

# AT 20R

#### Owner's Manual

Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (p. 2), "USING THE UNIT SAFELY" (p. 3), and "IMPORTANT NOTES" (p. 4, 5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

#### Copyright © 1999 ROLAND CORPORATION

All rights reserved. No part of this publication may be reproduced in any form without



Roland







ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous vollage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

## IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

- 1. Read all the instructions before using the product.
- Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
- This product should be used only with a cart or stand that is recommended by the manufacturer.
- 4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
- The product should be located so that its location or position does not interfere with its proper ventilation.
- The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat
- The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.

- The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 10.The product should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into the product; or
  - C. The product has been exposed to rain; or
  - D. The product does not appear to operate normally or exhibits a marked change in performance; or
  - E. The product has been dropped, or the enclosure damaged.
- 11.Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

-For the USA

This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.

For Canada

For Polarized Line Plug

CAUTION:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**ATTENTION:** POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED. Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

#### **USING THE UNIT SAFELY**

#### INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

#### About △ WARNING and △ CAUTION Notices

# Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly. Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. \* Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

#### About the Symbols

The △ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.

The ⊘ symbol alerts the user to items that must never

be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.

The symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

#### ALWAYS OBSERVE THE FOLLOWING .....

#### $oldsymbol{\Lambda}$ WARNING

 Before using this unit, make sure to read the instructions below, and the Owner's Manual.



 Do not open or perform any internal modifications on the unit.



 Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.



Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged.



 In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.



 Protect the unit from strong impact. (Do not drop it!)



 Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.



 Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.



 Always grasp only the plug on the power-supply cord when plugging into, or unplugging from, an outlet or



#### **⚠** CAUTION

 Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.



 Never climb on top of, nor place heavy objects on the unit.



 Never handle the power cord or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.



If you need to move the instrument, take note of the precautions listed below. At least two persons are required to safely lift and move the unit. It should be handled carefully, all the while keeping it level. Make sure to have a firm grip, to protect yourself from injury and the instrument from damage.



- Check to make sure the knob bolts securing the unit to the stand have not become loose. Fasten them again securely whenever you notice any loosening.
- · Disconnect the power cord.
- Disconnect all cords coming from external devices.
- · Close the lid.
- Remove the music stand.
- Before cleaning the unit, turn off the power and unplug the power cord from the outlet (p. 14).



 Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet.



• Be careful when opening/closing the lid so you do not get your fingers pinched (p. 14). Adult supervision is recommended whenever small children use the unit.



 When using the bench, please observe the following points:



- Do not use the bench as a toy, or as a stepping stool.
- Do not allow two or more persons to sit on the bench.



 Do not sit on the bench if the bolts holding the bench legs are loose. (If the bolts are loose, immediately re-tighten them using the supplied wrench.)

## IMPORTANT NOTES

In addition to the items listed under "IMPORTANT SAFETY INSTRUCTIONS" and "USING THE UNIT SAFELY" on pages 2 and 3, please read and observe the following:

#### **Power Supply**

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

#### **Placement**

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum.
   To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Observe the following when using the unit's floppy disk drive. For further details, refer to "Before Using Floppy Disks".
  - Do not place the unit near devices that produce a strong magnetic field (e.g., loudspeakers).
  - Install the unit on a solid, level surface.
  - Do not move the unit or subject it to vibration while the drive is operating.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- To avoid possible breakdown, do not use the unit in a wet area, such as an area exposed to rain or other moisture.

#### **Maintenance**

- For everyday cleaning wipe the unit with a soft, dry cloth
  or one that has been slightly dampened with water. To
  remove stubborn dirt, use a cloth impregnated with a
  mild, non-abrasive detergent. Afterwards, be sure to
  wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

#### **Repairs and Data**

Please be aware that all data contained in the unit's
memory may be lost when the unit is sent for repairs.
Important data should always be backed up on a floppy
disk, or written down on paper (when possible). During
repairs, due care is taken to avoid the loss of data.
However, in certain cases (such as when circuitry related
to memory itself is out of order), we regret that it may not
be possible to restore the data, and Roland assumes no
liability concerning such loss of data.

#### **Memory Backup**

 If the power to this unit is not switched on for an extended period of time (about 2 weeks), the contents of memory will be lost, and the unit will revert to its factory defaults. To avoid the loss of important data that has been placed in memory, a backup of your data should be periodically created on a floppy disk

#### **Additional Precautions**

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of loosing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory on a floppy
- Unfortunately, it may be impossible to restore the contents of data that was stored on a floppy disk once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

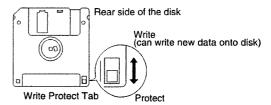
#### Before Using Floppy Disks Handling the Floppy Disk Drive

- Install the unit on a solid, level surface in an area free from vibration. If the unit must be installed at an angle, be sure the installation does not exceed the permissible.
- Avoid using the unit immediately after it has been moved to a location with a level of humidity that is greatly different than its former location. Rapid changes in the environment can cause condensation to form inside the drive, which will adversely affect the operation of the drive and/or damage floppy disks. When the unit has been moved, allow it to become accustomed to the new environment (allow a few hours) before operating it.
- To insert a disk, push it gently but firmly into the drive it will click into place. To remove a disk, press the EJECT button firmly. Do not use excessive force to remove a disk which is lodged in the drive.
- Never attempt to remove a floppy disk from the drive while the drive is operating (the indicator is lit); damage could result to both the disk and the drive.
- Remove any disk from the drive before powering up or down.
- To prevent damage to the disk drive's heads, always try
  to hold the floppy disk in a level position (not tilted in
  any direction) while inserting it into the drive. Push it in
  firmly, but gently. Never use excessive force.
- To avoid the risk of malfunction and/or damage, insert only floppy disks into the disk drive. Never insert any other type of disk. Avoid getting paper clips, coins, or any other foreign objects inside the drive.

#### **Handling Floppy Disks**

- Floppy disks contain a plastic disk with a thin coating of magnetic storage medium. Microscopic precision is required to enable storage of large amounts of data on such a small surface area. To preserve their integrity, please observe the following when handling floppy disks:
  - Never touch the magnetic medium inside the disk.
  - Do not use or store floppy disks in dirty or dusty
  - Do not subject floppy disks to temperature extremes (e.g., direct sunlight in an enclosed vehicle). Recommended temperature range: 10 to 50° C (50 to 122° F).
  - Do not expose floppy disks to strong magnetic fields, such as those generated by loudspeakers.

Floppy disks have a "write protect" tab which can protect
the disk from accidental erasure. It is recommended that
the tab be kept in the PROTECT position, and moved to
the WRITE position only when you wish to write new
data onto the disk.



- The identification label should be firmly affixed to the disk. Should the label come loose while the disk is in the drive, it may be difficult to remove the disk.
- Store all disks in a safe place to avoid damaging them, and to protect them from dust, dirt, and other hazards.
   By using a dirty or dust-ridden disk, you risk damaging the disk, as well as causing the disk drive to malfunction.
- Disks containing performance data for this unit should always be locked (have their write protect tab slid to the "Protect" position) before you insert them into the drive on some other unit (except the PR-300, or a product in the HP-G, MT, KR, or Atelier families), or into a computer's drive. Otherwise (if the write protect tab remains in the "Write" position), when you perform any disk operations using the other device's disk drive (such as checking the contents of the disk, or loading data), you risk rendering the disk unreadable by this unit's disk drive.
- \* GS ( ) is a registered trademark of Roland Corporation.
- Apple is a registered trademark of Apple Computer, Inc.
- Macintosh is a registered trademark of Apple Computer, Inc.
- \* IBM is a registered trademark of International Business Machines Corporation.
- \* IBM PC is a registered trademark of International Business Machines Corporation.

## **FEATURES**

We want to take a moment to thank you for your purchase of the Roland AT-20R "Atelier Series" Organ.

The AT-20R is an electronic organ which provides a generous collection of rich organ sounds. In addition, it is designed to be easy to learn and use. In order to enjoy reliable performance of your new keyboard for many years to come, please take the time to read through this manual in its entirety.

#### **Main Features**

#### O Simple and Easily Understood Operation

The large, color-coded buttons are organized by function, and laid out with an emphasis on ease of realtime operation. All models of the Atelier series use the same button arrangement, so that even beginners on the organ will be able to operate the instrument easily.

#### OA Rich Array of Organ Sounds are Built-In

The AT-20R provides a rich array of organ sounds, including pipe organ, theatre organ, and jazz organ sounds.

#### O Human voices

In addition to its diverse organ voices, the ATELIER-R series instruments also offer unique vocals, such as "Jazz Scat."

#### O Harmony Intelligence

The AT-20R's Harmony Intelligence function detects chords played on the Lower key-board, and automatically adds harmony to what is played on the Upper keyboard. This allows you to add harmonic richness to your playing and create a more impressive performance.

New on the AT-20R is a Harp-type Harmony Intelligence feature that lets you easily simulate the beautiful sonorities of a real harp.

#### O Versatile Rhythms

The AT-20R contains 32 different Rhythms so you can enjoy playing along with the Rhythms of a variety of musical genres. In addition, the Arranger function lets you play an Automatic Accompaniment suitable for the Rhythm simply by using the Lower keyboard to specify a chord.

#### O Disk Styles can be Loaded into Internal Memory

The Rhythm [Disk] button already contains 2 different Rhythms, but you can overwrite these with Rhythms loaded from a disk. When Rhythm data from a disk is loaded into internal memory, it will not be lost even if the power is turned off. It is convenient to load frequently-used disk Rhythms into internal memory.

#### **SMF Music Data can be Loaded**

The built-in composer features tape recorder-like operation. In addition to using the composer to easily record your playing, you can load SMF format music data and play along with it.

#### OSMF Save

Since the AT-20R can save performance data in SMF format, performance data you create using an Atelier series organ can be easily edited on an external sequencer.

#### **Conventions Used in This Manual**

- Button names are enclosed in square brackets ("[]"), as in [Demo] button.
- Whether a button light is illuminated, dark, or blinking is illustrated as shown below.



- Please be aware that although the display screens shown in this owner's manual are generally based on the factory settings, some may not necessarily match the factory settings.
- [+][-], [▲][▼], [◄][►] means that you should press one or the other button.
   Example: Rhythm Select [-][+] buttons, Part Balance Reverb [▲][▼] buttons, Menu
   [◄][►] buttons

## Contents

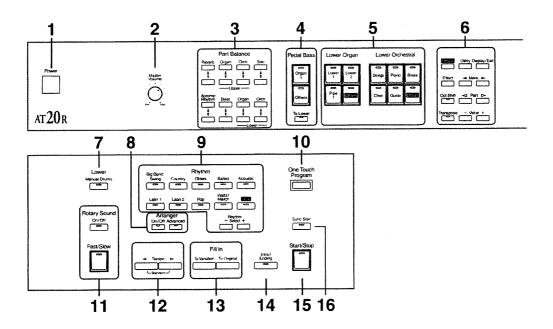
Using the Unit Safety	2
IMPORTANT NOTES	4
FEATURES	6
Main Features	6
Conventions Used in This Manual	
Contents	8
Panel Descriptions	. 12
Before You Begin	. 14
Opening/Closing the Lid	14
Setting Up the Music Stand	
Connecting the Power Cord	
Turning the Power On and Off	
Tuning On the Power	
Turning Off the Power	
Using Headphones	
Some Notes on Using Headphones	
Restoring All the Factory Default Settings	
Displaying Basic Screens (Display/Exit Button)	
Rhythm Screen	
Composer Screen	
Start Playing the AT-20R	. 1 <i>7</i>
Listening to the Demo Songs	
Selecting Voices	
About the Voices and Parts	
Functions of the Upper/Lower/Pedal Bass Sound Select Buttons	20
Selecting the Upper and Lower Voices	20
Selecting Pedal Bass Voice	22
Selecting Solo Voice	
Selecting a Voice Using the [Others] Button	24
Adjust the Volume Balance (Part Balance Buttons)	
Transpose the Pitch in Octave Units (Oct Shift Button)	
Playing Drums and Sound Effects on the Keyboard	
Playing Drums from the Entire Lower Keyboard (Manual Drums)	
Changing the Drum Set Type	29
Using the Rhythm (Music Style) Functions	. 30
Selecting a Rhythm	30
Playing Rhythms—Starting and Stopping the Rhythm	31
Starting at the Press of a Button	
Starting the Rhythm Automatically When You Play the Lower Keyboard or Pedalboard	
- Sync Start	
Stopping the Rhythm	
Adding Variation to the Rhythm	
Playing Rhythm and Automatic Accompaniment	34
COMMENTE UN ACTIVO (OPECCIA) (I CHILO) DULIOII)	

	o Make Automatic Accompaniment Settings — One Touch Program	
	Panel Settings Appropriate for Each Rhythm	
	(Music Style) from a Disk	
_	and Ejecting a Floppy Disk	
, ,	he Disk Rhythms	
-	Disk Rhythms Into Internal Memory	
Restoring	the Rhythm Stored in the [Disk] Button to the Factory Settings	39
Adding Various	s Effects to a Voice	40
Adding Harmon	y to a Melody — Harmony Intelligence	40
	pe of Harmony Intelligence	
•		
Sustain Effect		43
<b>Using the Play</b>	Functions	44
	Keyboard to Play the Bass Voice — [To Lower] Button	
	Different Key (Transpose Button)	
-	verall Volume Using an Expression Pedal	
	the Sound (Damper Pedal)	
Using the Foot S	witch	47
<b>Using the Regis</b>	stration Buttons	48
Storing Registrat	ions	48
Recalling a Regis	stration	49
How to R	ecall a Registration	49
Changing	the Way in Which Registrations Are Recalled	49
Automatically Re	egistering When You Switch Panel Settings	50
Assigning a Nam	ne to a Registration Set	50
Copying (	Only the Name of a Registration	52
	ion Sets to a Floppy Disk (Save Button)	
•	sly Saved Registration Sets Into the AT-20R (Load Button)	
• *	Set of Registrations	
	ın Individual Registration	
Deleting a Previo	ously Saved Registration Set	56
Record and Pla	yback Your Performance	57
	mances (Rec Button)	58
Recording Each I	Part Separately	59
Playing Back a Po	erformance Song (Play Button)	60
	fic Track — Track Mute	
	nance Song (Clear)	
	3	
	me of a Performance Song (Rename)	
-	nce Songs Onto Floppy Disk (Save Button)	
	SMF Format	
_	ance Songs Into the AT-20R	
	a New Recording onto SMF Format Music Data	
	formance Songs Stored on Floppy Disk	
Erasing Periorma	ance Songs Stored on Disk	13

Re-Recording Part of Your Performance — Punch-in Recording	
Repeatedly Layering Performances Over a Region — Loop Recording	76
ettings for the Composer (Function Button)	78
Count-in Recording	78
Changing the Metronome Setting	
Metronome Volume	
Changing the Sound of the Metronome	78
Setting the Beat	79
How the Expression Pedal Functions (Exp. Source)	79
Function During Recording	79
Function During Playback	80
Muting Individual Channels of Performance Data	
Switching the Display of Lyrics On (Displayed) or Off (Not Displayed)	81
lit Menu (Editing Song Files)	82
Delete Part of the Recorded Song (Delete Measure (Bar))	82
Delete the Recording from a Track (Delete Track)	
Erase Recording (Erase)	
Copy Recording (Copy)	85
Correct Timing Inaccuracies (Quantize)	86
ljusting the Effects	87
Changing the Reverb Type	
Changing the Reverb Depth	
Sustain Effect	
Changing the Sustain Length	
arious Other Settings (Utility Button)	89
Initial Touch (Initial Touch ON/OFF)	
Pedal Bass Mode (How the Bass Pedalboard Can Be Played)	
Solo Mode (Changing How the Solo Voice Will Sound)	
Registration Shift (Use the Left Foot Switch to Switch Through Registration Buttons)	
Left Foot Switch Assignment	
Damper Pedal Assignment	
Glide Destination	
Manual Drums Set	
Harmony Intelligence Type (Selecting the Type of the Harmony Intelligence)	
Chord Intelligence (Chord Intelligence ON/OFF)	
Chord Hold (Chord Hold ON/OFF)	
Registration Arranger Update (Arranger Settings Recall Timing)	
Registration Transpose Update (Transpose Setting Recall Timing)	
Tx MIDI Channel (MIDI Output Channel)	
MIDI IN Mode	
Send PC Switch (Specifying Transmission of PC Numbers)	
PC Number (Specifying PC Numbers)	
Master Tune	
LCD Contrast	95

Connecting External Devices	96
Names and Functions of Jacks and Connectors	96
Making the Connections	96
Connecting Audio Equipment	96
Connecting a Computer	97
If You're Using MIDI	97
Connecting the AT-20R to a MIDI Instrument	98
Troubleshooting	99
Display Messages	101
Voice List	103
Drum Set List	104
Manual Drum Set	104
Style List	106
Chord List	107
Settings That Are Stored After the Power Is Turned Off	109
Settings That Are Stored After the Power Is Turned Off	
Settings That Are Stored in the Registration Buttons	109
Settings That Are Stored in the Individual Registration Buttons	109
Glossary	110
About ATELIER Series Sound Generator	111
MIDI Implementation Chart	112
Main Specifications	113
Index	115
Demo Song List	117

## **Panel Descriptions**



- 1 [Power] switch ( $\rightarrow$  p. 14)
- 2 [Master Volume] knob ( $\rightarrow$  p. 14)
- 3 Part Balance [▲] [▼] button ( → p. 26, p. 43)
- Pedal Bass Voice select buttons ( → p. 22)
   Pedal Bass Part
   [To Lower] button ( → p. 44)
- 5 Lower Voice select buttons ( → p. 20)

  Lower Organ part

Lower Organ part Lower Orchestral part

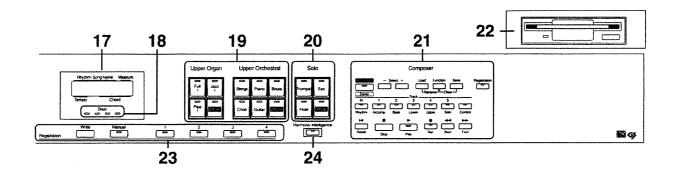
6

[Others] button (  $\rightarrow$  p. 24) [Effect] button (  $\rightarrow$  p. 87) [Oct Shift] button (  $\rightarrow$  p. 27) [Transpose] button (  $\rightarrow$  p. 45) [Utility] button (  $\rightarrow$  p. 89-p. 95) [Display/Exit] button (  $\rightarrow$  p. 16) Menu [  $\blacktriangleleft$  ][  $\blacktriangleright$  ] buttons Part [  $\blacktriangleleft$  ][ $\blacktriangleright$  ] buttons Value [-] [+] buttons

7 [Manual Drums] button ( $\rightarrow$  p. 28)

8 Arranger [On/Off] button (  $\rightarrow$  p. 34) [Advanced] button (  $\rightarrow$  p. 33)

- 9 Rhythm select buttons ( $\rightarrow$  p. 30) Rhythm Select [-] [+] buttons ( $\rightarrow$  p. 30)
- 10 [One Touch Program] button ( $\rightarrow$  p. 35)
- 11 Rotary Sound ( → p. 42)[On/Off] button[Fast/Slow] button
- 12 Tempo [ **◄** ][ **▶** ] button ( → p. 34)
- **13 Fill In ( → p. 33)** [To Variation] button [To Original] button
- 14 [Intro/Ending] button ( $\rightarrow$  p. 31)
- 15 [Start/Stop] button ( $\rightarrow$  p. 31)
- 16 [Sync Start] button ( $\rightarrow$  p. 31)



- 17 Display ( $\rightarrow$  p. 16)
- 18 Beat Indicator ( → p. 34)
- 19 Upper voice select buttons ( $\rightarrow$  p. 20)

Upper Organ part Upper Orchestral part

- 20 Solo voice select buttons ( → p. 23)
  Solo part
- 21 Composer

[All Song Play/Demo] button (  $\rightarrow$  p. 17, p. 72) Select [-] [+] buttons [Load] button (  $\rightarrow$  p. 54, p. 55, p. 70) [Function] button (  $\rightarrow$  p. 78-p. 86) [Save] button (  $\rightarrow$  p. 53, p. 67) [Registration] button (  $\rightarrow$  p. 50-p. 56)

Track buttons ( $\rightarrow$ p. 57, p. 61)

[Reset] button

[Stop] button

[Play] button ( $\rightarrow$ p. 60, p. 72)

[Rec] button ( $\rightarrow$  p. 58, p. 59, p. 62)

[Bwd] button

[Fwd] button

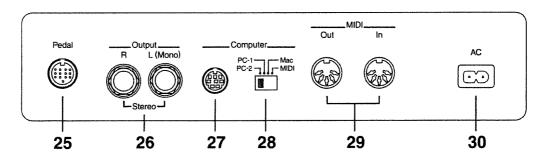
- 22 Disk Drive ( $\rightarrow$  p. 37)
- 23 Registration buttons

[Write] button ( $\rightarrow$  p. 48) [Manual] button ( $\rightarrow$  p. 50)

Registration [1] - [4] buttons ( $\rightarrow$  p. 48)

24 [Harmony Intelligence] button ( $\rightarrow$  p. 40)

#### $\blacksquare$ Rear Panel ( $\rightarrow$ p. 96)

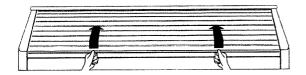


- 25 Pedal connector
- 26 Output L (mono) /R jacks
- 27 Computer connector

- 28 Computer switch
- 29 MIDI Out / In connectors
- 30 AC Inlet

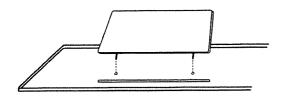
## **Before You Begin**

#### **Opening/Closing the Lid**



- 1. To open the lid, hold it with both hands and slide it to the rear.
- 2. To close the lid, slowly pull it forward until it stops.
- \* Be careful not to get your fingers caught when opening or closing the lid. Adult supervision is recommended when small children are going to be using the instrument.
- \* To prevent accidents, be sure to close the lid before moving the organ.
- Make sure you don't have anything (such as sheet music) on the keyboard when you close the lid.

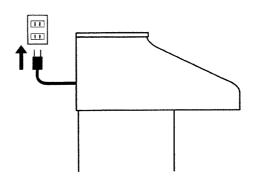
#### Setting Up the Music Stand



1. Attach the music stand by inserting it into the two holes.

#### **Connecting the Power Cord**

- 1. First, make sure that the [Power] switch at the panel's left side is OFF (not pushed in).
- Connect the supplied power cord to the AC Inlet connector, then plug the other end into an AC outlet.



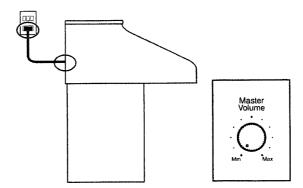
- \* Only use the power cord supplied with this instrument.
- Whenever you do not intend to use the instrument for extended periods of time, pull out the power cord from the AC outlet.

#### Turning the Power On and Off

\* Once the connections have been completed, turn on or off power to your various devices in the order specified. By turning on or off devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

#### **■** Tuning On the Power

- 1. Make sure of the following before the power is turned on.
- Is the power cable correctly connected to the AC inlet?
- Is the power cable correctly connected to the AC outlet?
- Is the [Master Volume] knob (located at the left of the Lower keyboard) set to the Min (minimum) position?

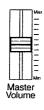


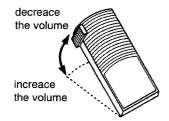
#### 2. Press the [Power] switch to turn on the power.



- \* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.
- The [Master Volume] knob located on the left of the Lower Keyboard panel is an overall control for adjusting the volume of the entire instrument.

Position the Expression Pedal to the half-way mark. Now adjust the [Master Volume] knob to a suitable level. Now that this level has been set, you can use the Expression Pedal to change the volume with your foot as you play the AT-20R. The volume will be increased when the Expression Pedal is pressed down, and decreased when the pedal is returned.



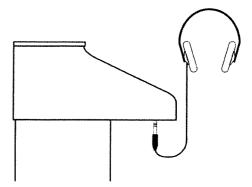


#### **■** Turning Off the Power

- 1. Before switching the power off, set the [Master Volume] knob to the Min (minimum) position.
- 2. Press the [Power] switch to turn off the power.

#### **Using Headphones**

The AT-20R features a Phones jack. This allows you to play without having to worry about bothering others around you, even at night.



1. Connect the headphones to the Phones jack on the underside of the unit.

The sound from the built-in speakers stops. Now, sound is heard only through the headphones.



- 2. Adjust the headphones volume with the [Master Volume] slider and Expression pedal.
- \* Accepts connection of Stereo headphones.
- To prevent damage to the cord, handle the headphones only by the headset or the plug.
- Headphones may be damaged if the volume is too high when they are plugged in.
  - Lower the volume on the AT-20R before plugging in headphones.  $\,$
- To prevent possible auditory damage, loss of hearing, or damage to the headphones, the headphones should not be used at an excessively high volume.
  - Use the headphones at a moderate volume level.

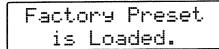
## Restoring All the Factory Default Settings

The settings stored in the AT-20R can be returned to their factory settings. This function is called "Factory Reset."

- 1. Make sure there is no floppy disk in the disk drive before carrying out the procedure.
- 2. Turning off the power.
- 3. While holding down the [One Touch Program] button, press the [Power] switch to turn the power on.



The following display appears.

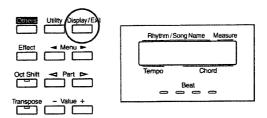


- \* Loading factory default settings will erase any Registrations currently in the memory of the AT-20R. To save the registrations you are currently using, refer to page 53.
- \* Even if you perform the Factory Reset operation, the Rhythm [Disk] button will not return to the factory settings.

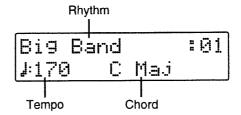
  If you wish to return the Rhythm [Disk] button to the factory settings, please refer to page 39.
- \* When you are using the instrument for the very first time, or it has remained unused for about two weeks or so, it will automatically be returned to the factory default settings when the power is turned on.

## Displaying Basic Screens (Display/Exit Button)

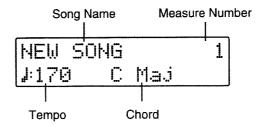
The instrument's display provides a large variety of information. The AT-20R has two types of basic display screen: the Rhythm display, and the Composer display. You can alternate from one to the other by pressing the [Display/Exit] button.



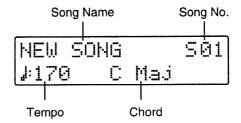
#### **■** Rhythm Screen



#### ■ Composer Screen



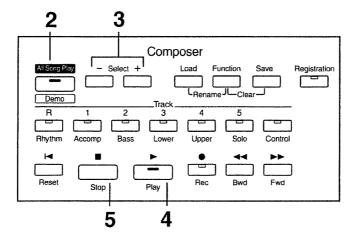
When you have selected a performance song on a floppy disk:



## **Start Playing the AT-20R**

## **Listening to the Demo Songs**

The AT-20R contains 3 Demo songs. Here's how to play the Demo songs, and fully appreciate the sounds, Rhythms, and Automatic Accompaniment that are available with the AT-20R.



1. Make sure that a floppy disk is not inserted in the disk drive.

If a floppy disk is in the disk drive, press the Eject button (p. 37) and remove the floppy disk.

2. Press the [All Song Play/Demo] button (the indicator will light).

All track indicator will light.

- 3. Use the [-] and [+] Composer Select buttons to select a Demo song.
- 4. Press the [Play] button.

When the selected demo song ends, the next demo song will begin playing.

5. To stop playback in the middle of the song, press the [Stop] button.

The [All Song Play/Demo] button's indicator will be turned off.



Check out the "Demo Song List" (p. 117) for information such as the names of the composers and players of the demo songs.

#### • If the Following Screen Appears

If the performance song in the unit has not been saved to a floppy disk, the following message will appear, and it will not be possible to play the Demo songs.

If you don't mind erasing this song, press the [Rec] button. However, if you wish to save this song, press the [Reset] button to cancel the procedure, and then save the song onto a floppy disk.



If you wish to save the musical data to a floppy disk, refer to "Saving Performance Songs Onto Floppy Disk (Save Button)" (p. 67).



All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.



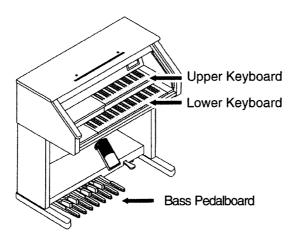
The data for the Demo song that is being played is not available at the MIDI Out connector.

## **Selecting Voices**

The AT-20R is able to produce the sounds of various instruments. These sounds are called "Voices" (or tones). It is very easy to select voices.

#### ■ About the Voices and Parts

The AT-20R has two keyboards and one Bass Pedalboard, as shown below. From top to bottom these are called the "Upper Keyboard," "Lower Keyboard," and "Bass Pedalboard."



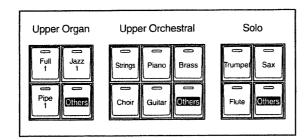
The Upper Keyboard and Lower Keyboard each have two parts: "Organ," "Orchestral." You can select one voice for each part, meaning that it is possible to layer up to two voices on each keyboard and play them simultaneously.

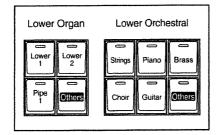
The voice of the "Solo" part can be layered on the Upper keyboard.

The Bass Pedalboard has the part: "Pedal Bass."

	Keyboard	Type of voices	Parts	
_	Upper Keyboard	Upper	Upper Organ Upper Orchestral	
		Solo	Solo	
	Lower Keyboard	Lower	Lower Organ Lower Orchestral	
_	Bass Pedalboard	Pedal Bass	Pedal Bass	

#### ■ Functions of the Upper/Lower/Pedal Bass Sound Select Buttons





Each time you press a voice button, its indicator will switch between being lit and being turned off. Voices that have their button indicator lit can be played.



If none of the voice buttons are lit, playing the keyboard will not produce a sound.

#### ■ Selecting the Upper and Lower Voices

Press the "Organ," or "Orchestral" buttons for each Keyboard (Upper/Lower) to select the desired voice.

When the power is turned on, the Upper keyboard will play "Full Organ 1" and the Lower keyboard will play "Lower Organ1."

## Example: Selecting "Jazz Organ1" for the Upper Organ part, and "Grand Piano" for the Upper Orchestral.

1. Press the Upper Organ [Jazz 1] button (indicator lights).

The name of the selected voice will appear in the display for several seconds.

U.Or9an Voice Jazz Or9an1

Now when you play the Upper keyboard, the "Jazz Organ1" will sound.

2. Press the Upper Orchestral [Piano] button (the indicator lights).

Now when you play the Upper keyboard, the two voices "Jazz Organ1" and "Grand Piano" will sound simultaneously (mixed together).

## The Organ voices Full Organ 1 to Full Organ 6 are actually preset combinations of different organ footages with combinations as follows:

```
Full Organ 1 - 80 0000 004
Full Organ 2 - 88 8000 008
Full Organ 3 - 80 8808 008
Full Organ 4 - 80 0800 000
Full Organ 5 - 85 3111 246
Full Organ 6 - 88 8888 888
```

## For example: a combination of "85 3111 246" means the following levels have been set:

```
16' is set at 8 (maximum)
8' is set at 5
5 1/3' is set at 3
4' is set at 1
2 2/3' is set at 1
2' is set at 1
1 3/5' is set at 2
1 1/3' is set at 4
1' is set at 6
```

Similarly, the "Jazz" organ voices are actually preset combinations of different Jazz organ footages and percussion with combinations as follows:

```
Jazz Organ 1 - 88 8000 000 with 3rd harmonic percussion Jazz Organ 2 - 88 8800 000 with 3rd harmonic percussion Jazz Organ 3 - 80 0800 000 with 2nd harmonic percussion Jazz Organ 4 - 88 8000 000 with 2nd harmonic percussion Jazz Organ 5 - 88 8800 000 with 2nd harmonic percussion Jazz Organ 6 - 88 8630 000 with 3rd harmonic percussion
```

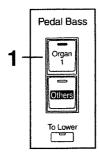
Likewise the "Pipe" organ and "Theater" organ voices are actually preset combinations of classical pipe and theater organ sounds experienced on our famous Rodgers organs. The Upper and Lower keyboards each have three parts; Organ, Symphonic, and Orchestral. One voice can be selected from each part, allowing you to mix (layer) up to 3 voices. Voices can be selected for the Lower keyboard in the same way as for the Upper keyboard.

Like the Upper keyboard organ voices, the Lower organ voices are actually preset combinations of different organ footages with combinations as follows:

```
Lower Organ 1 - 00 8000 000
Lower Organ 2 - 00 8400 000
Lower Organ 3 - 00 8503 000
Lower Organ 4 - 00 8000 005
Lower Organ 5 - 00 8640 000
Lower Organ 6 - 00 8402 001
```

#### ■ Selecting Pedal Bass Voice

Immediately after the power is turned on, the Pedal Bass voice will sound single notes using the "Organ Bass 1" voice. Here's how to select Bass voice played by the Pedalboard.



#### 1. Press the Pedal [Organ 1] button (indicator lights).

The name of the selected voice will appear in the display for several seconds.

Now when you play the Pedalboard, "Organ Bass 1" will be heard.



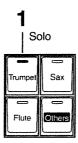
Settings can be adjusted to allow multiple notes to be played on the Pedalboard (p. 90)



If you press the [To Lower] button (indicator lights p. 44), the Bass voice can now be played by the Lower keyboard, not by the Pedalboard.

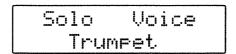
#### **■** Selecting Solo Voice

The Solo section of the Upper keyboard is monophonic, that is, the Solo voice will only sound for the highest note played on the Upper keyboard. This allows you to play full chords and have the selected Solo voice playing the highest (solo) note.



#### 1. Press the Solo [Trumpet] button (indicator lights).

The name of the selected voice will appear in the display for a few seconds.



Play the Upper keyboard. The selected voice will sound by the highest note played.

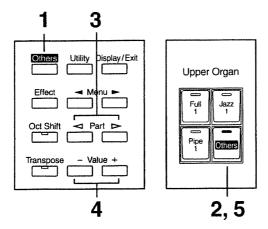


It is possible to change how a Solo voice will sound.

Normally, the Solo voice will be sounded by the highest note you play on the Upper keyboard, but you can make settings so that the last-played note will sound the Solo voice. You can also make settings so that the Solo voice will be sounded by all notes of the keyboard to which the Solo voice is assigned. For details refer to "Solo Mode (Changing How the Solo Voice Will Sound)" (p. 90).

#### ■ Selecting a Voice Using the [Others] Button

Notice that there is an [Others] button for each of the "Organ," "Orchestral" sections of the Upper and Lower voices, for the "Solo" section, and for the "Pedal Bass" sections of the Pedal bass voice. By using the [Others] buttons, you can select from all internal voices of the AT-20R.



1. Press the [Others] button to the left of the display.

All [Others] buttons begin to flash.

2. Press the [Others] button for the section (Part) to which you wish to assign a voice.

The indicator of the selected [Others] button will blink, and the indicators of the remaining [Others] buttons will change from blinking to dark.

**3.** Use the [<] and [▷] Part buttons to select a voice group.

The voice number of each voice is preceded by an alphabetical character A–T which indicates the voice group; e.g., "G11 Strings1."

**4.** Use the [-] and [+] Value buttons to select the desired voice.

The name of the selected voice is shown in the display.

**5.** Once again, press the [Others] button for the part to which the selected voice will be assigned.

The selected voice is now stored, and will be retained even while the instrument is switched off.



To stop mid-way through this or any procedure, press the [Display/Exit] button.



About the voices that can be assigned to an [Others] button, please refer to "Voice List" (p. 103).

#### Shortcut When Selecting Voices for Any [Others] Button

Instead of using the general [Others] button located at the left of the display, here's a quicker way to select voices for any [Others] button.

1. Press the [Others] button for the Part for which you wish to specify a voice.

The voice name will appear in the display.

2. While the voice name is shown in the display screen, use the Value [-] [+] buttons to select the desired voice.

The indicator of the selected [Others] button will blink.

3. Once again, press the [Others] button for the part whose sound you wish to set to confirm the voice.

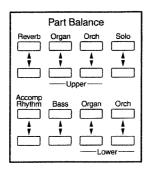
The indicator of the [Others] button will change from blinking to lit.



When you press the [Others] button, the voice name will appear in the display screen, but the basic screen will reappear if you wait several seconds without pressing the Value [-] [+] buttons. If you wish to change the sound that is assigned to the [Others] button, press the [Others] button, and quickly use the Value [-] [+] buttons to select the desired voice while the voice name is still shown in the display screen.

## Adjust the Volume Balance (Part Balance Buttons)

The AT-20R allows you to adjust the volume balance individually for each Part.



The following buttons are used to adjust the volume of a multiple number of Parts.

#### Accomp Rhythm button:

Automatic Accompaniment (except bass)

Playback of performance data from something other than the Atelier, Rhythm performance, Manual Drums

#### Bass button:

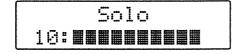
Pedal Bass Voice, Bass part of Automatic Accompaniment

## The volume levels of each part are adjusted using the corresponding [ ▲ ] and [ ▼ ] buttons.

When you press the up button (  $\blacktriangle$  ), the volume increases; when you press the down button (  $\blacktriangledown$  ), the volume decreases.

The volume can be set to any value from 0 to 12.

When you press the Part Balance [  $\blacktriangle$  ][  $\blacktriangledown$  ] buttons, the volume for each part will be shown in the display.



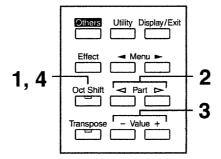


When the volume value shown in the display is 0, that part will produce no sound.

## Transpose the Pitch in Octave Units (Oct Shift Button)

Octave Shift is a function that allows you to alter the pitch of what is played by one or two octaves.

You can apply an Octave shift to the following 6 Parts: All of the Upper and Lower Parts (Organ/Orchestral) The Bass Parts (Pedal Bass) The Solo Part



Press the [Oct Shift] button.

The [Oct Shift] button's indicator begins to flash.

2. Use the [⊲] and [⊳] Part buttons to select a performance Part to which you wish to apply an Octave Shift.

3. Use the [-] and [+] Value buttons to set the amount of shift.

The value can be set to a range of +/-2 octaves.

4. Press the [Oct Shift] button.

The basic screen will reappear

When all Parts are set to value 0, the [Oct Shift] button's indicator goes off.

When any Part is set to any value other than 0, the [Oct Shift] button's indicator will light.



Please note that when you apply the Octave Shift function to certain voices, their pitch could be stretched beyond their recommended note ranges, and they may not sound as expected. Care should be taken when using Octave Shift.

## Playing Drums and Sound Effects on the Keyboard

#### ■ Playing Drums from the Entire Lower Keyboard (Manual Drums)

You can use the Lower keyboard to play various drum sounds (drum set). In this case, the Lower voices will no longer sound.



#### 1. Press the [Manual Drums] button (indicator lights).

Play the Lower keyboard and listen to the various drum sounds on each key. The [Manual Drums] button will alternate between on (lit) and off each time it is pressed.

Immediately after the power is turned off, the STANDARD drum set will sound.



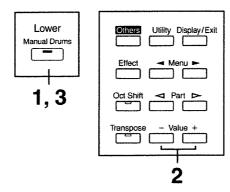
Refer to "Drum Set List" (p. 104) for details on which drum sound or Sound Effect will be played by each note.

#### **■** Changing the Drum Set Type

As the drum set, you can choose from 8 types of drum set and one type of sound effect. When you change the drum set, the sound produced by each note will change. Immediately after the power is turned on, the STANDARD drum set will sound. Let's try selecting a different Drum Set or the Sound Effect set.

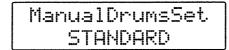


Refer to "Drum Set List" (p. 104) for details on which drum sound or Sound Effect will be played by each note.



- 1. Press the [Manual Drums] button (indicator lights).
- 2. When the Drum Set name is displayed on the screen, press the [-] or [+] Value button to select a Drum Set or Sound Effect Set.

The [Manual Drums] button indicator will begin to flash.



You can select from 8 different Drum Sets and one set of Sound Effects as follows:

STANDARD, ROOM, POWER, ELECTRONIC, TR-808, JAZZ, BRUSH, ORCHESTRA, SOUND EFFECTS

3. Press the [Manual Drums] button once again.

The [Manual Drums] button indicator will be lit constantly, and the selected Drum Set Type will be applied.



To stop mid-way through this or any procedure, press the [Display/Exit] button.



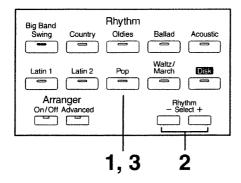
The Drum Set Type can also be selected from the Utility menu. Please refer to "Manual Drums Set" (p. 92).

## Using the Rhythm (Music Style) Functions

The AT-20R lets you enjoy playing along with a rhythmic accompaniment.

#### Selecting a Rhythm

The AT-20R provides 32 types of Rhythms and Automatic Accompaniments (Music Styles). These are organized into 10 groups.



#### 1. Press a Rhythm button to select a Rhythm group.

The indicator will light, and the first Rhythm in the group will be selected. That Rhythm will be shown in the display.

## 2. To select a different Rhythm within the same group, use the [-] and [+] Rhythm Select buttons.

The indicator of the Rhythm button will flash.

#### 3. Press the Rhythm button once again (indicator lights constantly).

The Rhythm button's indicator will change from blinking to light. The Rhythm has now been applied.

#### O Using the Rhythms of the [Disk] Button

The [Disk] button contains 2 preset Rhythms. These Rhythms can be rewritten by loading disk styles into the AT-20R.

Styles that are already written in the [Disk] button memory can be selected in the same way as when selecting Rhythms of another Rhythm group.

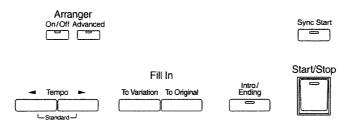


If you wish to store a disk style in the [Disk] button, refer to "Loading Disk Rhythms Into Internal Memory" (p. 38).

## Playing Rhythms—Starting and Stopping the Rhythm

There are two ways to start the Rhythm:

- 1. Manually by pressing a button,
- 2. Automatically by playing a note on the Lower keyboard or Pedalboard (Syncro Start). You can also make the Rhythm start after playing an Intro, or make the Rhythm stop after playing an Ending.



#### ■ Starting at the Press of a Button

- Starting with an Intro
  - 1. Press the [Intro/Ending] button.

The Intro is played and the Rhythm starts. While the Intro is playing, the [Intro/Ending] button indicator will light, until the Intro ends then the button indicator will go dark.

- O Making the Intro Short and Simple
  - 1. Press the [To Variation] or [To Original] button.
  - 2. Press the [Start/Stop] button.

A short Intro is played and the Rhythm starts.

- Starting without an Intro
  - 1. Press the [Start/Stop] button.

The Rhythm starts without an Intro being played.

## ■ Starting the Rhythm Automatically When You Play the Lower Keyboard or Pedalboard – Sync Start



If the Arranger function is ON (the Arranger [On/Off] button indicator is lit), it is not be able to start the Rhythm by playing the Pedalboard.

- O Starting with an Added Intro
  - 1. Press the [Sync Start] button to make the indicator light up.

#### 2. Press the [Intro/Ending] button.

The [Intro/Ending] button's indicator will flash.

#### 3. Play either the Lower keyboard or the Pedalboard.

The Intro is played and the Rhythm starts.

While the Intro is playing, the [Intro/Ending] button indicator will light, until the Intro ends the button indicator will be turned off.

#### O Making the Intro Short and Simple

- 1. Press the [Sync Start] to make the indicator light up.
- 2. Press the [To Variation] or [To Original] button.

[Start/Stop] button indicator will flash.

Pressing the [To Variation] or [To Original] button makes the Rhythm pattern change as well

#### 3. Play either the Lower Keyboard or the Pedalboard.

A short Intro is played and the Rhythm starts.

#### Starting without an Intro

- 1. Press the [Sync Start] button (the indicator lights).
- 2. Play either the Lower keyboard or the pedalboard.

The Rhythm starts without an Intro being played.

#### ■ Stopping the Rhythm

#### Stopping with an Ending

1. Press the [Intro/Ending] button.

An Ending is played, then the Rhythm stops.

While the Ending is playing, the [Intro/Ending] button indicator will flash, until the Ending finishes the button indicator will be turned off.

#### O Making the Ending Short and Simple

**1.** Press the [To Variation] or [To Original] button, and then press the [Start/Stop] button.

A short Ending is played, then the Rhythm stops.

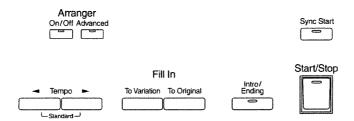
#### Stopping without an Ending

1. Press the [Start/Stop] button.

The Rhythm will stop without an Ending being played.

## **Adding Variation to the Rhythm**

You can add variation to the Rhythm by changing the arrangement or by switching the Rhythm pattern.



Button	Function
Arranger [Advanced] button	Basic Arrangement (indicator off) / Full Arrangement (indicator lit)
Fill In [To Variation] button	After the fill-in has played, play the Variation Rhythm pattern
Fill In [To Original] button	After the fill-in has played, play the Original Rhythm pattern

#### What is a Fill In?

A fill-in is a short phrase that is inserted at a break in the melody or at a point where the character of the song changes (between Chorus's or Verses).



The functions of the [Start/Stop] button, the [To Variation] button, the [To Original] button and [Advanced] button can be assigned to the foot switch located on the left side of the Expression Pedal (p. 90).

## **Playing Rhythm and Automatic Accompaniment**

The Arranger function of the AT-20R can add an Automatic Accompaniment to each Rhythm. Based on the selected Rhythm, the Arranger function automatically adds an accompaniment that is suitable for the chord being pressed on the Lower keyboard.



#### 1. Press the Arranger [On/Off] button (indicator lights.)

Indicator is lit (On) Rhythm and Automatic Accompaniment

Indicator is not lit (Off) Rhythm (Drums only)



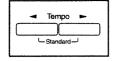
If the Arranger[On/Off] button is ON and no Pedal bass voice is selected, the Automatic Accompaniment will play the bass sound.

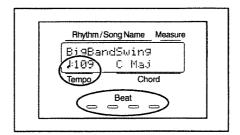


While the Intro or Ending is being played, the Lower keyboard voices will not play.

## Changing the Tempo (Speed) (Tempo Button)

You can change the tempo of the Rhythm or Automatic Accompaniment.





## Press the [ ◄] and [ ► ] Tempo buttons to change the tempo (speed) of the Rhythm or Automatic Accompaniment.



*By pressing the* [ ◀ ] *and* [ ▶ ] *Tempo buttons simultaneously, the tempo is returned to the standard (preset) tempo for the selected Rhythm.* 

The value of the tempo currently set (20~250 beats per minute) can be checked in the display.

You can also check the tempo by viewing the Beat indicator. The indicator flashes red on the first beat of the measure (bar), and green on the remaining beats.

# A Simple Way to Make Automatic Accompaniment Settings — One Touch Program

In addition to the Rhythm, you can also play an Automatic Accompaniment. The AT-20R provides a very convenient [One Touch Program] button. By simply pressing this button once, the Arranger function will be turned ON, and keyboard voices that are most appropriate for playing with the currently selected Rhythm/Automatic Accompaniment are selected.

By pressing the [One Touch Program] button, you can make the following settings.

#### When the Rhythm is Stopped

- [Sync Start] button lit, [Intro/Ending] button blinking (Waiting for Sync Start)
- Arranger [On/Off] button lit (Automatic Accompaniment playing)
- · Panel appropriate for the Rhythm
- 1. Select a Rhythm (p. 30).
- 2. Press the [One Touch Program] button.

Panel settings suitable for the selected Rhythm and Automatic Accompaniment will be selected automatically.

**3.** On the Lower keyboard, play a chord.

At the moment you play the keyboard, the Intro will begin, and then the Rhythm and Automatic Accompaniment will play.



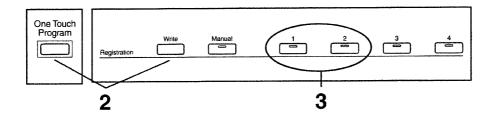
While the Intro or Ending is being played, the Lower keyboard voices will not play.

#### ■ Recalling Panel Settings Appropriate for Each Rhythm

For each of the Rhythms (Music Styles) built into the AT-20R, there are 2 types of available panel settings, which are appropriate for use with that Rhythm (Music Style). These can be stored at Registration buttons [1] - [2].



If this procedure is carried out, the Registrations that were previously at Registration buttons [1] – [2] will be lost. If you wish to retain them, use the procedure explained on page 53 to save them to a floppy disk.



- 1. Select a Rhythm (p. 30).
- 2. While holding the Registration [Write] button, press the [One Touch Program] button.

The panel settings appropriate for the Rhythm will now be stored in Registration buttons [1] – [2].

**3.** To recall and use the panel settings that you have stored, press one of the Registration buttons [1] – [2].

# Using a Rhythm (Music Style) from a Disk

The AT-20R contains 32 types of built-in Rhythms (Music Styles). Additional Rhythms (Music Styles) are available on the Music Style disk included are available. Here's how to select a Rhythm (Music Style) from a Music Style disk.

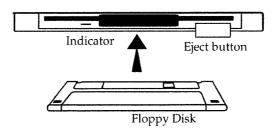
### ■ Inserting and Ejecting a Floppy Disk



If you're using the disk drive for the first time, be sure to read the important notes on page 5.

1. Hold the floppy disk with the label facing upwards, and push it into the disk drive until it clicks into place.

The disk drive is on the right side of the unit, above the keyboard.





Never attempt to remove a floppy disk from the drive while the drive is operating (the indicator is lit); damage could result to both the disk and the drive.

2. .Press the Eject button.

The floppy disk is ejected a little out of the slot. Gently grasp the end of the floppy disk and pull it out.

### ■ Playing the Disk Rhythms

- 1. Press the Rhythm [Disk] button (confirm that its indicator is lit)
- 2. Insert the Music Style disk into the disk drive.
- 3. Use the [-] [+] Composer Select buttons to select a Rhythm on the Music Style disk.



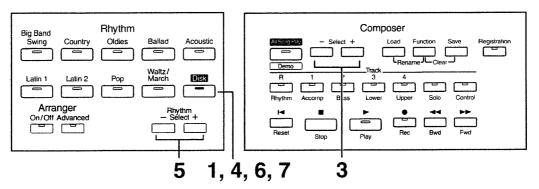
The [Start/Stop] button indicator will be blinking while the Rhythm is being loaded. You can play the selected Rhythm after loading is completed.

4. Press the [Start/Stop] button or the [Intro/Ending] button.

The selected song is played.

### ■ Loading Disk Rhythms Into Internal Memory

The [Disk] button already contains 2 Rhythms, but these can be rewritten by Rhythms from a Music Style disk. Rhythms loaded from the disk into internal memory will not be lost even if the power is turned off. It is convenient to load frequently-used disk Rhythms into internal memory.



- 1. Press the Rhythm [Disk] button (indicator lights).
- 2. Insert the Music Style disk into the disk drive.
- **3.** Use the [-] and [+] Composer Select buttons to select a disk Rhythm (indicator begins to flash).



Press the [Start/Stop] button, you can hear the Rhythm.

4. After selecting a disk Rhythm, press the Rhythm [Disk] button once more.

The following screen will appear.

5. Use the [-] and [+] Rhythm Select buttons to select where you wish the selected Rhythm to be stored.

**6.** Press the Rhythm [Disk] button to confirm the storage-destination Rhythm.

To cancel the procedure, press the [Display/Exit] button.

**7.** Press the Rhythm [Disk] button again to start loading the Rhythm into the internal memory.

While the Rhythm is being loaded into internal memory, the following screen will be displayed.

Once the Rhythm has been accommodated in memory, the basic screen will reappear.



Never remove the disk or turn off the power while the Rhythm data is being loaded from disk into the AT-20R. If you do so, the Rhythm data will not be loaded into the AT-20R, and malfunctions could result. After returning the Rhythm stored in the [Disk] button to the factory settings (see following section), re-load the Rhythm from disk.

# ■ Restoring the Rhythm Stored in the [Disk] Button to the Factory Settings

The Rhythm that was loaded from the Music Style disk into the [Disk] button will not disappear even if you turn off the power or execute the Factory Reset operation. If you wish to restore the Rhythm of the [Disk] button to the factory setting, use the following procedure.

- 1. Press the [Power] button to turn off the power.
- 2. Hold down the Rhythm [Disk] button, and press the [Power] switch.

The Rhythm that had been stored in the Rhythm [Disk] button will return to the factory settings.



To return settings other than those of the [Disk] button to the factory settings, use the Factory Reset operation (p. 16).

# Adding Various Effects to a Voice

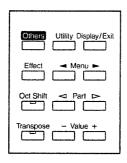
The AT-20R allows you to add a variety of effects to each voice, and to use various playing techniques to make your performance more expressive.

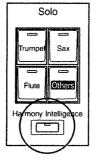
### Adding Harmony to a Melody — Harmony Intelligence

Harmony Intelligence is a function that adds harmony to a single note being played on the Upper keyboard, the harmony being dependent on the chord played on the Lower keyboard. In addition it automatically selects the appropriate voices according to the harmony type.

1. Press the [Harmony Intelligence] button (indicator lights).

Each time you press a [Harmony Intelligence] button, the indicator will alternate between ON (lit) and OFF.





## Changing the Type of Harmony Intelligence

There are 4 different Harmony Intelligence.

When you press the [Harmony Intelligence] button, the most appropriate voice(s) will be automatically set.

The manner in which notes will sound also depends on the Harmony type.

- 1. Press the [Harmony Intelligence] button (indicator lights).
- 2. While the voice name is shown in the display screen, use the Value [-] [+] buttons to select the Harmony Intelligence.

The indicator of the [Harmony Intelligence] button will blink.

**3.** Once again, press the [Harmony Intelligence] button.

The indicator of the [Harmony Intelligence] button will light, and the Harmony Intelligence is confirmed.



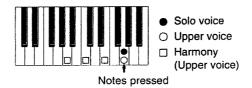
You may change the selected Solo voice and/or the Upper voice to one of your choice.

How notes pressed are sounded by the different Harmony Intelligence types:

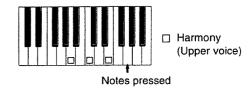
	Туре	How notes pressed are sounded
Traditional	Туре А	Solo & Upper
Harp	Туре В	
Octave 1	Type A	Solo & Upper
Octave 2	Туре А	Solo & Upper

#### O How notes are sounded by the different Harmony Intelligence types

Type A (Solo & Upper)



Type B





The number of notes of the harmony will depend on the Harmony Intelligence type.



You can select the Harmony Intelligence at the Utility menu (p. 92).

# **Rotary Effect**

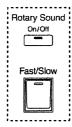
Rotary is an effect which simulates the sound of rotating speakers. There is a choice of two settings: Fast and Slow.

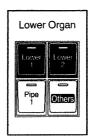
The Rotary effect can be applied to the following sounds.

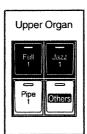
• Voices assigned to buttons in the upper line of "Upper Organ" and "Lower Organ."



Some sounds do not allow the Rotary effect to be applied. For details refer to "Voice List" (p. 103).







- 1. Select the voice to which you wish to apply the Rotary effect.
- **2.** Press the Rotary Sound [On/Off] button (confirm that its indicator is lit).

The Rotary effect will be applied to the voice.

**3.** Press the Rotary Sound [Fast/Slow] button to switch between Rotary Fast (LED lit) and Rotary Slow (LED turned off).

**LED lit (Fast)** The effect obtained is equivalent to speakers being rapidly ro-

tated.

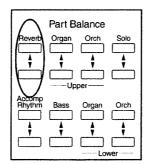
**LED turned off (Slow)** Effect simulating the slow rotation of speakers.



You can assign the Rotary Sound [Fast/Slow] button function to the foot switch located on the left side of the Expression Pedal (p. 90).

### **Reverb Effect**

Reverb is an effect that adds a sense of spaciousness to the sound, creating the illusion of playing in a large or small concert hall, a large or small room, a small club, etc.



Press the Reverb [ ▲ ] or [ ▼ ] buttons in the far left side of the Part Balance section to adjust the overall Reverb amount.

When you press the up button [  $\blacktriangle$  ], additional Reverb is applied. Pressing the down button [  $\blacktriangledown$  ] decreases the Reverb level.



You can also select the type of Reverb you wish and the level for each individual Part. For details refer to "Changing the Reverb Type" (p. 87) and "Changing the Reverb Depth" (p. 88).

### **Sustain Effect**

Sustain allows you to add a Sustain effect or decay to each voice after the keys are released. The Sustain effect can be added simultaneously to the Upper (except the Solo Part), Lower, and Pedal Bass voices.

- 1. Press the [Effect] button.
- 2. Use the [ ◄] and [►] Menu button to select the "Sustain."
- **3.** Use the  $[ \lhd ]$  and  $[ \rhd ]$  Part button to select the desire part.
- 4. Use the [-] and [+] Value buttons to switch ON or OFF.
- 5. To return to the basic screen, press the [Effect] or [Display/Exit] button.

The basic screen will reappear.



The length of Sustain can be modified independently for each keyboard (p. 88).

# **Using the Play Functions**

# Using the Lower Keyboard to Play the Bass Voice — [To Lower] Button

By using the [To Lower] button, you can sound the Pedal Bass voice by playing the root note (see p. 110) of a chord on the Lower keyboard in the area that is playing the Lower voice.



If no portion of the Lower keyboard is sounding the Lower voice (the [Manual Drums] button is ON), the Pedal Bass voice will not sound.

#### Pedal Bass





- 1. Select a Pedal Bass voice (p. 22).
- 2. Press the [To Lower] button (indicator lit).

When you play a chord in the area of the Lower keyboard that sounds the Lower voice, the Pedal Bass voice will also be heard and will play the root note.

Now when you play C/E/G on the Lower keyboard, the C (bottom note) will also play the Pedal Bass voice. In this way, the Pedal Bass voice will be played by the root note of the chord you play on the Lower keyboard.

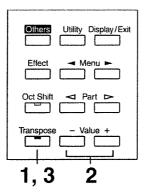
If the Leading Bass function is assigned to the Foot Switch (p. 90), the lowest note you play in the Lower keyboard will sound the Pedal Bass voice.



If the [To Lower] is ON, the Pedal Bass voice will not be heard from the Pedalboard.

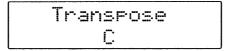
## Transposing to a Different Key (Transpose Button)

This function allows you to transpose the keyboard to another key in semitone steps. For example: you may play in the familiar C major scale while your music will sound in any key of your choice.



- 1. Press the [Transpose] button (indicator will flash).
- 2. Set the transpose value using the [-] and [+] Value buttons.

Each press of the [-] or [+] Value button transposes the key a semitone. Acceptable values range from Ab to G (in semitone steps).





By pressing the Value [-][+] buttons simultaneously, you can restore the default setting C.

3. Press the [Transpose] button to return to the basic screen.

If the transpose function is set to any key other than C, the Transpose button indicator will be lit. If the pitch is not transposed (i.e., the key is C), the [Transpose] button indicator will be dark.



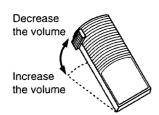
The transposition setting is stored in the Registration. For details on the settings that are stored in the Registration, refer to "Settings That Are Stored After the Power Is Turned Off" (p. 109).



You can change the timing at which the transposition settings saved in a Registration will be recalled. For details refer to "Registration Transpose Update (Transpose Setting Recall Timing)" (p. 93)

# Adjusting the Overall Volume Using an Expression Pedal

You can adjust the entire volume using an Expression Pedal. When you depress the Expression Pedal, the volume increases. The volume decreases as you tilt the pedal back.





You can also specify whether the Expression Pedal will or will not control the volume during the recording of music data (p. 79).



Likewise you can specify whether the Expression Pedal will or will not control the volume during the playback of recorded music data (p. 80).

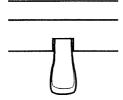


The volume of a song file that has not been created on an Atelier (SMF Song Files) cannot be controlled from the Expression Pedal.

# Adding Decay to the Sound (Damper Pedal)

When you depress the Damper (Sustain) pedal, a decay effect will be added to the voices. While you continue depressing the damper pedal, notes will be sustained even if you release the keys.

By default the decay effect will be applied to the voices played on the Lower keyboard.





You can modify the setting so that decay is applied to notes played on the Upper keyboard (p. 91).



Decay cannot be added to the Solo voices.



Decay can not be applied to Pedal Bass voices played on the Lower keyboard (when the [To Lower] button indicator is lit).

# **Using the Foot Switch**

The instrument is provided with a Foot Switch, one on left side of the Expression Pedal. You can switch between Fast/Slow for the Rotary effect by pushing the left switch with your foot.



With the factory settings, the following function is assigned to the left Foot Switch.

**Left Foot Switch** Switch the Rotary effect between Fast/Slow

### 1. Press the left Foot Switch toward the left.

The Rotary effect will switch between "Fast" and "Slow" each time you press the Foot Switch.



You can also change the function assigned to the left Foot Switch. Please refer to "Left Foot Switch Assignment" (p. 90).



You can select the keyboard to which the effect will apply when you operate the Foot Switch. Please refer to "Glide Destination" (p. 91).

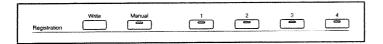


If the Utility menu item Registration Shift is ON, the left Foot Switch will be dedicated to switching through the Registration buttons (p. 90).

# **Using the Registration Buttons**

The AT-20R allows you to store sound settings and panel settings such as 4 in the Registration buttons. There are a total of 4 Registration buttons, and one set of panel settings can be stored in each, allowing you to register a total of 4 different panel settings. Each set of panel settings that has been stored in a Registration button is called a "Registration."

This provides a convenient way to change large numbers of panel settings during a performance, or to recall a complex panel setting.





Settings that have been stored to Registration buttons [1]–[4] are remembered even if the power is turned off. If you wish to restore the settings stored in the Registration buttons to their factory settings, use the "Factory Reset" operation (p. 16).

## **Storing Registrations**

- 1. Make all the panel settings that you wish to store.
- 2. While holding down the [Write] button, press one of the Registration buttons [1] [4].

The panel settings will be stored in the selected Registration button.



With the settings of Registration buttons [1] - [4] considered as one set, a single floppy disk can store up to 99 sets of data (p. 53).



For details on the settings that are stored in a Registration, refer to "Settings That Are Stored in the Registration Buttons" (p. 109).

# **Recalling a Registration**

### ■ How to Recall a Registration

- Recalling Voices and Other Panel Settings
  - 1. Press a Registration button [1]–[4].
- Recalling Settings for Rhythm and Automatic Accompaniment in Addition to the Panel Settings
  - 1. Press and hold a Registration button [1]–[4] for several seconds.

### ■ Changing the Timing of Recalling Registrations

Settings for Rhythm play and Automatic Accompaniment are recalled when you continue holding a Registration button [1]–[4] for several seconds, but you can change this so that the settings are recalled the instant you press the button.

- 1. Press the [Utility] button located to the left of the display.

¶Arran9erUpdate⊮ DELAYED

3. Press the [-] and [+] Value buttons to switch between "DELAYED" and "INSTANT."

To return to the basic screen, press the [Utility] or [Display/Exit] button.

**DELAYED** When you press and hold a Registration button [1]–[4] for several seconds, the settings for Rhythm and Automatic Accompaniment will be recalled in addition to the panel settings. If you press and immediately release a Registration button [1]–[4], only the settings that are not related to Rhythm or Automatic Accompaniment will be recalled.

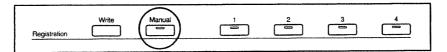
**INSTANT** Settings for Rhythm and Automatic Accompaniment will be recalled the instant that you press a Registration button [1]–[4].



You can change the timing of recalling the transpose setting when you press a Registration button [1]–[4]. For more information, please refer to p. 93.

# Automatically Registering When You Switch Panel Settings

When the [Manual] button is ON (lit), all panel settings you make will be stored automatically in the [Manual] button as they are made, thus updating the Registration that had been previously saved. If you change to a preset Registration [1]–[4], it is possible to return to the previous panel settings by pressing the [Manual] button.

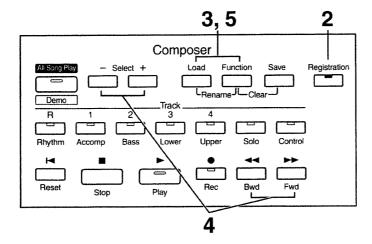




The settings stored in the [Manual] button returns to the default settings while the power is turned off.

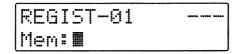
# Assigning a Name to a Registration Set

When saving Registration sets, names like "REGIST-01 – 99" will be assigned by default, but you can assign a name that will help you later to identify the contents of the Registration set.



- 1. Make sure that the disk drive contains a disk that was formatted (p. 64) by the AT-20R.
- 2. Press the [Registration] button (indicator lights).
- 3. Press the [Load] button and the [Function] button simultaneously.

4. Use the [-] and [+] Composer Select buttons to move the cursor, and use the [Bwd]/[Fwd] buttons to select a character.



The following characters can be selected.

You can also use the [Reset] button to delete a character, and the [Rec] button to insert a space.

**5.** When you have finished assigning the name, simultaneously press the [Load] button and the [Function] button once again.

The Registration set in the AT-20R's internal memory has now been named.

To return to the basic screen, press the [Registration] button or the [Display/Exit] button.



It is not possible to save during the process of assigning a name.

### ■ Copying Only the Name of a Registration

Here's how you can copy just the name of a Registration without copying its performance data.

- 1. Insert the floppy disk that contains the Registration that you wish to copy into the disk drive.
- 2. Press the [Registration] button to make the indicator light.
- 3. Use the Composer Select [-] and [+] buttons to select the Registration whose name you wish to copy.
- **4.** Simultaneously press the [Load] button and [Function] button.

5. Press the [Load] button.

Only the name of the Registration will be recalled.

**6.** Simultaneously press the [Load] button and [Function] button.

## Saving Registration Sets to a Floppy Disk (Save Button)

With the settings of Registration buttons [1] – [4] considered as one set, a single floppy disk can store up to 99 sets of data. We recommend that complex panel settings or Registrations you wish to keep be saved on disk. If AT-20R Registrations that you create are saved on a floppy disk, they can then be recalled later or recalled for use on another AT-20R

- 1. Make sure that the disk drive contains a disk that was formatted by the AT-20R.
- 2. If the [Registration] button indicator is not lit, press the [Registration] button (indicator lights).
- 3. Use the [-] and [+] Composer Select buttons to select the number that you wish to save to.

Numbers which have not been used in the Saving operation will be displayed as "- - -".

To cancel the operation, press the [Registration] button.

4. Press the [Save] button to execute the save operation.

When the Registration set is saved to the floppy disk, the indication of "---" will change to "USE."

When saving is completed, the basic screen will reappear.

If you have assigned a name, the Registration set will be saved to floppy disk with that name.

### • If the Following Screen Appears

If you press the [Save] button for a Registration number with the word "USE" indicated, the following message will appear.

#### O If you wish to update the contents of the Registration deta

1. Press the [Rec] button.

The Registration will be rewritten.

# O If you wish to save the data without erasing the Registration set already on disk

1. Press the [Reset] button to cancel the procedure.

Rewriting of the Registration will be canceled.

- 2. Use the [-] and [+] Composer Select buttons to select a number for which "- -" is displayed on the upper right of the screen.
- 3. Press the [Save] button to save the Registration set.

When the data has been saved, the basic display will reappear.

When the Registration set is saved to the floppy disk, the indication of "---" will change to "USE."

# Loading Previously Saved Registration Sets Into the AT-20R (Load Button)

Here's how to recall a previously saved Registration set from the floppy disk into the memory of the AT-20R.

Registrations can be selected in the following two ways.

· Loading a Set of Registrations

You can load a "set" (a collection of settings for Registration buttons [1] – [4]) from floppy disk.

· Loading an Individual Registration

You can load settings for an individual Registration button [1] – [4].



Be aware that when you load Registrations from a disk, the Registrations that were previously in internal memory will be lost. It is a good idea to save important Registrations to floppy disk (see p. 53).

### ■ Loading a Set of Registrations

Registrations Sets saved to a floppy disk can be loaded back into the instrument.

- 1. Insert the floppy disk into the disk drive.
- 2. Press the [Registration] button (indicator lights).
- **3.** Use the [-] and [+] Composer Select buttons to select the Registration set that you wish to load.

Мн	Reg	i	:	ŧ.	USE
Mem	=				

To cancel the procedure, press the [Registration] button.

4. Press the [Load] button to execute loading.

When loading is complete, the basic screen will reappear.

### ■ Loading an Individual Registration

You can load any desired individual Registration to any desired Registration button.

- 1. Insert the floppy disk containing the Registration into the disk drive.
- 2. Press the [Registration] button (indicator lights).
- **3.** Use the [-] and [+] Composer Select buttons to select the Registration set that you wish to load.
- 4. Press the [Function] button.
- 5. Use the [Bwd]/[Fwd] buttons to specify the Registration button number to be loaded.

- 6. Press the [Rec] button.
- 7. Use the [Bwd] or [Fwd] buttons to specify the storage-destination Registration.

**8.** Press the [Rec] button.

The following display will appear.

To cancel the procedure, press the [Reset] button.

**9.** Press the [Rec] button once again.

When the Registration has been loaded, the basic screen will reappear.

## **Deleting a Previously Saved Registration Set**

Here's how to delete a Registration set that was saved to a floppy disk.

- 1. Insert the floppy disk into the disk drive.
- **2.** Press the [Registration] button (indicator lights).
- **3.** Use the Composer Select [-] and [+] buttons to select the Registration set that you wish to delete.
- 4. Simultaneously press the [Function] button and the [Save] button.

The following display will appear.

To cancel the operation, press the [Reset] button.

5. If you are sure that you wish to delete the data, press the [Rec] button.

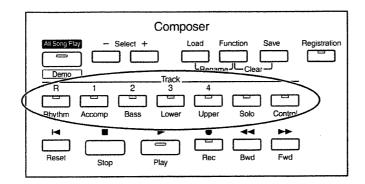
When the Registration has been deleted, the basic screen will reappear.

When a Registration set has been deleted, the indication of "USE" will change back to "--." If you had assigned a name to the Registration set you deleted, the name will revert back to "REGIST-XX."

REGI	1.	P0400 00000 61981
Mem:		

# Record and Playback Your Performance

The AT-20R's Composer allows you to record (in digital form) what you played on the instrument.



#### What is a Track?

The Composer operates like a tape recorder with the capability of recording seven separate tracks. You can record different kinds of performance data into each track:

**Rhythm** Rhythm performances, Manual Drums **Accomp** Automatic Accompaniment (except Bass)

Bass Pedal Bass voice, Bass part of the Automatic Accompaniment

Lower Lower voice
Upper Upper voice
Solo Solo voice

**Control** Panel operations, Expression Pedal operations



More information about the track assignments when playing commercial SMF data, please refer to page 61.

During recording, the control track will store the operations as follows.

#### Panel Operations

(Voice selections, Tempo changes, Rotary fast/slow etc.)

Newly recorded performance data will be added without erasing the previously recorded data.

If you wish to erase all the recorded data and record new performance data, use the editing function "Erase" (erase performance data) to erase the data (p. 84).

#### Expression Pedal Operations

This will depend on the expression function in the Function menu. The way in which expression operations are recorded will depend on the setting of the "Exp. Source" item "Recording" in the Function menu.

**PEDAL** Expression pedal operations will be recorded.

If expression data has already been recorded, the previously recorded

data will be erased as the new data is recorded.

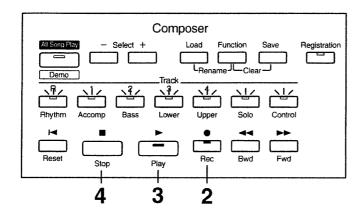
**COMPOSER** Expression pedal operations will not be recorded.

If expression data has already been recorded, the previously recorded

data will remain without being erased.

For details refer to "How the Expression Pedal Functions (Exp. Source)" (p. 79).

## **Recording Performances (Rec Button)**



### 1. Select the panel settings needed for recording the performance.

If a floppy disk is in the disk drive, press the Eject button (p. 37) and remove the floppy disk.

### 2. Enter the recording standby mode by pressing the [Rec] button.

The [Rec] button's indicator will light. The [Play] button and all track indicators will flash.

### 3. Press the [Play] button to start recording.

When you press the [Play] button, the metronome will play two measures (bars) of count-in before recording begins.

If you wish to use Rhythm and Automatic Accompaniment as you record, press the [Start/Stop] button instead of the [Play] button to begin recording. Also, if the [Sync] button is lit (i.e., if Sync Start is ON), recording will begin the instant you play the Lower keyboard.

### 4. Press the [Stop] button when you have completed your recording.

The Track indicator where a performance song is recorded will change from a flashing to a constant light.

If you press the [Reset] button instead of the [Stop] button, the unit resets (returns) to the beginning of the song just recorded.



When you press the [Intro/Ending] button (or [Start/Stop] button) while recording a Rhythm performance or Automatic Accompaniment, the Rhythm performance and Automatic Accompaniment will stop. However, the recording itself will continue. Press the [Stop] button to stop recording.



The Play and Stop functions can both be assigned to the foot switch located on right side of the Expression Pedal. Each touch of the switch will alternate the operation between the Play and Stop functions (p. 90).



You can also choose to cancel the metronome count-in before recording starts (p. 78).



If you press the [Rec] button when a song has been selected from the floppy disk, the selected song will be completely loaded into the AT-20R and the Composer will enter into the recording standby mode.

If you wish to record a new song, use the [-] and [+] Composer Select buttons to first select "NEW SONG" before pressing the [Rec] button. Alternatively, eject the disk from the floppy disk drive before pressing the [Rec] button.

MEW 50NG 1 1:120

#### • If the Following Screen Appears

Internal Memory Near Limit

When the instrument's memory is nearing capacity.

Memory Full

When recording was automatically canceled because the memory limit was reached.

## **Recording Each Part Separately**

As you listen to the recorded performance, you can record each Part in sequence. In this method, each part is recorded one after another: first the Rhythm part, then the bass part, etc. If there are any previously recorded performances, you can listen to them as you record additional parts.

- 1. Select the panel settings needed for recording the performance.
- 2. Use the [Bwd] / [Fwd] buttons to select the desired measure (bar) when you start recording.

If you wish to start recording from the beginning of the song, press the [Reset] button.

3. Press the [Rec] button to enter the recording standby mode.

The [Rec] button indicator will light, and the [Play] button and the track buttons of unrecorded tracks will blink.

The button indicators of tracks that are already recorded will light.

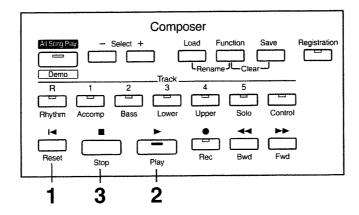
4. Press the [Play] button to start recording.

When you press the [Play] button, the metronome will play two measures (bars) of count-in before recording begins. As you listen to the performance song previously recorded, record the Part into a new Track.

5. Press the [Stop] button when your recording is completed.

The track button indicators for which performance data has been recorded will be lit.

# Playing Back a Performance Song (Play Button)



# 1. Press the [Reset] button to return to the beginning of the first measure (bar).

The location at which playback will start will return to the beginning of measure 1. When you wish to play a performance song from a specific point, use the [Bwd] / [Fwd] buttons to select the desired measure (bar).

### 2. Press the [Play] button to start playback.

After playback reaches the end of the performance, it will stop automatically.

### 3. To stop playback at any point, press the [Stop] button.

If you press the [Reset] button instead of the [Stop] button, the unit resets (returns) to the beginning of the data.



If you press the [Play] button while holding down the [Stop] button, the metronome will play two measures (bars) of count-in before playback starts.



The [Play] and [Stop] functions can be assigned to the foot switch located on left side of the Expression Pedal. Each touch of the switch will alternate the operation between the Play and Stop functions (p. 90).



You can specify whether or not the Expression Pedal will affect the playback and what you play while Atelier music data is being played back (p. 80).



If you use the Rhythm or Automatic Accompaniment immediately after having loaded and played back a song other than an Atelier performance song, such as SMF's, etc., the playback may not sound right (the voices may have changed, etc.) To prevent this from happening, press the [Reset] button before playback.

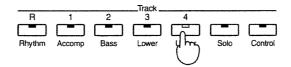


When a song other than an Atelier performance song (such as an SMF Song File) is loaded and played back, the Expression Pedal will have no effect on the playback volume.

# Silencing a Specific Track — Track Mute

The button indicators for tracks in which performances were recorded will be lit. By turning off these track button indicators, you can temporarily silence the sound. This is referred to as "Track Mute."

#### **Example: Muting the sound for Upper Part**



1. Press a track button whose indicator is lit to turn the light off.

The track whose indicator was turned off will be muted (silenced).

2. Press the track button once again (indicator lights).

The part that had been muted will return to normal and will be heard.

### ■ Track Assignments When Playing Commercial SMF Data

• When you playback without loading (p. 70, p. 72) the SMF data

Button	Channel
[R]	10
[1]	
[2]	2
[3]	3
[4]	4
[Solo]	5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16

• When you first load and then playback the SMF data

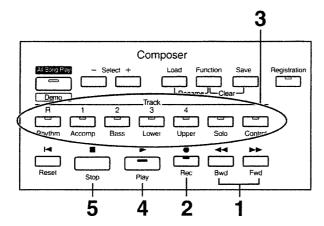
Button	Channel
[R]	10
[1]	Performance data other than 2 and 10
[2]	2
[3]	Nothing (Performance data from the ATELIER series can be recorded)
[4]	Nothing (Performance data from the ATELIER series can be recorded)
[Solo]	Nothing (Performance data from the ATELIER series can be recorded)

## **Re-Recording**

If you made a mistake in your performance during recording, you can re-record just a portion of the musical data in the track.



If you wish to re-record with different settings for voices, tempo, part balance, erase the recorded song (p. 63) and re-record again. If the Control track still contains data from before you re-recorded, the volume or sounds may change during playback.



- 1. Use the [Reset] button or the [Bwd] / [Fwd] buttons to move to the measure (bar) where you wish to start re-recording.
- 2. Press the [Rec] button to enter into the recording standby mode.

The [Rec] button indicator will light, and the indicators of the [Play] button and the track buttons of unrecorded tracks will flash. The track buttons of tracks already-recorded will light.

3. Press the Track button which you wish to re-recording (indicator flashes).

The song data of the specified Track (with the exception of the Control Track) will be erased as new song data is recorded.

When the indicator of a Track is lit constantly, no song data has been recorded on that Track.

4. Press the [Play] button to start recording.

When you press the [Play] button, the metronome will play two measures (bars) of count-in before recording begins.

5. Press the [Stop] button when your recording is completed.

The button indicators of tracks which were re-recorded will change from flashing to being constantly lit.



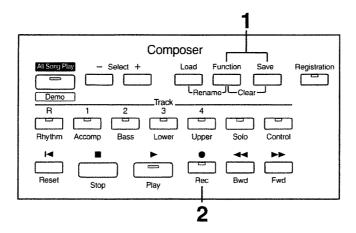
If you wish to keep the existing Expression Pedal data, and record only the panel operations, you can make settings to prevent the operation of the Expression Pedal from being recorded (p. 79).



You can use punch-in recording (p. 74) to re-record only the area that you specify.

# **Erasing a Performance Song (Clear)**

If you wish to discard your recording and re-record from the beginning, or if you wish to record a new performance, you must erase the previously-recorded data.



1. Press the [Function] and [Save] buttons simultaneously.

The following message, asking you to confirm your choice, will be displayed.

To cancel the procedure, press the [Reset] button.

2. If you are sure that you wish to erase the song, press the [Rec] button.

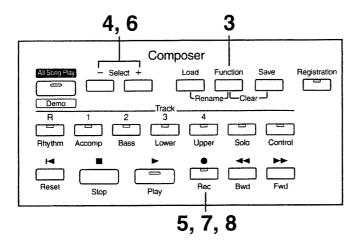
## **Formatting Disks**

Before any floppy disk (new or used) can be used with the AT-20R, it must first be formatted (prepared).

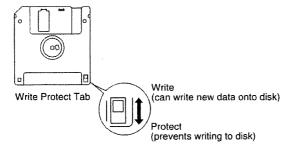
Floppy disks must first be "formatted" (initialized) before they can be used by the AT-20R to store data. "Formatting" is the process of erasing any data which may have been on the disk and making the format of the floppy disk match the format of the device. The AT-20R cannot use a floppy disk that has a format differing from its own format.



Formatting a disk will erase any data that may have been stored on it. Carefully check any previously used disk to be sure it doesn't contain any valuable data.



1. Make sure that the write protect tab of the floppy disk is in the "Write" (permit) position.



2. With the label of the floppy disk facing upward, insert it into the disk drive until it clicks into position.

The disk drive is located to the upper right of the AT-20R's keyboard.



Please DO NOT insert the floppy disk into the gap between the cabinet the lid.

3. Press the [Function] button.

4. Use the [-] and [+] Composer Select buttons to select "Disk Utility."

Disk Utility **¤** Yes:REC

- 5. Press the [Rec] button.
- **6.** Use the [-] and [+] Composer Select buttons to select "Format Disk."
- 7. Press the [Rec] button.

The following message, asking you to confirm, will be displayed.

To cancel the procedure, press the [Reset] button.

8. Press the [Rec] button again to perform the Format.

While formatting is in progress, the following display will appear.

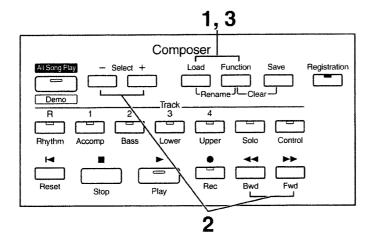
When formatting is completed, the basic screen will reappear.



Never attempt to remove the floppy disk until formatting is complete.

# Changing the Name of a Performance Song (Rename)

A name is automatically assigned to a performance song that you record. However, at some point you may wish to change the name to something more meaningful.



- 1. Press the [Load] and [Function] buttons simultaneously.
- 2. Use the [-] and [+] Composer Select buttons to move the cursor, and use the [Bwd]/[Fwd] buttons to select a character.

The following characters can be selected when changing a name:

space! "#% & '() \* +, -. /;; =? ^ \_ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z 0 1 2 3 4 5 6 7 8 9

To delete a character, press the [Reset] button. A space can be inserted by pressing the [Rec] button.

**3.** To confirm the new name, simultaneously press the [Load] and [Function] buttons once again.

The new name is now inserted.

NOPE

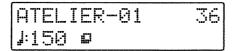
It is not possible to save during the Rename procedure.

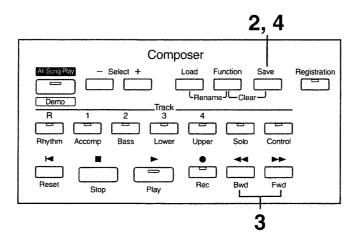


You cannot directly change or edit the name of a performance song stored on a disk. The song must first be loaded (p. 70) into the instrument, edited, and then saved to disk again.

# Saving Performance Songs Onto Floppy Disk (Save Button)

The performance data that you recorded will disappear when the power of the AT-20R is turned off. If you wish to keep the performance data, you can save it on a floppy disk. If the performance data has never been saved to a floppy disk, a " you can save it on a floppy disk. If the performance data has never been saved to a floppy disk, a " you can save it on a floppy disk. If the performance data is saved to a floppy disk, this symbol will no longer be displayed.





- 1. Insert a floppy disk formatted (p. 64) on the AT-20R into the disk drive.
- 2. Press the [Save] button to save the performance.
- 3. Use the [Bwd] / [Fwd] button to select the format.

You can select either "ORIGINAL" or "SMF" format.

ORIGINAL Save data in Atelier format
SMF Save data in SMF format

Save Format ORIGINAL«/»/SAVE

### 4. Press the [Save] button to confirm the type of format.

While performance data is being saved to the floppy disk, the following display will appear.



Music data that was saved in Atelier format cannot be played back correctly on instruments other than the Atelier series.



For a detailed explanation of the SMF format, refer to "Saving in SMF Format" (p. 69).

### • If the Following Screen will Appear

If the floppy disk already contains performance data of the same name, the following display will appear.

- O If you wish to update the contents of the performance data
- Press the [Rec] button.
- O If you wish to save the data without erasing the performance data already on floppy disk you must rename the song
- 1. Press the [Reset] button to cancel saving.
- 2. Change the name (p. 66), and perform the Save procedure once again.

### ■ Saving in SMF Format

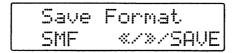
Since the AT-20R allows you to save data in SMF format, performance data you've recorded using the Atelier's organ sound generator can easily be edited on an external sequencer.

Alternatively, since the sound generator of the Atelier organ can be controlled from MIDI In, data that was saved in SMF format can be played back on your external sequencer, thus playing the Atelier via MIDI.



SMF (Standard MIDI File) is a data format that was created as a standardized way to exchange music data between devices made by different manufacturers.

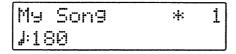
- 1. Insert a floppy disk that was formatted by the AT-20R (p. 64) into the floppy disk drive.
- 2. Press the [Save] button.
- 3. Use the [Bwd] / [Fwd] buttons to select "SMF" as the format.



4. Press the [Save] button to confirm the type of format.

The data will be saved in SMF format.

Performance data that was saved in SMF format will be indicated by a "∷" symbol.





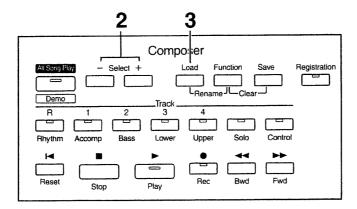
Saving performance data in SMF format (SMF) requires a longer time than saving it in Atelier format (ORIGINAL).



Performance data saved by the AT-20R will not playback correctly on any device other than the Atelier series.

# Loading Performance Songs Into the AT-20R

To edit (p. 82) or re-record a performance song that is stored on a floppy disk, you must first load that song into the instrument.



- 1. Insert the correct disk into the disk drive.
- 2. Press the [-] or [+] Composer Select button to select the performance song you wish to load.
- 3. Press the [Load] button to carry out the load operation.

### • If the Following Screen will Appear

The following message below is shown when the performance song in the unit has not been saved to floppy disk.

- O If you wish to erase the performance song
- 1. Press the [Rec] button.
- O If you wish to save the performance song on a floppy disk
- 1. Press the [Reset] button to cancel the procedure.
- 2. Save the song onto a floppy disk (p. 67).



If you load a song other than Atelier performance songs (SMF song files, etc.), the Rhythm (drum) Part will automatically be loaded into the Rhythm track, and the other Parts loaded into the Accomp and Bass tracks.



If loading is canceled because the memory limit has been reached, the following message will be displayed:

Memory Full

### ■ Layering a New Recording onto SMF Format Music Data

You can load SMF format music data into the AT-20R and play it back while you record your own playing as an additional layer.

- 1. Insert a floppy disk containing SMF format music data into the floppy disk drive.
- 2. Use the Composer select [-] [+] buttons to select the music data that you wish to load into the AT-20R.
- 3. Press the [Load] button.

The selected music data will be loaded.

When SMF format music data is loaded into the AT-20R, it will be stored in the following tracks (p. 61).

**Rhythm** The Rhythm performance (channel 10)

**Bass** The Bass performance (channel 2)

**Accomp** Performance data other than the Rhythm and Bass (except channels 2 and 10)

- **4.** Make the panel settings that you wish to record.
- 5. Use the [Bwd] button and [Fwd] button to move to the measure at which you wish to begin recording.
- 6. Press the [Rec] button to enter record-ready mode.

The [Rec] button indicator will light, and the [Play] button indicator will blink.

Press the [Play] button to begin recording.

As you record, the music data that was loaded into the AT-20R will play back.

**8.** Press the [Stop] button to stop recording.



The performance data you recorded can be saved on a floppy disk (p. 67).



Commercially sold music files can also be loaded into the AT-20R, but for reasons of copyright protection, cannot be saved in SMF format.

# Playing Back Performance Songs Stored on Floppy Disk

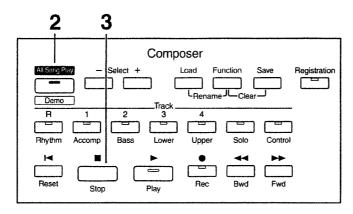
In addition to playing back the music you recorded on the instrument and saved to a floppy disk, AT-20R also lets you enjoy a wide variety of commercially available song files, such as defined below.

#### **SMF Song Files**

The Standard MIDI File (SMF) format was designed to provide a means for exchanging performance data among a wide variety of devices. In addition to the song files described earlier, the AT-20R is also capable of playing back any Standard MIDI File compatible with the GM or GS formats.



If you wish to purchase SMF music data, please contact the dealer where you purchased the AT-20R.



### 1. Insert the correct floppy disk into the disk drive.

When the performance song loaded from a disk is a Standard MIDI File, ":: " will be displayed after the file name.

# 2. When you wish to play back all the performance songs in order, press the [All Song Play/Demo] button.



When you only wish to play back one song, use the [-] and [+] Composer Select buttons to select the song, then press the [Play] button.

3. To stop playback, press the [Stop] button.

## **Erasing Performance Songs Stored on Disk**

Follow the steps below to erase a performance song that was saved onto a floppy disk.

- 1. Insert the floppy disk into the disk drive.
- 2. Press the [Function] button.
- 3. Press the [-] or [+] Composer Select button to select "Disk Utility."

- 4. Press the [Rec] button.
- **5.** Press the [-] or [+] Composer Select button to select "Delete Song."

6. Press the [Rec] button.

To cancel the procedure, press the [Reset] button.

- **7.** Using the [Bwd]/[Fwd] buttons, select the performance song to be erased.
- 8. Press the [Rec] button.

You will see the following:

**9.** To go ahead with the erasure, press the [Rec] button again.

To cancel the procedure, press the [Reset] button. When erasing is completed, the basic screen will reappear.

# Re-Recording Part of Your Performance — Punchin Recording

After you have recorded a performance, you can re-record a specified portion of the performance. With this method, you listen to the recorded performance, and re-record just the desired area. This recording method is called "Punch-in Recording."

#### To use Punch-in Recording, you can...

• Turn on the Function menu item "Punch In/Out," and specify the area that you wish to re-record.

• Use the Composer to play back the recorded performance, and re-record just a specific portion.

#### O Specify the Area that You Wish to Re-record

- 1. Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Punch In/Out."

- 3. Press the [Rec] button.
- 4. Use the[Bwd] / [Fwd] buttons to select "ON."

Punch	In/Out
OH	%/%/REC

ON Punch-in RecordingOFF Normal Recording

- 5. Press the [Rec] button.
- **6.** Use the [Bwd] / [Fwd] buttons to select "from" (the first measure that you wish to re-record).

Funch	I/0	Meas.
from	oftens	X/»/REC

- 7. Press the [Rec] button.
- **8.** Use the [Bwd] / [Fwd] buttons to select "for" (the number of measures that you wish to re-record).

**9.** Press the [Function] or [Display/Exit] button.

#### O Re-record While You Listen to the Song

- 10. Enter the recording standby mode by pressing the [Rec] button.
- Press the Track button which you wish to re-recording (indicator flashes).
- 12. Press the [Play] button.

When you press the [Play] button, the metronome will play two measures (bars) of count-in before recording begins.

When you reach the first measure of the specified area, recording will begin. When the specified area ends, recording will end, and playback will resume.

While the song is playing back or recording, the [Rec] button's indicator will be lit as
follows.

While the performance is playing back While you are re-recording

The [Rec] button's indicator will flash
The [Rec] button's indicator will light constantly



When recording has ended for the specified area and the data is once again playing back, the [Rec] button's indicator will resume flashing.

#### 13. Press the [Stop] button to stop the song.

The indicator of the track button which recorded the performance will light.



When Punch-in Recording ends, the Function menu item "Punch In/Out" will return to OFF (normal recording). If you wish to use punch-in recording once again, you must make the "Punch In/Out" setting once again.

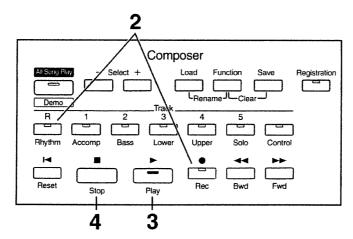
# Repeatedly Layering Performances Over a Region — Loop Recording

You can repeatedly record over a specified area to build up multiple performances. This type of recording is called "Loop Recording."

This recording method is convenient when you wish to layer drum sounds individually for the Rhythm part.



"Loop Recording" can be used only when recording the Rhythm part.



- 1. Press the [Manual Drums] button to select a Drum Set or Sound Effect Set (p. 28).
- 2. Enter the recording standby mode by pressing the [Rec] button and [Rhythm] button.

The [Play] button and [Rhythm] button indicators will flash.

### 3. Press the [Play] button.

When you press the [Play] button, the metronome will play two measures (bars) of count-in before recording begins.

When recording reaches the end of the measure, it will return to the beginning of the measure, allowing you to continue recording to layer additional notes.



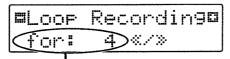
You can change the number of measures over which Loop Recording will occur. Please refer to "Changing the Number of Measures for Loop Recording" (p. 77).

4. Press the [Stop] button to stop recording.

#### O Changing the Number of Measures for Loop Recording

With the initial settings, Loop Recording will occur over one measure. In the Function menu you can change the number of measures over which Loop Recording will occur.

- Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Loop Recording."



The Number of Measures for Loop Recording

- 3. Use the [Bwd] button and [Fwd] button to select the number of measures for Loop Recording.
- 4. Press the [Function] or [Display/Exit] button.

The number of measures for Loop Recording has now been specified.

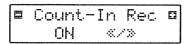
Use the procedure for Loop Recording to begin recording.

## **Settings for the Composer (Function Button)**

### **Count-in Recording**

This setting (ON/OFF) determines whether or not a metronome count-in (2 measures) will be heard after pressing the [Play] button on recording. (The count-in helps you to establish the tempo before you begin playing.)

- 1. Press the [Function] button.
- 2. Using the [-] and [+] Composer Select buttons, select "Count-In Rec."



Use the [Bwd]/[Fwd] buttons to turn it ON or OFF.

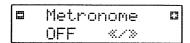
ON A two-measure count will sound before recording OFF No count will sound before recording

To return to the basic screen, press the [Function] button or the [Display/Exit] button.

## Changing the Metronome Setting

This setting determines whether or not the metronome will sound

- 1. Press the [Function] button.
- 2. Using the [-] and [+] Composer Select buttons, select "Metronome"



3. Use the [Bwd]/[Fwd] buttons to select OFF, REC, or ON.

OFF Not heard at all

REC Heard only while recording

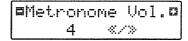
ON Heard constantly

To return to the basic screen, press the [Function] button or the [Display/Exit] button.

#### Metronome Volume

Carry out the steps below to adjust the volume of the metronome.

- 1. Press the [Function] button.
- 2. Using the [-] and [+] Composer Select buttons, select "Metronome Vol."



3. Press the [Bwd]/[Fwd] buttons to select the desired volume level (1–10).

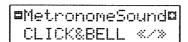
Increasing the value will raise the volume of the metronome.

To return to the basic screen, press the [Function] button or the [Display/Exit] button.

## Changing the Sound of the Metronome

You can choose one of 4 different sounds for the metronome.

- 1. Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Metronome Sound."



3. Press the [Bwd] / [Fwd] buttons to select the type of sound for the metronome.

CLICK&BELL Conventional metronome sound ELECTRONIC Electronic metronome sound VOICE ENG. Human voice (English) VOICE JPN. Human voice (Japanese)

To return to the basic screen, press the [Function] button or the [Display/Exit] button.

→ This setting remains stored in memory even while power is turned off.

### **Setting the Beat**

This setting determines the beat to be used when recording performance songs.

Numerator

1 or higher (denominator x 2-1)

Denominator 2, 4, 8, 16

- 1. Press the [Function] button.
- 2. Using the [-] and [+] Composer Select buttons, select "Beat."



- 3. Use the [Bwd]/[Fwd] buttons to set the numeric value for the numerator.
- 4. To set the denominator, use the [Rec] button to move the cursor from the numerator to the denominator.

Press the [Rec] button again if you wish to return to the numerator.

5. Use the [Bwd]/[Fwd] buttons to set the numeric value for the denominator.

To return to the basic screen, press the [Function] button or the [Display/Exit] button.

- \* When recording your performance with playing Rhythm performances or Automatic Accompaniment, the beat is set automatically.
- \* You cannot change the beat of previously recorded songs.

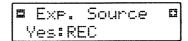
## How the Expression Pedal Functions (Exp. Source)

Specify how the Expression Pedal will function when your performance is being recorded and when ATELIER song files are being played back.

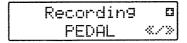
#### **■** Function During Recording

Specify whether Expression Pedal operations will be recorded or not while your performance is being recorded.

- 1. Press the [Function] button.
- 2. Press the [-] or [+] Composer Select button to select "Exp. Source."



- 3. Press the [Rec] button.
- 4. Press the [-] or [+] Composer Select button to select "Recording."
- 5. Use the [Bwd]/[Fwd] buttons to specify the pedal function.



PEDAL Expression Pedal movements will be re-

corded. The previous recording will be erased as new songs are recorded.

COMPOSER Expression Pedal movements will not

be recorded.

The previous data will remain without

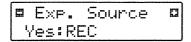
being erased.

To return to the basic screen, press the [Function] button.

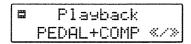
#### **■** Function During Playback

You can specify whether or not the Expression pedal will function while ATELIER song files are being played back.

- 1. Press the [Function] button.
- 2. Press the [-] or [+] Composer Select button to select "Exp. Source."



- 3. Press the [Rec] button.
- 4. Press the [-] or [+] Composer Select button to select "Playback."
- 5. Press the [Bwd]/[Fwd] buttons to specify the pedal function.



**PEDAL** Expression pedal will function. The Ex-

pression Pedal recording within the

song file will be ignored.

COMPOSER Expression pedal will not function. The

Expression pedal recording within the

song file will be effective.

PEDAL+COMP Expression pedal will function. Expres-

sion pedal recording within the song file

will also be effective.

To return to the basic screen, press the [Function] button.

## Muting Individual Channels of Performance Data

You can mute (silence) individual channels of performance data of SMF data (sold separately).

- \* It is not possible to mute the performance that you play on the AT-20R (except for the Rhythm and Automatic Accompanient)
- 1. Press the [Function] button.
- Use the Composer Select [-] [+] buttons to select "Ch.Mute."
- 3. Press the [Bwd] / [Fwd] buttons to select the channel that you wish to mute.

From the left, these are "1 Ch. (channel 1), 2 Ch. ... 15 Ch., and 16 Ch."

□Ch.Mute«/»/REC□ 1234567890123456

4. Press the [Rec] button.

©Ch.Mute≪/»/REC© -234567890123456

The number will change to "-," indicating that the corresponding channel has been muted.

5. Once again press the [Rec] button, and muting will be canceled.

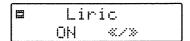
To return to the basic screen, press the [Function] button or the [Display/Exit] button.

- \* Channel mute will be defeated when you perform the following operations.
- Use the Composer Select [-] and [+] buttons to select different performance data.
- Press the [All Song Play/Demo] button to play performance data.

### Switching the Display of Lyrics On (Displayed) or Off (Not Displayed)

Some music files have Lyrics included and these Lyrics can be displayed on the screen. You can turn on or off the lyrics display of such music files.

- 1. Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Lyric."



3. Press the [Bwd] / [Fwd] buttons to switch the lyric display "ON (displayed)" or "OFF (not displayed)."

To return to the basic screen, press the [Function] button.

\* If you press a voice select button etc. while playing back music files that contains lyrics, the display screen will switch, and the lyrics will no longer be displayed. To re-display the lyrics, press the [Play] button once again.

## **Edit Menu (Editing Song Files)**

Song files that you record can be edited using five different functions.

The following editing functions are provided.

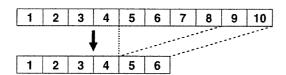
Delete measure	(p. 82)													
Delete Track	(p. 83)	 		•		_	_	-	-	-	-	-	-	•
Erase	(p. 84)				_									
Сору	(p. 85)	 	 	_	_	_		_	_	-		_	_	-
Quantize	(p. 86)	 	 _	_	_		_	_	_	_	_	_	_	_

\* Once you edit data, it cannot be restored to its original condition. As a precaution against accidents, we recommend that you save your song to a floppy disk before you edit it.

## Delete Part of the Recorded Song (Delete Measure (Bar))

This function lets you delete specified measures (bars) of the song from all tracks. When any part of the song file is deleted, subsequent recording will be moved forward to fill the gap.

Example: To delete measures (bars) 5-8



- 1. Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Edit Menu."

- 3. Press the [Rec] button.
- Use the [-] and [+] Composer Select buttons to select "Delete Measure."

To cancel the operation, press the [Reset] button.

- 5. Press the [Rec] button.
- Use the [Bwd]/[Fwd] buttons to specify "from" (the delete start measure).

- 7. Press the [Rec] button.
- Use the [Bwd]/[Fwd] buttons to specify "for" (number of measures from the delete start measure).

If you wish to delete from a certain measure (bar) to the last measure (bar), set for "ALL".

9. To execute the delete operation, press the [Rec] button once again.

The following screen will appear.

To cancel the operation, press the [Reset] button.

10.Press the [Rec] button to start deleting the measure.

When the recording has been deleted, the basic screen will reappear.

## Delete the Recording from a Track (Delete Track)

This function lets you delete the recording from a track that you specify.

#### What is a Track?

The AT-20R has seven tracks. These tracks record the following performance data.

Rhythm	Rhythm performance, Manual Drums	
Accomp	Automatic Accompaniment (except Bass and	
	Rhythm performance), SMF data (except Bass and Rhythm performance)	
Bass	Pedal Bass voice, Bass part of the Automatic Accompaniment, Bass part of the SMF data	
Lower	Lower voice	
Upper	Upper voice	
Solo	Solo voice	
Control Panel operations (ex.: switching the b		
	Expression pedal operations, Part Balance Vol-	
	ume	

- \* SMF data (except for data that was saved by the ATELIER series) stores the Rhythm track in channel 10, and the remaining musical data in the Accomp and Bass tracks (p. 61).
- 1. Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Edit Menu."
- 3. Press the [Rec] button.
- 4. Use the [-] and [+] Composer Select buttons to select "Delete Track."

To cancel the operation, press the [Reset] button.

5. Press the [Rec] button.

6. Use the [Bwd]/[Fwd] buttons to select the track that you wish to delete.

Settings:

RHYTHM, ACCOMP, BASS, LOWER, UPPER, SOLO, CONTROL

7. Press the [Rec] button.

The following display will appear.

To cancel the operation, press the [Reset] button.

8. Press the [Rec] button once again to execute the Delete Track function.

When the recording has been deleted, the basic screen will reappear.

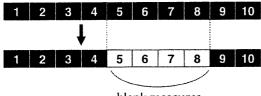
### **Erase Recording (Erase)**

You can erase a specified portion of the performance in a specified area without making the song shorter. This is called the "Erase" function.

As an alternative to the method of erasing all performance data in a specified area, you can erase the following contents of the performance.

ALL	All recording
NOTE	Notes played on the keyboard
CONTROL	Panel operations, Part Balance Volume
EXPRESSION	Expression pedal recording
VOICE	Voice settings
TEMPO	Tempo setting

Example: Erasing measures (bars) 5-8



blank measures

- 1. Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Edit Menu."
- 3. Press the [Rec] button.
- 4. Use the [-] and [+] Composer Select buttons to select "Erase Event."

To cancel the operation, press the [Reset] button.

- 5. Press the [Rec] button.
- 6. Use the [Bwd]/[Fwd] buttons to select the data to be erased.

Settings ALL, NOTE, CONTROL, EXPRESSION, VOICE, TEMPO

- 7. Press the [Rec] button.
- 8. Use the [Bwd] / [Fwd] buttons to select the track whose recording you wish to delete.

If you have selected EXPRESSION and TEMPO as the type of recording to be erased, the Track selection will not be available because the expression control recording is common to all tracks.

ALL, RHYTHM, ACCOMP, BASS, LOWER, Settings: UPPER, SOLO

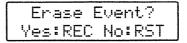
If you select "ALL", the recording will be erased from all tracks.

- 9. Press the [Rec] button.
- 10.Use the [Bwd] / [Fwd] buttons to specify "from" (erase start measure).
- 11.Press the [Rec] button.
- 12.Use the [Bwd] / [Fwd] buttons to specify "for" (number of measures from the erase start mea-

If you wish to erase to the last measure (bar), set "for: ALL."

13.Press the [Rec] button.

The following screen will appear.



To cancel the operation, press the [Reset] button.

14.Press the [Rec] button once again to execute the Erase function.

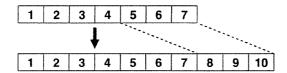
When erasure is complete, the basic screen will reappear.

### **Copy Recording (Copy)**

This function lets you copy a portion of recorded song to a different measure (bar) location in the same track.

\* If a recording already exists at the copy destination, it will be erased

**Example:** If you wish to copy measures (bars) 5–7 to measure (bar) 8



- 1. Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Edit Menu."
- 3. Press the [Rec] button.
- Use the [-] and [+] Composer Select buttons to select "Copy."

To cancel the operation, press the [Reset] button.

- 5. Press the [Rec] button.
- **6.** Use the [Bwd]/[Fwd] buttons to select the track whose recording you wish to copy.

Settings: ALL, RHYTHM, ACCOMP, BASS, LOWER, UPPER, SOLO, CONTROL

If you select "ALL", the recording in all the tracks will be copied.

- 7. Press the [Rec] button.
- 8. Use the [Bwd] / [Fwd] buttons to specify "from" (copy start measure).

Cory	«/»/REC
from:	5

- 9. Press the [Rec] button.
- 10.Use the [Bwd] / [Fwd] buttons to specify "for" (number of measures from the copy start measure).

Copy	«/»/REC
for:	3

To specify until the last measure (bar), set "for: ALL".

- 11.Press the [Rec] button.
- 12.Use the [Bwd] / [Fwd] buttons to specify "to" (copy destination measure).

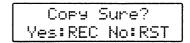
«/»/REC
8

If you select "END," the data will be copied following the end of the last measure.

- 13.Press the [Rec] button.
- 14.Use the [Bwd] / [Fwd] buttons to specify "time" (number of times to copy the data).

#### 15.Press the [Rec] button.

The following screen will appear.



To cancel the operation, press the [Reset] button.

16.To execute the Copy function, press the [Rec] button once again.

When copying is complete, the basic screen will reappear.

## Correct Timing Inaccuracies (Quantize)

Quantize is a function that corrects the timing of notes to a specified resolution.

For example even if you intend to play at quarter-note timing, the notes may be slightly earlier or later than precise quarter-note intervals. In such cases, you can quantize to quarter note (1/4) timing to adjust the timing of the notes to precise quarter-note intervals.

- 1. Press the [Function] button.
- 2. Use the [-] and [+] Composer Select buttons to select "Edit Menu."
- 3. Press the [Rec] button.
- 4. Use the [-] and [+] Composer Select buttons to select "Quantize."

To cancel the operation, press the [Reset] button.

- 5. Press the [Rec] button.
- 6. Use the [Bwd]/[Fwd] buttons to select the track whose recording you wish to quantize.

Settings:

ALL, RHYTHM, ACCOMP, BASS, LOWER, UPPER, SOLO

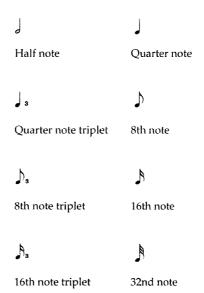
If you select "ALL", the recording in all the tracks will be quantized.

- 7. Press the [Rec] button.
- Use the [Bwd] / [Fwd] buttons to specify "from" (quantize start measure).
- 9. Press the [Rec] button.
- 10.Use the [Bwd] / [Fwd] buttons to specify "for" (number of measures from the quantize start measure).

To specify the recording to the last measure (bar), set "for: ALL".

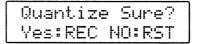
- 11.Press the [Rec] button.
- 12.Use the [Bwd] / [Fwd] button to specify "Res" (timing to which notes will be adjusted).

"Res" (timing to which notes will be adjusted) can be set to the following values.



#### 13.Press the [Rec] button.

The following display will appear.



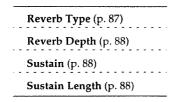
To cancel the operation, press the [Reset] button.

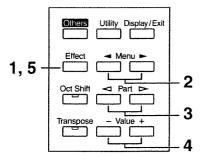
## **14.**To execute the Quantize function, press the [Rec] button once again.

When quantization is completed, the basic screen will reappear.

## **Adjusting the Effects**

You can customize the Reverb and Sustain effects by adjusting their values. The effects values are available for change in the following 3 menus:



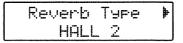


- 1. Press the [Effect] button.
- 2. Use the [ ] and [ ] Menu buttons to select the desired Menu.
- 3. When adjusting "Reverb Depth" or "Sustain Length", use the [ < □] and [ ▷ ] Part buttons to select the desired Part.
- 4. Use the [-] and [+] Value buttons to set the desired value.
- 5. To return to the basic screen, press the [Effect] or [Display/Exit] button.

The basic screen will reappear.

### **Changing the Reverb Type**

You can select from the following eight types of Reverb:

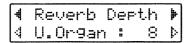


Display	Description	
ROOM 1	Reverberation of a small room	
ROOM 2	Reverberation of a small club	
ROOM 3	Reverberation of a large room	
HALL 1	Reverberation of a large concert hall	
HALL 2	Reverberation of a small concert hall	
PLATE	A bright, metallic Reverberation	
DELAY	An echo-like sound repeated several times	
PAN DELAY	Similarly to the above but where the sound is panned between the left and right speakers	

<sup>\*</sup> It is not possible to modify the delay time (delay interval) when "PAN DELAY" is selected.

#### Changing the Reverb Depth

The depth of the Reverb can be set (0–10) for the following 16 Parts. You can make independent settings for each Part.



Part Accomp (Automatic Accompaniment except

Bass), Rhythm, M.Drums, A.Bass (Bass part of Automatic Accompaniment), P.Bass, L.Organ,

L.Orch, U.Organ, U.Orch, Solo

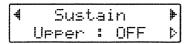
Settings 0-10

AUTO (Accomp, Rhythm, A.Bass)

For the three Parts of the Accomp, Rhythm and Accompaniment Bass, you have the option of selecting the "AUTO" setting. Parts for which "AUTO" is selected will be set to the Reverb Depth that is most suitable for the Rhythm currently selected.

### **Sustain Effect**

Sustain allows you to add a Sustain effect or decay to each voice after the keys are released.



Keyboard Upper, Lower, Pedal

ON The Sustain effect is applied to the voices

OFF The Sustain effect is not applied to the voices

### **Changing the Sustain Length**

The sustain length can be set independently (SHORT, MIDDLE (Medium) or LONG) for the Upper and Lower keyboards and Bass Pedalboard. You can make a separate setting for each keyboard.

∢Sustain Len9th Upper : LONG ⊅

Keyboard **Upper, Lower, Pedal**Settings **SHORT, MIDDLE, LONG** 

## **Various Other Settings (Utility Button)**

You can adjust the settings for the following 19 items (menus).

Initial Touch			
Initial Touch ON/OFF			
Pedal Bass Mode			
How the Pedal Bass voice can be played			
Solo Mode			
Changing how the Solo voice will sound			
Registration Shift			
Using the left Foot Switch to switch registrations			
Left Foot Switch Assignment			
Selecting function for left Foot Switch			
Damper (Sustain) Pedal Assignment			
Specifying which keyboard will be affected when you press			
the Damper (Sustain) pedal			
Glide Destination			
Setting determines which keyboard will be affected when you $% \left\{ 1,2,\ldots ,n\right\}$			
use the Glide effect.			
Manual Drums Set			
Selecting the Manual Drums type.			
Harmony Intelligence Type			
Selecting the Harmony Intelligence type.			
Chord Intelligence			
Chord Intelligence ON/OFF			
Chord Hold			
Chord Hold ON/OFF			
Registration Arranger Update			
Registration recall timing			
Registration Transpose Update			
Transpose setting recall timing			
Tx MIDI Channel			
MIDI output channel			
MIDI-IN Mode			
Send PC Switch			
Specifying Transmission of PC Numbers			
PC Number			
Specifying PC Numbers			
Master Tune			
Adjusting the basic pitch			
LCD Contrast			
Adjusting the contrast of the display			

- 1. Press the [Utility] button.
- 2. Press the [ ] and [ ] Menu buttons to select the desired menu.
- For "Initial Touch" or "Tx MIDI Channel," use the [ < □] and [ > ] Part buttons to select the keyboard or part.

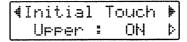
For "PC Number," use the [ $\triangleleft$ ] and [ $\triangleright$ ] Part buttons to select the settings.

4. Use the [-] and [+] Value buttons to set the desired value.

To return to the basic screen, press the [Utility] button or the [Display/Exit] button

## Initial Touch (Initial Touch ON/OFF)

Initial Touch is a function that translates the force used in playing the keys into a directly proportional amount of volume. It can be switched ON/OFF independently for the Upper and Lower Keyboards.



Part	Upper, Lower
ON	The harder you play the key, the higher the
	volume. Some voices switches the sound
	depending on the strength with which you play
	the keyboard.
OFF	Volume remains constant regardless of how hard
	you play.

# Pedal Bass Mode (How the Bass Pedalboard Can Be Played)

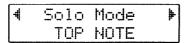
You can set the Bass Pedalboard to play simultaneous multiple notes or single notes only.

MONOPHONIC Only single notes can be played.

POLYPHONIC Multiple notes can be played.

## Solo Mode (Changing How the Solo Voice Will Sound)

When the Solo voice is assigned to the Upper keyboard, you can specify how the Solo voice will sound when more than one key is pressed.



TOP NOTE The Solo voice will sound the highest

note that is played for the Solo part.

LAST NOTE The Solo voice will sound the note that

was most recently played for the Solo

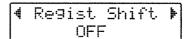
part.

POLYPHONIC The Solo voice will sound all notes that

are played for the Solo part.

# Registration Shift (Use the Left Foot Switch to Switch Through Registration Buttons)

You can use the left Foot Switch as a dedicated switch for selecting registrations in order.



ON Dedicated switch for selecting registrationsOFF Functions other than selecting registrations can

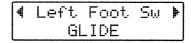
also be used

If Registration Shift is turned ON, each time you press the left Foot Switch, the registrations will be selected in the following order:  $1 \rightarrow 2 \rightarrow 3 \rightarrow ... \rightarrow 12 \rightarrow 1 \rightarrow ..$  etc.

→ This setting remains stored in memory even while the power is turned off.

#### **Left Foot Switch Assignment**

You can select any of the following functions and assign them to either Foot Switch on the left or left side of the Expression Pedal.



#### **Function**

Description

#### **ROTARY FAST/SLOW**

Switch the Rotary speed between "FAST" and "SLOW."

#### GLIDE

While the Foot Switch is pressed, the pitch will temporarily be lowered, and will gradually return to normal when you release the Foot Switch.

#### **LEADING BASS**

The Leading Bass function will operate only while you continue pressing the Foot Switch. When the Leading Bass function is enabled, the lowest note of the cord you play on the Lower keyboard will be used as the bass note (the bottom note of the chord).

#### RHYTHM START/STOP

Start/Stop the Rhythm.

#### COMPOSER PLAY/STOP

The same function as the Composer [Play] button and [Stop] button. Each time you press the Foot Switch, the performance data will play back or stop.

#### INTRO/ENDING

Play an Intro or Ending.

#### **FILL IN TO VARIATION**

After inserting a Fill-In, playback will switch to the variation pattern.

#### FILL IN TO ORIGINAL

After inserting a Fill-In, playback will switch to the original pattern.

#### ADVANCED/BASIC

Switch the pattern between the basic arrangement (BASIC) and a more complex arrangement (ADVANCED).

#### BREAK

Stop the Rhythm for one measure (break)

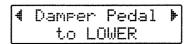
#### DAMPER OF UPPER

Notes played on the Upper keyboard will be sustained only while you continue pressing the Foot Switch.

\* If the Utility menu "Registration Shift" setting is "ON", the left Foot Switch will be dedicated to switching through the Registrations, and the "Left Foot Switch Assignment" setting will be ignored.

### **Damper Pedal Assignment**

You can specify which keyboard will be affected when you press the Damper (Sustain) pedal.



**UPPER** The effect is applied to the voices played on

the Upper keyboard.

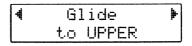
**LOWER** The effect is applied to the voices played on

the Lower keyboard.

If the voice is a percussive voice (such as a Piano voice), the tone will be sustained, but fade away just like an acoustic piano. Is the voice is a non-percussive instrument (such as a String voice), the tone will be sustained as long as the pedal is depressed.

#### **Glide Destination**

You can select the keyboard to which the effect will apply when you operate the Glide effect.



UPPER The effect is applied to the voices played on

the Upper keyboard.

LOWER The effect is applied to the voices played on

the Lower keyboard.

**PEDAL** The effect is applied to the voices played on

the Pedalboard.

#### **Manual Drums Set**

This setting allows you to choose one of the following 8 Drum Sets or one Sound Effects Set.

∢ManualDrumsSet⊧ STANDARD

Settings

STANDARD, ROOM, POWER, ELECTRONIC, TR-808, JAZZ, BRUSH, ORCHESTRA, SOUND EFFECTS

- → The combination of sounds that are assigned to each key will differ depending on which Manual Drum Set is selected. For details refer to "Drum Set List" (p. 104).
- → You can select Manual Drum Set using the [Manual Drums] button and the [-] [+] Value buttons (p. 29).

# Harmony Intelligence Type (Selecting the Type of the Harmony Intelligence)

This setting allows you to select the type of the Harmony Intelligence.

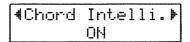
◀ Harmony Type ▶ TRADITIONAL

Settings TRADITIONAL, HARP, OCTAVE1, OCTAVE2

## Chord Intelligence (Chord Intelligence ON/OFF)

"Chord Intelligence" is a feature that intelligently plays the correct accompaniment chords the moment you play a key specifying a chord on the Lower keyboard during Automatic Accompaniment.

To play a C chord on the Lower keyboard, for example, you usually have to press down the three keys C, E, and G; but with Chord Intelligence, you only have to press the C Key to initiate a C chord accompaniment.

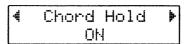


ON Chord Intelligence function is ON
OFF Chord Intelligence function is OFF

\* For more information about chord fingering, see the "Chord List" (p. 107).

## Chord Hold ON/OFF)

The Chord Hold function can be switched ON/OFF. When Chord Hold is ON, the Automatic Accompaniment will continue playing even when you lift your hand from the keyboard to play a new chord.



ON The Automatic Accompaniment determined by the chord played on the Lower keyboard is held (even if you release the keys).

OFF When you release the keys that you played in the Lower keyboard, the Automatic Accompaniment will stop (be muted). Only the Rhythm (drum) performance will continue.

### **Registration Arranger Update** (Arranger Settings Recall Timing)

You can specify how the settings related to Rhythm performances and Automatic Accompaniment will be recalled when you press a Registration button [1] - [4].

DELAYED

DELAYED Settings related to Rhythm performances and Automatic Accompaniment will be recalled when you hold a Registration button [1] - [4] for several seconds. If you quickly press the Registration button, only the panel settings (voice, etc.) that are not related to Rhythm and Automatic Accompaniment will be updated.

INSTANT

Settings related to Rhythm performances and Automatic Accompaniment will be recalled the instant you press a button [1] - [4] along with all other panel settings.

→ This setting remains stored in memory even while power is turned off.

### **Registration Transpose Update** (Transpose Setting Recall Timing)

You can specify how the transpose setting will be recalled when you press a Registration button [1] - [4].

∢Trans. Update INSTANT

DELAYED

Transpose settings will be recalled when you hold a Registration button [1] - [4] for several seconds.

**INSTANT** 

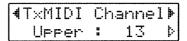
Transpose setting will be recalled the instant you press a button [1] - [4] along with all other panel settings.

→ This setting remains stored in memory even while power is turned off.

### Tx MIDI Channel (MIDI Output Channel)

When you use the MIDI connectors or the computer connector of the AT-20R to transmit musical data to external devices, for each keyboard (Upper, Lower, and Pedal) you can specify the channel on which your playing will be transmitted as MIDI messages. (Value: 1-16)

You can modify these Tx (Transmit) MIDI settings as needed. (For details refer to p. 97)



Upper, Lower, Pedal, Control Part

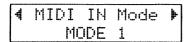
Channel 1-16

- The CONTROL part transmits expression pedal data and PC
- It is not possible to set more than one part (Upper, Lower and Pedals) to the same channel.
- → The MIDI message of the Control track remains stored in memory even while power is turned off.

#### **MIDI IN Mode**

This instrument contains two sound generators: one for SMF data playback and one for keyboard performance.

Normally, data received at the MIDI In connector will control only the sound generator for SMF data playback. However by changing the MIDI IN Mode setting, you can also control the keyboard sound generator from MIDI In.



MODE 1 Control the instrument as a GS sound generator

MODE 2 Channels 1–8 and channel 10 will be sent to the GS sound generator, and channel 9 and

channels 11–16 will be sent to the keyboard sound generator.

Ch	MODE 1	MODE 2
1-8	GS	GS
9	GS	Manual Drums
10	GS	GS
11	GS	Nothing
12	GS	Lower
13	GS	Upper
14	GS	Pedal Bass
15	GS	Nothing
16	GS	Solo, Control

- \* There are limitations on the types of MIDI messages that can be received by the keyboard sound generator. For details refer to the "Midi Implementation" (sold separately).
- → This setting remains stored in memory even while power is turned off.

## Send PC Switch (Specifying Transmission of PC Numbers)

Transmission of PC (Program Change) numbers can be switched ON/OFF.

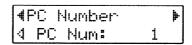


ON PC numbers are transmitted
OFF PC numbers are not transmitted

→ This setting remains stored in memory even while power is turned off.

## PC Number (Specifying PC Numbers)

You can specify the Program Change number that will be transmitted from MIDI Out when a Registration is selected.



Setting Bank MSB (Bank Select MSB) 0-127
Bank LSB (Bank Select LSB) 0-127
PC Num (PC Number) 1-128

Use the [ ] and [ ] Part buttons to select the settings.

### **Master Tune**

The basic pitch of an instrument is generally considered as the pitch of the middle A note. The "Master Tune" parameter lets you adjust this basic pitch to match the pitch of any other instruments that are playing together with the AT-20R.

Settings 415.3Hz - 466.2Hz (0.1 Hz units)

- → By pressing the [+] and [-] Value buttons simultaneously, you can restore the default setting (440.0 Hz).
- → This setting remains stored in memory even while power is turned off.

#### **LCD Contrast**

This setting allows you to adjust the contrast of the display.

Available settings 1–10 (higher values will darken the display)

→ This setting remains stored in memory even while power is turned off.

## **Connecting External Devices**

If you want to hook up an external instrument to the AT-20R, then this chapter is for you.

## Names and Functions of Jacks and Connectors

#### 1 MIDI Out/In Connectors

You can connect external MIDI instruments to these connectors to exchange performance information.

#### 2 Output L (mono)/R Jacks

You can some awesome sounds if you connect speakers or other audio equipment to these jacks. You can also hook up a portable stereo to record your performances on cassette tape.

#### 3 Computer Connector

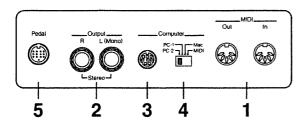
You can connect a computer to this connector to exchange performance information.

#### 4 Computer Switch

Set this switch to Mac, PC-1, or PC-2 according to the type computer that's connected.

You can also switch between connections to the MIDI Out/In connectors and the Computer connector.

#### 5 Pedal Connector



#### **Making the Connections**

If you're planning on connecting the AT-20R to other equipment with cables, be sure to follow the steps shown below to make the connections. By turning on or off devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

- Turn down the volume all the way on all equipment.
- 2. Turn off the power to the AT-20R and other connected equipment.
- 3. Connect the AT-20R and other equipment with the cables.
- 4. Turn on the connected equipment.
- 5. Turn on the AT-20R.
- 6. Adjust the volume.
- After use, follow the steps below to switch off the power.
- Turn down the volume all the way on all equipment.
- 2. Turn off the AT-20R.
- 3. Turn off the connected equipment.

#### **■** Connecting Audio Equipment

You can hook up a tape recorder or other audio device and record your performances on the AT-20R. Use an audio cable to connect the input jack on the audio set or amp mixer to one of the output jacks on the AT-20R. Use an audio cable with a standard plug. When purchasing an audio cable, please consult the vendor where you bought the AT-20R.



### **■** Connecting a Computer

The AT-20R provides a Computer connector. By connecting this to the serial port of your computer, you can transmit and receive musical data. Since the AT-20R is able to save musical data in SMF format, you can use your computer to edit the musical data.

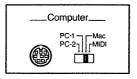
- 1. Turn off the AT-20R and the computer.
- 2. Use a computer cable (sold separately) to connect the Computer connector on the AT-20R to a serial port on the computer.
- 3. Set the Computer switch on the bottom of the unit to match the type of connected computer.
- → Take a look at the Connection Examples.
- 4. Turn on the computer.
- 5. Turn on the AT-20R.
- **6.** Make the settings for baud rate (transmission speed) for the computer and the software.
- → For more information, refer to the documentation for the computer you are using.
- 7. You should also make the settings for the MIDI send channel (p. 93).

#### **Connection Examples:**

#### O Connection with an Apple Macintosh computer

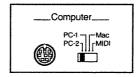
Use a computer cable (sold separately) to connect the Computer connector on the AT-20R to the modem port (or printer port) on the Apple Macintosh. Set the Computer switch to "Mac."

Use "PatchBay" on the Apple Macintosh to set the interface type (the clock speed for the MIDI interface) to "1 MHz."



#### O Connection with an IBM PC

Use a computer cable (sold separately) to connect the Computer connector on the AT-20R to the COM1 or COM2 serial port on the IBM PC. Set the Computer switch to "PC-2."



### If You're Using MIDI

#### About MIDI

MIDI stands for "Musical Instrument Digital Interface," and is a unified standard for the exchange of performance data and other information between electronic instruments and computers.

The AT-20R is equipped with MIDI connectors and a Computer connector to let it exchange performance information with external devices. These connectors can be used to connect the AT-20R to an external device for even greater versatility.

#### About MIDI Connectors

The AT-20R has two kinds of MIDI connectors. Connecting these to the MIDI connectors on a MIDI instrument makes it possible for the two instruments to control each other.

For instance, you can output sound from the other instrument or switch tones on the other instrument. You should also set the MIDI send channel as needed.

#### O MIDI Out Connector

Only the notes played on the keyboard, movements of the Damper pedal, Expression data, and data indicating that a Registration button [1]–[4] was pressed will be transmitted to the external MIDI connector.

#### Connecting External Devices

#### O MIDI In Connector

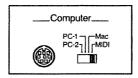
Performance messages from an external MIDI device are received here.

These incoming messages may instruct the receiving MIDI instrument to play sounds or switch tones.

The AT-20R contains two sound generators: one sound generator for its own keyboards and one GS sound generator (p. 111). Normally, musical data transmitted from an external device to the MIDI In connector is sent to the GS sound generator, but you can also set the "MIDI IN Mode" parameter (p. 94) so that the keyboard sound generator is controlled.

## ■ Connecting the AT-20R to a MIDI Instrument

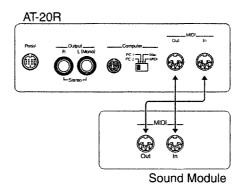
- 1. Turn off the AT-20R.
- 2. Set the Computer switch on the bottom of the AT-20R to "MIDI."



- \* When the AT-20R is powered up, the setting doesn't change until the power is reset, even if the computer switch is operated.
- 3. Use a MIDI cable (sold separately) to connect the MIDI connector on the external instrument to the MIDI connector on the AT-20R.
- 4. Turn on the external MIDI device and AT-20R.
- 5. You should also set the MIDI send channel and switch Local Control on or off as needed.

#### **Connection Example:**

O Connecting the MIDI Device



\* A separate publication titled "MIDI Implementation" is also available. It provides complete details concerning the way MIDI has been implemented on this unit. If you should require this publication (such as when you intend to carry out byte-level programming), please contact the nearest Roland Service Center or authorized Roland distributor.

## **Troubleshooting**

### When you press the [Power] switch, the power doesn't come on.

O Power cord is not connected correctly (p. 14).

#### No sound is heard.

- The [Master Volume] slider is set too low (p. 15).
- O Headphones are connected (p. 15).
  When you connect the headphones, the sound is heard only through the headphones.
- The volume of each Part Balance button is set too low (p. 26).
- O The volume is set too low on the Expression Pedal (p. 46).
- You do not have a voice selected (p. 19).
   Voices that have their button indicator lit can be played.
- O You have selected Manual Drums for the Lower keyboard, and are playing a key to which no drum sound or Sound Effect has been assigned (p. 28, p. 104).

## No sound is heard (when a MIDI instrument is connected).

- The power of the connected external devices is not turned on (p. 96).
- O The Computer switch on the bottom of the unit is not set to "MIDI" (p. 97).

#### Damper Pedal does not operate

- O The damper pedal affects only the Lower keyboard. The damper pedal does not affect the Bass Pedalboard. You can change the settings so that the damper pedal affects the Upper keyboard (p. 91).
- O The damper pedal does not affect the Solo voice.

#### **Expression Pedal does not operate**

- The Expression Pedal will not function while playing back performance data (SMF music data) from a device other than the Atelier series.
- O The function of the Expression Pedal during recording (p. 79) or the function during playback (p. 80) has been set to "COMPOSER."

## Can't use the function assigned to the right foot switch

 If the Utility menu item "Registration Shift" (change Registrations) is ON (p. 90), the right foot switch will be dedicated to switching the Registration.

## When the Human Voice "Jazz Scat" is selected, playing dynamics do not change the sound

 The Utility menu item "Initial Touch" is turned OFF (p. 89).

#### Rotary effect is not be applied.

 Some sounds do not allow the rotary effect to be applied (p. 103).

#### When you release your fingers from keys in the Lower keyboard while Automatic Accompaniment and Rhythm are playing, the Rhythm performance only remains playing.

O Chord Hold is at OFF (p. 92). The Automatic Accompaniment will play while you press a chord. If Chord Hold is turned ON, the Automatic Accompaniment will continue playing with the Rhythm even when you take your hand off of the Lower keyboard.

## Even though you press only one key, a multiple number of notes sound.

- O Harmony Intelligence is at ON (p. 40).
- O Chord Intelligence is turned ON (p. 92).

#### **Automatic Accompaniment sounds odd**

- O The keys for a chord were not pressed simultaneously.
- O When Chord Intelligence is OFF (p. 92), the chord is not being pressed correctly.
- O When performance data from a device other than the AT-20R is being played together with the Automatic Accompaniment, the Automatic Accompaniment may not be sounded correctly.

#### Rhythm sounds odd

O When performance data from a device other than the AT-20R is being played together with the Automatic Accompaniment, the Rhythm performance may not be sounded correctly.

#### Pitch is off.

- O Transpose is in effect (p. 45).
- O The tuning is incorrect (p. 95).
- While set for an octave shift (p. 27), you are playing keys beyond the recommended range. This does not indicate a malfunction.

#### Performance data cannot be played back

O While the Function menu appears in the display (with the exception of Channel Mute), playback is not allowed. If you wish to playback performance data, press the [Function] button once again to exit the Function menu (p. 78).

#### Recording is not possible

- O Punch-in recording has been selected (p. 74).
- O If you wish to erase a previously-recorded track and then re-record, press the track button for the desired track to make that button indicator blink before you begin recording (p. 62).
- O While the Function menu appears in the display (with the exception of Channel Mute), recording is not allowed. If you wish to record performance data, press the [Function] button once again to exit the Function menu.

#### Lyrics are not indicated properly in the display

- With some music files, the lyrics cannot be displayed correctly.
- O If you press a button while the lyrics are being shown in the display, the lyrics will disappear. To recall them, press the [Play] button.

#### The recorded performance has disappeared

O Any performance that has been recorded is deleted when the power to the unit is turned off. A performance cannot be restored once it's been deleted, so be sure to save it on a floppy disk before you turn off the power (p. 67).

## The bass note of the Automatic Accompaniment does not sound

 When a voice is selected for the Pedal Bass part, the bass of the Automatic Accompaniment will not sound.

## When you started a Rhythm with an Intro, the Rhythm did not sound

 $\,{\rm O}\,$  Some Rhythms do not have rhythm sounds in the intro.

#### MIDI messages received at MIDI In are not sounded

- O The Computer switch is not set to "MIDI" position (p. 97).
- The Computer switch was set to "MIDI" after the power was turned on.
  - Turn off the power, and then turn the power on once again.

#### Sound is distorted / cracked

- O The Part Balance volume of each part is too high (p. 26).
- O The Reverb volume has been raised when the volume of each Part Balance button is already raised. Either lower the Reverb volume, or adjust the Part Balance of each part (p. 26).
- O The [Master Volume] knob has been used to raise the overall volume excessively (p. 15).

## Some keys (of certain keyboard parts) sound strange

O You've assigned the same voice, using the same range, to multiple parts.

## The Rhythm does not change when you press the Registration [1]-[4] buttons

O The settings at which Registrations are recalled (Registration Arranger Update) has been set to "DELAYED" (p. 93).

### The volume changes during playback of performance data

O When recording is performed repeatedly while changing the Part Balance volume, the previously-recorded Part Balance data remains in the Control track. If you wish to get rid of the volume changes, use the Erase function (p. 84) to delete the Part Balance data.

## Bass is heard even though you are not playing the Bass Pedalboard

O The [To Lower] button (p. 44) is ON.
When the [To Lower] button is ON, the Bass will be sounded by the Lower keyboard.

#### When playing the same sound in the Upper keyboard and Lower keyboard, the volume is different

O on one of the keyboards, "Initial Touch" is turned ON (p. 89).

#### Lower keyboard cannot be heard

O The Lower keyboard will not produce sound while an Intro or Ending is being played.

#### The sound is not played correctly

O If you layer the same type of sound, or play an octaveshifted organ sound, the timing at which you play a note or the phase relationship between the two sounds may affect the way in which the sounds are heard, but this is not a malfunction.

#### Can't play the demo songs

O A floppy disk is inserted in the disk drive. In order to play the demo song, you must remove the floppy disk from the disk drive (p. 37).

#### Can't select Rhythms from a Music Style disk

O The Rhythm [Disk] button has not been selected (p. 37).

## **Display Messages**

#### **■ E.00**

Copy Protected.
Can't Save

#### Meanings:

- To protect the copyright, this music file cannot be saved as SMF format.
- When you want to save as Atelier format, you can save only original disk.

#### **■ E.01**

Can't Save This Song.

#### Meanings:

• You can only play the music data. It cannot be saved on a floppy disk or internal memory.

#### **■ E.02**

Write Protected Disk

#### Meanings:

 The protect tab on the floppy disk is set to the Protect position.

Change it to the Write position and repeat the procedure.

#### **■** E.03

Master Disk

#### Meanings:

This floppy disk cannot store the format or save any data.
 Insert a different disk and repeat the procedure.

#### **■ E.05**

Read Only Song. Can't Save

#### Meanings:

• A new song cannot be saved onto this floppy disk.

#### **■ E.10**

No Disk

#### Meanings:

 No floppy disk is connected to the disk drive. Insert the disk correctly, and repeat the procedure.

#### **■ E.11**

Disk Full

#### Meanings:

 There is not sufficient space left on the floppy disk for the data to be saved. Save the data onto a different floppy disk or delete music data on the disk.

#### **■ E.12**

Unknown Disk

#### Meanings:

• The floppy disk inserted into the disk drive cannot be read. Please format the floppy disk.

#### **■** E.13

Disk Ejected

#### Meanings:

 The floppy disk was removed from the disk drive while loading or writing was in progress. Insert the floppy disk and repeat the procedure.

#### **■** E.14

Dama9ed Disk

#### Meanings:

• This floppy disk is damaged and cannot be used. Insert a different disk and repeat the procedure.

#### **■** E.15

Can't Read

#### Meanings:

• This song cannot be read.

#### **≡** E.16

Can't Play

#### Meanings:

 It cannot be read the floppy disk quickly enough. Press the [Reset] button, then press the [Play] button to play the song.

#### **■ E.30**

Memory Full

#### Meanings:

- The Rhythm data is excessively large, and cannot be loaded.
- The performance data is excessively large, and cannot be loaded.
- Since the internal memory is full, recording or editing is not possible.

#### **■ E.40**

MIDI Buffer Full

#### Meanings:

 The AT-20R cannot deal with the excessive MIDI data sent from the external MIDI device. Reduce the amount of MIDI data sent to the AT-20R.

#### **■ E.41**

Communication Error

#### Meanings:

A MIDI cable or computer cable has been disconnected.
 Connect it properly and securely.

#### **■ E.43**

Computer I/F Error

#### Meanings:

 The Computer Switch is set to a wrong position or the computer is set wrongly. Switch off the AT-20R then set the Computer Switch to the correct position and set the computer correctly. After that, switch on the AT-20R again.

#### **■ E.51**

Memory Error

#### Meanings

 There is something wrong with the system. Repeat the procedure from the beginning.

#### **■** Others

Factory Preset is Loaded.

#### Meanings:

The internal settings (Registrations, etc.) were lost, because
the instrument was not turned on for about two weeks. The
basic screen will appear after the instrument has been
returned automatically to all the factory default settings.

Internal Memory Near Limit

#### Meanings:

 The AT-20R is warning you that its memory will soon become full to capacity, so not much more recording can be done.

Clear Song Sure? Yes:REC No:RST

#### Meanings:

To carry out the procedure, you first need to erase performance data in the AT-20R. This message asks you to confirm that you don't mind doing this. To erase the data, press the [Rec] button.

When you do not want to erase it, press the [Reset] button then save the data on disk.

OverwriteRe9ist? Yes:REC No:RST

#### Meanings:

This Registration is already being used. To overwrite the
previous Registration data in this memory, press the [Rec]
button. If you decide to keep the previous Registration data
in this memory and save your settings in an unused
memory, press the [Reset] button, press the [Select] button
to select a number for which "—" is displayed, and then
save the data.

Overwrite Song ? Yes:REC No:RST

#### Meanings:

 There already is performance data having the same name on the disk.

To replace the existing data with the new version, press the [Rec] button. To save it as a separate new file, press the [Reset] button first. Then, after changing the name, save it on disk.

# Voice List

A11	Full Organ1	*1	I11	Violin	Q51	Soprano Sax
A12	Full Organ2	*1	I12	Viola	Q61	Alto Sax
A13	Full Organ3	*1	113	Cello	Q71	Tenor Sax
A14	Full Organ4	*1	I14	Pizzicato	R11	Flute
A15	Full Organ5	*1	J11	Jazz Scat	R22	Pan Flute
A16	Full Organ6	*1	J12	Pop Voice	R31	Oboe
B11	Jazz Organ1	*1	J13	Jazz Doo	R32	Bassoon
B12	Jazz Organ2	*1	J14	Jazz Doot	R41	Clarinet
B13	Jazz Organ3	*1	J15	Jazz Dat	R51	Shakuhachi
B14	Jazz Organ4	*1	J16	Jazz Bap	S11	Synth. Lead1
B15	Jazz Organ5	*1	J17	JazzDowfall	S12	Synth. Lead2
B16	Jazz Organ6	*1	J21	Choir	<b>T1</b> 1	Organ Bass1
B21	Rock Organ1		K11	Grand Piano	T12	Organ Bass2
B22	Rock Organ2		K21	Honky-tonk	T21	Pipe Org. Bs
C11	Lower Organ1	*1	K31	E.Piano1	T31	String Bass
C12	Lower Organ2	*1	K32	E.Piano2	T32	Bass+Cymbal
C13	Lower Organ3	*1	K41	Harpsichord	T41	Contrabass1
C14	Lower Organ4	*1	K42	Clavi.	T51	E.Bass1
C15	Lower Organ5	*1	L11	Accordion	T52	E.Bass2
C16	Lower Organ6	*1	L21	Harmonica	T61	Tuba
D11	Pipe Organ1		M11	Nylon-str.Gt	T71	Synth. Bass1
D12	Pipe Organ2		M21	Steel-str.Gt	T81	Voice Thum
D13	Pipe Organ3		M31	Jazz Guitar		
D14	Pipe Organ4		M41	Overdrive Gt		
D15	Pipe Organ5		N11	Hawaiian Gt.		
D16	Pipe Organ6		N12	Banjo		
D17	Pipe Organ7		N21	Harp		
D21	Diapason 8'		N31	Sitar		
E11	Theater Or.1		O11	Vibraphone		
E12	Theater Or.2		O12	Glockenspiel		
E13	Theater Or.3		O13	Celesta		
E14	Theater Or.4		O21	Marimba		
E15	Theater Or.5		O22	Xylophone		
E16	Theater Or.6		O31	Tubular-bell		
F11	Synth. Org.1		O41	Steel Drums		
F12	Synth. Org.2		P11	Tp. Section		
G11	Strings1		P21	Fr.Horn Sect		
G12	Strings2		P31	Sax.Section		
H11	Slow Str.1		P41	Synth. Brass		
H21	Synth. Str.1		Q11	Trumpet		
H22	Synth. Str.2		Q21	Mute Trumpet		
H31	Synth. Pad1		Q31	Trombone		
H32	Synth. Pad2		Q41	Flugel Horn		

<sup>\*1:</sup> Rotary: effective

## **Drum Set List**

## **Manual Drum Set**

	JAZZ		2001		2011/22			
	STANDARD		ROOM		POWER		ELECTRONIC	
C2 36	Std Kick 1		Std Kick 1		MONDO Kick		Elec BD	
37	Side Stick		Side Stick		Side Stick		Side Stick	
38	Snare Drum 1		Snare Drum 1		Gated SD		Elec SD	
40	Hand Clap		Hand Clap		Hand Clap		Hand Clap	
40	Snare Drum 2		Snare Drum 2		Snare Drum 2		Gated SD	
41	Low Tom 2		Room Low Tom 2		Room Low Tom 2		Elec Low Tom 2	
42	Closed Hi-hat 1	[EXC1]	Closed Hi-hat 1	[EXC1]	Closed Hi-hat 1	[EXC1]	Closed Hi-hat 1	[EXC1]
43	Low Tom 1		Room Low Tom 1		Room Low Tom 1		Elec Low Tom 1	
44	Pedal Hi-hat 1	[EXC1]	Pedal Hi-hat 1	[EXC1]	Pedal Hi-hat 1	[EXC1]	Pedal Hi-hat 1	[EXC1]
46	Mid Tom 2	/EVO41	Room Mid Tom 2	(EV.04)	Room Mid Tom 2		Elec Mid Tom 2	
47	Open Hi-hat 1	[EXC1]	Open Hi-hat 1	[EXC1]	Open Hi-hat 1	[EXC1]	Open Hi-hat 1	[EXC1]
-	Mid Tom 1		Room Mid Tom 1		Room Mid Tom 1		Elec Mid Tom 1	
C3 48	High Tom 2		Room Hi Tom 2		Room Hi Tom 2		Elec Hi Tom 2	İ
49	Crash Cymbal 1		Crash Cymbal 1		Crash Cymbal 1		Crash Cymbal 1	ĺ
50	High Tom 1		Room Hi Tom 1		Room Hi Tom 1		Elec Hi Tom 1	
51 52	Ride Cymbal 1		Ride Cymbal 1		Ride Cymbal 1		Ride Cymbal 1	Ī
	Chinese Cymbal Ride Bell		Chinese Cymbal Ride Bell		Chinese Cymbal		Reverse Cymbal	[
53 54	Tambourine				Ride Bell		Ride Bell	
			Tambourine		Tambourine		Tambourine	ŀ
55 56	Splash Cymbal Cowbell		Splash Cymbal		Splash Cymbal		Splash Cymbal	
57	Crash Cymbal 2		Cowbell Crash Cymbal 2		Cowbell		Cowbell	l
58	Vibra-slap		Vibra-slap		Crash Cymbal 2		Crash Cymbal 2	į
59	Ride Cymbal 2		Ride Cymbal 2		Vibra-slap		Vibra-slap	
	High Bongo		High Bongo		Ride Cymbal 2 High Bongo		Ride Cymbal 2 High Bongo	
C4 60 61	Low Bongo		Low Bongo		Low Bongo		Low Bongo	
62	Mute High Conga		Mute High Conga		Mute High Conga		Mute High Conga	
63	Open High Conga		Open High Conga		Open High Conga		Open High Conga	
64	Low Conga		Low Conga		Low Conga		Low Conga	-
	High Timbale		High Timbale		High Timbale		High Timbale	
65 66	Low Timbale		Low Timbale		Low Timbale		Low Timbale	
67	High Agogo		High Agogo		High Agogo		High Agogo	
68	Low Agogo		Low Agogo		Low Agogo		Low Agogo	
69	Cabasa		Cabasa		Cabasa		Cabasa	
70	Maracas		Maracas		Maracas		Maracas	
71	Short Hi Whistle	[EXC2]	Short Hi Whistle	[EXC2]	Short Hi Whistle	(EXC2)	Short Hi Whistle	[EXC2]
C5 72	Long Low Whistle	[EXC2]	Long Low Whistle	[EXC2]	Long Low Whistle	[EXC2]	Long Low Whistle	[EXC2]
73	Short Guiro	[EXC3]	Short Guiro	[EXC3]	Short Guiro	EXC3	Short Guiro	[EXC3]
74	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Long Guiro	[EXC3]
75	Claves		Claves		Claves		Claves	
76	High Wood Block		High Wood Block		High Wood Block		High Wood Block	
77	Low Wood Block		Low Wood Block		Low Wood Block		Low Wood Block	
78	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]
79	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Open Cuica	[EXC4]
80	Mute Triangle	[EXC5]	Mute Triangle	[EXC5]	Mute Triangle	[EXC5]	Mute Triangle	[EXC5]
81	Open Triangle	[EXC5]	Open Triangle	[EXC5]	Open Triangle	[EXC5]	Open Triangle	[EXC5]
83	Shaker		Shaker		Shaker		Shaker	
	Jingle Bell		Jingle Bell		Jingle Bell		Jingle Bell	
C6 84	Bell Tree	ļ	Bell Tree		Bell Tree		Bell Tree	
85	Castanets		Castanets		Castanets		Castanets	
86	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]
88	Open Surdo	[EXC6]	Open Surdo	[EXC6]	Open Surdo	[EXC6]	Open Surdo	[EXC6]
00							****	

no sound

 $[\mathsf{EXC}]: \quad \text{will not sound simultaneously with other percussion instruments of the same number}$ 

	TR-808		BRUSH		ORCHESTRA		SOUND EFFECT	
C2 36	808 Bass Drum 1		Std Kick 1		Concert BD 1			
37	808 Rim Shot		Side Stick		Side Stick			
38	808 Snare Drum		Brush Tap		Concert SD			
39	Hand Clap		Brush Slap		Castanets		High Q	
40	Snare Drum 2		Brush Swirl		Concert SD		Slap	
	808 Low Tom 2		Low Tom 2		Timpani F		Scratch Push [EXC7]	
41 42			Closed Hi-hat 1 [EXC1]		Timpani F#		Scratch Pull	[EXC7]
	808 Low Tom 1	[2,10,1]	Low Tom 1	[	Timpani G	- 1	Sticks	
43 44	808 CHH	[EXC1]	Pedal Hi-hat 1	[EXC1]	Timpani G#		Square Click	
45	808 Mid Tom 2	[LXO1]	Mid Tom 2	(2,101)	Timpani A	1	Metronome Click	ı
46	808 OHH [EXC1]		Open Hi-hat 1	[EXC1]	Timpani A#		Metronome Bell	I
47	808 Mid Tom 1		Mid Tom 1	[EXCI]	Timpani B	1	Guitar sliding Fing	er
<del>                                     </del>	808 Hi Tom 2		High Tom 2		Timpani c		Guitar cutting nois	
C3 48 49	808 Cymbal		Crash Cymbal 1	1	Timpani c#		Guitar cutting nois	
50	808 Hi Tom 1		High Tom 1	1	Timpani d		String slap of doub	
51	Ride Cymbal 1	1	Ride Cymbal 1	1	Timpani d#		Fl.Key Click	
52	Chinese Cymbal		Chinese Cymbal	I	Timpani e		Laughing	
	Ride Bell		Ride Bell		Timpani f		Screaming	
53 54	Tambourine		Tambourine	l	Tambourine		Punch	
-	Splash Cymbal		Splash Cymbal	1	Splash Cymbal		Heart Beat	
55 — 56	808 Cowbell		Cowbell		Cowbell		Footsteps1	
57	Crash Cymbal 2	l	Crash Cymbal 2		Concert Cymbal 2		Footsteps2	
58	Vibra-slap	ĺ	Vibra-slap	1	Vibra-slap		Applause	
59	Ride Cymbal 2	l	Ride Cymbal 2	1	Concert Cymbal 1		Door Creaking	
	High Bongo		High Bongo		High Bongo		Door	
C4 60 61	Low Bongo		Low Bongo	1	Low Bongo		Scratch	
62	808 High Conga		Mute High Conga		Mute High Conga		Wind Chimes	
63	808 Mid Conga		Open High Conga	1	Open High Conga		Car-Engine	
64	808 Low Conga	Í	Low Conga		Low Conga		Car-Stop	
-	High Timbale	ļ	High Timbale		High Timbale		Car-Pass	
65 66	Low Timbale		Low Timbale	1	Low Timbale		Car-Crash	
67	High Agogo	ļ	High Agogo		High Agogo		Siren	
68 Low Agogo		Low Agogo			Low Agogo		Train	
69	Cabasa		Cabasa		Cabasa		Jetplane	
70	808 Maracas	1	Maracas		Maracas		Helicopter	
71	Short Hi Whistle	(EXC2)	Short Hi Whistle	IEXC21	Short Hi Whistle	[EXC2]	Starship	
C5 72	Long Low Whistle	[EXC2]	Long Low Whistle	[EXC2]	Long Low Whistle	[EXC2]	Gun Shot	
73	Short Guiro	[EXC3]	Short Guiro	EXC3	Short Guiro	[EXC3]	Machine Gun	
74	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Lasergun	
75	808 Claves		Claves	-	Claves		Explosion	
76	High Wood Block		High Wood Block		High Wood Block		Dog	
	Low Wood Block	1	Low Wood Block		Low Wood Block		Horse-Gallop	
77 78	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Birds	
79	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Rain	
80	Mute Triangle	[EXC5]	Mute Triangle	[EXC5]	Mute Triangle	[EXC5]	Thunder	
81	Open Triangle	[EXC5]	Open Triangle	[EXC5]	Open Triangle	[EXC5]	Wind	
82	Shaker		Shaker		Shaker		Seashore	
83	Jingle Bell		Jingle Bell		Jingle Bell		Stream	
C6 84	Bell Tree		Bell Tree		Bell Tree		Bubble	
85	Castanets		Castanets		Castanets		Cat	
86	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]		
87	Open Surdo	[EXC6]	Open Surdo	[EXC6]	Open Surdo	[EXC6]		
88	****				Applause		*****	

---: no sound [EXC]: will not sound simultaneously with other percussion instruments of the same number

## **Style List**

[Big Band/Swing]

BigBandSwing

Big Band

A Cappella

Combo

[Country]

Hoedowm

CountryWaltz

**Easy Country** 

[Oldies]

Twist

50's Pop 1

Slow Dance

[Ballad]

Love Songs

Torch Song

Love Romance

[Acoustic]

G.Pop

P.Slow

P.Night

[Latin1]

Slow Bossa

Bossa Nova

Salsa

[Latin2]

Rhumba

Mambo

Tango 1

Samba Rio

[Pop]

Swing Pop

Easy Listen1

Easy Listen2

Raindrops

[Waltz/March]

Slow Waltz

March 4/4

March 6/8

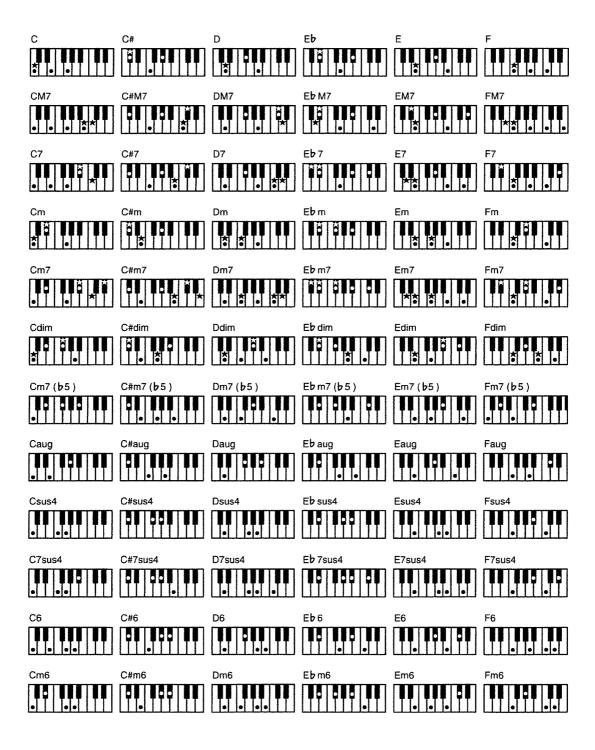
[Disk]

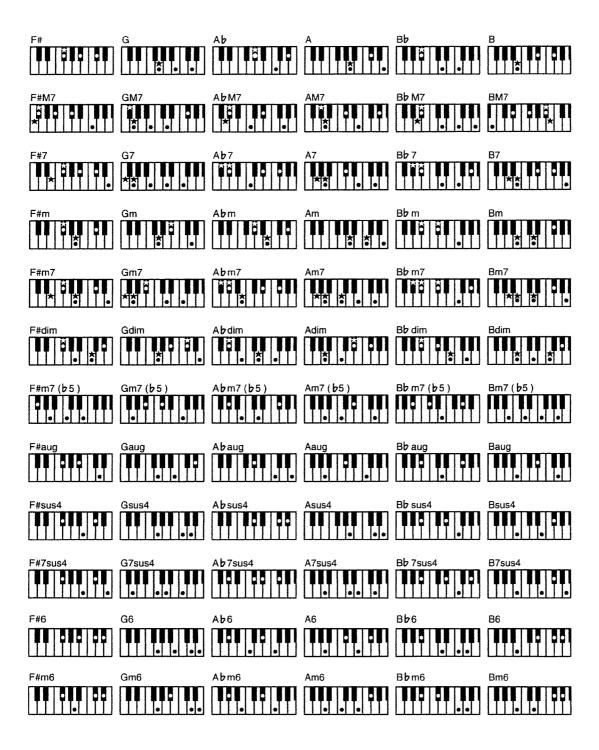
Hawaiian

Dixieland

## **Chord List**

- symbol: Indicates the constituent note of chords.
- ★ symbol: Chord shown with an "★" can be played by pressing just the key marked with the "★".





## Settings That Are Stored After the Power Is Turned Off

# Settings That Are Stored After the Power Is Turned Off

## **Function Menu**

Metronome Sound

## **Utility Menu**

Registration Shift

Registration Arranger Update

Registration Transpose Update

TX MIDI Channel (only the MIDI Output channel of the

Control track)

MIDI In Mode

Send PC Switch

Master Tune

LCD Contrast

# Settings That Are Stored in the Registration Buttons

## **Panel Settings**

Registration Name

Selected Rhythms for each Rhythm group button

## **Utility Menu**

Registration Shift

Registration Arranger Update

Registration Transpose Update

# Settings That Are Stored in the Individual Registration Buttons

## **Panel Settings**

[To Lower] button (ON/OFF)

[Manual Drums] button (ON/OFF)

The Voices assigned for each part

The Reverb depth for each part

The voices assigned to the [Others] buttons for each part

[Harmony Intelligence] button (ON/OFF)

Rotary [Fast/Slow] button (ON/OFF)

Rhythm type

[Intro/Ending] button (ON/OFF)

[Sync Start] button (ON/OFF)

[Advanced] button (ON/OFF)

Part Balance [▲] [▼] buttons settings (Part Balance

Volume)

Rotary [ON/OFF] button (ON/OFF)

Arranger [ON/OFF] button (ON/OFF)

Transpose setting

Tempo setting

## Effect Menu

Reverb Type

Sustain

Sustain Length

## **Utility Menu**

Initial Touch ON/OFF

Pedal Bass Mode

Solo Mode

Left Foot Switch Assignment

Damper Pedal Assignment

Manual Drums Set

Harmony Intelligence Type

Chord Intelligence (ON/OFF)

Chord Hold (ON/OFF)
Tx MIDI Channel (Upper, Lower, Pedal, Solo)

PC Number (Bank Select)

# Glossary

## **Arrangement**

This refers to changes that have been made in an original tune, by adding a new accompaniment or by changing the instruments used.

## **Automatic Accompaniment**

Automatic Accompaniment is automatic accompaniment when just a few keys in the lower section of the keyboard are pressed to specify the chord.

## **Basic Chord**

This refers to the most commonly used types of chord, which are generally the following six types: major chords, minor chords, minor seventh chords, minor seventh (\$\beta\$) chords, dominant seventh chords, and diminished seventh chords.

## Chord

Notes of two or more pitches sounded simultaneously. Chords consisting of three notes are called "triads," and are the most basic type of chord.

## **Ending**

This is the last part of the accompaniment. When you stop playing the Automatic Accompaniment, the AT-20R plays an Ending appropriate for the Rhythm.

## Glide

An effect that temporarily lowers the pitch and then gradually returns it to normal.

## Intro

This is the introductory portion of an Automatic Accompaniment performance. The AT-20R plays an intro ideally suited to each Rhythm when it starts playing the Automatic Accompaniment.

## Inversion

When the lowest note of a chord is the root, the chord is said to be in "root position." In contrast, forms of a chord in which other notes are the lowest pitch are called "inversions."

## Mute

To silence a sound. The AT-20R provides a Track Mute function that allows you to turn off the track button indicator of a track on which music data has been recorded, so that the corresponding track will temporarily be silenced.

## **Panel Settings**

Settings such as sound selections, tempo, Rotary fast/slow.

## Registration

A unit of data that contains the performance state of the instrument, such as sound selections and panel settings.

#### Reverb

An effect that simulates the reverberation of a room or concert hall.

## **Root Note**

The root note is the basis of a chord. All chords are built on a root note, which is the part of the chord name given in uppercase letters.

#### Rotary

An effect which simulates the modulation given to the sound when a rotating speaker is used. The Rotary effect produces two types of modulation: fast or slow.

#### Sustain

An effect that adds a decay to each note. The AT-20R allows sustain to be applied to the voices of the upper part, lower part, and pedal part.

## Voice

The AT-20R is able to produce the sounds of various instruments. These sounds are called "Voices."

## **About ATELIER Series Sound** Generator

The ATELIER series come equipped with GM / GS sound generators.

## General GM System



The General MIDI system is a set of recommendations which seeks to provide a way to go beyond the limitations of proprietary designs, and standardize the MIDI capabilities of sound generating devices. Sound generating devices and music data that meets the General MIDI standard bears the General MIDI logo. Music data bearing the General MIDI logo can be played back using any General MIDI sound generating unit to produce essentially the same musical performance.

## GS format

The GS Format is Roland's set of specifications for standardizing the performance of sound generating devices. In addition to including support for everything defined by the General MIDI System, the highly-compatible GS Format additionally offers an expanded number of sounds, provides for the editing of sounds, and spells out many details for a wide range of extra features, including effects such as reverb and chorus.

Designed with the future in mind, the GS Format can readily include new sounds and support new hardware features when they arrive.

Since it is upwardly compatible with the General MIDI System, Roland's GS Format is capable of reliably playing back GM Scores equally as well as it performs GS Music Data (music data that has been created with the GS Format in mind).

This product supports both the General MIDI system and the GS format, and can be used to play back music data carrying either of these logos.

## MIDI Implementation Chart

del A I -20F		Mibi impleme			V 0751011 . 1.0
	Function	Transmitted	Recognized		Remarks
Basic Channel	Default Changed	12 (Lower) 13 (Upper) 14 (Pedal Bass) 16 (Solo, Expression, PC) 1–16	1-16 1-16 1-16 1-16 1-16		
Mode	Default Messages Altered	x x	Mode 3 Mode 3, 4(M=1)		•3
Note Number :	True Voice	36–96 	0–127 0–127		
Velocity	Note ON Note OFF	O *1 x 8n v=64	O x		
After Touch	Key's Ch's	x x	0	*2 *2	
Pitch Bend		х	0	*2	
Control Change	0, 32 1 5 6, 38 7 10 11 16 64 65 66 67 84 91 93 98, 99 100, 101	O *1 x x x x x O x O x x x x x x x	00000000000000000	<b>ೱಀಁಀಁಀಁಀಁಀಁಀಁಀಁಀಁಀಀಁಀಁಀಁಀಁಀಁಀಁಀಁ</b>	Bank select Modulation Portamento time Data entry Volume Panpot Expression Glide Hold 1 Portamento Sostenuto Soft Portamento control Effect1 depth Effect3 depth NRPN LSB, MSB RPN LSB, MSB
Prog Change	: True #	0–127 *1	O 0–127	*3	Program number 1-128
System Excl	usive	x	0		
System Common	: Song Pos : Song Sel : Tune	x x x	x x x		
System Real Time	: Clock : Commands	0	x x		
Aux Message	: All sound off : Reset all controllers : Local Control : All Notes OFF : Active Sense : Reset	x x x X O x	O (120, 126, 127) O x O (123–125) O x		
Notes		*1 O x is selectable. *2 O x is selectable by S *3 Recognaize only GS *4 Recognaize only Key *5 Recognaize as M=1 e	Part. board Part.		

Mode 1 : OMNI ON, POLY

Mode 2: OMNI ON, MONO Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO O:Yes X:No

Date: Dec. 1, 1998

Version: 1.00

# **Main Specifications**

## AT-20R:Music Atelier

## Keyboard

Upper 49 Keys Lower 61 Keys; Pedalboard 13 notes

## Voices (108 Voices)

## Upper Organ:

Full, Jazz, Pipe etc.

## Upper Orchestral:

Strings, Piano, Brass, Choir, Guitar etc.

## Lower Organ:

Lower, Pipe etc.

## Lower Orchestral:

Strings, Piano, Brass, Choir, Guitar etc.

## Solo:

Trumpet, Sax, Flute etc.

## **Pedal Bass:**

Organ1 etc.

\* Any one of the 108 voices (except the preset ones) can be assigned to each [Others] button.

# Rhythms (32 Rhythms, Variation/Original)

Big Band/Swing, Country, Oldies, Ballad, Acoustic, Latin1, Latin2, Pop, Waltz/March, Disk etc.

 Music Style Disks (MSA series; sold separately) can provide additional Music Styles.

# Number of accompaniment/SMF play voices

226 Voices

## **Number of Manual Drums sets**

8 Sets

## **Number of Sound Effects sets**

1 Set

## **Effects**

Rotary Sound, Reverb, Sustain, Glide

## Harmony Intelligence

Traditional, Harp, Octave 1, Octave 2

## **Arranger function**

Arranger On/Off, Start/Stop, Intro/Ending, Sync Start, Fill In (Variation/Original), Advanced/Basic, One Touch Program, Break

## **Number of Registration memories**

4

## Composer

Tracks: 7

Note Storage: approx. 40,000 notes

Song Length: max. 999 measures

Tempo: Quarter note = 20 to 250

Resolution: 120 ticks per quarter note

Recording: Realtime

## Storage: 3.5 inch micro floppy disk

## Disk format:

720 K bytes (2DD), 1.44 M bytes (2HD)

## Songs:

max. 56 (2DD), max. 99 (2HD)

## Rated power output

25 W x 2

## Speakers

## Body:

full-range: 20 cm x 2

## Display

16 characters, 2 lines (backlit LCD)

## Disk drive

3.5 inch micro floppy disk drive (2DD/2HD)

## **Pedals**

Damper pedal

Expression pedal

Left foot switch (assignable)

## **Connectors**

Phones jack (Stereo)

AC inlet

Pedal jack

MIDI connectors (In/Out)

Audio output jacks (L(MONO)/R)

Computer connector

## **Power supply**

AC 117 V, AC 230 V or AC 240 V

## **Power consumption**

80 W (AC 117 V) 65 W (AC 230 V) 65 W (AC 240 V)

## **Finish**

Traditional Walnut

## **Dimensions**

**Console** (Including music rest): 1146 (W) x 567 (D) x 471 (H) mm 45-1/8 (W) x 22-3/8 (D) x 18-9/16 (H) inches

**Stand** (Including Pedalboard):

1152 (W) x 515 (D) x 748 (H) mm 45-3/8 (W) x 20-5/16 (D) x 29-1/2 (H) inches

Total (Including music rest and Pedalboard):

1152 (W) x 567 (D) x 1219 (H) mm 45-3/8 (W) x 22-3/8 (D) x 47-1 (H) inches

## Bench:

600 (W) x 300 (D) x 600 (H) mm 23-5/8 (W) x 11-13/16 (D) x 23-5/8 (H) inches

## Weight

Console: 39.3 kg / 86 lbs 11 oz Stand: 24.0 kg / 52 lbs 15 oz Total: 63.3 kg / 139 lbs 9 oz Bench: 6.3 kg / 13 lbs 15 oz

## **Accessories**

Bench

Owner's manual 3.5 inch micro floppy disk (2HD) (Blank Disk) Music style disk Power Cord

<sup>\*</sup> In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

# Index

A	Floppy Disk3
Arrangement33	Format6
Arranger34–35	Foot Switch47, 9
Automatic Accompaniment34–35	Format6
В	G
Basic Pitch95	Glide9
Basic Screen	<b>3.140</b>
Bass Pedalboard 19	Н
Bass To Lower	Harmony Intelligence40, 92
Beat	Headphones1
Beat Indicator	
Break	i
Dicar	Initial Touch89
C	Intro31, 93
Chord	
Chord Hold	L
Composer	LCD Contrast95
Composer Screen	Leading Bass9
Computer	Loading
Copy	Disk Rhythm38
Measure85	Performance Song70
Copying	Registration54
Name of Registration52	Loop Recording76
Count-In	Lower Keyboard19
Count-In Recording	Lower Voice20
Count in rectacing	1.4
D	M
Damper Pedal46, 91	Manual Drum Set29, 92
Delete	Manual Drums28
Measure82	Master
Track	Volume46
Deleting	Master Tuning95
Registration56	Metronome
Demo Song	Sound78
Disk Drive	Volume78
Display of Lyrics81	MIDI97
Drum Set	MIDI Output Channel93
	Music Style Disk37
E	Muting
Eject Button37	Channel80
Ending32, 91	\$1
Erase	N
Portion of Performance Data84	Name
Erasing	Performance Song66
Performance Song63	0
Performance Songs on Floppy Disk73	-
Expression Pedal46	Octave Shift
Function	One Touch Program35
	P
F D C house	Panel Settings36
Factory Default Settings16	Part19
Factory Reset16	PC Number94
Fill In	Pedal46
Fill In To Original33, 91	Pedal Bass Voice
Fill In To Variation33, 91	How the Bass Pedalboard Can Be Played90

## Index

Playing
Demo Song17
Performance Song60
Performance Song on Floppy Disk72
Punch-in Recording74
Tutter in recording
Q
Quantize86
Quantize
R
* <del>-</del>
Recording
Registration
Assigning a Name50
Copying the Name52
Delete56
Load54
Recall49
Recall Timing93
Save53
Store
Reverb Effect
Reverb Depth88
Reverb Type87
Rhythm30
Arrangement33
Ending32
Fill In33
Intro31
Starting and Stopping31, 91
Rhythm Screen
Rotary Effect
Rotary Effect42
•
S
S Saving
Saving Performance Song67
Saving Performance Song
Saving Performance Song67
Saving Performance Song
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69
Saving Performance Song 67 Registration 53 SMF 67 SMF Format 69 SMF
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF       61
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF       61         SMF Format       71–72
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69         SMF Song File       72
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69         SMF Song File       72         Solo Voice       23
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69         SMF Song File       72
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69         SMF Song File       72         Solo Voice       23
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF Track Assignment       61         SMF Format       71–72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF Track Assignment       61         SMF Format       71–72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28         Sustain Effect       43, 88
Saving       67         Registration       53         SMF       67         SMF Format       69         SMF       67         SMF Format       69         SMF Track Assignment       61         SMF Format       71–72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28         Sustain Effect       43, 88         Sustain Length       88
Saving       67         Performance Song       67         Registration       53         SMF       67         SMF Format       69         SMF Track Assignment       61         SMF Format       71–72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28         Sustain Effect       43, 88
Saving       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28         Sustain Effect       43, 88         Sustain Length       88         Sync Start       31, 35
Saving       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28         Sustain Effect       43, 88         Sustain Length       88         Sync Start       31, 35
Saving       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28         Sustain Effect       43,88         Sustain Length       88         Sync Start       31,35         T       Tempo         34
Saving       67         Registration       53         SMF       67         SMF Format       69         SMF       71–72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28         Sustain Effect       43, 88         Sustain Length       88         Sync Start       31, 35         T       Tempo       34         Track       57
Saving       67         Registration       53         SMF       67         SMF Format       69         SMF       71-72         Save       69         SMF Song File       72         Solo Voice       23         Changing How the Solo Voice Will Sound       90         Sound Effect       28         Sustain Effect       43,88         Sustain Length       88         Sync Start       31,35         T       Tempo         34

U	
Upper Keyboard	19
Upper Voice	
V	
Volume	
Master	14
Metronome	
Volume Balance	26

# **Demo Song List**

To play the Demo Songs, please refer to "Listening to the Demo Songs" (p. 17).

## **■ AT-20R**

Song Title	Composer	Player	Copyright
Big Band	Ric Iannone	Ric Iannone	© 1999 Roland Corporation
Jazz Scat	Ric Iannone	Ric Iannone	© 1999 Roland Corporation
TheaterOrgan	Jonas Nordwall	Jonas Nordwall	© 1995 Rodgers Instruments LLC

- \* All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.
- \* The data for the Demo song that is being played is not available at the MIDI Out connector.

## **■** Profile

## **Hector Olivera**

Hector Olivera was born in Argentina. He received his education at the Conservatory and the University of Buenos Aires followed by a scholarship at the famous Juilliard School of Music in New York. Olivera has performed extensively throughout the world including concerts at prestigious places such as the Notre Dame Cathedral in Paris and Carnegie Hall in New York. Hector Olivera's expertise involves both the traditional pipe organ and the electronic organ. Presently Olivera tours internationally playing some of the world's most magnificent pipe organs as well as his preferred electronic organ, the Roland Atelier for which he continues to collaborate with its development.

## Jonas Nordwall

A native of Portland, Mr. Nordwall received his Bachelor of Music Degree in 1970 from the University of Portland studying with Arthur Hitchcock. Additional study was done with Frederick Geoghegan, the noted English/Canadian organist. As a teenager, Jonas had the privilege to study with Richard Ellsasser, one of the greatest virtuoso organist of this century.

Besides serving as Director of Music for the First United Methodist Church in Portland, Oregon and as the Organist for the Oregon Symphony Orchestra.

He has been a featured recitalist for national conventions of the American Theatre Organ Society and was Organist of the year for 1987.

## Ric lannone

Ric Iannone began playing the piano and accordion at the age of two and a half. By the time he was seven, he was performing public and private engagements with his musician father. For more than 20 years Ric has performed and traveled extensively throughout the United States and Europe, delighting audiences with his unique playing style and music arrangements. He is equally comfortable playing the organ, piano or keyboard, as a concert artist and product demonstrator.

## Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.



#### **EGYPT**

Al Fanny Trading Office P.O. Box 2904, El Horrieh Heliopolos, Cairo, TEL: (02) 4185531

#### RELINION

Maison FO - YAM Marcel 25 Rue Jules MermanZL Chaudron - BP79 97491 Ste Clotilde REUNION TEL: 28 29 16

#### SOUTH AFRICA That Other Music Shop

(PTY) Ltd. 11 Melle Street (Cnr Melle and luta Street) Braamfontein 2001 Republic of SOUTH AFRICA TEL: (011) 403 4105

Paul Bothner (PTY) Ltd. 17 Werdmuller Centre Claremont Republic of SOUTH AFRICA

P.O. Box 23032 Claremont, Cape Town SOUTH AFRICA, 7735 TEL: (021) 64 4030



## CHINA

Beijing Xinghai Musical Instruments Co., Ltd. 6 Huangmuchang Chao Yang District, Beijing, CHINA TEL: (010) 6774 7491

## HONG KONG

Tom Lee Music Co., Ltd. Service Division 22-32 Pun Shan Street, Tsuen Wan, New Territories, HONG KONG TEL: 2415 0911

## INDIA

Rivera Digitec (India) Pvt. Ltd. 409, Nirman Kendra Mahalaxmi Flats, Compound off Dr. Edwin Moses Road Mumbai 400011, INDIA TEL: (022) 498 3079

## INDONESIA

PT Galestra Inti Kompleks Perkantoran Duta Merlin Blok E No.6—7 Jl. Gajah Mada No.3—5, lakarta 10130. INDONESIA TEL: (021) 6335416

## **KOREA**

Cosmos Corporation Service Station 261 2nd Floor Nak-Won Arcade Jong-Ro ku, Seoul, KOREA TEL: (02) 742 8844

## MALAYSIA

Bentley Music SDN BHD 140 & 142, Jalan Bukit Bintang 55100 Kuala Lumpur, MALAYSIA TEL: (03) 2443333

#### PHILIPPINES

G.A. Yupangco & Co. Inc. 339 Gil J. Puyat Avenue Makati, Metro Manila 1200, PHILIPPINES TEL: (02) 899 9801

## **SINGAPORE**

Swee Lee Company 150 Sims Drive, SINGAPORE 387381 TEL: 748-1669

## CRISTOFORI MUSIC PTE

Blk 3014, Bedok Industrial Park E. #02-2148, SINGAPORE 489980 TEL: 243 9555

## TAIWAN

ROLAND TAIWAN ENTERPRISE CO., LTD. Room 5, 9fl. No. 112 Chung Shan N. Road Sec. 2, Taipei, TAIWAN, ROC TEL: (02) 2561 3339

#### **THAILAND**

Theera Music Co. , Ltd. 330 Verng NakornKasem, Soi 2, Bangkok 10100, THAILAND TEL: (02) 2248821

## VIETNAM

Saigon Music 138 Tran Quang Khai St., District 1 Ho chi minh City VIETNAM TEL: (8) 844-4068

## AUSTRALIA/ **NEW ZEALAND**

#### AUSTRALIA

Roland Corporation Australia Pty. Ltd. 38 Campbell Ávenue Dee Why West, NSW 2099 AUSTRALIA TEL: (02) 9982 8266

## **NEW ZEALAND**

Roland Corporation (NZ) Ltd. 97 Mt. Eden Road, Mt. Eden, Auckland 3, NEW ZEALAND TEL: (09) 3098 715

## CENTRAL/LATIN **AMERICA**

## **ARGENTINA**

Instrumentos Musicales S.A. Florida 656 2nd Floor Office Number 206A Buenos Aires ARGENTINA, CP1005 TEL: (54-11) 4- 393-6057

Roland Brasil Ltda. R. Coronel Octaviano da Silveira 203 05522-010 Sao Paulo BRAZIL TEL: (011) 843 9377

#### CHILE

Comercial Fancy S.A. Avenida Rancagua #0330 Providencia Santiago, CHILE TEL: 56-2-373-9100

## **EL SALVADOR**

OMNI MUSIC 75 Avenida Notre y Alameda Juan Pablo 2 No. 4010 San Salvador, EL SALVADOR TEL: (503) 262-0788

#### MEXICO

Casa Veerkamp, s.a. de c.v. Av. Toluca No. 323 Col. Olivar de los Padres 01780 Mexico D.F. MEXICO TEL: (525) 668 04 80

La Casa Wagner de Guadalajara s.a. de c.v. Av. Corona No. 202 S.I. Guadalajara, Jalisco Mexico C.P.44100 MEXICO TEL (03) 613 1414

#### PANAMA

Productos Superiores, S.A. Apartado 655 - Panama 1 REP. DE PANAMA TEL: (507) 270-2200

## URUGUAY

Todo Musica Cuareim 1488, Montevideo URUGUAY TEL: 5982-924-2335

#### **VENEZUELA**

Musicland Digital C.A. Av. Francisco de Miranda, Centro Parque de Cristal, Nivel C2 Local 20 Caracas VENUZUETA VENEZUELA TEL: (02) 285 9218

## (EUROPE

#### **AUSTRIA**

Roland Austria GES.M.B.H. Siemensstrasse 4, P.O. Box 74, A-6063 RUM, AUSTRIA TEL: (0512) 26 44 260

#### BELGIUM/HOLLAND/ LUXEMBOURG

Roland Benelux N. V. Houtstraat 3 B-2260 Oevel (Westerlo) BELGIUM TEL: (014) 575811

#### DENMARK

Roland Scandinavia A/S Langebrogade 6 Post Box 1937 DK-1023 Copenhagen K. DENMARK TEL: 32 95 3111

## FRANCE

Roland France SA 4, Rue Paul Henri SPAAK Parc de l'Esplanade F 77 462 S Thibault Lagny Cedex FRANCE TEL: 01 600 73 500

## **FINLAND**

Roland Scandinavia As, Filial Finland Lauttasaarentie 54 B Fin-00201 Helsinki, FINLAND TEL: (9) 682 4020

#### **GERMANY**

Roland Elektronische Musikinstrumente Handelsgesellschaft mbH. Oststrasse 96, 22844 Norderstedt, GERMANY TEL: (040) 52 60090

#### GREECE

V. Dimitriadis & Co. Ltd. 20, Alexandras St. & Bouboulinas 54 St. 106 82 Athens, GREECE TEL: (01) 8227 775

#### HUNGARY

Intermusica Ltd. Warehouse Area 'DEPO' Pf.83 H-2046 Torokbalint, HUNGARY TEL: (23) 511011

## IPFI AND

Roland Ireland Audio House, Belmont Court, Donnybrook, Dublin 4. Republic of IRELAND TEL: (01) 2603501

## ITALY

Roland Italy S. p. A. Viale delle Industrie, 8 20020 Arese Milano, ITALY TEL: (02) 937-78300

## **NORWAY**

Roland Scandinavia Avd. Kontor Norge Lilleakerveien 2 Postboks 95 Lilleaker N-0216 Oslo TEL: 273 0074

## **POLAND**

P. P. H. Brzostowicz 111. Gibraltarska 4. PL-03664 Warszawa POLAND TEL: (022) 679 44 19

#### **PORTUGAL**

Tecnologias Musica e Audio, Roland Portugal, S.A. RUA SANTA CATARINA 131 - 4000 Porto -PORTUGAL TEL: (02) 208 44 56

#### ROMANIA

FBS LINES Plata Libertatii 1 RO-4200 Cheorgheni TEL: (066) 164-609

#### RUSSIA

Slami Music Company Sadojava-Triumfalnaja st., 16 103006 Moscow, RUSSIA TEL: 095 209 2193

#### **SPAIN**

Roland Electronics de España, S. A. Calle Bolivia 239 08020 Barcelona, TEL: (93) 308 1000

## **SWEDEN**

Roland Scandinavia A/S SWEDISH SALES OFFICE Danvik Center 28, 2 tr. S-131 30 Nacka SWEDEN TEL: (08) 702 0020

## **SWITZERLAND**

Roland (Switzerland) AG Musitronic AG Gerberstrasse 5, CH-4410 Liestal, SWITZERLAND TEL: (061) 921 1615

## **UKRAINE**

TIC-TAC Mira Str. 19/108 P.O. Box 180 295400 Munkachevo, UKRAINE TEL: (03131) 414-40

#### UNITED KINGDOM

Roland (U.K.) Ltd. Atlantic Close, Swansea Enterprise Park SWANSEA SA7 9FJ, UNITED KINGDOM TEL: (01792) 700139

## MIDDLE EAST

#### BAHRAIN

Moon Stores
Bab Al Bahrain Road, P.O. Box 20077 State of BAHRAIN TEL: 211 005

#### CYPRUS

Radex Sound Equipment Ltd. 17 Diagorou St., P.O. Box 2046, Nicosia CYPRUS TEL: (02) 453 426

## ISRAEL

Halilit P. Greenspoon & Sons Ltd. 8 Retzif Fa'aliya Hashnya St Tel-Aviv-Yaho ISRAEL TEL: (03) 6823666

## IORDAN

AMMAN Trading Agency Prince Mohammed St. P.O. Box 825 Amman 11118 JORDAN TEL: (06) 4641200

## KUWAIT

Easa Husain Al-Yousifi P.O. Box 126 Safat 13002 KHWAIT TEL: 5719499

#### **LEBANON**

P.O. Box 16-5857 Gergi Zeidan St. Chahine & Fils P.O. Box 16-5857 Gergi Zeidan St. Chahine Building, Achrafieh Beirut, LEBANON TEL: (01) 335799

#### **OMAN**

OHI Electronics & Trading Co. LLC P.O. Box 889 Musca Sultanate of OMAN TEL: 959085

#### **QATAR**

**Badie Studio & Stores** P.O. Box 62, DOHA QATAR

## **SAUDI ARABIA**

aDawliah Universal Electronics APL P.O. Box 2154 ALKHOBAR 31952, SAUDI ARABIA TEL: (03) 898 2081

## **SYRIA**

Technical Light & Sound Center Khaled Ibn Al Walid St. P.O. Box 13520 Damascus - SYRIA TEL: (011) 2235 384

#### TURKEY

Barkat Muzik aletleri ithalat ve ihracat limited ireketi Siraselvier Cad. Guney Ishani No. 86/6 Taksim, Istanbul TURKEY TEL: (0212) 2499324

## U.A.E.

Zak Electronics & Musical Instruments Co.
Labeel Road, Al Sheroog Bldg.,
No. 14, Grand Floor DUBAI
U.A.E.
P.O. Box 8050 DUBAI, U.A.E. TEL: (04) 360715

## NORTH AMERICA

## CANADA

Roland Canada Music Ltd. (Head Office) 5480 Parkwood Way Richmond B. C., V6V 2M4 CANADA TEL: (0604) 270 6626

Roland Canada Music Ltd (Toronto Office) Unit 2, 109 Woodbine Downs Blvd, Etobicoke, ON M9W 6Y1 CANADA

## U. S. A.

TEL: (0416) 213 9707

Roland Corporation U.S. 7200 Dominion Circle Los Angeles, CA. 90040-3696 U. S. A. TEL: (0323) 685 5141

## **Corrections**

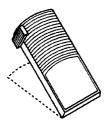
We apologize for the following errors in the Owner's Manual for AT-20R. Please make the appropriate corrections.

## **■** Foot Switch

## ● Page 10 Contents

Regist Shift (Use the <u>Left Foot Switch</u> to Switch Through Registration Buttons)	90
Left Foot Switch Assignment	90

## • Page 15, 46 and 47 Figures of Foot Switch



## Page 33 MEMO

The functions of the [Start/Stop] button, the [To Variation] button, the [To Original] button and [Advanced] button can be assigned to the foot switch located on the left side of the Expression Pedal (p. 90).

## Page 42 MEMO

You can assign the Rotary Sound [Fast/Slow] button function to the foot switch located on <u>the left side</u> of the Expression Pedal (p. 90).

## Page 47

The instrument is provided with a Foot Switch, one on <u>left side</u> of the Expression Pedal. You can switch between Fast/Slow for the Rotary effect by pushing <u>the left switch</u> with your foot.

With the factory settings, the following function is assigned to the left Foot Switch.

**<u>Left Foot Switch</u>** Switch the Rotary effect between Fast / Slow

## ● Page 47 Step 1

1. Press the Foot Switch toward the left.

## ● Page 47 MEMO

You can also change the function assigned to the left Foot Switch. Please refer to "Left Foot Switch Assignment" (p. 90).

## Page 47 NOTE

If the Utility menu item Registration Shift is ON, the left Foot Switch will be dedicated to switching through the Registration buttons (p. 90).

## ● Page 58 MEMO

The Play and Stop functions can both be assigned to the foot switch located on <u>left side</u> of the Expression Pedal. Each touch of the switch will alternate the operation between the Play and Stop functions (p. 90).

## Page 60 MEMO

The Play and Stop functions can be assigned to the foot switch located on <u>left side</u> of the Expression Pedal. Each touch of the switch will alternate the operation between the Play and Stop functions (p. 90).

## Page 89 List of Utility menu

Registration Shift
Using the left Foot Switch to switch registrations
Left Foot Switch Assignment
Selecting function for <u>left Foot Switch</u>

## Page 90 Subtitle and body

Registration Shift (Use the Left Foot Switch to Switch Through Registration Buttons)

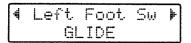
You can use the left Foot Switch as a dedicated switch for selecting registrations in order.

If Registration Shift is turned ON, each time you press the left Foot Switch, the registrations will be selected in the following order:  $1 \rightarrow 2 \rightarrow 3 \rightarrow ... \rightarrow 12 \rightarrow 1 \rightarrow ...$  etc.

## Page 90 Subtitle and body

Left Foot Switch Assignment

You can select any of the following functions and assign them to Foot Switch on the left side of the Expression Pedal.



## Page 91 The sentence below the list

\* If the Utility menu "Registration Shift" setting is "ON", the left Foot Switch will be dedicated to switching through the Registrations, and the "Left Foot Switch Assignment" setting will be ignored.

## Page 99 Troubleshooting

## Can't use the function assigned to the left foot switch

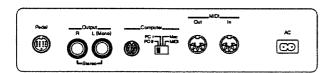
O If the Utility menu item "Registration Shift" (change Registrations) is ON (p. 90), the left Foot Switch will be dedicated to switching the Registration.

● Page 109 Utility Menu, Settings That Are Stored in the Individual Registration Buttons

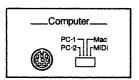
Left Foot Switch Assignment

## Rear Panel

Page 13, 96 and 98 Figures of rear panel



Page 97 and 98 Figures of Computer switch



## Others

## • Page 89 The sentence below Step 4

To return to the basic screen, press the [Utility] button or the [Display/Exit] button.

## **Demo Song List**

To play the Demo Songs, please refer to Owner's Manual "Listening to the Demo Songs."

## AT-90R

Song Title	Composer	Player	Copyright
Orchestra	Hector Olivera	Hector Olivera	© 1999 Roland Corporation
Pipe Organ	Hector Olivera	Hector Olivera	© 1999 Roland Corporation
Big Band	Ric lannone	Ric lannone	© 1999 Roland Corporation
TheaterOrgan	Jonas Nordwall	Jonas Nordwall	© 1995 Rodgers Instruments LLC
Jazz Scat	Ric lannone	Ric lannone	© 1999 Roland Corporation
Choir	Hector Olivera	Hector Olivera	© 1999 Roland Corporation
Soprano	Rachmaninov S.	Hector Olivera	© 1999 Roland Corporation
Gregorian	Ric lannone	Ric lannone	© 1999 Roland Corporation
Tenor	Ric lannone	Ric lannone	© 1999 Roland Corporation
AT-30R			
Song Title	Composer	Player	Copyright
	Composer Ric lannone	Player Ric lannone	© 1999 Roland Corporation
Song Title Big Band Jazz Scat			
Big Band Jazz Scat	Ric lannone	Ric lannone	© 1999 Roland Corporation
Big Band	Ric lannone Ric lannone	Ric lannone Ric lannone	© 1999 Roland Corporation © 1999 Roland Corporation
Big Band Jazz Scat TheaterOrgan	Ric lannone Ric lannone Jonas Nordwall	Ric lannone Ric lannone Jonas Nordwall	© 1999 Roland Corporation © 1999 Roland Corporation © 1995 Rodgers Instruments LLC
Big Band Jazz Scat TheaterOrgan Gregorian	Ric lannone Ric lannone Jonas Nordwall	Ric lannone Ric lannone Jonas Nordwall	© 1999 Roland Corporation © 1999 Roland Corporation © 1995 Rodgers Instruments LLC
Big Band Jazz Scat TheaterOrgan Gregorian	Ric lannone Ric lannone Jonas Nordwall Ric lannone	Ric lannone Ric lannone Jonas Nordwall Ric lannone	© 1999 Roland Corporation © 1999 Roland Corporation © 1995 Rodgers Instruments LLC © 1999 Roland Corporation
Big Band Jazz Scat TheaterOrgan Gregorian  AT-20R Song Title	Ric lannone Ric lannone Jonas Nordwall Ric lannone  Composer	Ric lannone Ric lannone Jonas Nordwall Ric lannone Player	© 1999 Roland Corporation © 1999 Roland Corporation © 1995 Rodgers Instruments LLC © 1999 Roland Corporation  Copyright

All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.

## ■ Profile

## **Hector Olivera**

Hector Olivera was born in Argentina. He received his education at the Conservatory and the University of Buenos Aires followed by a scholarship at the famous Juilliard School of Music in New York. Olivera has performed extensively throughout the world including concerts at prestigious places such as the Notre Dame Cathedral in Paris and Carnegie Hall in New York. Hector Olivera's expertise involves both the traditional pipe organ and the electronic organ. Presently Olivera tours internationally playing some of the world's most magnificent pipe organs as well as his preferred electronic organ, the Roland Atelier for which he continues to collaborate with its development.

#### Ionas Nordwall

A native of Portland, Mr. Nordwall received his Bachelor of Music Degree in 1970 from the University of Portland studying with Arthur Hitchcock. Additional study was done with Frederick Geoghegan, the noted English/Canadian organist. As a teenager, Jonas had the privilege to study with Richard Ellsasser, one of the greatest virtuoso organist of this century.

Besides serving as Director of Music for the First United Methodist Church in Portland, Oregon and as the Organist for the Oregon Symphony Orchestra.

He has been a featured recitalist for national conventions of the American Theatre Organ Society and was Organist of the year for 1987.

## Ric Iannone

Ric lannone began playing the piano and accordion at the age of two and a half. By the time he was seven, he was performing public and private engagements with his musician father. For more than 20 years Ric has performed and traveled extensively throughout the United States and Europe, delighting audiences with his unique playing style and music arrangements. He is equally comfortable playing the organ, piano or keyboard, as a concert artist and product demonstrator.

<sup>\*</sup> The data for the Demo song that is being played is not available at the MIDI Out connector.

# デモ曲一覧

デモ曲の再生については、取扱説明書「デモ曲を聴く」をご覧ください。

AT-90R			
曲名	作曲者	演奏者	Copyright
Orchestra	Hector Olivera	Hector Olivera	© 1999 Roland Corporation
Pipe Organ	Hector Olivera	Hector Olivera	© 1999 Roland Corporation
Big Band	Ric lannone	Ric lannone	© 1999 Roland Corporation
TheaterOrgan	Jonas Nordwall	Jonas Nordwall	© 1995 Rodgers Instruments LLC
Jazz Scat	Ric lannone	Ric lannone	© 1999 Roland Corporation
Choir	Hector Olivera	Hector Olivera	© 1999 Roland Corporation
Soprano	Rachmaninov S.	Hector Olivera	© 1999 Roland Corporation
Gregorian	Ric lannone	Ric lannone	© 1999 Roland Corporation
Tenor	Ric lannone	Ric lannone	© 1999 Roland Corporation
AT-30R			
曲名	作曲者	演奏者	
Big Band	Ric lannone	Ric lannone	© 1999 Roland Corporation
Jazz Scat	Ric lannone	Ric lannone	© 1999 Roland Corporation
TheaterOrgan	Jonas Nordwall	Jonas Nordwall	© 1995 Rodgers Instruments LLC
Gregorian	Ric lannone	Ric lannone	© 1999 Roland Corporation
AT-20R			
曲名	作曲者	演奏者	
Big Band	Ric lannone	Ric lannone	© 1999 Roland Corporation
Jazz Scat	Ric lannone	Ric lannone	© 1999 Roland Corporation
TheaterOrgan	Jonas Nordwall	Jonas Nordwall	© 1995 Rodgers Instruments LLC

- ※ デモ曲を個人で楽しむ以外に権利者の許諾なく使用することは、法律で禁じられています。
- ※ デモ曲の演奏データは MIDI Out 端子からは出力されません。

## ■ 作曲者プロフィール

## ヘクター・オリベラ (Hector Olivera)

アルゼンチン生まれ。ブエノスアイレス音楽院、ブエノスアイレス大学で学んだ後、ニューヨークのジュリアード音楽院の奨学生となる。その後、ノートルダム大聖堂やニューヨークのカーネギー・ホール等の一流会場でのコンサートも含め、世界中で精力的な演奏活動を行ってきた。彼は、伝統的なパイプオルガンだけでなく、電子オルガンの優れた演奏家でもある。現在は、世界でも有数な教会でのパイプオルガン演奏だけでなく、電子オルガンも好んで演奏し、国際的な演奏活動を展開する一方、ローランド・オルガン、ミュージック・アトリエの製品開発にも協力している。

## ジョナス・ノードウェル(Jonas Nordwall)

1970年、ポートランド大学でアーサー・ヒッチコックに師事し、音楽学士を取得。加えて、世界的に著名なオルガニスト、フレドリック・ジョーガンにも師事。また、10代にしてオルガニストとして今世紀最高の巨匠リチャード・エルセイザーに師事した経験を持つ。現在、オレゴン州ポートランドのユナイテッド・メソジスト教会の音楽主事を努める一方、オレゴン・シンフォニー・オーケストラのオルガン奏者としても活躍中。また、リサイタル楽器としてシアター・オルガンの人気を復興させた功労者の1人として、1987年にはオルガニスト・オブ・ジ・イヤーに選出される。パイプ・オルガンや電子オルガンの設計から演奏まで精力的に活動を続ける彼は、まさに才能を持つオルガン奏者の1人である。

## リック イアノニ (Ric lannone)

リック・イアノニは2オ半でピアノとアコーディオンを始め、7才までは公私にわたり、音楽家の父と共演していた。これまで20年間以上、合衆国やヨーロッパで精力的に演奏活動を行っており、彼のユニークな演奏と編曲は、常に聴衆を魅了してきた。コンサート・アーティストとして、また製品スペシャリストとして、オルガン、ピアノ、キーボードなどの心地よい演奏は高い評価を得ている。現在は、さまざまな講習会で教育、アレンジ、指導をこなす傍ら、彼が経営するIM MusicでGM ソフトウェアの制作を手がけている。

# Roland Organ AT 30R/20R Music Style Disk

# **Rhythm List**

No.	Name	No.	Name	No.	Name
01	BigBndBalld2	26	Miami	51	Folk Waltz
02	Boogie	27	Merenge	52	Slow Waltz 2
03	Jazz Band	28	Reggae	53	Swing Waltz
04	Blues 2	29	Tequila	54	March 2/4
05	Blues 3	30	Hawaiian 2	55	D Marsch 6/8
06	Big Band 4	31	Bossa Nova 2	56	R&B 2
07	Swing	32	FastBosaNova	57	Rock'n'Roll2
08	MidiumSwing2	33	Bossa Nova 5	58	Rock'n'Roll3
09	Slow Swing 2	34	Chacha 3	59	Contemp 1
10	Bluegrass 1	35	Salsa 2	60	Contemp 2
11	Bluegrass 2	36	Mambo 2	61	Funk 1
12	Cajun	37	Samba 2	62	Dance Pop 2
13	Slow Country	38	Tango 4		
14	ContryBallad	39	Beguine 2		
15	CountrySwing	40	Easy Listen3		
16	Two Step 2	41	Easy Listen4	•	•
17	Train Beat	42	Easy Listen5		
18	Twist 2	<b>4</b> 3	Easy Listen6		
19	Slow Rock 2	44	Easy Listen7		
20	Baroque	45	Pop Piano		
21	Classic	46	ShufflePop 1		
22	Charleston	47	Gospel 2		
23	Dixieland 2	48	GospelBallad		
24	Foxtrot	49	French Waltz		
25	Macarena	50	Vienna Waltz		



**Voice/Rhythm List** 

ボイス/リズム対応表

# Voice List

AT-R Voice No.	Tone Name	AT-90R/ AT-80R	AT-60R	AT-30R	AT-20R	AT-90/AT-80 Voice No.	AT-30 Voice No.
A11	Full Organ1	0	0	0	0	001	001
A12	Full Organ2	0	0	0	0	003	003
A13	Full Organ3	0	0	0	0	005	005
A14	Full Organ4	0	0	0	0	002	002
A15	Full Organ5	0	<u> </u>	0	0	004	004
A16	Full Organ6	0	0	0	0	006	006
A17	Full Organ7	0	<u>0</u>	0	<u>-</u>	033	033
A18	Full Organ8	0	······			****	<del>-</del>
A19 B11	Full Organ9 Jazz Organ1	0				007	007
B12		<u> </u>	<u>0</u>	<u> </u>	<u> </u>	007	009
B13	Jazz Organ2	0	0	0	00	011	011
B14	Jazz Organ3 Jazz Organ4	0	<u>0</u>		0	008	008
B15	Jazz Organ5		o	0	0	010	010
B16	Jazz Organ6	·················	<u>V</u>	o	0	012	012
B21	Rock Organ1		0	0	0	013	013
B22	Rock Organ2	0	0	0	0	014	014
C11	Lower Organ1	0	0	0	0	015	015
C12	Lower Organ2	0	o	0	0	017	017
C13	Lower Organ3	0	0	0	0	019	019
C14	Lower Organ4	0	0	0	0	016	016
C15	Lower Organ5	0	0	0	0	018	018
C16	Lower Organ6	0	0	0	0	020	020
D11	Pipe Organ1	0	0	0	0	021	021
D12	Pipe Organ2	0	0	0	0	023	023
D13	Pipe Organ3	0	0	0	0	025	025
D14	Pipe Organ4	0	0	0	0	022	022
D15	Pipe Organ5	0	0	0	0	024	024
D16	Pipe Organ6	0	0	0	0	026	026
D17	Pipe Organ7	0	0	0	0	034	034
D21	Diapason 8'	0	0	0	0	<u>-</u>	<del>-</del>
D22	FluteCeleste	0	О	0	<u> </u>	021a	<del>_</del>
D23	Gemshorn 8'	0	0		<del></del>	034a	
D24	Trompet 8'	0	O	<del>-</del>		034b	
D25	Hautbois 8'	0	<u> </u>	<del> </del>		034c 034d	<del></del>
D26	Viola 8'	0	<u> </u>	<del></del>	<u>-</u>		
D27	ViolaCeleste	<u> </u>	0			034e	
D28	Bombarde16'	00	0	<del>.</del>	****	 035a	
D31 D32	T.String 8' VoxHumana 8'	0	0	<del>-</del>		035b	
D32		00	0 0	<u>-</u>		035c	
D33	T.Tuba 8' T.Trumpet 8'	0				035d	······
D35	T.Sax 8'				_	035e	
D36	T.Oboe 8'	0	<u>ö</u>			035f	
D37	T.Krumet 8'	0	0			035g	
D38	Eng.Horn 8'	0	o		<del></del>	035h	
F11	Theater Or.1	0	0	0	0	027	027
E11 E12	Theater Or.2	0	0	0	0	029	029
E13	Theater Or.3	0	0	0	0	031	031
E13 E14	Theater Or.4	0	0	0	0	028	028
E15	Theater Or.5	0	0	0	0	030	030
E15 E16	Theater Or.6	0	0	0	0	032	032
E17	Theater Or.7	0	0	0	_	035	035
E17 F11 F12	Synth. Org.1	0	0	0	0	036	036
F12	Synth. Org.2	0	0	0	0	037	037
F13	Synth. Org.3	0	0			036a	_
F14	Synth. Org.4	0	0	_	_	037a	***
F15	Digi Church	0				_	
	Metalic Org	0					
F16		***************					
F21	Pop. Organ1	0	0	0		038	038
			0	0	<u> </u>	038 039 040	038 039 040

AT-R /oice No.	Tone Name	AT-90R/ AT-80R	AT-60R	AT-30R	AT-20R	AT-90/AT-80 Voice No.	AT-30 Voice No.
G11	Strings1	0	0	0	0	041	041
G12	Strings2	0	0	0	0	042	042
G13	Strings3	0	O		······	041a	
G14	Strings4	0	0		······································	042a	
G15	Strings5	0	o			041b	
G16	Strings6	o	······			041c	
G17	Strings7		0		······	041d	<del>-</del>
G18	Strings8				<u>-</u>	0410	
H11	Slow Str.1	<u> </u>	0	<u>-</u>	<u>-</u>	043	
H12		<u> </u>	0	0	0		043
п 12 Н13	Slow Str.2	O	0	0		044	044
	Slow Str.3	0	0	<del></del>	<del>-</del>		<del></del>
H21	Synth. Str.1	0	0	0	0	045	045
H22	Synth, Str.2	0	0	0	0	046	046
H23	Synth. Str.3	0	0	0		054	054
H31	Synth. Pad1	0	0	0	0	047	047
H32	Synth. Pad2	0	0	0	0	048	048
111	Violin	0	0	0	0	093	093
112	Viola	0	0	0	0	103	103
113	Cello	0	0	0	0	094	094
114	Pizzicato	0	0	0	0	056	056
J11	Jazz Scat	0	0	0	0	_	·····
J12	Pop Voice	0	0	o	<u>Ö</u>	050	050
J13	Jazz Doo	o	0	0	0		
J14	Jazz Doot	·······					•••••
J15	Jazz Door	***************************************	0	00	0	······	<del></del>
J16	Jazz Bap	0	0	0	<u> </u>		
		0	0	0	O	<del>-</del>	<del>-</del>
J17	JazzDowfall	0	0	0	0		<del></del>
J18	Soprano	0		<del>-</del>	<del>-</del>	<del>-</del>	_
J19	Tenor	0	_	<del>-</del>	_		
J21	Choir	0	0	0	0	049	049
J22	Gregorian	0	0	0			-
J23	Classical	0	0				
J24	Boys Choir	0	0	****	-	****	_
J25	Female 1	0				-	_
J26	Female 2	0			<u> </u>		<del>-</del>
J27	Gospel	0	-				
J31	Synth. Choir	0	0	0		051	051
J32	Synth. Voice	0	0	0	·······	052	052
J33	Space Voice	0	0	0	······	053	053
J41	Vocal Menu	************************	0				
(11	Grand Piano	0					
(12	Piano1					057	057
\12 <13	Piano2	0	0	o		080	080
(14	Piano3		0	0		057a	V6U
(21		<u> </u>	0	0			 058
	Honky-tonk	<u> </u>	0	<u> </u>	0	058	USB
(22	Honky-tonk2	<u> </u>	<u> </u>	<u>0</u>	······	 059	
(31 (00	E.Piano1	<u> </u>	<u> </u>	0	0		059
(32	E.Piano2	0	O	0	0	060	060
(33	E.Piano3	0	0	0		059a	<del>-</del>
(34	E.Piano4	0	0	0	_		
(41	Harpsichord	0	0	0	0	067	067
(42	Clavi.	0	0	0	0	081	081
.11	Accordion	0	0	0	0	073	073
.12	Bandoneon	0	0	0		086	086
.21	Harmonica	0	0	0	0	074	074
<i>I</i> 11	Nylon-str.Gt	0	0	0	0	061	061
<i>I</i> 12	Nylon Gt.2	o	0	0	······ <del>-</del>	061a	
//21	Steel-str.Gt	·······	o	o	o	062	062
л <u>г.</u> Л22	12str Guitar		······	<u> </u>	<u>-</u>		
из1	Jazz Guitar	0	0	0	0	063	063
//32	Clean Guitar			· • · · • • · · · · · · · · · · · · · ·	<u>.</u>	063a	
/132 /133	JC E.Guitar	· · · · · · · · · · · · · · · · · · ·	0	0	<del></del>		
#100	UU E.GUIIAI	0	0	0		063b	

AT-R /oice No.	Tone Name	AT-90R/ AT-80R	AT-60R	AT-30R	AT-20R	AT-90/AT-80 Voice No.	AT-30 Voice No.
M41	Overdrive Gt	0	0	0	0	064	064
M42	OverdriveGt2	0	<del>-</del>		••••	<u> </u>	
M43	Power Guitar	0			····		
M44	Rock Rhythm	0	<del>_</del>	_			<b></b>
N11	Hawaiian Gt.	0	0	0	0	087	087
N12	Banjo	0	0	0	0	072	072
N13	Mandolin	0	0	0	****	071	071
N14	Koto	0	0	0	_	068a	
N15	Taisho Koto	0	0	0		068b	_
N16	Shamisen	0	0	0	_	eties-	
N21	Harp	0	0	0	0	068	068
N22	Celtic Harp	0	-	<del>-</del>	-		*****
N23	Nylon Harp	0		_	-	<del>-</del>	_
N24	Harpvox	0			<del>-</del>	-	_
N31	Sitar	0	0	0	0	091	091
N41	Organ Harp	0	0	0		088	088
011	Vibraphone	o	0	0	0	069	069
012	Glockenspiel	<u>o</u>		0	0	083	083
013	Celesta	0	0	0		082	082
O14	Music Box		<u>.</u>	<u>.</u>	<u>.</u>		
O14 O21	Marimba	<i>.</i>				070	070
O21 O22		0	0	0	0	084	084
O22 O23	Xylophone	<u>0</u>	0	0		U04	
	Barafon	0	<del>_</del>		<u>-</u>	085	
O31	Tubular-bell	0	<u> </u>	<u> </u>	<u> </u>	092	085 092
041	Steel Drums	0	0	0	0	092	092
O42	Kalimba	<u>O</u>	<u> </u>		<u> </u>	091a	
O51	Organ Bell	0	0	<del></del>		085a	
O52	Vibra Bells	0	0			<del></del>	
O53	Digi Bells	0	<del>-</del>	<del>-</del>			<del>-</del>
P11	Tp. Section	0	0	0	0	065	065
P12	Brass 1	0		_		-	
P13	Brass 2	0					
P14	Brass 3	0	_			-	****
P21	Fr.Horn Sect	0	0	0	0	089	089
P22	Fr.HornSect2	0	0	_		089a	
P23	Fr.HornSect3	0				_	
P24	Fr.HornSect4	0					<del>-</del>
P25	Orch.Brs Ens	0				<del>-</del>	
P26	Muted Fr.Horn	0		·····	·····	<del></del>	***************************************
P31	Sax.Section	0		0	0	066	066
P32	Sax.Section2			<u> </u>	<u>-</u>	066a	
P41	Synth. Brass	o	o	o	О	090	090
C41		********************	0			095	095
	Trumpet	0	***********			095a	
Q12	Trumpet2	<u> </u>	<u>0</u>			096	096
Q21	Mute Trumpet	<u> </u>	0	<u>U</u>		096a	U30
Q22	MuteTrumpet2	<u> </u>	О	<del></del>	<del></del>	U <del>9</del> 0a	
Q23	Cup Mute Tp	<u> </u>		<del></del>	<del></del>		 
Q31	Trombone	0	00	0	0	105	105
Q32	Trombone2	0	0		<del>.</del>	105a	
Q41	Flugel Horn	0	0	0	0	104	104
Q42	F.Horn Solo1	0	0		<del>_</del>		<del>-</del>
Q43	F.Horn Solo2	0		_			
Q51	Soprano Sax	0	0	0	0	106	106
Q52	Soprano Sax2	0	0	ente		106a	
Q61	Alto Sax	0	0	0	0	097	097
Q62	Alto Sax2	0	0	<del></del>		097a	_
Q63	Blow Sax	0		· · · · · · · · · · · · · · · · · · ·		·····	<del>-</del>
Q71	Tenor Sax	0	0	0	0	098	098
Q72	Tenor Sax2		<u>V</u>	<del>.</del>	<u>-</u>	098a	_
R11	Flute		0		Λ	099	099
R12	Flute2		***********	<u>.</u>	<u>.</u>	099a	
		0	0		***************************************	U33a	
R13	Flute3	<u>o</u>	0		·····		<del>.</del>
R14	Tin Whistle	0	_			-	_

AT-R Voice No.	Tone Name	AT-90R/ AT-80R	AT-60R	AT-30R	AT-20R	AT-90/AT-80 Voice No.	AT-30 Voice No.
R21	Synth. Flute	0	0	0	A1-2011	055	055
R22	Pan Flute			0	0	100	100
R31	Oboe	0	0			101	101
R32	Bassoon	*********************	······		0	107	107
R33	English Horn	0 0	<u>~</u>		<u>.</u>		
R34	Wood Winds	o					
R41	Clarinet	o	o	0	o	102	102
R42	Clarinet2	o	0			102a	
R43	Clarinet3		o			102b	
R44	Clarinet4	0	o		······································	102c	
R45	Bs Clarinet	0	0				······
R51	Shakuhachi	0	0	0	0	108	108
R52	HumanWhistle	0	0	0	······································	109	109
R61		0	<del>.</del>	······· <del>·</del>	·········· <del>·</del>		
R62	Bagpipe Uillean Pipe	0				······································	
S11	Synth. Lead1	0	0	0	0	110	110
S12	Synth. Lead2	0	0	0	0	111	111
S13	Synth. Lead3	0	0	0	<del>-</del>	112	112
S14	Synth. Lead4	0	0	0	***************************************	113	113
S15	Synth. Lead5	0	0	0	<del></del>	114	114
S16	CC Solo	0		_	_	_	****
T11	Organ Bass1	0	0	0	0	115	115
T12	Organ Bass2	0	0	0	0	116	116
T21	Pipe Org. Bs	0	0	0	0	117	117
T22	Theater Bass	0	0			117a	-
T23	Bombarde	0	0		_		
T31	String Bass	0	0	0	0	118	118
T32	Bass+Cymbal	0	0	0	0	126	126
T33	String Bass2	0	0		<b>—</b>	118a	<del></del>
T41	Contrabass1	0	0	0	0	121	121
T42	Contrabass2	0	0	0	<del>-</del>	122	122
T51	E.Bass1	0	0	0	0	119	119
T52	E.Bass2	0	0	0	0	120	120
T53	E.Bass3	0	0		<del>-</del>	119a	_
T54	E.Bass4	0	0		-	120a	_
T61	Tuba	0	0	0	0	123	123
T62	Tuba2	0	0	_	<del>-</del>	123a	_
T71	Synth. Bass1	0	0	0	0	124	124
T72	Synth. Bass2	0	0	0	-	125	125
T81	Voice Thum	0	0	0	0		_
U11	Org. Attack1 Org. Attack2	0	0	0		075	075
U12	Org. Attack2	0	0	0	<del>_</del>	076	076
U13	Org. Attack3	0	0	0		077	077
U14	Org. Attack4	0	0	0	<del>-</del>	078	078
U15	Org. Click	0	0	0	<u> </u>	079	079
V11	Timpani	0	0	0	<del> </del>	127a	
V12	Timpani2	0	0			<u> </u>	<del>-</del>
V21	Ride Cymbal	0	0			126a	
V22	Crash Cymbal	0	0	<del>-</del>	<del></del>	126b	
V23	Tambourine	0	0		<del>-</del>	126c	
V24	Woodblock	0	0		_	126d	
V25	Jingle Bell	0	0		<del></del>	126e	
V26	Snare Drum	0	0	<del>-</del>		126f	<del>_</del>
V27	Bass Drum	0	O	<del>_</del>	<del>_</del>	126g	<del>-</del>
V28	Church Bell	0		<del>-</del>	<del></del>	127	407
V31	Perc. Set1	0	<u> </u>	0	<del> </del>		127
V32	Perc. Set2	0	0	0	<del>_</del>	128	128
V33	Perc. Set3	0	0	<del> </del>	<del></del>	128a	<del>-</del>
V34	Orch.HitMenu	<u> </u>	0	<del> </del>	<b></b>		
V35	DanceHitMenu	00		-		-	-

# Rhythm List (AT-90R/80R/60R/30R/20R)

1	90R	80R	60R	30R	20R
Fast BigBand	0	0	0	0	***
New Big Band	0	0	0	<del>-</del>	<del></del>
BigBandSwing	0	0	0	0	0
BigBndBallad	0	0	0	0	<del>-</del>
Jazz Band	<u></u> 0	0	0		<del>_</del>
Big Band	<u></u>	0	ō	0	0
Big Band 2	<u></u> O	o	<u>.</u>	<u>.                               </u>	
Boogie	<u></u>	• • • • • • • • • • • • • • • • • • • •		······································	_
Blues	<u>.</u>	0			
Dines					
A Cappella	0	0	0	0	0
Combo	<u></u>	<u></u>	<u>.</u>	0	0
Club Swing	<u></u>	<u>.</u>	<u>.</u>	<u></u>	
Medium Swing	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •			
Slow Swing	0	0	0		
	0	0	0	······	
Vocal Swing	0	<u> </u>	<u> </u>		
Swing	0	0	0	<del>-</del>	
Shuffle	0	0	0	<del></del>	<del>-</del>
CountryRoads	0	0	^		
	• • • • • • • • • • • • • • • • • • • •		0		
CountryPiano	0	0	0	o	
CtrySerenade	0	<u>o</u>	<del>-</del>	<u>-</u>	<del>-</del>
Western	0	<del>-</del>			
CountrySwing	0	<u>0</u>	0		<del>-</del>
Hoedown	0	0	0	0	0
Twostep	0	0	0	<del>_</del>	
CountryWaltz	0	0	0	0	0
Easy Country	0	0	0	0	0
Cajun	0	0			<del>-</del>
Beach Sound	0	0	0	<del>-</del>	
Rock'n'Roll	0	0	0		
Twist	0	0	0	0	0
50'sBallad	0				
Slow Dance	0	0	0	0	0
Dreamin'	0	0	0	0	_
50's Pop 1	0	0	0	0	0
50's Pop 2	0	0		_	_
***************************************					
Love Romance	0	0	0	0	0
Torch Song Torch Song 2	0	0	0	0	0
Torch Song 2	0	0	_		
Love Songs	0	0	0	0	0
MediumBallad	0	0	0	_	_
Pop Ballad	0	0	_		_
Ballad	0	0	0	0	
Classic	0	0	0		_
Dixieland	<u>.</u>	<u>.</u>	0	0	0
Polka	<u>.</u>	o	0	<u>.</u>	
Foxtrot	0	0	0	<u>~</u>	·····-
Charleston	0	0			
*******************************			0		
PianoBoogie1	0	0	<u>U</u>		
PianoBoogie2	0			·····	
Rag Time	0	0	<del> </del>	<del></del>	

	90R	80R	60R	30R	20R
G.Pop	0	0	0	0	0
G.Fast Pop	0	0	0	0	_
P.Slow	0	0	0	0	0
P.Jazz	0	0	0	0	
G.Slow	0	0			
G.Shuffle	0	0	0	<del>-</del>	
P.Night	0	0	0	0	0
P.Pop	0	0		_	<del>-</del>
P.Concerto	0	0			
					•••••
Hawaiian	0	0	0	0	0
French Waltz	0	0	0		
D Marsch 6/8	0	0	0		
Scotland	0	0	0		
Ireland	0	0	0	·····-	
Reggae	<u>.</u>	<u>.</u>	<u>.</u>	0	
Habanera	<u>ٽ</u>	<u>ў</u>	······	<u></u>	······
Sevilla	0	0	<u> </u>		
Jevilia					
Bossa Nova	0	О	0	0	0
Bossa Nova2	0	0	0	·············	_
FastBosaNova	<u>.</u>	o	0		
Slow Bossa	<u>.</u>	<u>0</u>	o		Ω
NewBossaNova		o		0	0
	************	• • • • • • • • • • • • • • • • • • • •			
Chacha	0	0	0	<u> </u>	<del></del>
Chacha 2	0	0	·····	<u>-</u>	
Salsa	0	0	0	0	0
Samba	0	0	_	_	_
Rhumba	<u>.</u>	o	0	0	0
Rhumba 2	0	<u>.</u>	<u></u>	<u>.</u>	
Beguine	<u>o</u>	0	О	0	
Mambo	<u>.</u>	0	o	<u>V</u>	
*****************************	•••••	·····			0
Tango 1	0	0	0	0	0
Tango 2 Latin Fusion	0	0	0	·····	
***************************************	0	0			<del></del>
Samba Rio	0	0	<u> </u>	0	0
Scroon 1	0	0	0	0	_
Screen 1	0	0	0	0	
Screen 2	0	0	0	<del>-</del>	<del></del>
Music Hall	0	0	o		·····
Broadway	0	0	0	0	
ChooChooSwg	0	0	0	<del>.</del>	<del> </del>
Bubbles	0	0	<del></del>	<del>-</del>	<del>-</del>
Balloon Trip	0	0		<del>_</del>	<del>-</del>
Raindrops	0	0	0	0	0
Festival	0	0	0	0	
Little Steps	0	0	<del>_</del>		****
WesternMovie	0	_		_	

	90R	80R	60R	30R	20R
8Beat Pop	0	0	0	-	
Swing Pop	0	0	0	0	0
PopularPiano	0	0	0	0	
Acoustic Pop	0	0	0	······	<del>-</del>
Pop'n Roll	0	0			_
Easy Listen1	0	0	0	0	0
Easy Listen2	0	0	0	0	0
Easy Listen3	• • • • • • • • • • • • • • • • • • • •			<u></u>	
Easy Listen4	0	0	······	<u> </u>	
Easy Listen5	0	0		······	
Lasy Listerio					•••••
Rollin'	0	О	0	_	_
16BeatShuffl	0	0	<del>-</del>	<del></del>	
Motown	0	0	0	0	_
ShufflePop 1	0	0	0	······································	
ShufflePop 2	0	0	0		
Rock'n'Shffl	ŏ	<u>.</u>	<u>.</u>	······································	
Light Fusion	• • • • • • • • • • • • • • • • • • • •	<u>v</u>			
Rock'n Pop	0				
nockiirop	0	0	<u> </u>		<del></del>
Gospel Piano	0		_		•
Gospel Pop	<u>.</u>	 O	 O	o	
GospelBallad	<u>.</u>	<u></u>		<u>.</u>	······
Gospel 1	<u>0</u>	0		······	······
Gospel 2	0	0	0		
Anthem					
	0	0	0	<u>o</u>	······
Revival	0	0	0	······	
Chapel	0	<del>-</del>	·····	<del></del>	·····
Last Dance	o	0	0	o	_
Jazz Waltz	0	0	0	<del></del>	
StringsWaltz	0	0	0		
Slow Waltz	0	0	0	0	0
Waltz	0	0	············	······································	
Musette	······	<u>.</u>	0	0	
Vienna Waltz	ŏ	<u>.</u>	<u>.</u>	······-	
March 4/4	<u>.</u>	<u>ў</u>	o	o	0
March 6/8					
March 2/4	0				
	0	0			
Simple March	0	0			
Cute Pop	0	o	0	_	
R&B	0	0		······································	
Slow Rock	<u>0</u>	<del>.</del>		······································	
Rock'n'Roll2	<u>0</u>	0	······		
60'sBallad	<u>.</u>	0			
Crystal		<u>.</u>	0		
	0				
Bossa Nova 3	0	0	0	<u>-</u>	<del>_</del>
Bossa Nova 4	0	0	0	<del>-</del>	<del>-</del>
Cinema	0	0		<del>-</del>	
Entertaining	0	<u>o</u>	<del>-</del>		<u>-</u>
70's Disco	0	<del>_</del>	<del>-</del>	<del> </del>	<del>-</del>
16Beat Pop 1	0	0	0	<del>-</del>	
16Beat Pop 2	0	0	0	<b></b>	<del></del>
AcousticRock	0	0	<del></del>	<del> </del>	
Rock 1	0	<u> </u>	<u> </u>		
Rock 2	0				

# Rhythm List

左ページ (P.8、10) は AT-90/80/30、右ページ (P.9、11) は AT-90R/80R/60R/30R/20R のリズム一覧表です。

The lists on left pages (p.8, 10) are AT-90/80/30 Rhythm List. The lists on right pages (p.9, 11) are AT-90R/80R/60R/30R/20R Rhythm List.

AT-90	AT-80	AT-80 for Japan	AT-30
Jazz Band	_	Jazz Band	Jazz Band
Big Band	_	_	Big Band
	Big Band	Big Band	****
-	Blues	_	
BigBndBallad	_	_	BigBndBallad
	BigBndBallad	BigBndBallad	
Boogie	_	Boogie	
Standard	Standard	Standard	
	Vocal Swing	<del>-</del>	······································
Combo	Combo	Combo	Combo
Medium Swing	_	Medium Swing	_
Shuffle	<del>-</del>	_	
Swing	Swing	Swing	Swing
	Club Piano	Club Piano	
Cntry Ballad	Cntry Ballad		
CountrySwing	CountrySwing	_	
- Couring	- Country Swing	Two Step	Two Step
- Bluegrass	Pluggeon		Two Step
Diueyiass	Bluegrass	Bluegrass	Dhacasas
~ 	——————————————————————————————————————		Bluegrass
CountryWaltz	CntryWltz		CountryWaltz
-	Easy Country	<del>_</del>	<del>-</del>
Hoe Down	Hoe Down		
New Country	***************************************	New Country	_
_		Western	
Two Step	Two Step	<u> </u>	
***************************************		Country Rock	
	_	DancePop 1	_
-		DancePop 2	
	_	70's Disco	
		Light Fusion	****
_	-	Rock 1	_
-		Rock 2	_
<del>-</del>	50's Ballad	_	
Slow Dance	Slow Dance	50'sBallad 1	<del></del>
50's	50's	_	
·····		_	Twist
Rock'n'Roll1	Rock'n'Roll	Rock'n'Roll1	Rock'n'Roll1
Rock'n'Roll2		Rock'n'Roll2	Rock'n'Roll2
-		R&B	- IOOR II I IOIL
_		AcousticRock	
ovo Songe	Lovo Songo	ACOUSTICHOCK	Lovo Conor
Love Songs	Love Songs	Polled 4	Love Songs
Ballad	Ballad	Ballad 1	Ballad
<del></del>		50'sBallad 2	
-	-	16BeatBallad	
Classic	Classic		Classic
****	Torch Song	_	
_	Piano Boogie	***************************************	
	***	Festival	_

- ※ Disk と書かれているのは、添付のミュージック・スタイル・ディスクのリズム番号です。※ World と書かれているのは、添付のワールド・スタイル・セットアップ・ディスクのリズム番号です。

Rhythm Number of Music Style Disk Rhythm Number of World Style Setup Disk \* Disk-\*\*:

\* World-\*\*:

AT-90R	AT-80R	AT-60R	AT-30R	AT-20R
Jazz Band	Jazz Band	Jazz Band	Disk-03	Disk-03
Big Band	Big Band	Big Band	Big Band	Big Band
Big Band2	Big Band2	Big Band2	_	
Blues	Blues	_	_	_
Disk1-01	Disk1-01	Disk1-01	Disk-01	Disk-01
BigBndBallad	BigBndBallad	BigBndBallad	BigBndBallad	_
Boogie	Boogie	Disk1-05	<del>-</del>	_
Disk1-02	Disk1-02	Disk1-02	****	
Vocal Swing	Vocal Swing	-	man.	
Combo	Combo	Combo	Combo	Combo
Disk1-07	Disk1-07	Disk1-07	Disk-08	Disk-08
Shuffle	Shuffle	Shuffle		
Swing	Swing	Swing	Disk-07	Disk-07
Club Swing	Club Swing			
Disk1-13	Disk1-13	Disk1-13	Disk-14	Disk-14
CountrySwing	CountrySwing	CountrySwing	Disk-15	Disk-15
Disk1-15	Disk1-15	Disk1-15	Disk-16	Disk-16
Disk1-10	Disk1-10	Disk1-10	Disk-10	Disk-10
Disk1-11	Disk1-11	Disk1-11	Disk-11	Disk-11
CountryWaltz	CountryWaltz	CountryWaltz	CountryWaltz	CountryWaltz
Easy Country	Easy Country	Easy Country	Easy Country	Easy Country
Hoedown	Hoedown	Hoedown	Hoedown	Hoedown
Cajun	Cajun	Disk2-01	Disk-12	Disk-12
Western	Disk2-02	Disk2-02	_	ALLEN .
Twostep	Twostep	<del>-</del>	_	_
Disk2-02	Disk2-03	_		
Disk2-32	Disk2-29	Disk2-14	_	_
Disk2-33	Disk2-30	Disk2-15	Disk-62	Disk-62
Disk2-31	Disk2-28	_	-	_
Light Fusion	Light Fusion	_	_	-
Rock 1	Disk2-24	Disk2-12		-
Rock 2	Disk2-25	Disk2-13	****	-
50'sBallad	Disk2-05	_		_
Slow Dance	Slow Dance	Slow Dance	Slow Dance	Slow Dance
50's Pop 1	50's Pop 1	50's Pop 1	50's Pop 1	50's Pop 1
Twist	Disk1-17	Disk1-17	Disk-18	Disk-18
Disk1-49	Disk1-49	Disk1-49	Disk-57	Disk-57
Disk1-50	Disk1-50	Disk1-50	Disk-58	Disk-58
R&B	R&B	_		_
AcousticRock	AcousticRock		_	
Love Songs	Love Songs	Love Songs	Love Songs	Love Songs
Ballad	Ballad	Ballad	Ballad	
Dreamin'	Dreamin'	Dreamin'	Dreamin'	_
Easy Listen5	Disk2-15	Disk2-06	Disk-42	Disk-42
Classic	Classic	Classic	Disk-21	Disk-21
Torch Song	Torch Song	Torch Song	Torch Song	Torch Song
PianoBoogie2	Disk2-06			
Festival	Festival	Festival		

Metaland	AT-90	AT-80	AT-80 for Japan	AT-30
Dixeland   Dixeland   Charleston   Charleston   Charleston   Reggae   Charleston   Charleston   Reggae   Charleston   Ch	Foxtrot	Foxtrot	Foxtrot	Foxtrot
Pareleston	Dixieland		_	Dixieland
Reggae			Dixieland	_
- Folk Dance -	Charleston	Charleston	_	_
Sesa Nova		_		
Bossa Nova	-	_	Folk Dance	_
—         Bossa Nova         Bossa Nova           sis Bossa         —         FastBosaNova         —           nacha         Chacha         Chacha         Chacha           ambo         —         Mambo         Mambo           amba         Samba         —           imba         Samba         Brumba         Rhumba           imba         Rhumba         Rhumba         Rhumba           imba         Rhumba         Rhumba         Rhumba           imba         Rhumba         Rhumba         Rhumba           imba         Rhumba         Rhumba         Rhumba           imba         Beguine         —         Samba           imgo         Tanga         —         —           imgo         Tanga         —         —           imgo         —         —	····		Kayou	
—         Bossa Nova         Bossa Nova           sis Bossa         —         FastBosaNova         —           nacha         Chacha         Chacha         Chacha           ambo         —         Mambo         Mambo           amba         Samba         —           imba         Samba         Brumba         Rhumba           imba         Rhumba         Rhumba         Rhumba           imba         Rhumba         Rhumba         Rhumba           imba         Rhumba         Rhumba         Rhumba           imba         Rhumba         Rhumba         Rhumba           imba         Beguine         —         Samba           imgo         Tanga         —         —           imgo         Tanga         —         —           imgo         —         —	Bossa Nova	Bossa Nova	-	_
Marbo		-		Bossa Nova
Chacha   C	Fast Bossa		FastBosaNova	_
ambbo         -         Mambo         Mambo           Imba         Samba         -           Imba         Samba         -           Imba         Rhumba         Rhumba           Imba         Rhumba         Rhumba           Imba         Rhumba         Rhumba           Impa         -         Beguine           Beguine         Beguine         -           Beguine         Beguine         -           Impo         -	Chacha	Chacha	Chacha	Chacha
Samba	Mambo	-	Mambo	Mambo
Imba         Samba         Samba         -           numba         Rhumba         Rhumba         Rhumba           -         -         Samba           nguine         -         -         Samba           nguine         -         -         Beguine         -           Beguine         -         -         -           Imago         -         -         -           Imago         -         -         -           -         -         Tango 1         -           -         -         Tango 2         -           -         -         Tango 2         -           -         -         Tango 2         -           -         -         -         Tango -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -			Salsa	
Numba	Samba	Samba		<del>-</del>
	Rhumba			Rhumba
Beguine	_	<u></u>	_	Samba
Beguine	Beguine	<del></del>		
Tango	-	Beauine	Beguine	_
-         Tango 2         -           -         Tango 2         -           -         -         Tango           -         Latin Fusion         -           -         -         -           Listin Hall         Music Hall         -           Music Hall         Music Hall         -           Listin Hall         -	Tango			
-   Tango 2	-	-	Tango 1	
-	 		Tango /	
ChooChooSwg	<del>-</del>		1 ango 2	Tango
ChooChooSwg	<del>-</del>		- Latin Fusion	- ango
Music Hall   Music Hall   Music Hall   —		ChaoChaoSwa	Lautt USIOII	
Description			Music Hall	
Bubbles		WIUSIC HAII	WIUSIC FIAII	<u> </u>
—   Pop 1   —   Pop 2   —   Pop 2   —   Pop 3   —   Pop 3   —   Pop 4   —   Pop 4   —   Pop 4   —   Pop 4   —   Pop 5   Pop 5   Pop		— — — — — — — — — — — — — — — — — — —		
Pop 2	Buddies	BUDDIES	- Don 4	<del></del>
Pop 3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
- Pop 4 - Simple 8Beat - Simple 8Beat - Contemporary - Simple 8Beat - Contemporary - Contemporary - Simple 8Beat - Contemporary - Contemporar	-			
-   Simple 8Beat   -    -   Contemporary   -    -   Easy Listen1   Easy Listen1   -    -   Easy Listen2   Easy Listen2   -    -   Easy Listen2   -   Easy Listen1    -     PopularPiano   PopularPiano   -    -   ShufflePop 1   Pop    -   ShufflePop 2   -    -   Rockn'Shffl   -    -   16Bt Shuffle   -    -   -   Easy Listen2    -   Supple   Gospel   Gospel   -    -   Gospel 2   -    -   Gospel 2   -    -   Gospel 3   Revival   New Gospel   -    -   Gospel 3   Gospel   -    -   Gospel 4   Revival   New Gospel   -    -   Gospel 5   Gospel   -    -   Gospel 6   Gospel   -    -   Gospel 7   -    -   Gospel 8   Gospel   -    -   Gospel 9   Gospel   Gospel   -    -   Gospel 9   Gospel   Gospel   Gospel   Gospel   -    -   Gospel 9   Gospel   Gosp	_			<del>-</del>
Contemporary	***************************************	<del></del>	,,,,	
Easy Listen1	<del>-</del>	<u> </u>	,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
ssy Listen2         Easy Listen1         —         Easy Listen1           upularPiano         PopularPiano         —         PopularPiano           up         —         ShufflePop 1         Pop           —         —         ShufflePop 2         —           —         —         Rock'n'Shtfl         —           —         —         Rock'n'Shtfl         —           —         —         Easy Listen2           upun         —         Easy Listen2           upun         —         Easy Listen2           upun         —         —           upun         —         —           upun         —         —           upun         —         —           —         —         —           upun         —         —			Contemporary	_
PopularPiano	Easy Listen1			
ShufflePop 1	Easy Listen2		_	
Pop	PopularPiano	PopularPiano	_	PopularPiano
-   ShufflePop 2   -	Pop	-		Pop
-         16Bt Shuffle         -           -         -         Easy Listen2           ospel         Gospel 1         -           -         Gospel 2         -           osvival         Revival         New Gospel         -           ospelBallad         -         GospelBallad         -           ospelBallad         -         GospelBallad         -           ospelBallad         -         March 4/4         March 4/4         March 4/4         March 6/8           ospelBallad         -         GospelBallad         -           ospelBallad         -         March 6/8         March 6/8           ospelBallad         -         -         March 6/8         March 6/8           ospelBallad         -				-
-         -         Easy Listen2           ospel         Gospel 1         -           -         Gospel 2         -           evival         Revival         New Gospel -           ospelBallad         -         GospelBallad -           ospelBallad         -         GospelBallad -           ospelBallad         -         March 4/4 March 4/4 March 4/4 March 4/4 March 6/8 March 6/8           ospelBallad         -         Simple March 6/8 M	<del></del>		Rock'n'Shffl	-
Gospel   G		_	16Bt Shuffle	anne .
Gospel   G	<del>-</del>	-	_	Easy Listen2
-         Gospel 2         -           evival         Revival         New Gospel         -           ethem         Anthem         Slow Gospel         -           espelBallad         -         GospelBallad         -           earch 4/4         March 4/4         March 4/4         March 4/4           earch 6/8         March 6/8         March 6/8         March 6/8           German March         March 2/4         -           -         Simple March         -           ew Waltz         Slow Waltz         Slow Waltz           ew Waltz         Slow Waltz         Slow Waltz           enna Waltz         Vienna Waltz         Vienna Waltz           Waltz         Waltz         -           ewaiian         Hawaiian         Hawaiian         Hawaiian	Gospel	Gospel	Gospel 1	
Evival         Revival         New Gospel         -           Inthem         Anthem         Slow Gospel         -           DespelBallad         -         GospelBallad         -           Interpetation         March 4/4         March 4/4         March 4/4           Interpetation         March 6/8         March 6/8         March 6/8           Interpetation         March 6/8         March 6/8         March 6/8         March 6/8           Interpetation         March 6/8         March 6		-	Gospel 2	<del>-</del>
Anthem	Revival	Revival		
SepelBallad	Anthem			<del></del>
Barch 4/4         March 4/4         March 4/4         March 4/4         March 6/8         March 12/4         —         —         —			,,,	<del>-</del>
Barch 6/8         March 6/8         Adwalls         Adwalls         March 6/8         March 12/4         Low Waltz         March 12/4		March 4/4		March 4/4
German March         March 2/4         —           -         Simple March         —           ow Waltz         Slow Waltz         Slow Waltz           ow Waltz 2         —         —           usette         Musette         Musette           enna Waltz         Vienna Waltz         Vienna Waltz           Waltz         Waltz         —           awaiian         Hawaiian         Hawaiian				
- Simple March -  Dow Waltz Slow Waltz Slow Waltz Slow Waltz  Dow Waltz 2  Jusette Musette Musette Musette Musette  Penna Waltz Vienna Waltz Vienna Waltz Vienna Waltz  Waltz Waltz -  Jawaiian Hawaiian Hawaiian Hawaiian	-			-
ow Waltz Slow Waltz Slow Waltz Slow Waltz  ow Waltz 2 usette Musette Musette Musette enna Waltz Vienna Waltz Vienna Waltz  Waltz Waltz - uwaiian Hawaiian Hawaiian Hawaiian	<del>-</del> 	German wateri		······
ow Waltz 2	Claw Maltz	Claw Malta		- Slow Moltz
usette Musette Musette Musette Musette enna Waltz Vienna Waltz Vienna Waltz Vienna Waltz Waltz Waltz – awaiian Hawaiian Hawaiian Hawaiian		Slow vvaliz	SIOM MAIR	SILBAN MOIC
enna Waltz Vienna Waltz Vienna Waltz Vienna Waltz Vienna Waltz - walian Hawaiian Hawaiian Hawaiian Hawaiian		_		A 45
Waltz Waltz - awaiian Hawaiian Hawaiian Hawaiian	Musette			
awaiian Hawaiian Hawaiian Hawaiian Hawaiian	Vienna Waltz			Vienna Waltz
olka Polka Polka Polka Polka	Hawaiian		, <u></u>	**************************************
	Polka	Polka	Polka	Polka

AT-90R	AT-80R	AT-60R	AT-30R	AT-20R
Foxtrot	Foxtrot	Foxtrot	Disk-24	Disk-24
Disk1-22	Disk1-22	Disk1-22	Disk-23	Disk-23
Dixieland	Dixieland	Dixieland	Dixieland	Dixieland
Charleston	Charleston	Charleston	Disk-22	Disk-22
Disk2-5	Disk2-7	_	_	-
Disk2-25	Disk2-21		_	-
World-33	World-33	World-33	World-33	-
Bossa Nova2	Bossa Nova2	Bossa Nova2	Disk-31	Disk-31
Disk1-29	Disk1-29	Disk1-29	Disk-33	Disk-33
FastBosaNova	FastBosaNova	FastBosaNova	Disk-32	Disk-32
Chacha	Chacha	Chacha	Chacha	_
Disk1-32	Disk1-32	Disk1-32	Disk-36	Disk-36
Salsa	Salsa	Salsa	Salsa	Salsa
Samba Rio	Samba Rio	Samba Rio	Samba Rio	Samba Rio
Rhumba	Rhumba	Rhumba	Rhumba	Rhumba
Disk1-33	Disk1-33	Disk1-33	Disk-37	Disk-37
Disk1-36	Disk1-36	Disk1-36	Disk-39	Disk-39
Beguine	Beguine	Beguine	Beguine	_
Disk1-34	Disk1-34	Disk1-34	and the same of th	-
Tango 1	Tango 1	Tango 1	Tango 1	Tango 1
Disk2-11	Disk2-10	_	10000	_
Disk1-35	Disk1-35	Disk1-35	Disk-38	Disk-38
Latin Fusion	Latin Fusion	***	-	_
ChooChooSwg	ChooChooSwg	ChooChooSwg	****	<del>-</del>
Music Hall	Music Hall	Music Hall		-
Broadway	Broadway	Broadway	Broadway	_
Bubbles	Bubbles	4000		_
Disk2-13	Disk2-11		- Carter	_
Disk1-41	Disk1-41	Disk1-41	Disk-45	Disk-45
Disk2-14	Disk2-12	-	_	
Disk2-15	Disk2-13	<u></u>		_
Disk2-16	Disk2-14		_	
Disk1-52	Disk1-52	Disk1-52	Disk-59	Disk-59
Easy Listen1	Easy Listen1	Easy Listen1	Easy Listen1	Easy Listen1
Easy Listen2	Easy Listen2	Easy Listen2	Easy Listen2	Easy Listen2
PopularPiano	PopularPiano	PopularPiano	PopularPiano	_
ShufflePop 1	ShufflePop 1	ShufflePop 1	Disk-46	Disk-46
ShufflePop 2	ShufflePop 2	ShufflePop 2		_
Rock'n'Shffl	Rock'n'Shffl	_		_
Disk2-21	Disk2-17	****	****	_
Easy Listen3	Easy Listen3	Disk2-04	Disk-40	Disk-40
Gospel 1	Gospel 1	Gospel 1		_
Gospel 2	Gospel 2	Disk2-07	Disk-47	Disk-47
Revival	Revival	Revival		-
Anthem	Anthem	Anthem	Anthem	
GospelBallad	GospelBallad	Disk2-08	Disk-48	Disk-48
March 4/4	March 4/4	March 4/4	March 4/4	March 4/4
March 6/8	March 6/8	March 6/8	March 6/8	March 6/8
March 2/4	March 2/4	Disk2-10	Disk-54	Disk-54
Simple March	Simple March		***************************************	
Slow Waltz	Slow Waltz	Slow Waltz	Slow Waltz	Slow Waltz
Disk1-43	Disk1-43	Disk1-43	Disk-52	Disk-52
Musette	Musette	Musette	Musette	-
Vienna Waltz	Vienna Waltz	Disk2-09	Disk-50	Disk-50
Waltz	Waltz	_		
Hawaiian	Hawaiian	Hawaiian	Hawaiian	Hawaiian
Polka	Polka	Polka	Polka	_

For EU Countries



This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/EEC.

For the USA

## FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

  Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

  Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment. This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

## NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

## **AVIS**

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

# Roland® 71235912

UPC 71235912