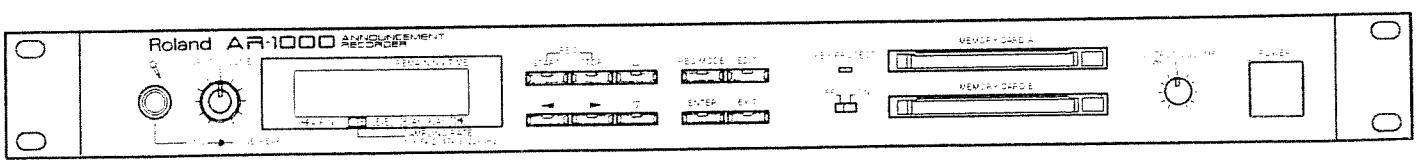
Roland

ANNOUNCEMENT RECORDER

AR-1000

OWNER'S MANUAL



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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 voltage" 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

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

1. Read all the instructions before using the product.
2. 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.
3. 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.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. Avoid using the product where it may be affected by dust.
8. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Do not tread on the power-supply cord.
11. Do not pull the cord but hold the plug when unplugging.
12. When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
13. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. 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.
15. 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 Canada

For Polarized Attachment Plug

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

ATENTION: 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.

SAVE THESE INSTRUCTIONS

For the U.K.

WARNING: THIS APPARATUS MUST BE EARTHED

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.
GREEN-AND-YELLOW: EARTH, 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 GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.

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.

The product which is equipped with a THREE WIRE GROUNDING TYPE AC PLUG must be grounded.

Thank you, and congratulations on your choice of the **Roland AR-1000 Announcement Recorder**.
In order to enjoy command over the complete range of superior features the unit offers, please take the time to read this manual in its entirety.

FEAUTURES

- Highly realistic recording/playback of voice (or music) is assured thanks to adoption of the ADPCM method.
- Since your voice recordings are placed directly onto IC cards (memory cards), you will not experience any deterioration in the sound quality, or have problems with the transport mechanism as you might if using conventional recording/playback devices that use tape.
- Accommodates up to 500 Phrases (or 1,960 seconds) of recorded material. (When 2 memory cards are used.)
- The LCD display provides for the efficient confirmation of the settings you make, since it can display a whole group of settings at once.
- A comprehensive selection of playback methods is available to allow you to select the one that best suits the situation you have at hand. These include: Program Playback (2 patterns), Direct Playback (3 patterns), as well as playback which is controlled by a personal computer (using RS-232-C).
- Different methods of recording can be accommodated thanks to its two sets of inputs (LINE/MIC).
- Since it is equipped with its own speaker, it allows for trouble free monitoring of what you record.
- Can be mounted on EIA-1U rack.
- The unit facilitates mixing that similar audio sources, since the line inputs are equipped with a muting feature.

Concerning Memory Cards

Note that no memory cards are included with this product; they are available for purchase separately.
Any memory card which complies with PCMCIA R2.0/JEIDA* Ver. 4 (SRAM and FLASH cards) is permissible.

* Japan Electronics Industries Development Association

PCMCIA compatible memory card:
A memory card which complies with the R2.0 standard specified by the PC Memory Card International Association.

SRAM cards:
SRAM stands for Static Random Access Memory, and these are cards which can be written to (recorded onto)/erased at will.

FLASH cards:
These cards can be written to (recorded onto)/erased electrically.

Capacity (Bytes)	Recording Time (Sec.) Sampling rate		
	8.5kHz	17kHz	22kHz
128K	29	14	11
256K	60	30	23
512K	120	60	47
1M	243	121	94
1.5M	366	183	142
2M	489	244	190
3M	735	367	285
4M	980	490	381

(Amount afforded by a single memory card)

CONTENTS

IMPORTANT NOTES

In addition to the items listed under Safety Precautions on page 2, please read and adhere to the following:

[Power Supply]

- When making any connections with other devices, always turn off the power to all equipment first; this will help prevent damage or malfunction.
- Do not use this unit on the same power circuit with any device that will generate line noise, such as a motor or variable lighting system.

[Placement]

- Using the unit near power amplifiers (or other equipment containing large transformers) may induce hum.
- This unit may interfere with radio and television reception. Do not use this unit in the vicinity of such receivers.

[Maintenance]

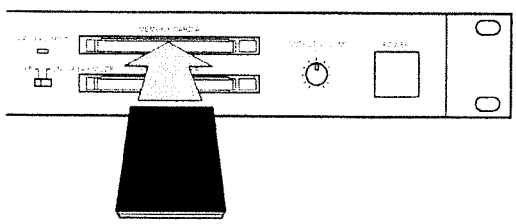
- For everyday cleaning wipe the unit with a soft, dry cloth (or one that has been slightly dampened with water). To remove stubborn dirt, use a mild neutral detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind,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

[Additional Precautions]

- Protect the unit from strong impact.
- Do not allow objects or liquids of any kind to penetrate the unit. In the event of such an occurrence, discontinue use immediately. Contact qualified service personnel as soon as possible.
- Never strike or apply strong pressure to the display.
- A small amount of heat will radiate from the unit, and thus should be considered normal.
- Before using the unit in a foreign country, consult with qualified service personnel.

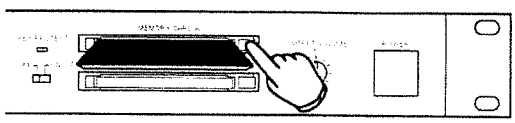
How to Insert Memory Cards

With the brand name on the card facing upwards, insert it into the slot until it is firmly gripped in place.



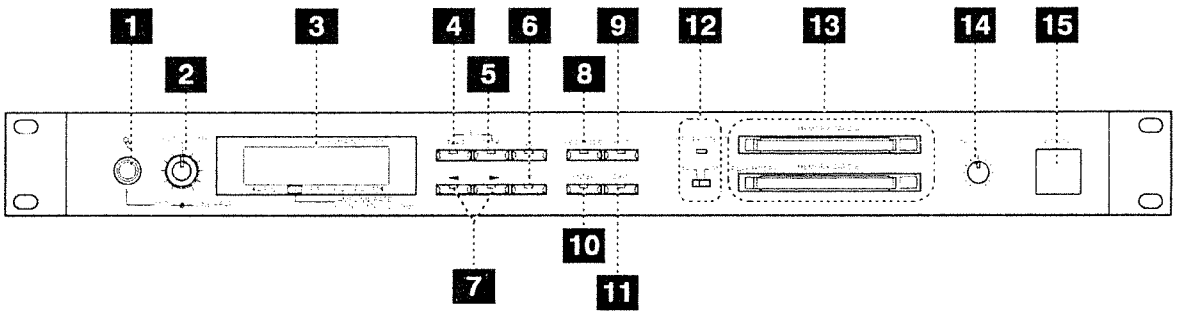
Removing Memory Cards

Press the button at the slot's right, then pull out the memory card.

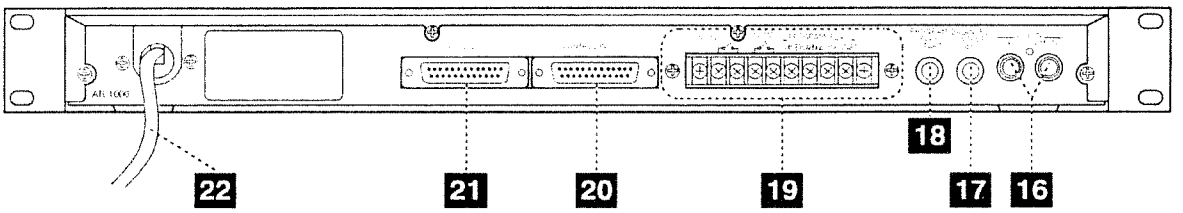


PANEL DESCRIPTIONS

«Front panel»

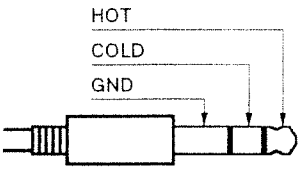


«Rear panel»



1 MIC Input Jack
2 INPUT VOLUME Knob
3 Display
4 START Button
5 STOP Button
6 Value Altering Buttons [△]/[▽]
7 Item Selection Buttons [◀]/[▶]
8 REC MODE Button / Indicator
9 EDIT Mode Button / Indicator
10 ENTER Button
11 EXIT Button
12 KEY PROTECT Switch / Indicator
13 MEMORY CARD Slots
14 OUTPUT VOLUME Knob
15 POWER Switch

16 LINE Input Jacks
17 BALANCED OUTPUT Jack



18 PROGRAM PLAY Input Jack (page 60)
19 CONTROL IN / OUT Terminals (page 60)
20 CONTROL IN / OUT Connector (page 60)
21 RS-232-C Connector (page 62)
22 Power Cord

Note Regarding the KEY PROTECT Switch

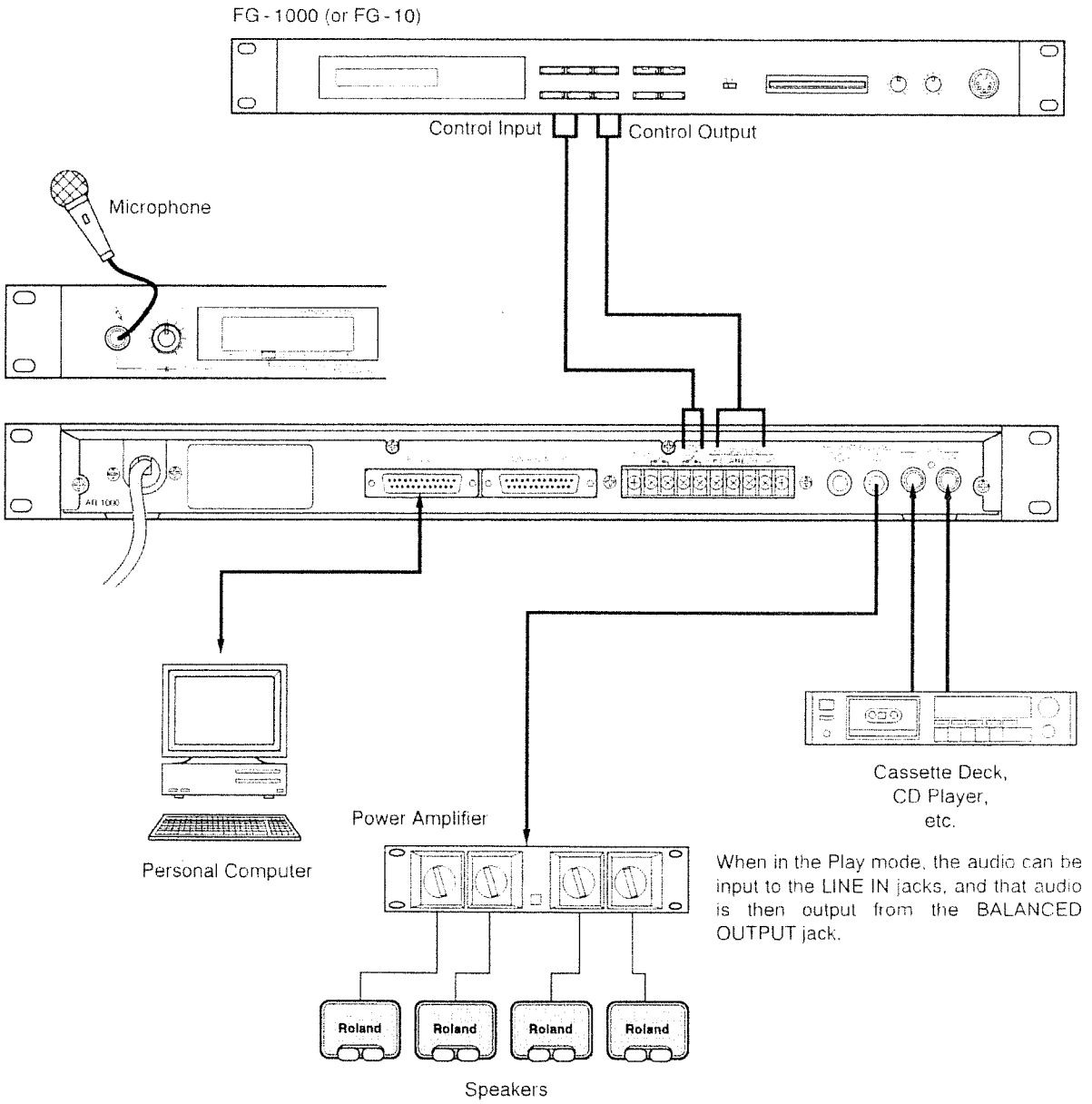
KEY PROTECT

OFF ON (PLAY MODE)

This switch should normally be left at the ON position in order to prevent accidental setting changes.

ON : Control Input will be accepted, and play will take place in accord with the stipulated settings.(Play Mode)
OFF : Control Input will be ignored. Functions such as recording/editing can be performed.

CONNECTION EXAMPLE



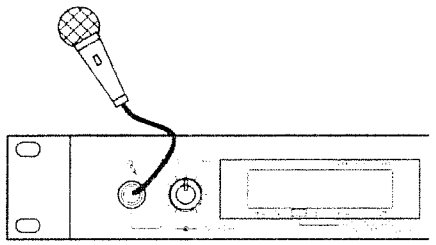
When in the Play mode, the audio can be input to the LINE IN jacks, and that audio is then output from the BALANCED OUTPUT jack.

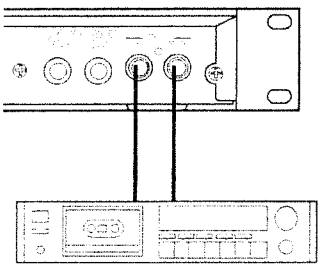
GETTING STARTED

RECORDING

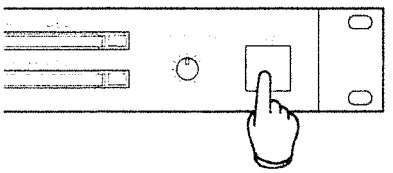
Getting Ready

1 **Connect a microphone, cassette deck, or other device to this unit's input jack.**





2 **Push the POWER switch ON.**



3 **Insert a memory card (SRAM) into the MEMORY CARD A slot.**

* Slide the write protect switch on the memory card to the "OFF" position.

* Recordings cannot be made directly to a FLASH card.

4 **Switch OFF the KEY PROTECT switch.**

The KEY PROTECT indicator will go out.

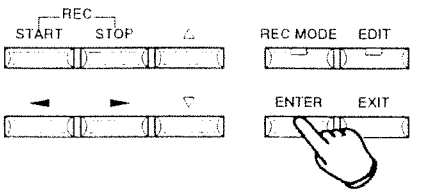
Formatting Memory Cards

Before using all new memory cards, as well as any that have previously been used with other equipment, you must "format" (initialize) them so that this unit is able to work with them.
Any time you insert an unformatted memory card into a MEMORY CARD slot, you will be presented with the display page where formatting is carried out.

```
CARD  Format
CARD  A | 512KBytes
```

* Should you not wish to go ahead and format the card, remove the card at this point.

Press [ENTER] to begin formatting the card.




```
Formatting      10%
CARD  A | 512KBytes
```

Once formatting has completed, the unit goes into the PLAY mode.

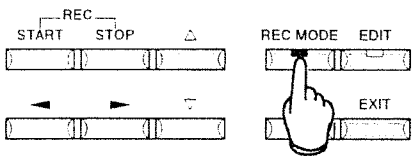
```
NO    PHRASE
```

«IMPORTANT»
Never remove the memory card from the slot while it is being formatted.

Cards can be inserted into either the A or B MEMORY CARD slots for formatting.

Making a Recording

1 Set the unit to the recording mode.

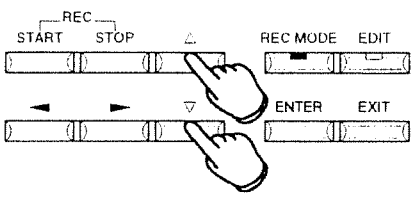


Press the **[REC MODE]** button.
The button's indicator will light.

```
REC  MODE        0120
A001 | - | -- | -- | ---
PHRASE No. TYPE LEVEL DELAY PLAY TIME
```

2 Select the Phrase number.

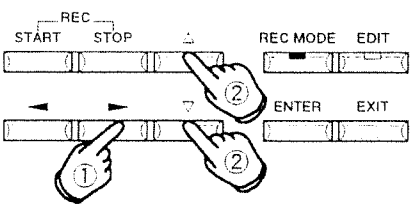
Each item of audio material that you record is referred to as a "Phrase." Each Phrase is organized according to its assigned number.



Select the Phrase number into which you intend to record using [△]/[▽].

* Immediately after a card has been newly formatted, this number will be "001."

3 Select the type of recording.



① Using the [▶] button, move the blinking cursor to Type.

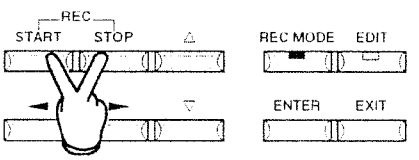
② Select the type using the [△]/[▽] buttons.

```
REC  MODE        0120
A001 | 1 | 100 | 00 | 000
PHRASE No. TYPE LEVEL DELAY PLAY TIME
```

The following 3 types of recording (Samplig rate) are available:

1. ➡8.5 k : Provides the longest amount of recording time.
2. ➡17 k : Provides standard recording.
3. ➡22 k : Provides the most realistic recording.

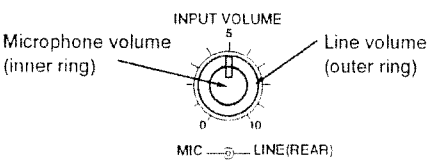
4 Enter recording standby.



While holding down **[STOP]**, press the **[START]** button. The Level Meter will appear in the display.

```
PAUSE
A001 | 1 | -- | -- | ---
PHRASE No. TYPE LEVEL DELAY PLAY TIME
```

5 Set the recording level.

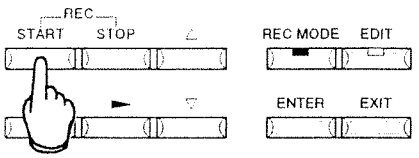


Use the INPUT LEVEL knob to adjust the recording level. At the ideal level, the " " should not light at all.

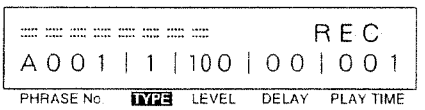
«IMPORTANT»

Always place the volume at "0" for whichever input (Mike or Line) you are not using at that time.

6 Start recording.

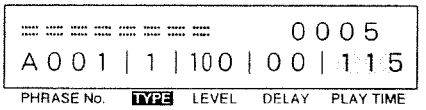


Press the **[START]** button, and recording will begin. Once recording begins, the readout for "PLAY TIME" will begin changing.

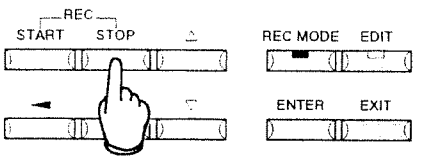


«IMPORTANT»

- Recording stops automatically as soon as the "REMAINING TIME" reaches "0."
- When the "REMAINING TIME" becomes 5 seconds and less, the readout under "REC" will indicate those remaining seconds.

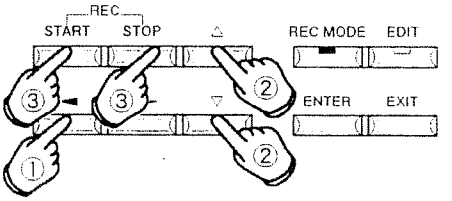


7 Stop recording.



Press the **[STOP]** button to get the recording to stop, and have what was recorded stored onto the card.

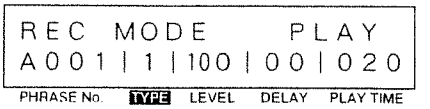
8 Check what was recorded.



① Using the [◀] button, move the blinking cursor to PHRASE No.

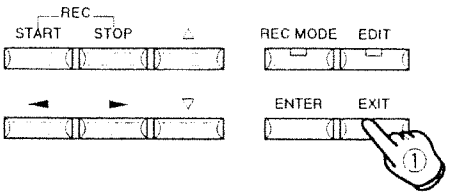
② Select the Phrase (number) you wish to check using the [△]/[▽] buttons.

③ Press the **[START]** button to start playback.
Press the **[STOP]** button to stop playback.



9 Steps 2 through 8 can be repeated as many times as necessary.

10 Finish up with the recording process.



① Press the **[EXIT]** button.
The REC MODE indicator will go out.

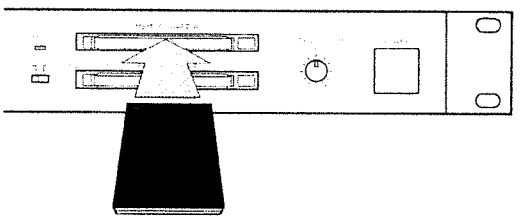
② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit is placed in the PLAY mode.

This unit allows you to select the volume level that will used during actual playback, and allows you to specify an amount of delay before play for each of the Phrases(audio segments) that you have recorded. For information on how to make these settings, refer to page 20.

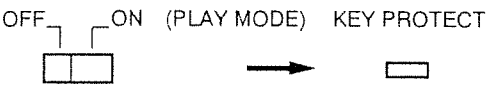
Monitoring Memory Cards (Monitor Mode)

Perform the steps below to listen to (monitor) the Phrases that have been recorded onto a memory card.

1 Insert a card containing your recorded material into a MEMORY CARD slot (either A or B).

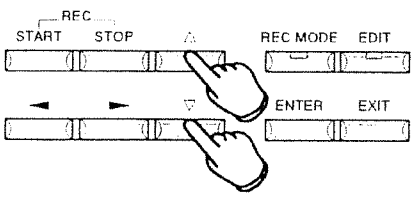


2 Switch OFF the KEY PROTECT switch.

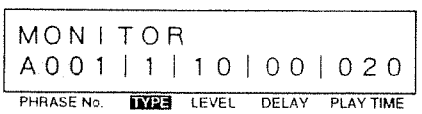


The indicator will go out.

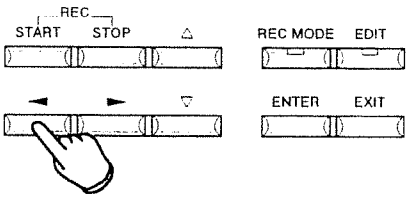
3 Select the Phrase you wish to monitor.



Select the Phrase number using the [△]/[▽] buttons.

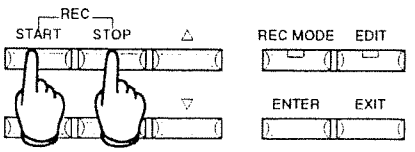


4 Select the appropriate Memory Card slot (A or B).



Press the [◀] button to select between A / B.

5 Begin monitoring.



Press the **[START]** button to begin monitoring.
Press the **[STOP]** button when you are through.

6 Exit the procedure.

Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit is placed in the PLAY mode.

■ PLAYBACK (PLAY MODE)

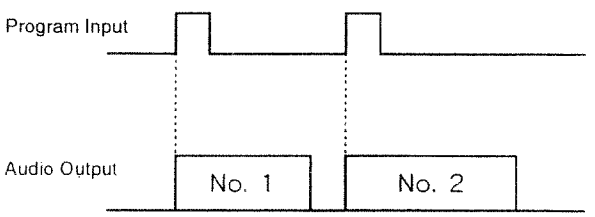
The following explains how to have Phrases played back using control signals sent by an external device. When the KEY PROTECT switch is ON, the unit will be in the PLAY mode.

* Control signal: ON/OFF events which occur as a result of shorting or opening the Control Input terminal and connector.

Program Play

- With each reception of a control signal, the next item will be played.
- When shipped, the unit is set up so that when control signals are input to the PROGRAM PLAY Input Terminals, Phrases 1 through 16 will be played in numerical order.
  (Phrases into which nothing has been recorded are ignored.)

* Program Play is given priority over Direct Play.



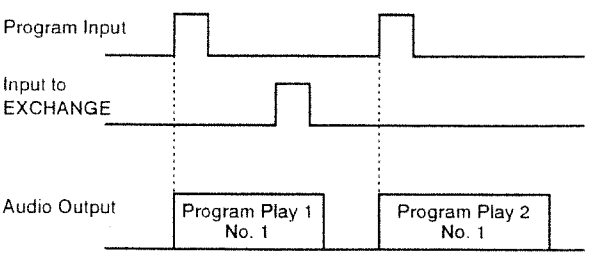
● Program Play 1 & 2

After making settings for Program Play 1 & 2 (page 44), you can have up to a total of 2 patterns, and 100 Phrases be played.

- The selection between Program Play 1 & 2 is made by applying a control signal to the "EXCHANGE" terminal of the CONTROL IN / OUT Terminals.

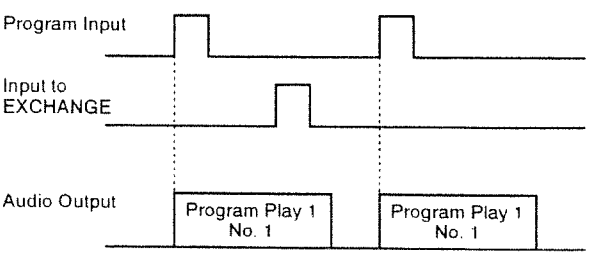
* When a control signal is input at "EXCHANGE," the unit will return to the first Phrases for both Program Play 1 & 2.

● Program Play (2 patterns played)
● When Program 2 is set



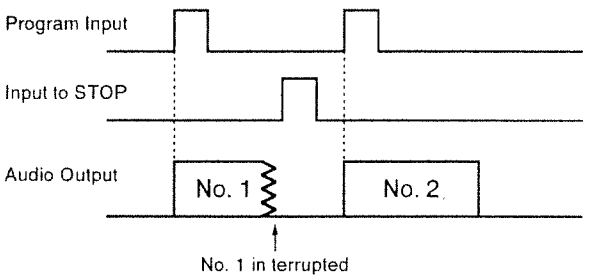
- When Program Play 2 has not been set, the unit will return to the first Phrase number for Program Play 1 when the control signal is applied to the "EXCHANGE" terminal.

● Program Play (Reset carried out)
● When Program 2 has not been set



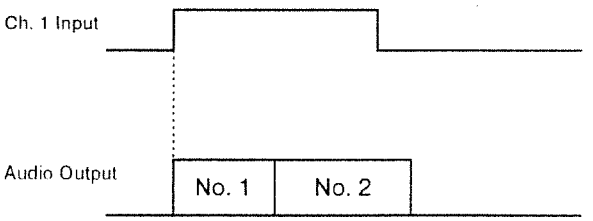
- During play, play can be stopped by applying a control signal to "STOP."

• STOP Control



- When a control signal is consecutively input at "START," the unit will repeatedly carry out Program Play.

• Consecutive Play



Direct Play

The following explains how Phrases which have been assigned to channels 1 through 16 can be selected and played by means of control signals.

- Using control signals input to the CONTROL IN/OUT connector (CH 1—16), the Phrases which have been assigned to be played back for each channel can be played.
- In making the settings for Control In (page 46), you can select from 3 available modes: Normal Play, Last-In Play, and Sequence Play. (At the defaults, the unit uses Normal Play.)

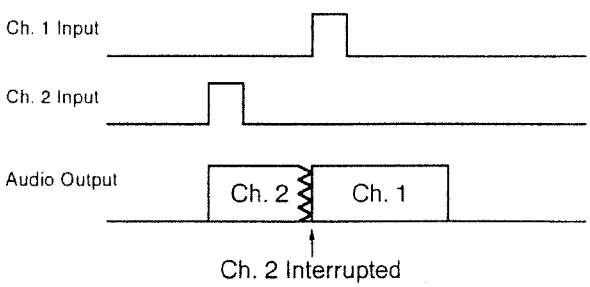
● Normal Play

The channels are treated in accord with their order of priority, with the lowest number having the highest priority.

Ch. 1 > Ch. 2 > Ch. 3 > ... Ch. 16

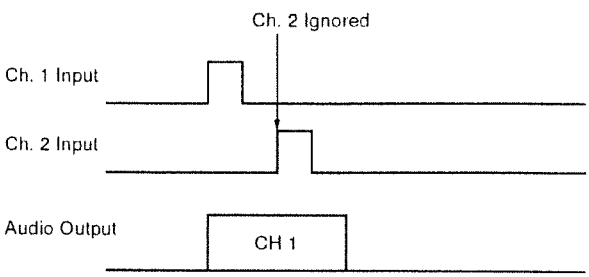
- Should a control signal having high priority channel be received during playback, what was being played is interrupted, and the corresponding high-priority channel is given priority and is played.

● When a high-priority ch. control signal is received:

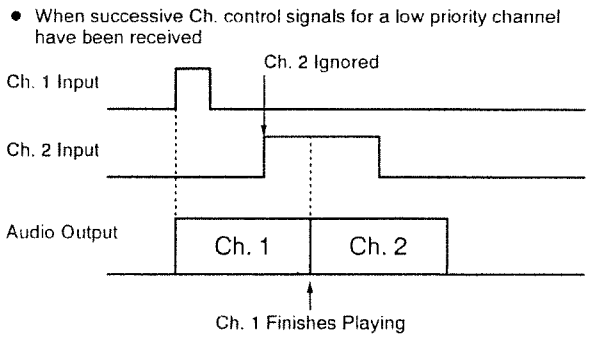


- Should a control signal having low priority channel be received during playback, that low-priority channel control signal is ignored.

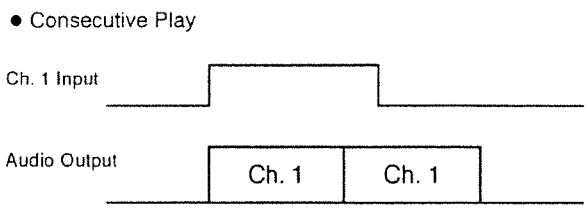
● When a low-priority ch. control signal is received:



- If successive control signals specifying a channel that has a low priority are input, that low priority channel will start being played back only after channels having a higher priority have finished playing.

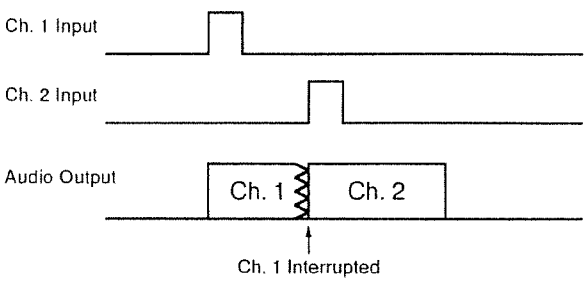


- When a control signal is consecutively applied, the material will be played repeatedly.

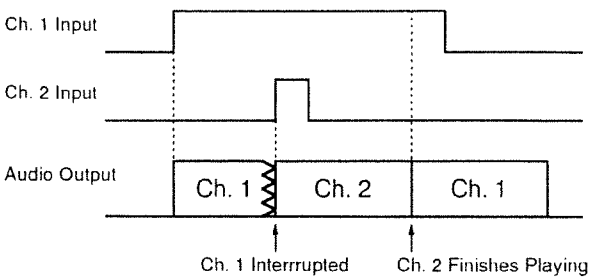


● Last-In Play

- When an other channel control signal is received during playback, the Phrase that was being played is terminated, and the Phrase which corresponds to the control signal that was received most recently is played.

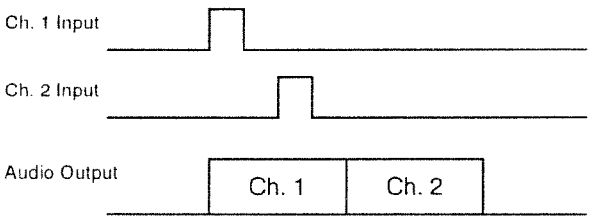


- If consecutive control signals are input, the channel which has thus been successively requested will be played again after some other channel, for which more recent control signals have been received, has finished playing.



● Sequence Play

Any control signals received during playback are placed in memory, and will be used to play their indicated requests in the order received once the currently playing material has finished.

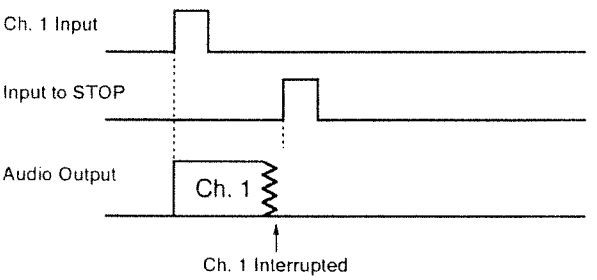


● Stop

During play, play will be stopped when a control signal is applied to "STOP."

Ordinarily, all playback (whether it is Last-in or Sequence) will be stopped.

● STOP Control

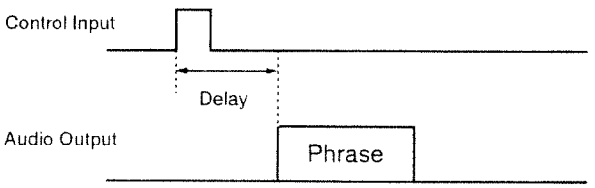


ADVANCED FEATURES

CHANGING THE SETTINGS FOR PHRASES

Changes in (or registration of) the settings for the items below can be made with respect to the Phrases that you record.

Playback Level (LEVEL)	Determines the volume at which your Phrases will be played. (Ordinarily 100%)
Amount of Delay (DELAY)	The amount of time that is to pass from the moment a control signal is received from an external device until the Phrases actually begin playing. (Ordinarily "0" seconds.)

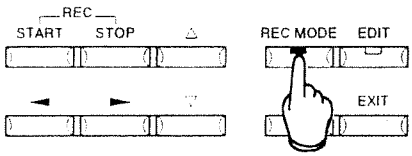


Control Output (see page 61)	Selects whether Control Output is ON or OFF, and sets the Offset Time. (The amount of time before Control Output begins operating after Phrases have played.) (Ordinarily OFF.)
Phrase Name	To make it convenient to recognize and organize your Phrases, each of them can be given a name which can contain up to 11 characters. Once Phrases have been supplied with names, their name will be displayed when relevant (such as when in the Play mode). PLAY MODE A001 TEST

※ **Settings for the Play Volume, Delay, and Control Out will be valid only when the Key Protect switch is at ON (while in the Play mode).**

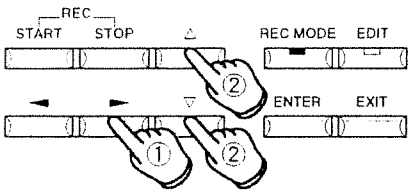
1 Set the unit to the recording mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)



② Press the **[REC MODE]** button.
(The indicator will light.)

2 Set the playback LEVEL.

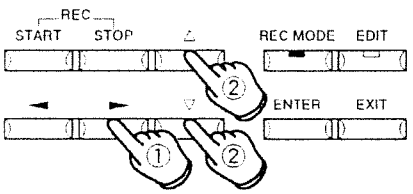


① Using the [▶] button, move the blinking cursor to LEVEL.

② Set the level using the [△]/[▽] buttons. (10 to 100)

```
REC  MODE        0100
A001 | 1 | 80 | 00 | 020
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Set the amount of DELAY.

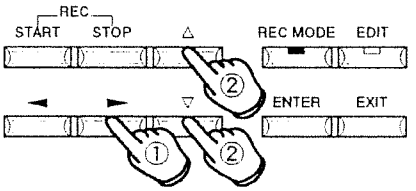


① Using the [▶] button, move the blinking cursor to DELAY.

② Set the delay using the [△]/[▽] buttons.(0 to 59sec.)

```
REC  MODE        0100
A001 | 1 | 80 | 10 | 020
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Select ON or OFF for CONTROL OUTPUT.

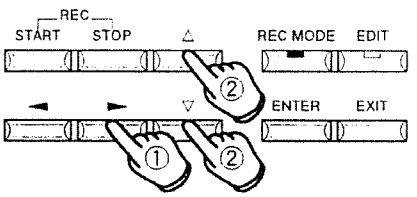


① Press the [▶] button to reach the next display page.

```
CONT.  OUT
ON  | OFFSET  | 00s
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

② Set it either ON or OFF using the [△]/[▽] buttons.

5 Set the OFFSET Time for CONTROL OUTPUT.

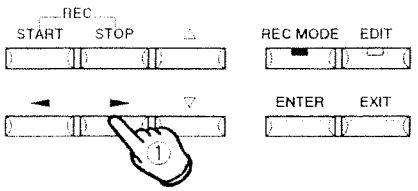


① Use the [▶] button to move the cursor.

② Make the setting using the [△]/[▽] buttons.
(0 to 59 sec.)

```
CONT.  OUT
ON  | OFFSET  | 03s
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

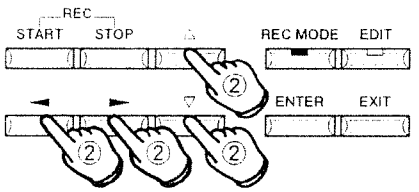
6 Supply the Phrase name.



① Press the [▶] button to reach the next display page.

```
PHRASE NAME
A001 | TEST
```

PHRASE No. TYPE LEVEL DELAY PLAY TIME



② Use the [◀]/[▶] buttons to move the blinking cursor, and input the desired characters by pressing the [△]/[▽] buttons.

* **Available Characters:**

(space) ! # $ % & ' ( ) * + , - . /
0—9 : ; < = > ? @ A—Z [ ] ^ _ a—z
{ }

Deleting the Phrase Name

Carry out the steps below to delete a Phrase Name (clear away all existing characters so you start over again with a fresh name).

1) While you have the Phrase Name shown in the display, press the **[EDIT]** button.

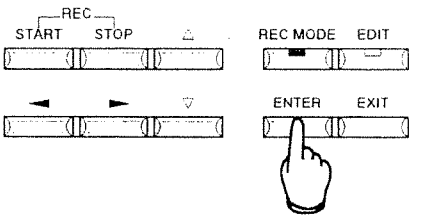
```
DEL PHRASE NAME
A001 | TEST
```

PHRASE No. TYPE LEVEL DELAY PLAY TIME

* Press the **[EDIT]** button again, and you are taken to the page where you can supply a name for the Phrase.

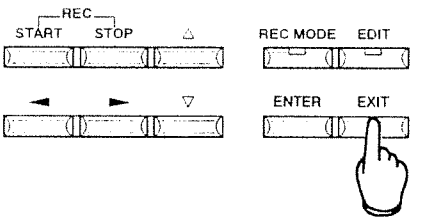
2) Press the **[ENTER]** button, and the Phrase Name will be erased.

7 Save settings onto memory card.



Press the **[ENTER]** button and the settings will be stored onto memory card.

8 Finish up with this procedure.



① Press the **[EXIT]** button.
The REC MODE indicator will go out.

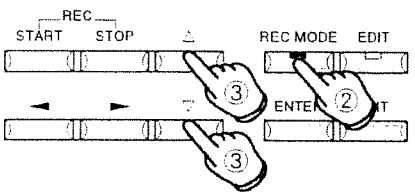
② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

DELETING PHRASES

Use the following procedure to delete unneeded Phrases that have been recorded.
*** Pattern Phrases (page 29) cannot be deleted.**

1 Select the Phrase that is to be erased.

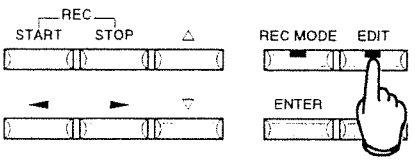
① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)



② Press the **[REC MODE]** button.
(The indicator will light.)

③ Select the Phrase number using the [△]/[▽] buttons.

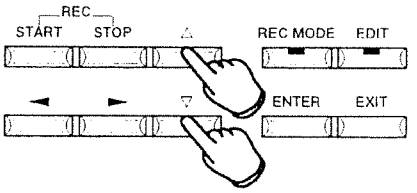
2 Get into the Rec Edit mode.



Press the **[EDIT]** button.
The EDIT indicator will light, and the next display page will appear.

```
REC  EDIT
1 | PHRASE  DELETE
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

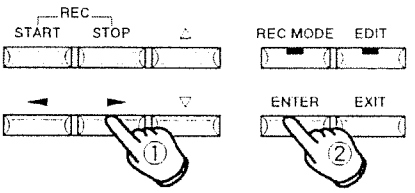
3 Choose the Delete function.



Use the [△]/[▽] buttons to select "PHRASE DELETE."

```
REC  EDIT
1 | PHRASE  DELETE
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Carry out the deletion.



① Press the [▶] button. The Phrase you are about to delete, and the settings for it will be shown.

* A change to another Phrase number cannot be made.

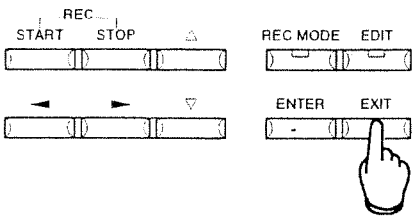
```
PHRASE  DELETE
A002 | 1 | 80 | 10 | 020
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

② Press the **[ENTER]** button to delete the Phrase.

* Press the **[EDIT]** button to return to the recording mode.

```
REC  MODE          0120
A001 | - | -- | -- | ---
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

5 Finish up with this procedure.



① Press the **[EXIT]** button.
The REC MODE indicator will go out.

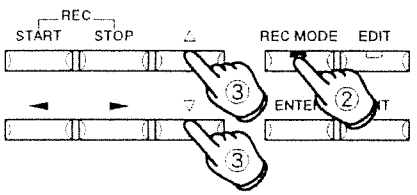
② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

■ COPYING PHRASES

The following procedure allows you to copy a Phrase to another Phrase location.
＊ Pattern Phrases (page 29) cannot be copied.

1 Select the Phrase which is to become the source for the copy.

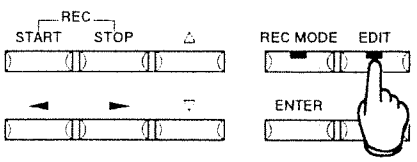
① Switch OFF the KEY PROTECT switch.
(Its indicator will go out.)



② Press the **[REC MODE]** button.
(The indicator will light.)

③ Select the Phrase number using the [△]/[▽] buttons.

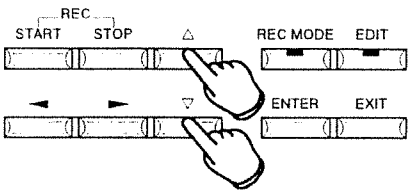
2 Get into the Rec Edit mode.



Press the **[EDIT]** button.
The EDIT indicator will light, and a display page within that mode will appear.

```
REC  EDIT
1 | PHRASE  DELETE
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

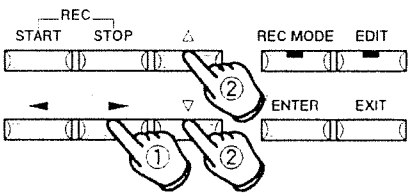
3 Choose the phrase copying function.



Use the [△]/[▽] buttons to select "PHRASE COPY."

```
REC  EDIT
2 | PHRASE  COPY
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Specify the destination of the copy.



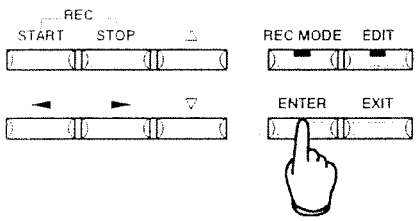
① Press the **[▶]** button.

② Select the Phrase number using the [△]/[▽] buttons.

```
PHRASE  COPY
A001  ←  A002 | 1 | 80
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

＊ Press the **[▶]** button to select brtween Memory Card A/B.

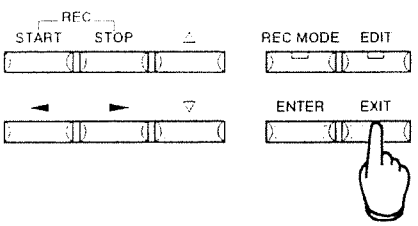
5 Carry out the Phrase copy.



Press the **[ENTER]** button and the Phrase will be copied.

* Press the **[EDIT]** button, and you will be returned to the recording mode.

6 Finish up with this procedure.



① Press the **[EXIT]** button.
The REC MODE indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

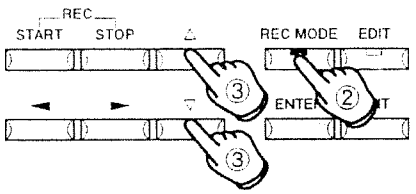
DELETING SILENT PORTIONS

The following procedure allows you to have any silent portions within a Phrase be deleted automatically.

NOTE Silent portions cannot be deleted from Pattern Phrases (page 29).
This procedure can be used only if the silent portions deletion function has been set to OFF in the Sub-Menu (page 54).

1 Select the Phrase from which you wish silent portions to be deleted.

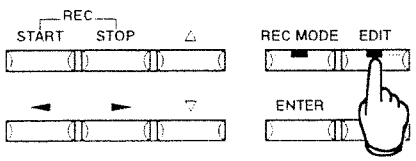
① Switch OFF the KEY PROTECT switch.
(Its indicator will go out.)



② Press the **[REC MODE]** button.
(The indicator will light.)

③ Select the Phrase number using the [△]/[▽] buttons.

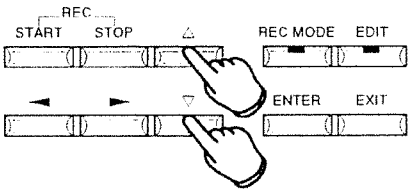
2 Get into the Rec Edit mode.



Press the **[EDIT]** button.
The EDIT indicator will light, and the next display page will appear.

```
REC  EDIT
1 | PHRASE  DELETE
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

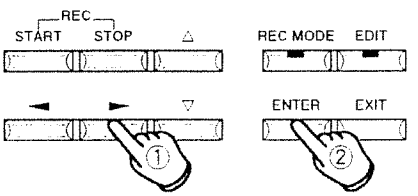
3 Choose the delete silence function.



Use the [△]/[▽] buttons to select "SILENCER."

```
REC  EDIT
3 | SILENCER
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

4 Carry out the deletion.



① Press the [▶] button. The Phrase from which you are about to delete silent portions, and the settings for it will be shown.

* A change to another Phrase number cannot be made.

```
SILENCER
A002 | 1 | 80 | 10 | 020
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

② Press the **[ENTER]** button.
Any silent portions at the beginning and end of the Phrase will be deleted.

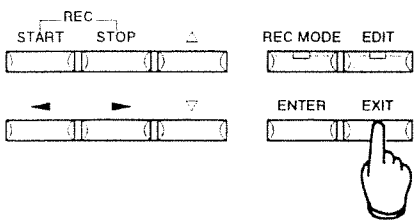
* Press the **[EDIT]** button to return to the recording mode.

```
S I L E N C E R
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

Once the silent portions have been deleted, the display will change as follows.

```
R E C   M O D E          0 1 0 2
A 0 0 2 | 1 | 8 0 | 1 0 | 0 1 8
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

5 Finish up with this procedure.



① Press the **[EXIT]** button.
The REC MODE indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

■ PATTERN PHRASES

Once you have a number of Phrases recorded, they can be joined together to form another kind of Phrase, a "Pattern Phrase" which you can also store in memory.
This feature can be conveniently used when you need to have a Phrase repeated a number of times – – simply join the same Phrase repeatedly. Also, through the well – planned use of Pattern Phrases, you can reduce the overall amount of data you need to store.

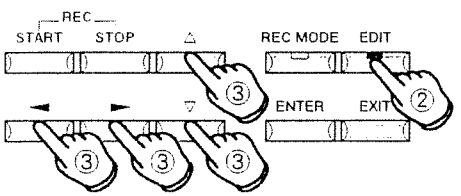
* **Up to a maximum of 100 Pattern Phrases can be registered.**
* **Whatever setting for the Play Volume that has been made for each of the Phrases will remain in effect.**
* **Any Phrase that has been assigned for use in a Pattern Phrase will have a "P" shown for its "Type."**

```
PLAY MODE
A001 | P | 10 | 00 | ---
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

«NOTE» A Pattern Phrase can only use Phrases which reside on the same card as it does. Pattern Phrases cannot be joined to other Pattern Phrases.

1 Select the editing mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

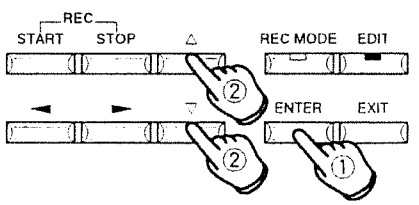


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "EDIT."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Choose the Pattern Phrase function.

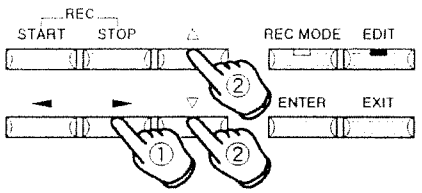


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "PATTERN PHRASE."

```
EDIT
1 | PATTERN PHRASE
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Select the Phrase that is to be made a Pattern Phrase.



① Press the [▶] button.

② Select the Phrase number using the [△]/[▽] buttons.

* Empty Phrase numbers and Pattern Phrases are shown in the display.

```
1 | PATTERN  PHRASE
A001←001 | ****| --
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

Deleting Pattern Phrases

Perform the steps below to delete the currently displayed Pattern Phrase.

1) Press the **[EDIT]** button.

```
P-PHRASE  DELETE
A001 | P | 10 | 00 | ---
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2) Press the **[ENTER]** button, and the Pattern Phrase will be deleted.

```
1 | PATTERN  PHRASE
A001←001 | ****| --
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

* To cancel the Pattern Phrase Delete, press the **[EDIT]** button.

Displaying the Play Time for a Pattern Phrase

Perform the steps below to check the play time for the currently displayed Pattern Phrase.

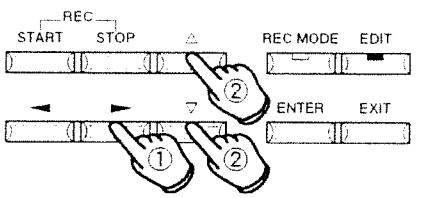
1) Press the **[REC MODE]** button.

```
PLAY  TIME
A001 |  01h 10m 15s
```
Hour Minute Second

2) Press the **[EDIT]** button, and you are returned to the page you were in before.

```
1 | PATTERN  PHRASE
A001←001 | A002 | 00
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Set the order in which they are to play.

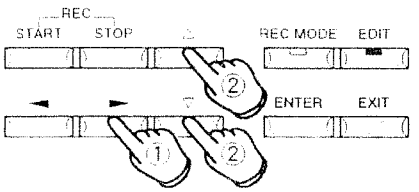


① Use the [▶] button to move the blinking cursor.

② Make the setting using the [△]/[▽] buttons.

```
1 | PATTERN  PHRASE
A001←001 | ****| 00
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

5 Select a Phrase to include in the pattern.



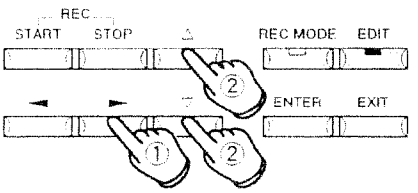
① Use the [▶] button to move the blinking cursor.

② Select the Phrase numbers to include using the [△]/[▽] buttons.

* Only the numbers for Phrases which have recorded material in them will be shown.

```
1 | PATTERN  PHRASE
A001←001 | A002 | 00
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

6 Set the amount of time to pause before the next Phrase.

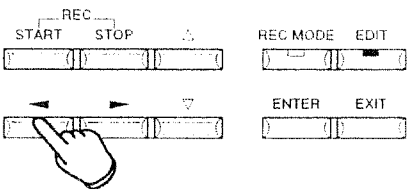


① Use the [▶] button to move the blinking cursor.

② Set the amount of pause using the [△]/[▽] buttons.

```
1 | PATTERN  PHRASE
A001←001 | A002 | 01
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

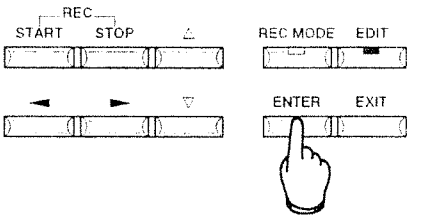
7 Return to Step 4.



Press the [◀] button to go back.

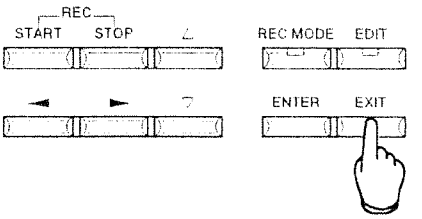
8 Repeat Steps 4 through 7 until you have joined all the Phrases you wish to include.

9 Store the Pattern Phrase.



Press the **[ENTER]** button, and the settings for the Pattern Phrase are stored in memory.

10 Finish up with this procedure.



① Press the **[EXIT]** button.
The REC MODE indicator will go out.

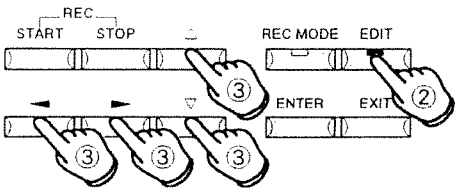
② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

■ ERASING MEMORY CARD DATA

The procedure below will erase all data stored on a memory card.

1 Select the editing mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

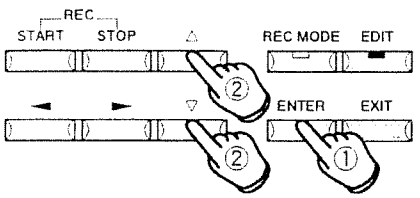


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "EDIT."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Choose the card erasure function.

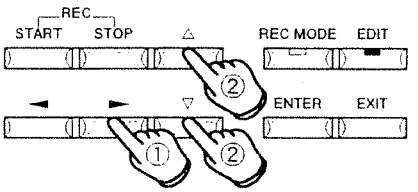


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "CARD DELETE."

```
EDIT
2 | CARD DELETE
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Select the memory card that is to be erased.

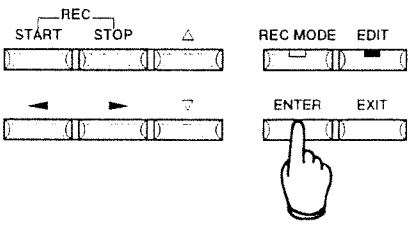


① Press the [▶] button.

② Select which memory card to erase (A or B) using the [△]/[▽] buttons.

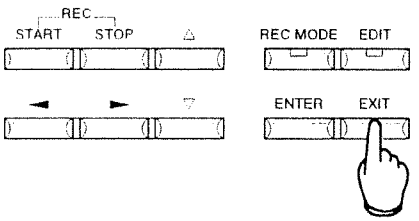
```
2 | CARD DELETE
MEMORY CARD | A
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Carry out the erasure.



Press the **[ENTER]** button.
All Phrases contained on the memory card will be erased.

5 Finish up with this procedure.



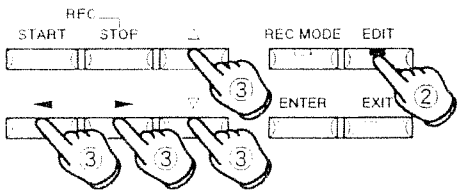
① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

FORMAT OF MEMORY CARDS

1 Select the editing mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

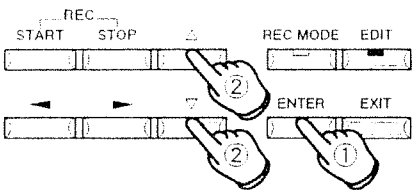


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "EDIT."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Choose the card formatting function.

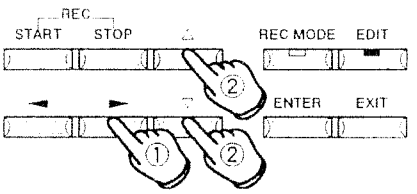


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "CARD FORMAT."

```
EDIT
3 | CARD  FORMAT
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Select the memory card slot.

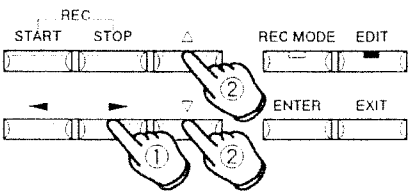


① Press the [▶] button.

② Select the targeted card slot (A or B) using the [△]/[▽] buttons.

```
3 | CARD  FORMAT
CARD  A | 512KBytes
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Select the capacity at which to format.



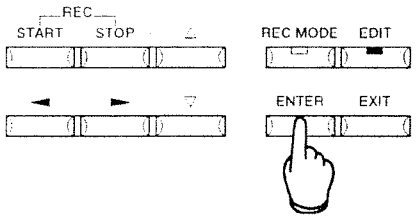
① Use the [▶] button to move the cursor.

② Set the capacity using the [△]/[▽] buttons.

* You can also format a card at a capacity which is smaller than the allowable capacity of the card. Doing so can be useful when wishing to make copies of the memory card.

```
3 | CARD  FORMAT
CARD  A | 512KBytes
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

5 Carry out the formatting.



Press the **[ENTER]** button, and the card will be formatted.

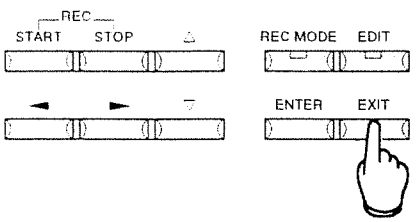
```
Formatting      10%
CARD  A | 512KBytes
```

PHRASE No. TYPE LEVEL DELAY PLAY TIME

«IMPORTANT»

Never remove a memory card while formatting is in progress.

6 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

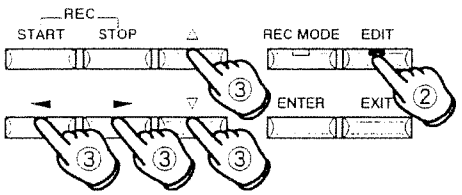
GIVING CARDS A NAME

Each memory card can be supplied with a name that consists of 8 characters or less. By giving cards a name, you will much easily be able to distinguish among them.

∗ The card name will be displayed for about 3 seconds whenever a card is inserted.

1 Select the editing mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

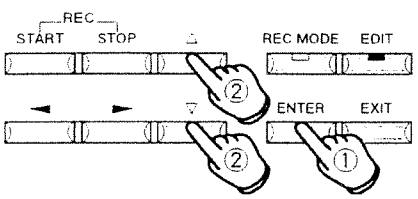


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "EDIT."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Choose the card naming function.

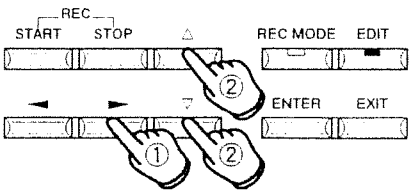


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "CARD NAME."

```
EDIT
4 | CARD  NAME
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Select the memory card slot.

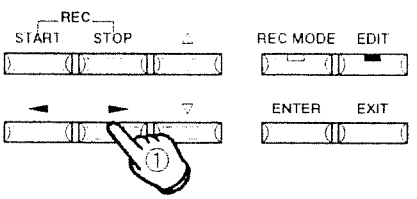


① Press the [▶] button.

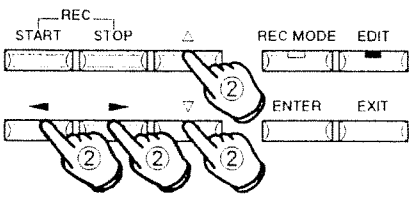
② Select the relevant card slot (A or B) using the [△]/[▽] buttons.

```
4 | CARD  NAME
CARD  A |
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Specify the card name.



① Press the [▶] button.



② While using the [◀]/[▶] buttons to move the cursor, input the desired characters by pressing the [△]/[▽] buttons.

✻ **Available Characters:**
(space) ! # $ % & ' ( ) 0—9 : ; < = > ? @ A—Z ` _

```
4 | CARD  NAME
CARD  A | SAMPLE
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

Deleting the Card Name

Carry out the steps below to delete a Card Name (clear away all existing characters to allow space for a new name).

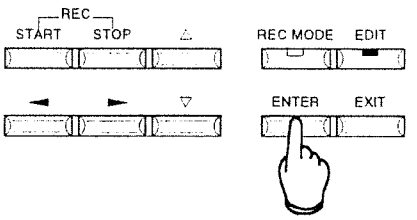
1) While you have the Card Name shown in the display, press the **[EDIT]** button.

```
DEL  CARD  NAME
CARD  A | TEST
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

✻ Press the **[EDIT]** button again, and you are taken to the page where you can supply a new name for the card.

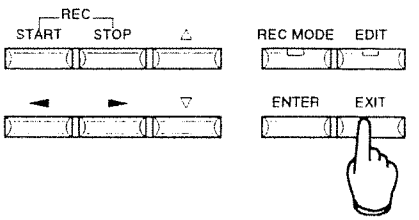
2) Press the **[ENTER]** button to delete the Card Name.

5 Finalize the card name.



Press the **[ENTER]** button, and the card name will be registered.

6 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

MAKING COPIES OF SRAM CARDS

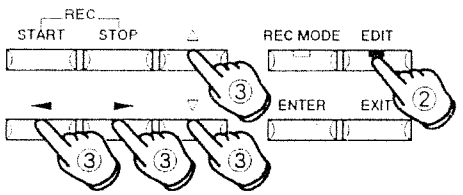
The procedure below allows you to make a copy of one SRAM card onto another. The card contained in slot A is copied to the card in slot B.

«IMPORTANT»

- You must insert the source card in MEMORY CARD A slot, and the card onto which to make the copy into the MEMORY CARD B slot.
- **Never attempt to remove the cards while the copy is being made.**
- Copies can only be made between cards which both have the same capacity.
- You need to use the FLASH COPY function to copy FLASH cards.

1 Select the copying mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

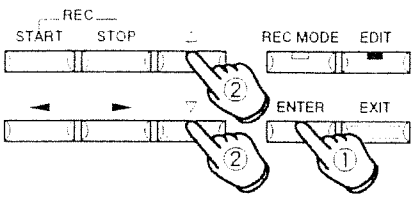


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "COPY."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Choose the SRAM card copying function.

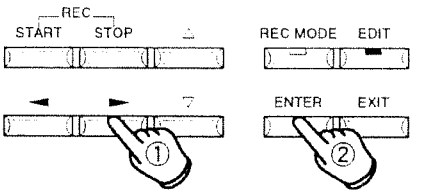


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "SRAM COPY."

```
COPY
1 | SRAM  COPY
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Carry out the SRAM copying.

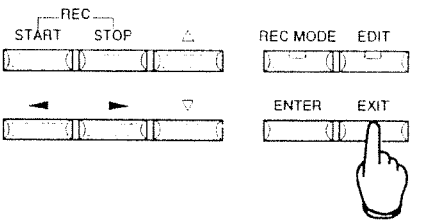


① Press the **[▶]** button.

② Press the **[ENTER]** button, and the card will be copied.

```
1 | SRAM  COPY
A  →  B
```
↓
```
1 | SRAM  COPY
COPYING          10%
```

4 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

MAKING COPIES OF FLASH CARDS

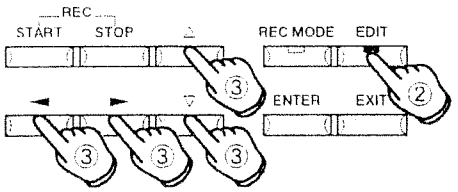
The procedure below allows you to make a copy of an SRAM or FLASH card onto a FLASH card.

«IMPORTANT»

- You must insert the source card in MEMORY CARD A slot, and the card onto which to make the copy into the MEMORY CARD B slot.
- **Never attempt to remove the cards while the copy is being made.**
- Copies can only be made between cards which both have the same capacity.

1 Select the copying mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

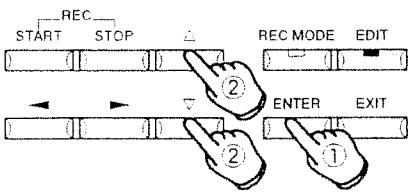


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "COPY."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Choose the FLASH card copying function.

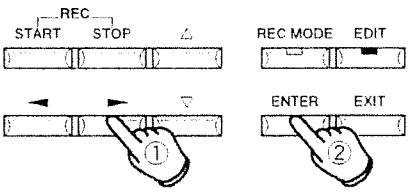


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "FLASH COPY."

```
COPY
2 | FLASH  COPY
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Carry out the FLASH card copying.



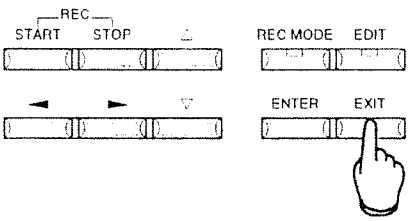
① Press the **[▶]** button.

② Press the **[ENTER]** button, and the card will be copied.

```
2 | FLASH  COPY
A  →  B
```
↓
```
2 | FLASH  COPY
COPYING        25%
```

* Please be prepared to wait a considerable amount of time, since FLASH cards require more time than others to copy.

4 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

SYSTEM SETTINGS

Settings which determine the manner in which Phrases will be played in the Play mode, and other settings related to Control Input are referred to as "*System Data.*"
System Data can be of any of the following 4 types. All of this data can be stored on memory cards.

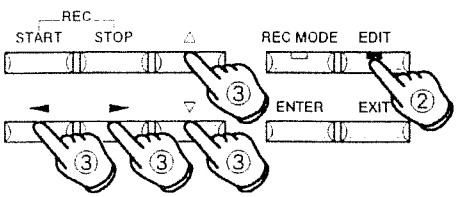
- The playing order for Program Play.
- The Phrase assignments made for the channels (1—16).
- How play should take place during Direct Play.
- Setting for the Power On mode.

Setting the Target for Storage of System Data

Perform the following to select whether the System Data is to be stored in internal memory or on a memory card.
The target that has been set here will be used to store all System Data.

1 Select the system mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

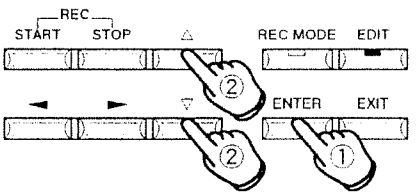


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SYSTEM."

```
EDIT        SYSTEM
COPY        SUB_MENU
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

2 Select SYSTEM SELECT.

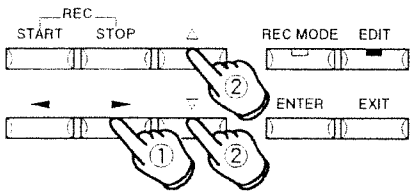


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "SYSTEM SELECT."

```
SYSTEM
1 | SYSTEM  SELECT
PHRASE No  TYPE  LEVEL  DELAY  PLAY TIME
```

3 Select the target for storage of system data.



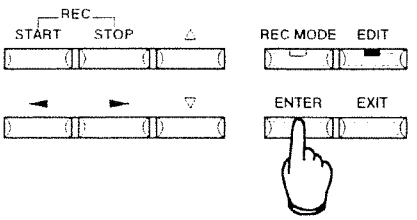
① Press the [▶] button.

② Use the [△]/[▽] buttons to select "AR-1000" , "CARD A" or "CARD B."

```
1 | SYSTEM  SELECT
SYSTEM  |  AR-1000
```

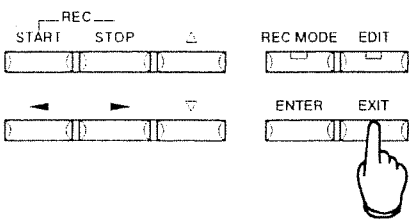
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Finalize the choice for the target.



Press the **[ENTER]** button, and the selected target is set.

5 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

During play, all system data will be read from the storage location which has been set here.
If there is no system data available at the specified storage location, the unit will read the data it finds at some other location.

● Setting the Playing Order for Program Play

The following procedure is used to decide on the playing order that Phrases will follow for Program Play. Program Play provides for 2 patterns (Program Play 1 & 2). A combined total of 100 Phrases can be registered.

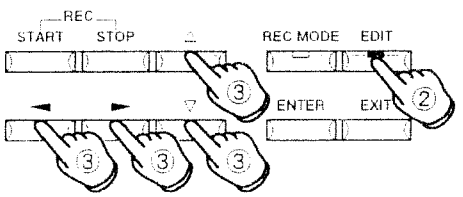
The factory defaults are as follows :

Program Play 1 ····· Phrase Nos. 001—016 are registered on memory card A.

Program Play 2 ····· No Phrases are registered.

1 Select the system mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)



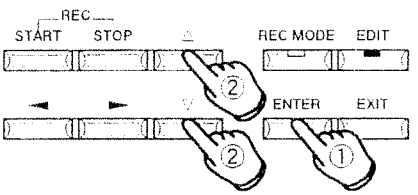
② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SYSTEM."

EDIT	SYSTEM
COPY	SUB_MENU

PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Select PROGRAM PLAY.



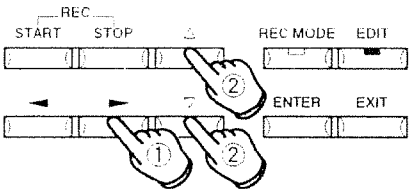
① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "PROGRAM PLAY 1" or "PROGRAM PLAY 2."

```
SYSTEM
2 | PROGRAM  PLAY  1
```

```
SYSTEM
3 | PROGRAM  PLAY  2
```

3 Select the playing order.

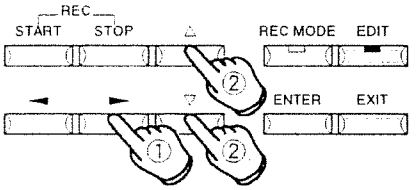


① Press the [▶] button.

② Use the [△] / [▽] buttons to set the playing order.

```
2 | PROGRAM  PLAY  1
001 | A001 | 1 | 60 | 04
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Select the Phrases.



① Use the [▶] button to move the cursor.

② Select the Phrase numbers to be played, in accord with the order set in 3, using the [△] / [▽] buttons.

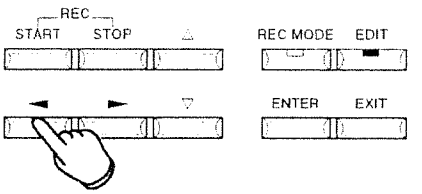
```
2 | PROGRAM  PLAY  1
001 | A001 | 1 | 60 | 04
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

* Phrases which have not yet been recorded will also be displayed.

```
2 | PROGRAM  PLAY  1
001 | A011 | - | -- | --
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

* You can choose among memory cards A, B, & C by pressing the [▶] button. Note, however, that card C refers to an expansion card, and will not be a valid choice if using this unit alone.

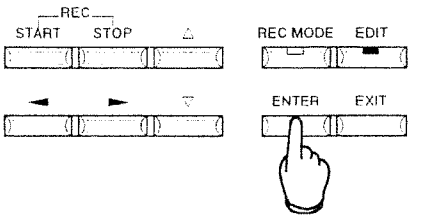
5 Return to Step 3.



Press the [◀] button to go back.

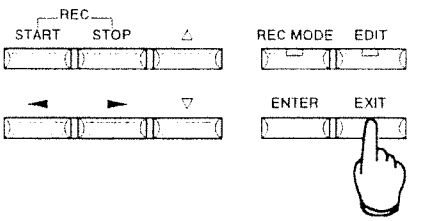
6 Repeat Steps 3 through 5 as many times as necessary.

7 Store the playing order.



Press the **[ENTER]** button, and the playing order is stored in memory.

8 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

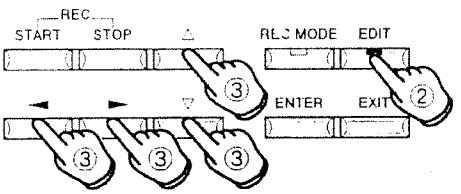
● Assigning Phrases to Control Input Channels

The following procedure is used to assign Phrases to Control Input Channels 1 through 16. You will then be able to directly control the play of up to 16 Phrases by means of the Control In/Out connectors.

At the factory defaults, the unit is set so Phrases 001—016 are assigned to channels 1—16 on memory card A.

1 Select the system mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

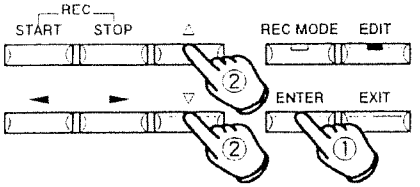


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SYSTEM."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Select the Control Channel function.

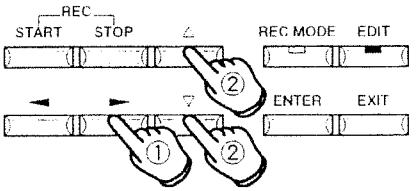


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "CONT.CHANNEL."

```
SYSTEM
4 | CONT.   CHANNEL
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Set the channel.

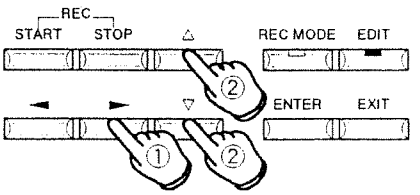


① Press the **[▶]** button.

② Use the **[△]/[▽]** buttons to select the channel.

```
4 | CONT.   CHANNEL
CH01  |  A001
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Specify the Phrase.

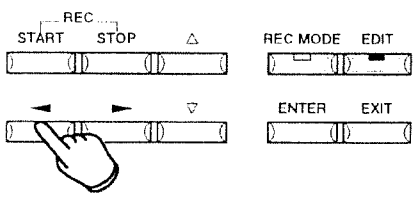


① Use the **[▶]** button to move the cursor.

② Select the Phrase number using the [△]/[▽] buttons.

```
4 | CONT.   CHANNEL
CH01  |  A001
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

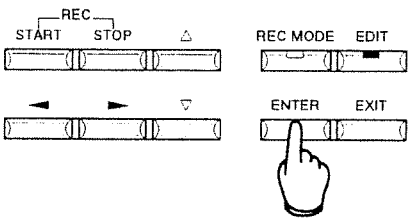
5 Return to Step 3.



Press the [◀] button to go back.

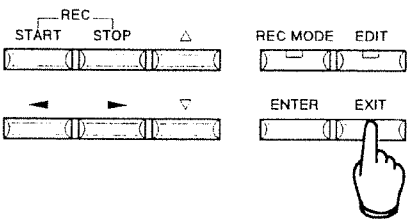
6 Repeat Steps 3 through 5 as many times as necessary.

7 Store the settings.



Press the **[ENTER]** button, and your Phrase assignments to Control Input channels will be stored in memory.

8 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

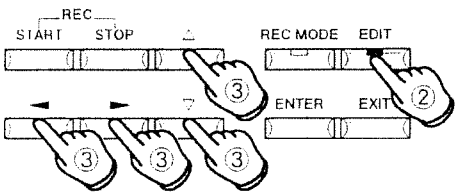
● Setting How Play Should Take Place During Direct Play

Perform the steps below to make your choice for how play should take place during direct play (the "Type"). The selections available are: Normal, Last-In, Sequence, and RS-232-C.

＊ When shipped, the unit was set to use Normal Play.

1 Select the system mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

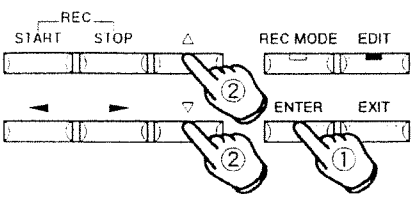


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SYSTEM."

```
EDIT        SYSTEM
COPY        SUB_MENU
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

2 Select the Control Input function.

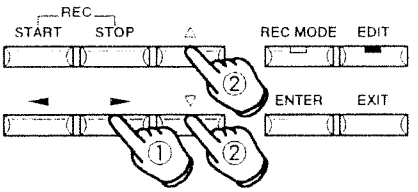


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "CONT.IN."

```
SYSTEM
5 | CONT.    IN
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

3 Select the Type.



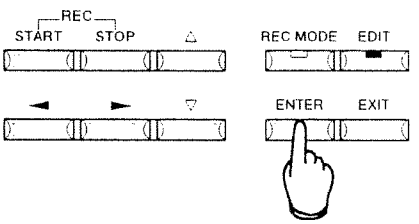
① Press the [▶] button.

② Use the [△]/[▽] buttons to select from NORMAL/LAST-IN/SEQUENCE/RS-232-C.

```
5 | CONT.    IN
CONT.     |  NORMAL
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

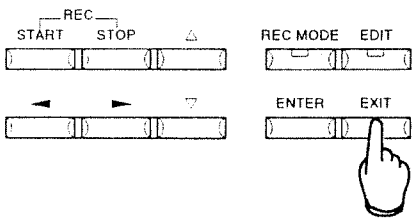
«NOTE»
If you select RS-232-C all the other types of Control Input will be ignored.

4 Store the Type.



Press the **[ENTER]** button, and the Type is registered in memory.

5 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

● Setting for the Power On Mode

The following explains the selection available for the manner in which the unit will be set to handle Program Play each time power is turned on (Power On Mode). Two Power On modes are available.

* When shipped, the unit was set to "AUTO."

AUTO

Program Play will start upon input of a Program Play signal. If power is turned OFF then ON again, the unit will return to Program Play No. 1.

```
PGM  PLAY1   |  AUTO
001 | A001 | 1 | 80 | 00
```

The Program Play Number can be changed using the [△]/[▽] buttons. Press the **[ENTER]** button and the Program Play Number will change.

«NOTE» Changes in the Program Play Number must be made before a Program Play signal arrives.

MANUAL

Unless the Program Play Number is changed and the **[ENTER]** button is pressed, a Direct Play signal is input, or a **Reset signal** (*see below) is input, play will not take place when a Program Play signal arrives.

This mode can be used to prevent the playing of Phrases at incorrect times, as the result of discrepancies between the actual time and the Phrase order (caused by a power failure, for example) while this unit is used in tandem with a timing device (such as the Roland FG-1000). Since in order for something to be played a change to a specific Program Play Number must be made even after power has been turned off momentarily, Phrases will not be played at inappropriate times.

If power is turned OFF then ON again, the unit will return to Program Play No. 1.

```
PGM  PLAY1 |MANUAL
001 | A001 | 1 | 80 | 00
```

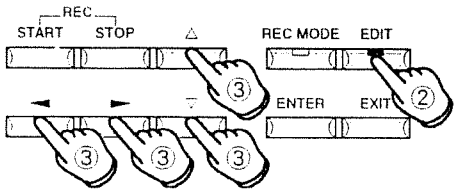
The Program Play Number can be changed using the [△]/[▽] buttons. Press the **[ENTER]** button and the Program Play Number will change.

---

* **Reset Signal** : A control signal which is input to the Program Play Input Terminals for a duration of more than 30 seconds.

1 Select the system mode.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

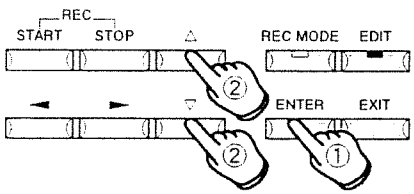


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SYSTEM."

```
EDIT        SYSTEM
COPY        SUB_MENU
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

2 Select the Power On Mode.

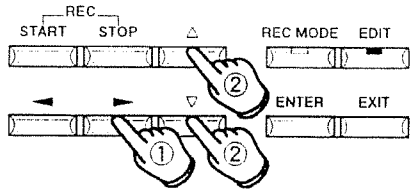


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "POWER ON."

```
SYSTEM
6 | POWER ON MODE
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

3 Set the mode to either Auto or Manual.



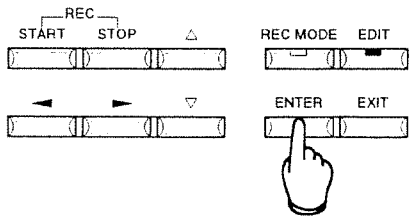
① Press the [▶] button.

② Use the [△]/[▽] buttons to switch between AUTO/MANUAL.

```
6 | POWER ON MODE
MODE        | AUTO
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

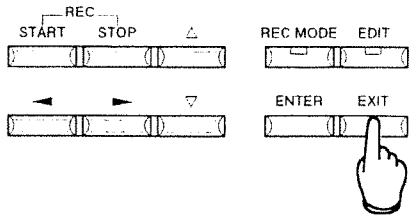
AUTO : Automatic Mode
MANUAL : Manual Mode

4 Store the setting for the Power On Mode.



Press the **[ENTER]** button, and your choice for the Power On Mode is registered in memory.

5 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

■ CONFIGURATION (SUB-MENU)

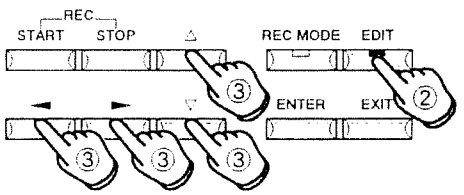
The group of settings used to configure the unit to suit the setup you have in mind is located with the "SUB-MENU."

● Choice for Play Monitoring

Perform the steps below to switch between either the internal speaker or the BALANCED OUTPUT jack as the path to be used for output of audio while in the Monitor mode.

1 Select the Sub – Menu.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

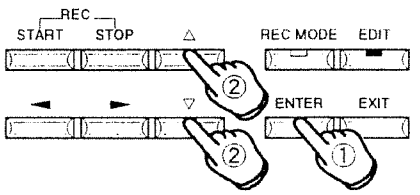


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SUB_MENU."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Select the Play Monitor function.

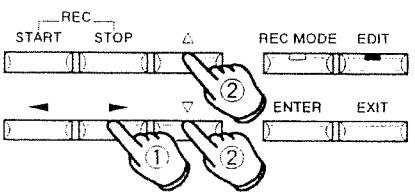


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "PLAY MONITOR."

```
SUB_MENU
1 | PLAY  MONITOR
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Select the path for the output.



① Press the [▶] button.

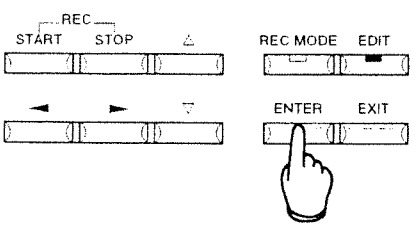
② Use the [△]/[▽] buttons to make the selection.

```
1 | PLAY  MONITOR
MON.  |  INTERNAL
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

INTERNAL : Audio will be output from the unit's internal speaker.

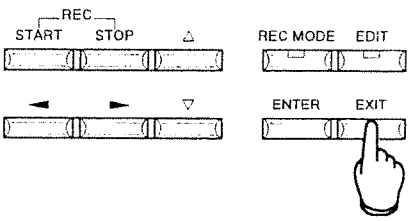
BALANCED : Audio will be output from the unit's BALANCED OUTPUT jack. Connect these outputs with amp/speakers.

4 Store the selected output path.



Press the **[ENTER]** button, and the specified output path is registered in memory.

5 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

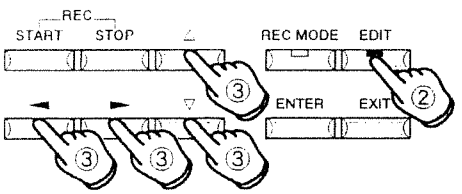
② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

● Choice for Recording Monitoring

Perform the steps below to switch between either the internal speaker or the BALANCED OUTPUT jack as the path to be used for output of audio while in the Recording mode.

1 Select the Sub – Menu.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

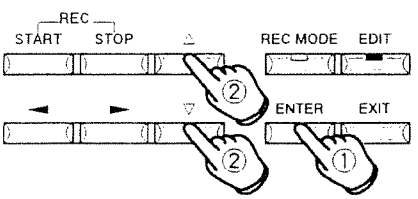


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SUB_MENU."

```
EDIT        SYSTEM
COPY        SUB_MENU
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

2 Select the Recording Monitor function.

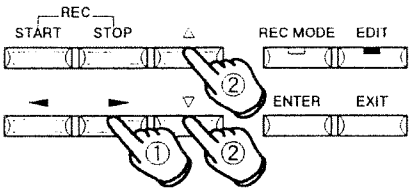


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "REC MONITOR."

```
SUB_MENU
2 | REC  MONITOR
PHRASE No  TYPE  LEVEL  DELAY  PLAY TIME
```

3 Select the path for the output.



① Press the [▶] button.

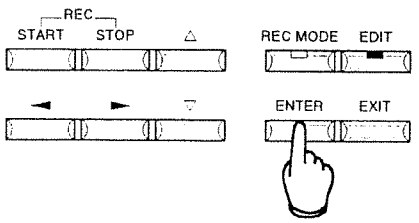
② Use the [△]/[▽] buttons to make the selection.

```
2 | REC  MONITOR
MON.   | INTERNAL
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

INTERNAL : Audio will be output from the unit's internal speaker.

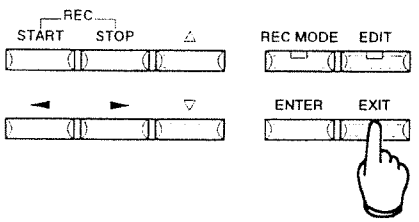
BALANCED : Audio will be output from the unit's BALANCED OUTPUT jack.
Connect these outputs with amp/speakers.

4 Store the selected output path.



Press the **[ENTER]** button, and the specified output path is registered in memory.

5 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

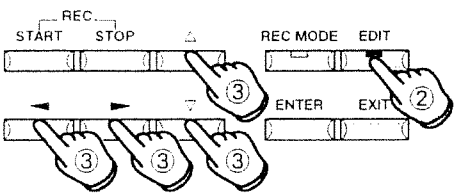
② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

● Setting the Silent Portions Deletion Function

Perform the steps below to choose whether the silent portions deletion function should be ON or OFF.
When ON, this function will automatically delete all of the useless silent portions that can often be introduced during recording. This function works on the silence that occurs at the very beginning, when recording had started, yet the actual audio had not yet begun; and at the end, where the subject sound had finished, but recording had not yet been stopped.

1 Select the Sub – Menu.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

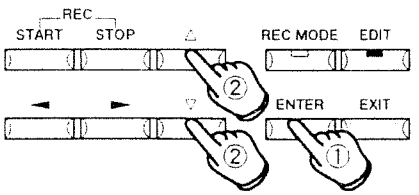


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SUB_MENU."

```
EDIT        SYSTEM
COPY        SUB_MENU
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

2 Select the silent portions deletion function.

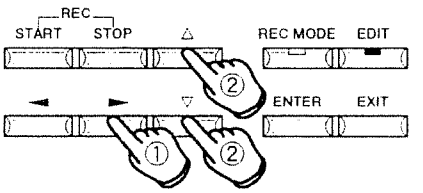


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "SILENCER."

```
SUB_MENU
3 | SILENCER
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

3 Choose to have the silent portions deletion function at either ON or OFF.

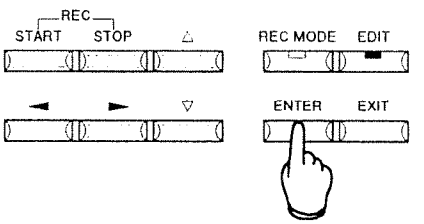


① Press the **[▶]** button.

② Use the [△]/[▽] buttons to switch between ON/OFF.

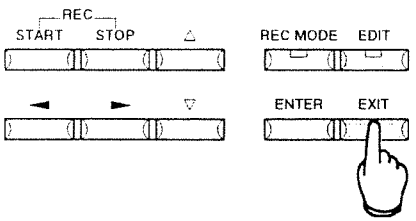
```
3 | SILENCER
SILENCER  |  ON
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

4 Store the setting for the silent portions deletion function.



Press the **[ENTER]** button, and the ON/OFF choice is registered in memory.

5 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

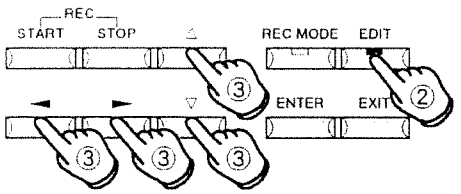
● Setting the Baud Rate for RS-232-C Communications

Perform the steps below to set the baud rate to be used when employing the RS-232-C connector for control.

∗ When shipped, the unit was set to 9,600 bps.

1 Select the Sub – Menu.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

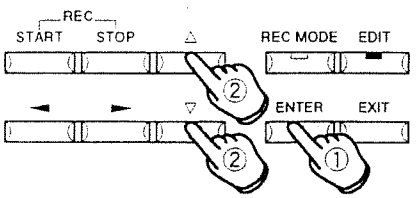


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SUB_MENU."

```
EDIT        SYSTEM
COPY        SUB_MENU
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

2 Select RS – 232C.

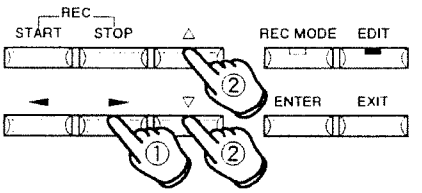


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "RS – 232C."

```
SUB_MENU
4 | RS-232C
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

3 Select the Baud Rate.



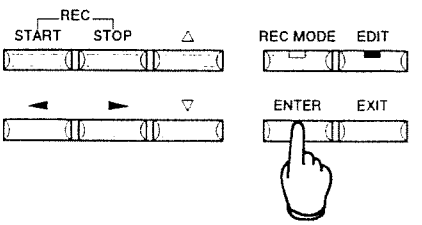
① Press the [▶] button.

② Use the [△]/[▽] buttons to select the baud rate.

Baud Rate Choices: 4,800, 9,600 bps

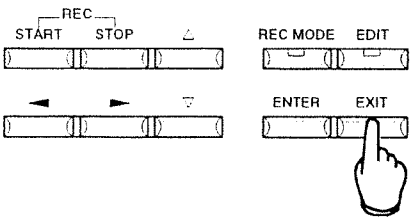
```
4 | RS-232C
BAUD RATE | 4800
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Store the Baud Rate setting.



Press the **[ENTER]** button to register the Baud Rate in memory.

5 Finish up with this procedure.

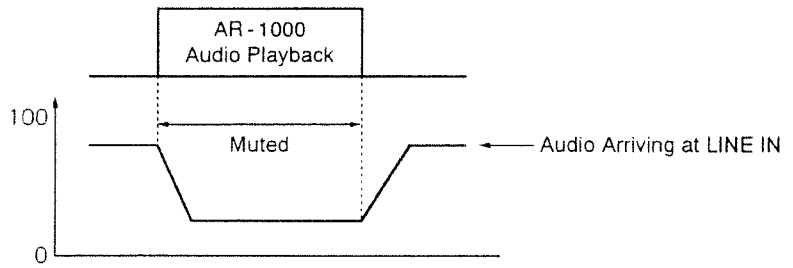


① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

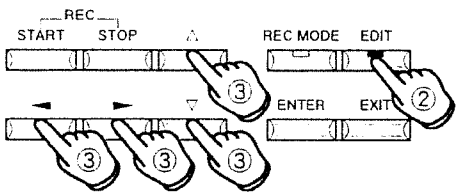
● Using the LINE IN MUTE Feature

When in the Play mode, the audio or the like can be input to the LINE IN jacks when you wish to have that audio output from the BALANCED OUTPUT jack.
During times when Phrases are played back, audio that is input to the LINE IN jacks will be mixed before output with the material this unit plays back. By selecting to use the **LINE IN MUTE feature**, you can have the volume of the audio arriving at LINE IN automatically be turned down at the moment that the playback of a Phrase begins. It is then returned to its original volume after the Phrase has completed.



1 Select the Sub - Menu.

① Switch OFF the KEY PROTECT switch.
(The indicator will go out.)

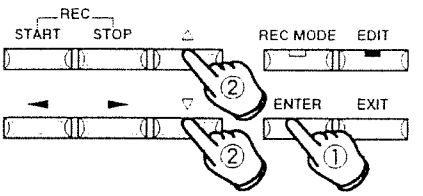


② Press the **[EDIT]** button.
(Its indicator will light.)

③ Use the [△]/[▽]/[◀]/[▶] buttons to select "SUB_MENU."

```
EDIT        SYSTEM
COPY        SUB_MENU
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

2 Select the MUTE Feature.

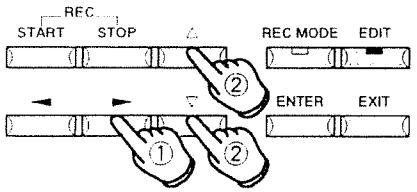


① Press the **[ENTER]** button.

② Use the [△]/[▽] buttons to select "LINE IN MUTE."

```
SUB_MENU
5 LINE IN MUTE
PHRASE No.  TYPE  LEVEL  DELAY  PLAY TIME
```

3 Select ON or OFF for MUTE.



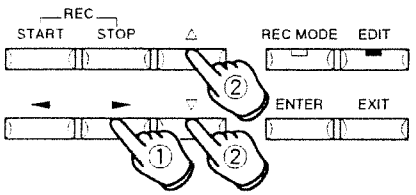
① Press the [▶] button.

② Set it either ON or OFF using the [△]/[▽] buttons.

«NOTE»
When at OFF, the volume of the audio arriving at LINE IN will NOT be turned down when playback of a Phrase begins.

```
5 | L I N E   I N   M U T E
M U T E |   O N
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

4 Select the volume that applies while muted.



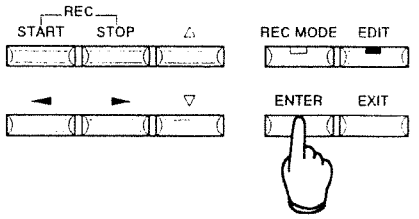
① Press the [▶] button.

② Using the [△]/[▽] buttons, specify the volume level for the audio arriving at LINE IN (0—80%).

```
5 | L I N E   I N   M U T E
L I N E   V O L   |   8 0 %
```
PHRASE No. TYPE LEVEL DELAY PLAY TIME

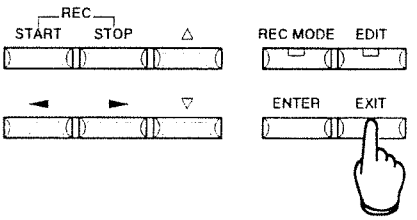
«NOTE»
When set to "0," the audio arriving at LINE IN will not sound at all while a Phrase is being played back.

5 Register the setting for the MUTE feature.



Press the **[ENTER]** button, and the setting for the MUTE feature will be placed in effect.

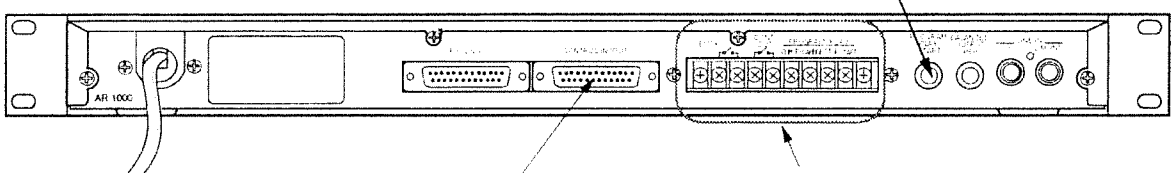
6 Finish up with this procedure.



① Press the **[EXIT]** button.
The EDIT indicator will go out.

② Switch ON the KEY PROTECT switch.
The KEY PROTECT indicator will light, and the unit returns to the PLAY mode.

ABOUT THE CONTROL IN / OUTS



PROGRAM PLAY Input Jack
Accepts input of the Program Play signals.

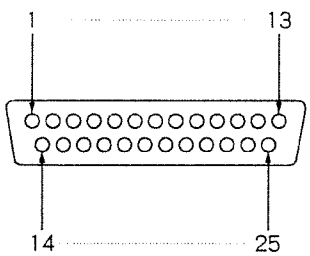
CONTROL IN / OUT Connector
Provides output of the Program Play, Direct Play, Busy and Control Output signals.
The supplied connector should be used.

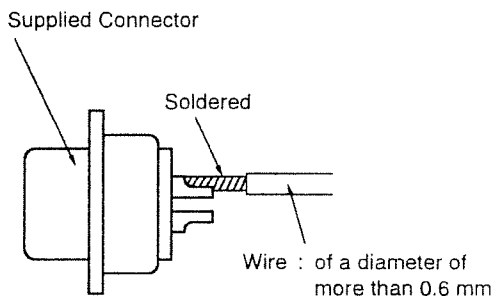
CONTROL IN / OUT Terminals
Program Play signals are input here. They provide output of the Busy and Control Output signals.

■ Specifications of the CONTROL IN/OUT Connector

Pin No.	Signal name
1	CH 1
2	CH 2
3	CH 3
4	CH 4
5	CH 5
6	CH 6
7	CH 7
8	CH 8
9	Common (GND)
10	CH 9
11	CH 10
12	CH 11
13	CH 12
14	CH 13
15	CH 14
16	CH 15
17	CH 16
18	Common (GND)
19	Start
20	Stop
21	Shift
22	Busy Output
23	Busy Output
24	Control Output
25	Control Output

Pinout





● Control Input

Start signals from external devices should be ON/OFF events that short or open the Control Input terminals and connector.

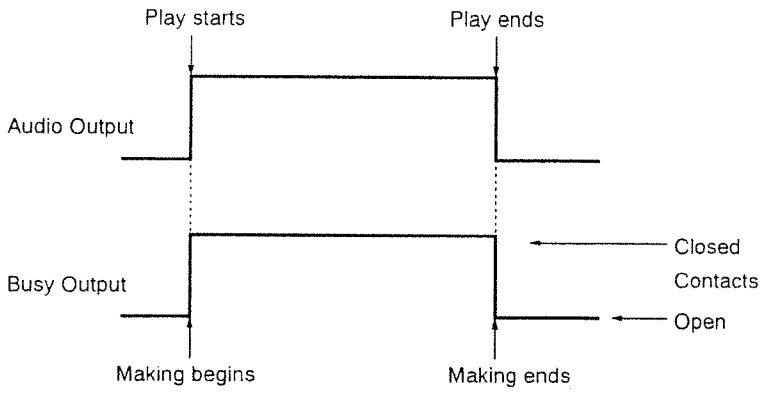
The start signal (input signal) needs to be sustained for at least 100ms.

* Program Play is given precedence over Direct Play.
* When using RS-232-C all other forms of Control Input become invalid.

● Control Output

Busy Output

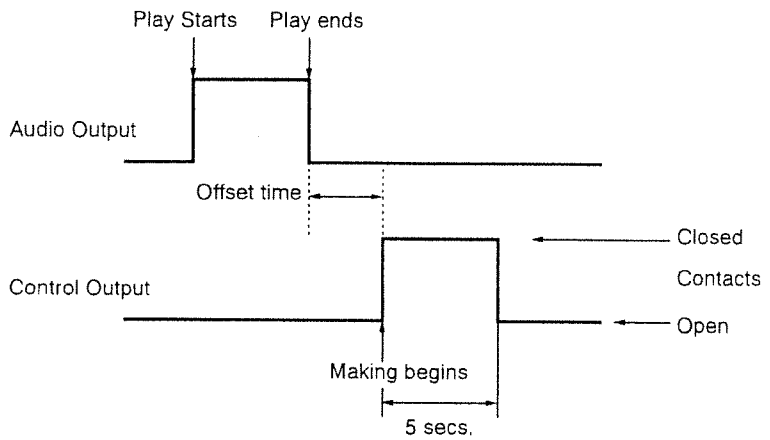
Busy Output is output which occurs when the contacts are closed during play. It can be used to control an external amplifier, etc.



- Busy Output is output from both the CONTROL IN/OUT Terminals and the CONTROL IN/OUT Connector.
- The maximum load sustainable by the contacts is DC30 V, 5 A.
- Busy Output will occur even during a period of pause.

Control Output

Busy Output is output which occurs when the contacts are closed after play. It can be used to control an external device after play has taken place.



- Control Output is output from both the CONTROL IN/OUT Terminals and the CONTROL IN/OUT Connector.
- The settings for Control Output should be made as explained on page 20.
- The maximum load sustainable by the contacts is DC30 V, 5 A.
- The make time is 5 seconds.

● RS-232-C

A personal computer can be used to control this unit.

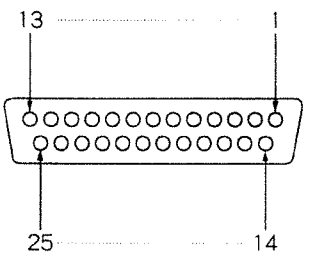
«Protocol»

Transmission method	: Start – stop transmission (asynchronous), full-duplex
Baud rate	: 4,800 / 9,600 bps
Parity	: None
Data	: 8 bits
Stop bit	: 1 bit
Character code	: ASCII

«Connector Specifications»

Pin No.	Signal name
1	FG
2	TXD
3	RXD
4	RTS
5	CTS
6	DSR
7	GND
8	DCO
9	NC
10	NC
11	NC
12	NC
13	NC
14	NC
15	NC
16	NC
17	NC
18	NC
19	NC
20	DTR
21	NC
22	NC
23	NC
24	NC
25	NC

Pinout



«Connecting Cables»

Most commercially available RS-232-C cables (reverse) are acceptable.

1. Command Format

All commands consist of the STX character (02H) in combination with a two-character identifier.
There are two types of commands; those that carry parameters, and those that do not.

Type 1 Commands Carrying No Parameters

«Ex.» Command ;

- The semicolon is appended to commands, and serves as the delimiter between them.

Type 2 Commands Requiring Parameters

«Ex.» Command : Parameter, Parameter,..... ;

- A colon is used as the separator between the command and its parameters.
- A comma is placed as a separator between parameters.
- A semicolon is placed at the end of the command string, and serves as the delimiter.

2. Commands

External → AR-1000

PA

Function Specifies Phrases to play
Syntax PA : P_No , P_No.....P_No
P_No : Phrase Number (4 bytes)
[A001—B250]
Example STX + PA : A002 : 28 ;
(Play Phrase #2 on card A)
Note 100 is the max. number of Phrases specifiable

PL

Function Starts play
Syntax PL ;
Example STX + PL ;
Note Ordinarily starts with A001 if no Phrase has been specified for play (PA command)

ST

Function Stops play
Syntax ST ;
Example STX + ST ;

LP

Function Performs loop play
Syntax LP ;
Example STX + LP ;

LS

Function Stops loop play
Syntax LS ;
Example STX +LS ;
Note Although loop play is stopped, play itself is not

AC

Function Checks the Active status of this unit
Syntax AC ;
Example STX +AC ;

AR-1000 → External

AC

Function Provides response to external AC requests

Syntax AC : ST, P_No ;

ST : Current status (1 byte)

0 : Play in progress

1 : Recording in progress/ in recording standby

P : Play in progress

P_No. : Phrase Number (4 bytes) [A001—B250]

Example [STX] + AC : P, B120 ;

Phrase #120 on card B currently being played → AC command

ACK

Function Provides response to ordinary status checks, and acknowledges reception of commands

Responds upon reception of AC commands (with Play stopped)

Syntax ACK(06H)

Returns only the control code, 06H

Example "06H"

ER

Function Output when an error has occurred

Syntax ER : E_No ;

E_No : Error Number (1 byte)

0 : Syntax Error

The syntax is incorrect

1 : Illegal Operation

The command cannot executed

e.g.) Memory card is not inserted

Example [STX] + ER : 1 ;

Note When this command is created, all the other commands will be ignored

CC

Function Provides output of the insertion status

Syntax CC : a,b ;

a : Insertion status of Card A

0: Not inserted

1: Inserted

b : Insertion status of Card B

0: Not inserted

1: Inserted

Example [STX] + CC : 0,1 ;

Note Generated automatically by the unit

■ ERROR MESSAGES

When a mistake in an operational procedure has been made, or the unit is unable to carry out a procedure properly, an Error Message will appear in the display. Should this occur, refer to the information below and perform the indicated remedy.

```
INSERT CARD
```

Cause : A memory card is not properly inserted in a slot.
Remedy : Insert a card into the slot.

A or B

```
NOT USED CARD A
```

Cause : A card that is unknown to the AR-1000 has been inserted.
Remedy : Switch to a card that the AR-1000 recognizes card usable on the AR-1000.

```
WRITE PROTECT
```

Cause : The Write Protect switch on the memory card is set to the "ON" position.
Remedy : Slide the Write Protect switch to the "OFF" position.

A or B

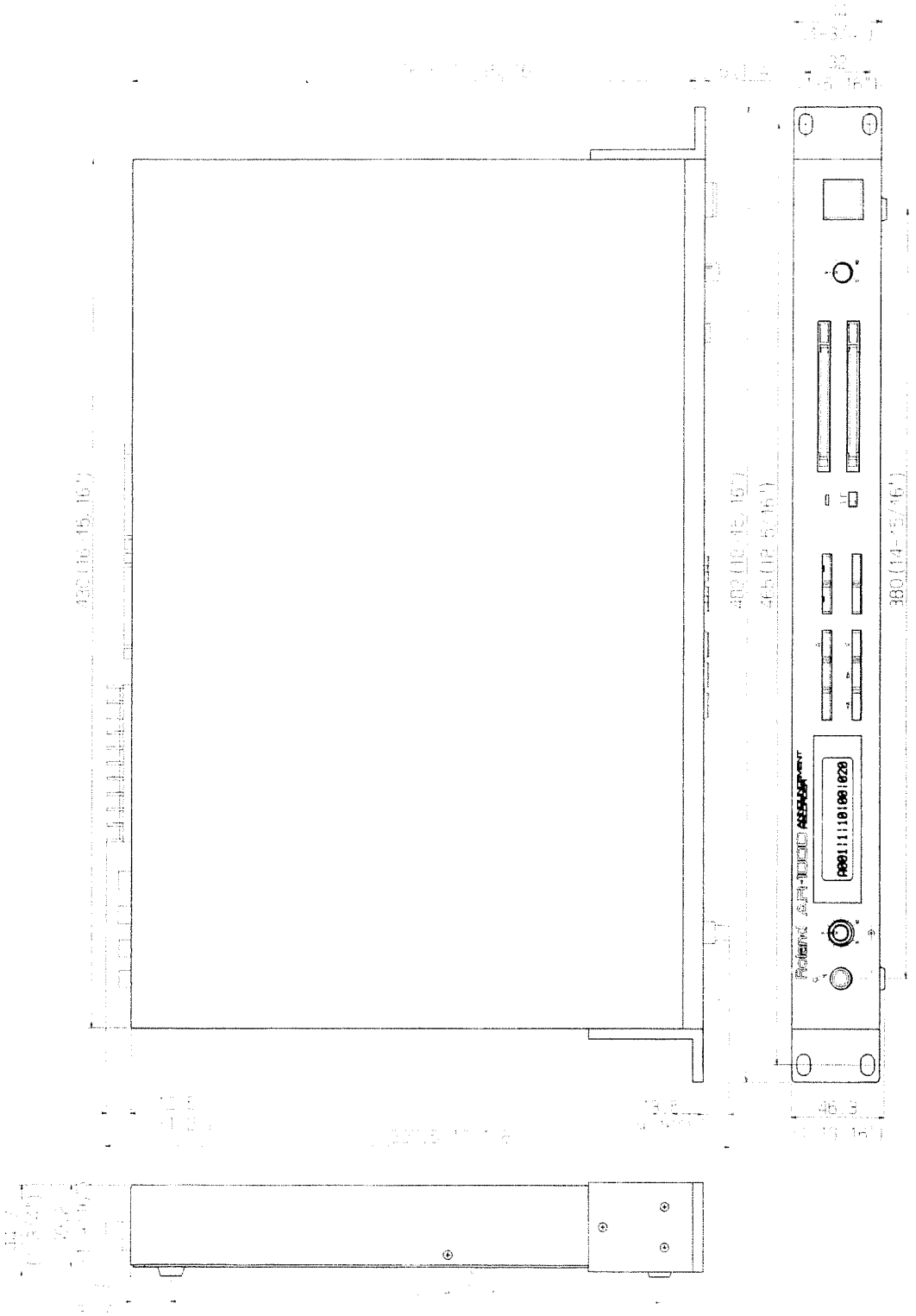
```
CARD A
BATTERY LOW
```

Cause : The memory card's backup-use battery has become depleted.
Remedy : Refer to the manual supplied with the memory card and replace its battery.

```
RESERVED FOR
PATTERN PHRASE
```

Cause : A Phrase being used by a Pattern Phrase cannot be deleted or overwriten.
Remedy : You need to first delete the Phrase from the Pattern Phrase it belongs to, then delete / overwrite it.

■ SCALE DIAGRAM OF EXTERIOR



■ SPECIFICATIONS

● Recording Format
ADPCM

● Maximum Recording Time
1960 sec
(Sampling rate: 8.5 kHz and 4M memory card x 2)

● Maximum Number of Phrase Recordable
500 phrases
(512k Bytes or more memory card x 2)

● Play mode
Program play : 2 pattern, Max 100 phrase
Direct play : 16 channels, 3 mode
(Normal, last-In, Sequence)

RS-232C
Continuous play phrase : Max 100 phrase
Play phrase : Max 500 phrase

● Sampling Rate
8.5, 17, 22 [kHz]

● Inputs
MIC Input(Front Panel) : 1
Input Impedance : 3k Ω
Nominal Input Level : − 50 dBm
Input Sensitivity : − 60dBm
Recommended
Source Impedance : 600 Ω or less

LINE Inputs(Rear Panel) : STEREO x 1
Input Impedance : 10 k Ω
Nominal Input Level : 0 dBm
Input Sensitivity : − 10dBm
Recommended
Source Impedance : 600 Ω or less

● Outputs
LINE Output : Balanced Out x 1
Output Impedance : 150 Ω
Nominal Output Level : 0 dBm
Non-clip Max. Output : +12dBm
(Balanced Output 600 Ω loaded.)

Recommended
Load Impedance : 600 Ω or less

[Control Ins and Outs]

● Control Ins
Number of Inputs : 3
- Program Play Input Jack : Program Play (Start)
- Control Ins and Outs Terminal
  Play mode : Program Play
  (Start, Stop, Exchange)

Trigger Signal Format : On, Off (Open, Close)
Current ratings : DC 24 V, 0.5 A or more

Control Ins and Outs Jack
Play mode:
1. Program Play (Start, Stop, Exchange)
2. Direct Play (16 Channels)

Trigger Signal Format : On, Off (Open, Close)
Current ratings : DC 24 V, 0.5 A or more

● Control Outs
Number of Outputs : 2
- Control Ins and Outs Terminal
  1.Busy (During play ON)
  2.Control Out

Signal Format : On, Off (Open, Close)
Current ratings : DC 30 V, 5 A

Control Ins and Outs Jack
1.Busy (During play ON)
2.Control Out
Signal Format : On, Off (Open, Close)
Current ratings : DC 30 V, 5 A
Busy (During play ON)
Control Out(16 Channels)

● RS-232-C
Transmission method : Start-Stop synchronous system (Asynchronous)
Duplex data transmission
Baud rate : 4800/9600 bps
Parity : none
Data bit : 8 bit
Stop bit : 1 bit
Code : ASCII

[Hardware]

● Display
1 line 20 character (Backlit LCD)

● Indicator
REC Mode Indicator
Edit Mode Indicator
Key Protect Indicator

● Controllers
Start Button
Stop Button
Item Select Button (x 2)
Inc/Dec Button (x 2)
REC Mode Button
Edit Mode Button
Enter Button
Exit Button
Input Volume Knob
Output Volume Knob
Key Protect Switch
Power Switch

● Connectors
LINE Input Jacks (L, R)
Balanced Output Jack
Program Play Input Jack
Control Ins and Outs Terminal :
Terminal Block with M3 bolts
(7.62mm between terminals)
Control Ins and Outs Jack :
D subminiature 25 Pin Connector
(Socket type)

RS-232-C Jack : D subminiature 25 Pin Connector
(Pin type)

● Power Supply
AC 117V, AC 230V or AC 240V

● Power Consumption
15W (AC 117V/230V/240V)

● Dimensions
482 (W) x 300 (D) x 44 (H) mm
19 (W) x 11-13/16 (D) x 1-3/4 (H) inches
(EIA-1U rack mount type)

● Weight
4.1 kg / 9lbs 1oz

● Supplied Accessories
Owner's Manual
Cable
D subminiature 25 Pin connector (for Control IN/OUT Jack)

※ **The specifications for this product are subject to change without prior notice.**

Information

When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

U. S. A.
Roland Corporation US
7200 Dominion Circle
Los Angeles, CA.
90040-3647, U. S. A.
☎ (213)685 - 5141

CANADA
Roland Canada Music Ltd.
(Head Office)
5480 Parkwood
Richmond B. C., V6V 2M4
CANADA
☎ (604)270 - 6626

Roland Canada Music Ltd.
9425 Transcanadienne
Service Rd. N., St Laurent,
Quebec H4S 1V3,
CANADA
☎ (514)335 - 2009

Roland Canada Music Ltd.
346 Watline Avenue,
Mississauga, Ontario L4Z
1X2, CANADA
☎ (416)890 - 6488

AUSTRALIA
Roland Corporation
(Australia) Pty. Ltd.
(Head Office)
38 Campbell Avenue
Dee Why West, NSW 2099
AUSTRALIA
☎ (02)982 - 8266

Roland Corporation
(Australia) Pty. Ltd.
(Melbourne Office)
50 Garden Street
South Yarra, Victoria 3141
AUSTRALIA
☎ (03)241 - 1254

UNITED KINGDOM
Roland(U.K.) Ltd.
Rye Close
Ancells Business Park
Fleet, Hampshire GU13
8UY, UNITED KINGDOM
☎ 0252 - 816181

Roland(U.K.) Ltd.,
Swansea Office
Atlantic Close, Swansea
Enterprise Park, Swansea,
West Glamorgan SA79FJ,
UNITED KINGDOM
☎ (0792)700 - 139

ITALY
Roland Italy S. p. A.
Viale delle Industrie 8
20020 ARESE MILANO
ITALY
☎ 02 - 93581311

SPAIN
Roland Electronics
de España, S. A.
Calle Bolivia 239
08020 Barcelona, SPAIN
☎ 93 - 308 - 1000

GERMANY
Roland Elektronische
Musikinstrumente
Handelsgesellschaft mbH.
Oststrasse 96, 2000
Norderstedt, GERMANY
☎ 040/52 60 090

FRANCE
Musikengro
102 Avenue Jean-Jaures
69007 Lyon Cedex 07
FRANCE
☎ (7)858 - 54 60

Musikengro (Paris Office)
Centre Region Parisienne
41 rue Charles-Fourier,
94400 Vitry s/Seine
FRANCE
☎ (1)4680 86 62

BELGIUM/ HOLLAND/ LUXEMBOURG
Roland Benelux N. V.
Houtstraat 1
B-2260 Oevel-Westerlo
BELGIUM
☎ (0032)14 - 575811

DENMARK
Roland Scandinavia A/S
Langebrogade 6
Box 1937
DK-1023 Copenhagen K.
DENMARK
☎ 31 - 95 31 11

SWEDEN
Roland Scandinavia A/S
DanvikCenter 28 A, 2 tr.
S-131 30 Nacka
SWEDEN
☎ 08 - 702 00 20

NORWAY
Roland Scandinavia
Avd. Norge
Lilleakerveien 2
Postboks 95 Lilleaker
N-0216 Oslo 2
NORWAY
☎ 02 - 73 00 74

FINLAND
Fazer Musik Inc.
Länsituulentie
POB 169
SF-02101 Espoo
FINLAND
☎ 0 - 43 50 11

NEW ZEALAND
Roland Corporation
(NZ) Ltd.
97 Mt. Eden Road, Mt.
Eden, Auckland 3,
NEW ZEALAND
☎ (09)3098 - 715

SWITZERLAND
Musitronic AG
Gerberstrasse 5, CH-4410
Liestal, SWITZERLAND
☎ 061/921 16 15

Roland CK (Switzerland)
AG
Postfach/Hauptstrasse 21
CH-4456 Tenniken
SWITZERLAND
☎ 061/98 60 55
Repair Service by
Musitronic AG

AUSTRIA
E. Dematte &Co.
Neu-Rum Siemens-
Strasse 4
A-6021 Innsbruck Box 591
AUSTRIA
☎ (0512)63 451

GREECE
V. Dimitriadis & Co. Ltd.
2 Phidiou Str., GR 106 78
Athens, GREECE
☎ 1 - 3620130

PORTUGAL
Casa Caius Instrumentos
Musicais Lda.
Rua de Santa Catarina 131
Porto, PORTUGAL
☎ 02 - 38 44 56

HUNGARY
Intermusica Ltd.
Warehouse Area 'DEPO'
Torokbalint, Budapest
HUNGARY
☎ (1)1868905

ISRAEL
D.J.A. International Ltd.
25 Pinsker St., Tel Aviv
ISRAEL
☎ 972 - 3 - 5283015

CYPRUS
Radex Sound Equipment
Ltd.
17 Panteli Katelari Str.
P.O.Box 2046, Nicosia
CYPRUS
☎ 453426, 466423

TURKEY
Barkat Sanayi ve Ticaret
Siraselviler Cad. 86/6
Taksim Istanbul, TURKEY
☎ 149 93 24

EGYPT
Al Fanny Trading Office
9, Ebn Hagar Askalany
Street, Ard El Golf,
Heliopolis, Cairo, EGYPT
☎ 2917803 - 665918

BRAZIL
Roland Brasil Ltda.
R. Alvarenga 591
CEP-05509 Sao Paulo
BRAZIL
☎ (011)813 - 7967
Repair Service for Roland
and Rhodes products

Oliver do Brasil S.A.
Instrumentos Musicais
Av. Ceci. No.578 Centro
Empresarial Tamboro
Barueri SP CEP 06400
BRAZIL
☎ (011)709 - 1267
Repair Service for BOSS
products

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Case Veerkamp, s.a. de c.v.
Mesones No. 21
Col. Centro
C.P. 06080 Mexico, D.F.
MEXICO
☎ (5)709 - 3716

La Casa Wagner de
Guadalajara s.a. de c.v.
Av. Corona No. 202 S.J.
C.P.44100
Guadalajara, Jalisco
MEXICO
☎ (36)13 - 1414

ARGENTINA
Netto S.A.
Venezuela 1433
1095 Buenos Aires
ARGENTINA
☎ 37 - 1632

HONG KONG
Tom Lee Music Co., Ltd.
Service Division
22-32 Pun Shan Street,
Tsuen Wan, New
Territories, HONG KONG
☎ 415 - 0911

KOREA
Cosmos Corporation
Service Station
261 2nd Floor Nak-Won
arcade
Jong-Ro ku, Seoul, KOREA
☎ (02) 742 8844

SINGAPORE
Swee Lee Company
Bras Basah Complex
#03-23 Singapore 0178
SINGAPORE
☎ 3367886

THAILAND
Theera Music Co., Ltd.
330 Verng Nakorn Kasem,
Soi 2, Bangkok 10100,
THAILAND
☎ 2248821

MALAYSIA
Syarikat Bentley
No.142, Jalan Bukit
Bintang 55100 Kuala
Lumpur, MALAYSIA
☎ 2421288

INDONESIA
PT Galestra Inti
Kompleks Perkantoran
Duta Merlin Blok C/59
Jl. Gajah mada No.3-5
Jakarta 10130
INDONESIA
☎ (021) 354604, 354606

TAIWAN
Siruba Enterprise(Taiwan)
Co., LTD.
Room. 5, 9fl. No. 112
Chung Shan N.Road Sec.2
Taipei, TAIWAN, R.O.C.
☎ (02)5364546

SOUTH AFRICA
That Other Music
Shop(PTY) LTD.
256 Bree Street,
Johannesburg 2001
Republic of South Africa
☎ 337 - 6573

Paul Bothner(PTY) LTD.
17 Werdmuller Centre
Claremont 7700
Republic of South Africa
☎ 021 - 64 - 4030

As of Jan 8. 1992

AR-1000 QUICK REFERENCE GUIDE

■ RECORDING

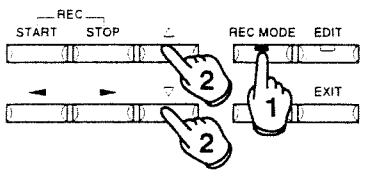
Prepare for Recording

- **AR-1000**
  KEY PROTECT switch ➡ OFF
- **Memory Card**
  Protect switch ➡ OFF

Different Types Offered (Sampling Rates)

1. 8.5 k : To get the longest recording time.
2. 17 k : For ordinary recording.
3. 22 k : To enjoy the highest quality recordings.

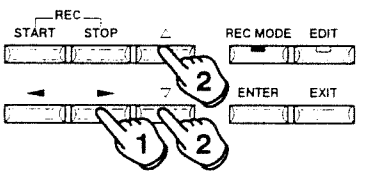
1 RECORDING MODE



1. Press **[REC MODE]**.
2. Select the Phrase using [△]/[▽].

```
REC MODE        0120
A001 | - | -- | -- | ---
```

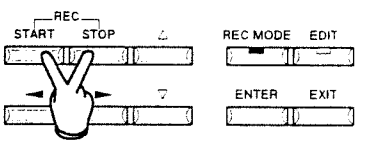
2 SET THE TYPE



1. Use [▶] to move the blinking cursor to Type.
2. Select the type using [△]/[▽].

```
REC MODE        0120
A001 | 1 | 100 | 00 | 000
```

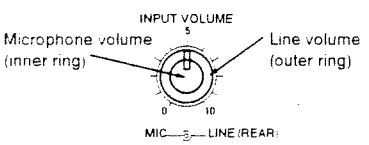
3 RECORDING STANDBY



Hold down **[STOP]** while you press **[START]**.

```
========        PAUSE
A001 | 1 | 100 | 00 | 000
```

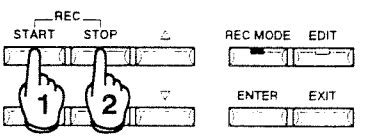
4 RECORDING LEVEL



Use the INPUT LEVEL knob to adjust the recording level. At the ideal level, the " ▪▪▪ " should not light at all.

```
========        PAUSE
A001 | 1 | 100 | 00 | 010
```

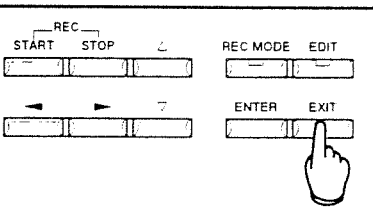
5 BEGIN RECORDING



1. Press **[START]** to start recording.
2. Press **[STOP]** to stop recording.

```
========        REC
A001 | 1 | 100 | 00 | 010
```

6 FINISH



Press **[EXIT]** to leave the recording mode.

```
MONITOR         0110
A001 | 1 | 100 | 00 | 010
```

MONITORING

- Do the following to listen to recordings on the memory card.

1 MONITOR MODE

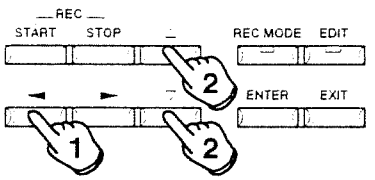
KEY PROTECT

OFF ON (PLAY MODE)

Slide the KEY PROTECT switch to OFF.

```
MONITOR
A001 | 1 | 90 | 00 | 010
```

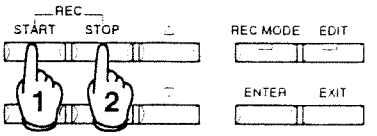
2 SELECT THE PHRASE



1. Using [◀], select card A or B.
2. Select the Phrase using [△]/[▽].

```
MONITOR
A001 | 1 | 90 | 00 | 010
```

3 START/STOP PLAYBACK



1. Press **[START]** to start playback.
2. Press **[STOP]** to stop playback.

```
MONITOR      PLAY
A001 | 1 | 90 | 00 | 010
```

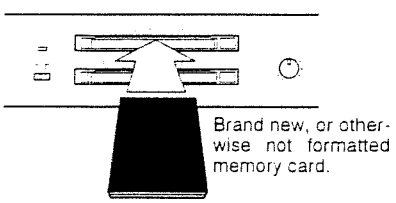
FORMATTING

- Memory cards need to formatted before the AR-1000 is able to use them.

IMPORTANT!

Never remove the memory card from the slot while it is being formatted.
Slide the write protect switch on the memory card to the "OFF" position.

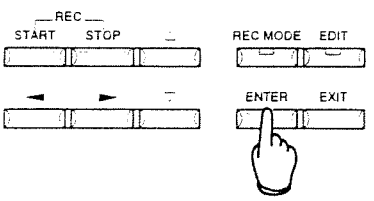
1 INSERT MEMORY CARD



* Slide the KEY PROTECT switch to OFF.

```
CARD Format
CARD A | 512KBytes
```

2 FORMAT IT



Press **[ENTER]** to begin formatting the card.

```
Formatting
CARD A | 512KBytes
```

3 COMPLETION

Once formatting has completed, the display will show the message below.

```
NO PHRASE
```

Actual time remaining when playing back/recording Phrases versus what is shown in the display

Although the AR-1000 internally carries out all its processing of Phrases in milliseconds, the display can only express time in whole seconds. the display will round off the time value to the nearest second in one of two ways, depending on whether it is in playback or recording, as follows:

● **When indicating the remaining recording time, the fractional part is ignored:**

Ex.) Remaining Recording Time ➡ 2.5 (sec)
Display shows ➡ 2 (sec)

● **When indicating the remaining playback time, the value is rounded to the next highest whole number:**

Ex.) Remaining Playback Time ➡ 2.5 (sec)
Display shows ➡ 3 (sec)

CORRECTIONS

Please note that some corrections need to be made to the "AR-1000 Owner's Manual." Please accept our sincerest apologies for any inconveniences this may cause. The manual should read as follows:

■ Page 3 "Concerning Memory Cards" .....

● **Correction for the Recording Time (in chart)**

(Erroneous) 3M bytes (8.5kHz) ➡ 735sec

(Correct) 3M bytes (8.5kHz) ➡ 734sec

■ Page 25 "COPYING PHRASES" .....

(Erroneous) [1] Select the Phrase which is to become the source for the copy.
[4] Specify the destination of the copy.

(Correct) [1] Select the Phrase which is to become destination for the copy.
[4] Specify the source of the copy.

■ Page 30 "Displaying the Play Time for a Pattern Phrase" .....

(Erroneous) 2) Press the **[EDIT]** button, and you are returned to the page you were in before.

(Correct) 2) Press the **[REC MODE]** button, and you are returned to the page you were in before.

■ Page 67—68 "SPECIFICATIONS" .....

● Page 67 "Outputs"

(Erroneous) Load Impedance : 600 Ω or less

(Correct) Load Impedance : 600 Ω or more

● Page 68 "Display"

(Erroneous) 1 Line 20 character (Backlit LCD)

(Correct) 2 Line 16 character (Backlit LCD)

For Germany

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der die das

ROLAND ANNOUNCEMENT RECORDER AR-1000

(Gerät Typ Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Amtsbl. Vfg 1046/1984

(Amtsblattverfügung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Roland Corporation Osaka/Japan

Name des Herstellers/Importeurs

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 A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

The I/O cable between this equipment and the computing device must be shielded.

For Canada

CLASS A **NOTICE**

This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

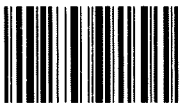
CLASSE A **AVIS**

Cet appareil numérique ne dépasse pas les limites de la classe A au niveau des émissions de bruits radioélectriques fixés dans le Réglement des signaux parasites par le ministère canadien des Communications.

Roland®

26055499

UPC 26055499



AR-1000 ANNOUNCEMENT RECORDER

Roland Corporation

26055497 '93-1-B2-11SE