

# ***Digital Signal Transfer™ System Master Room Kit***

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Operating Instructions

**DST**

***DLS-M1***

- TA-DM1000ES
- MX-RF1
- RM-P1

# WARNING

to prevent fire or shock hazard, do not expose the unit to rain or moisture.



## CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN



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.



This symbol 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.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### IMPORTANT NOTICE

THE DST SYSTEM WILL BLACK OUT UHF CHANNELS 13-15 AND CATV CHANNELS 64-68. IF THESE CHANNELS ARE ACTIVE IN YOUR AREA AND YOU WISH TO WATCH THEM, PLEASE ASK YOUR INSTALLER OR SONY RES DEALER FOR THE PROPER ANTENNA A/B SWITCH. THERE WILL BE NO CHARGE FOR THIS SWITCH.

### INFORMATION (for the customers in the U.S.A)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

### For the customers in Canada

This apparatus complied with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

### CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

### Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Lic. U.S. Pat. 4509211

## Owner's Record

The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. TA-DM1000ES

Serial No. \_\_\_\_\_

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# Introduction

## How to Use This Manual

This manual is arranged to help you quickly find the information you need for the operation of the Digital Signal Transfer™ System. This manual consists of the following sections.

- 
- 1** Preliminaries
  - 2** Connection
  - 3** Before using the RM-P1 Remote Commander
  - 4** Playback/reception
  - 5** Recording
  - 6** Other information
- 

### To become familiar with the Digital Signal Transfer™ System

Start reading from the "Preliminaries". "Overview of the Digital Signal Transfer™ System" gives an example to explain how to use this system.

### If you have the master digital control center, Digital Link™ Decoder Amplifier and other equipment already connected

Start from "Before using the RM-P1 Remote Commander".

### If the master digital control center, Digital Link™ Decoder Amplifier and other equipment have not been connected

Start from "Connection".

## Before You Begin

- 1** Check that the following are in the carton.
  - Master digital control center TA-DM1000ES
  - Signal combiner MX-RF1
  - Remote Commander RM-P1
  - Size AA (R6) battery (3)
  - F-type connector (2)
  - 75-ohm coaxial cable with F-type connectors (1)
  - Sony Infrared Remote Control System cable - audio type, 4-pin (6)
  - Sony Infrared Remote Control System cable - video type, mini (2)
  - Spacer (1)
  - Screwdriver (1): to adjust the ROOM NUMBER switch on the TA-DL100 Digital Link™ Decoder Amplifier
- 2** About the text of this manual
  - The supplied RM-P1 Remote Commander is always identified by its model name to avoid confusion with the remote commanders supplied for other equipment.
  - In the text, name of buttons and switches are written in capital letters or their symbol marks:  
Example: Press CD 1.
  - The operation explained in the text is based on the operation with the RM-P1 Remote Commander. If an operation is not possible with the RM-P1 Remote Commander, a note such as "This operation cannot be performed by the RM-P1 Remote Commander." appears in the text.

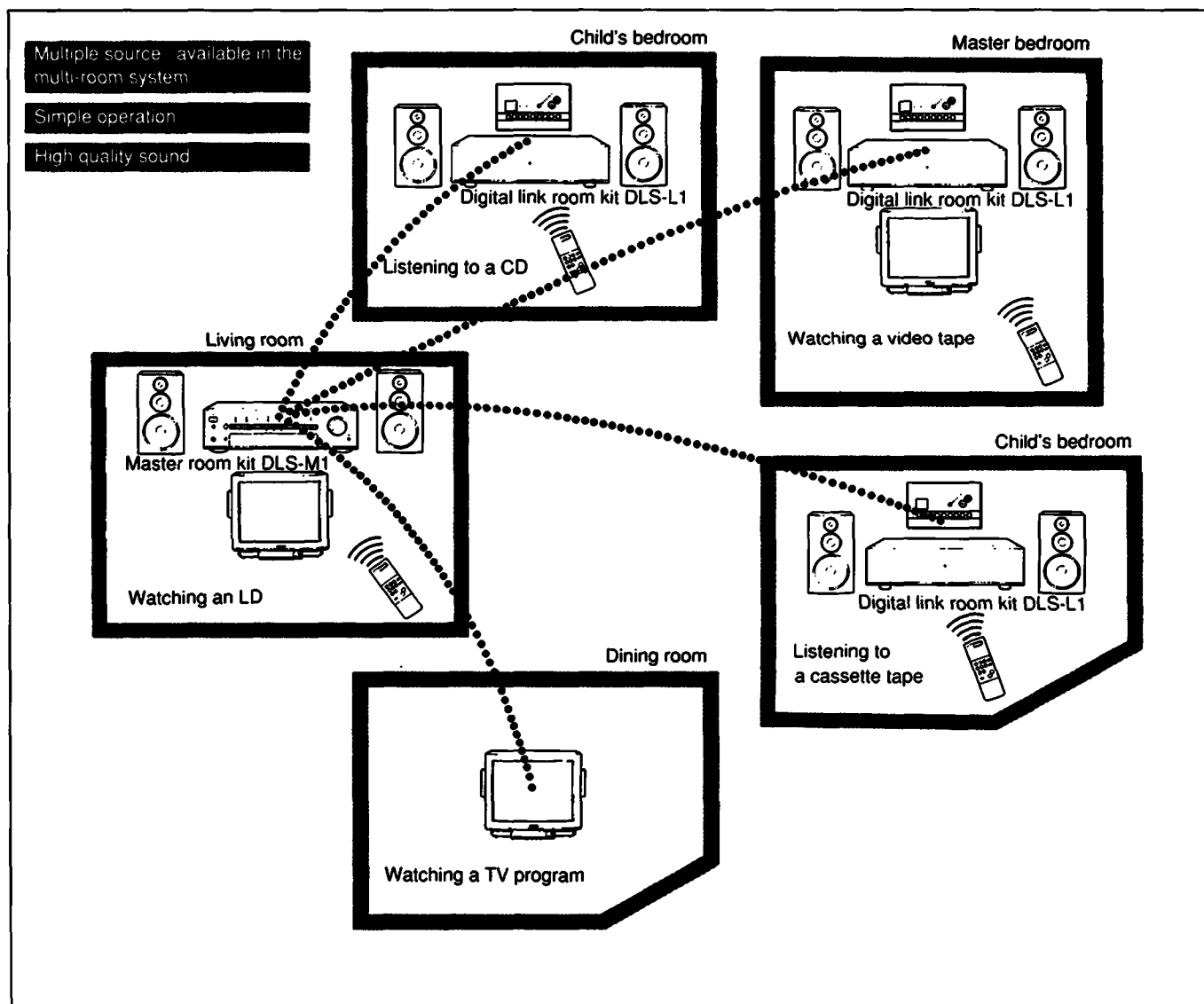
# Overview of the Digital Signal Transfer™ (DST) System

## Typical Configuration

The concept for DIGITAL SIGNAL TRANSFER™ System originated from a desire to develop a way to easily enjoy music or movie with a simple operation in any room of the house.

The system is designed to provide you the greatest enjoyment with the least amount of work. It will not be necessary to remember complex steps of operation or controls. Simply select the music you want to listen to or the movie you want to watch, adjust the volume, and the system will do the rest. This system allows you to enjoy high quality sound and picture wherever you are in the house, just by doing a simple operation.

The following illustration gives one example of how the DST system can be used.



# Overview of the Digital Signal Transfer™ (DST) System

## Understanding the DST System

The DST system transmits up to 3 digital audio signals, 1 analog audio/video signal and remote control signals through a 75-ohm coaxial cable\*. This system consists of the following main equipment:

- Master digital control center: transmits audio, video and remote control signals.
- DIGITAL LINK™ Decoder Amplifier: decodes audio and remote control signals transmitted from the master digital control center and transmits remote control signal.

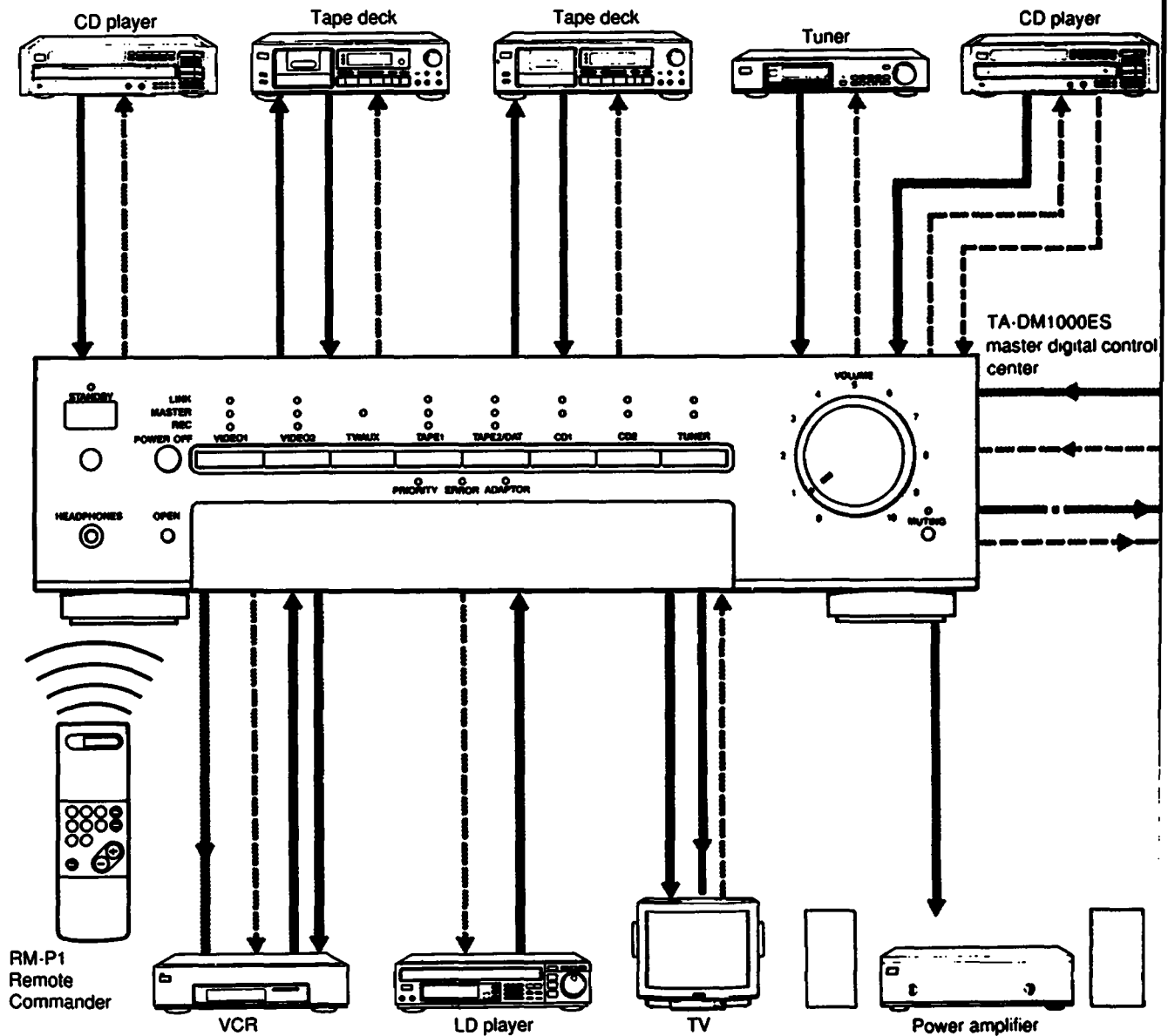
Transmitting audio signals digitally assures high quality sound, without experiencing the type of degradation, distortion or signal loss associated with conventional hardware systems.

The following configuration shows the signal transmission in the DST system.

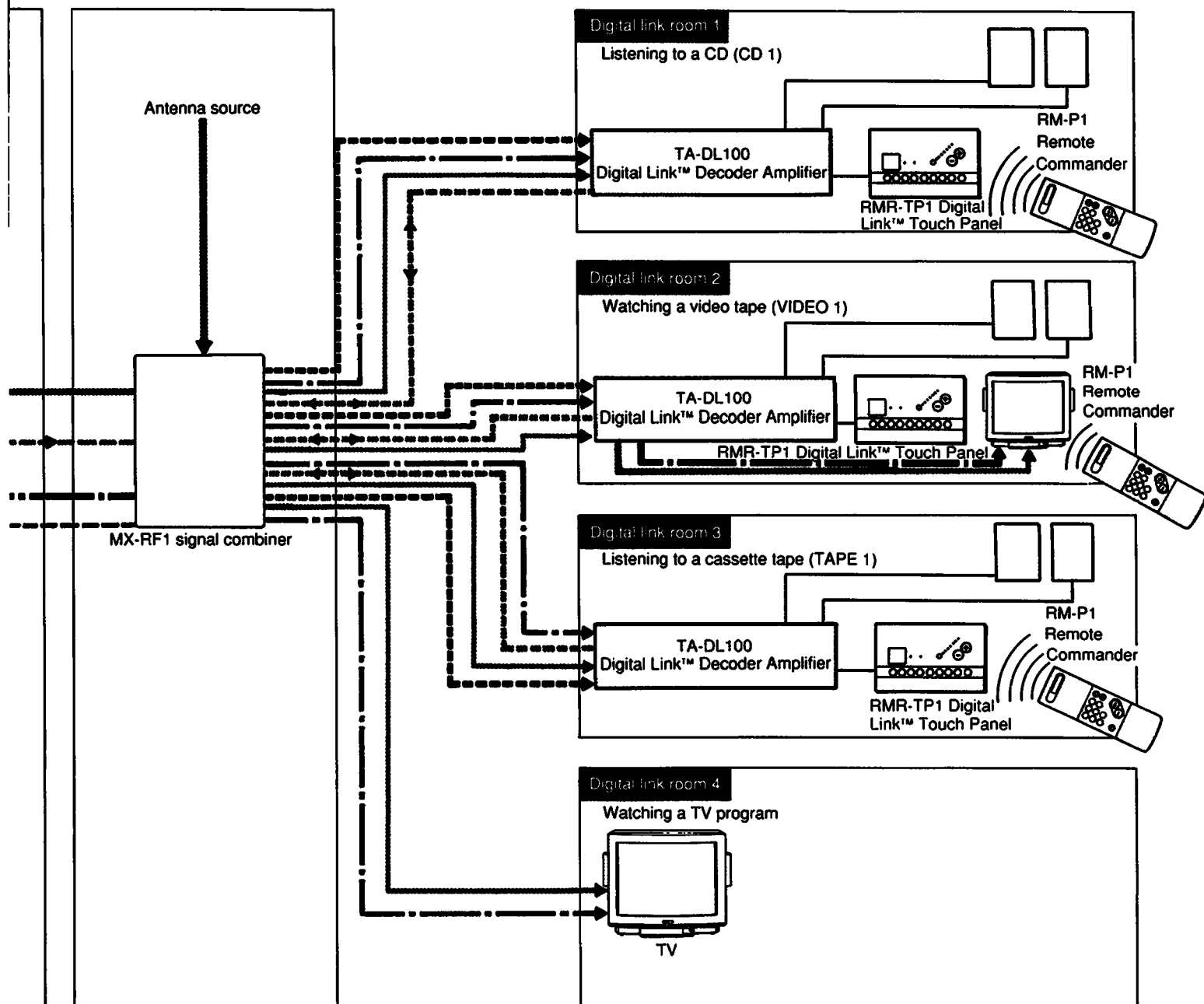
75-ohm coaxial cable is a common shielded antenna wire and used as medium carrier.

Master room

Watching an LD (VIDEO 2)



- Antenna source signal
- Remote control signal
- Analog video and audio signals
- Digital audio signal
- RF signal



# Overview of the Digital Signal Transfer™ (DST) System

## Features of the DST system

### **Multi-room and multiple source transmission**

- **Simultaneous transmission of 3 digital audio sources plus the monaural audio signal of a video source**  
The DST system transmits simultaneously 3 audio sources as well as 1 video source. Three audio sources are transmitted digitally. One of the audio sources is input at 44.1 kHz, and the other audio sources are transmitted by first being converted from analog to digital. A video source is transmitted by the amplitude modulation.

### • **System expandability**

Up to 16 Digital Link™ Decoder Amplifier can be connected to the DST system as auxiliary locations of control.

### • **Independent operation**

A Digital Link™ Touch Panel in each digital link room is provided with program source selection and level setting buttons which allows independent remote room control.

### **Digital transmission through 75-ohm coaxial cable**

- **High quality of sound**  
Digital transmission of the DST system reproduces high quality sound, reducing the distortion and signal noise inherent in conventional analog multi-room systems.
- **Signal transmission through a single cable**  
Audio, video and remote control signals are transmitted through a single 75-ohm coaxial cable.
- **Efficient installation**  
The DST system uses readily available 75-ohm coaxial cable as transmission carrier.

### **Other Features**

- **Intelligent Remote Commander**  
RM-P1 Remote Commander (supplied) allows you to control the system whether Sony or other manufacturers' equipment is connected. Once you have programmed the remote control signals on the master digital control center, the RM-P1 Remote Commander enables not only program source selections and level settings but also a variety of advanced operations such as fast-forwarding of tape.  
In addition, the RM-P1 Remote Commander is provided with a display window which allows you to confirm the selected program source and the transmission of remote control signals.
- **Priority to perform various operations**  
Priority is assigned to a variety of operations to avoid mixing up the remote control signals. These operations are available only in the room with priority.
- **Visible status information**  
Indicators showing the status of the DST system are provided on the master digital control center.



# Precautions

## On Safety

- Operate the unit only on 120V AC, 60 Hz.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.

## On Operation

Before making program source connections, be sure to unplug the unit.

## On Cleaning the Cabinet

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzene.

## On Installation

- **To prevent internal heat built-up in the unit**  
Place the unit in a location with adequate air circulation.
- **Do not install the unit:**
  - near heat sources such as radiator or air ducts.
  - in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- **Do not place anything on the top of the cabinet.**  
The top ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its components.
- **Do not throw away the carton and packing material.**  
It will be an ideal container when transporting the unit.

## For the Customers in the U.S.A.

For detailed safety precautions, see the "IMPORTANT SAFEGUARDS" leaflet.

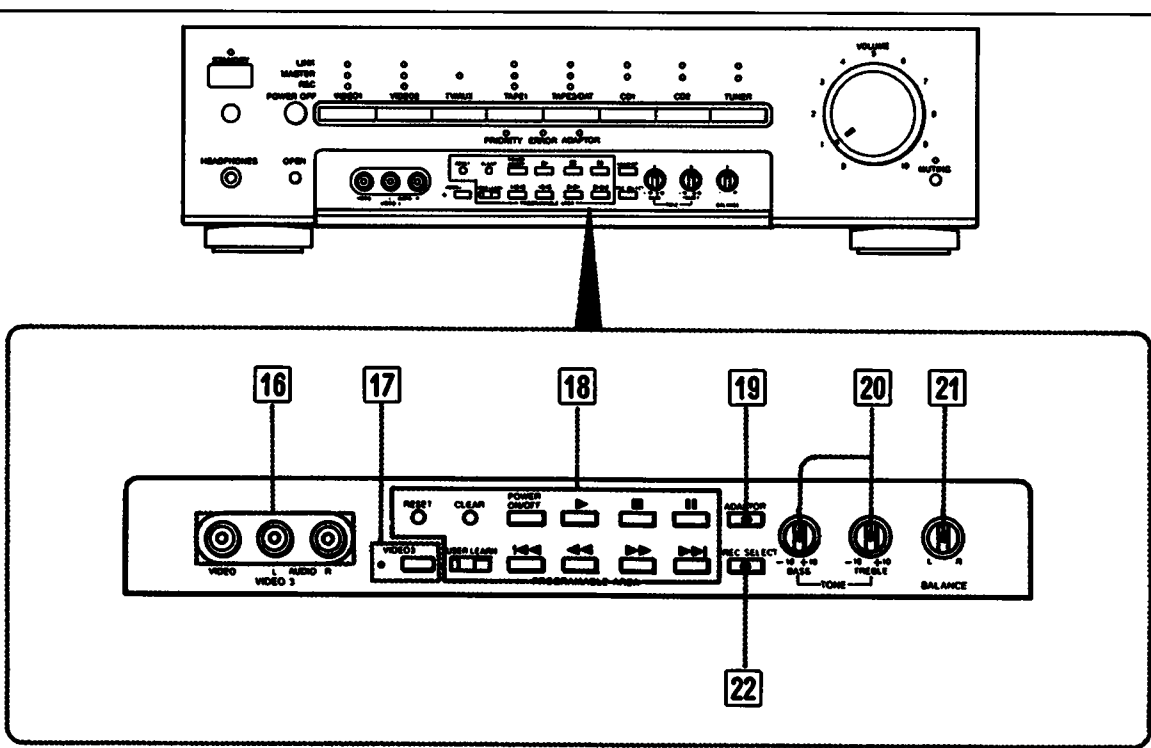
If you have any question or problem concerning your unit, please consult your nearest Sony ES dealer.

## Front



- 10

Inside the panel



**Refer to the pages indicated for details.**

**18 VIDEO 3 input jacks**

Connect video equipment such as a video camera recorder.

**17 VIDEO 3 button and indicator**

**Press to select the program source connected to VIDEO 3 jacks.**

**18 Programmable buttons for other manufacturers' remote commander 33**

**RESET:** Press if the remote control operation does not function. 34

**CLEAR:** Clears all programmed signals regardless of program source. 34

**USER/LEARN selector:** Set to LEARN to program remote control signals of other manufacturers' equipment, except the ones for TUNER, TV/AUX and VIDEO 3. Set to USER to operate the connected equipment. 34

**POWER ON/OFF, ►, ■, II, I◄◄, ◄◄, ►► and ►►►:**  
Operation buttons to be programmed on this master digital control center.

**19 ADAPTOR button**

**Press to listen to the sound from the equipment connected to ADAPTOR jacks.**

**20 TONE control knobs**

**INCREASE OR DECREASE THE BASS OR TREBLE TONE.**

**21** **BALANCE** control knob

**BALANCE CONTROL knob**  
Adjusts the balance between the left and right speakers.  
Normally set at the center position.

**22 REC SELECT button**

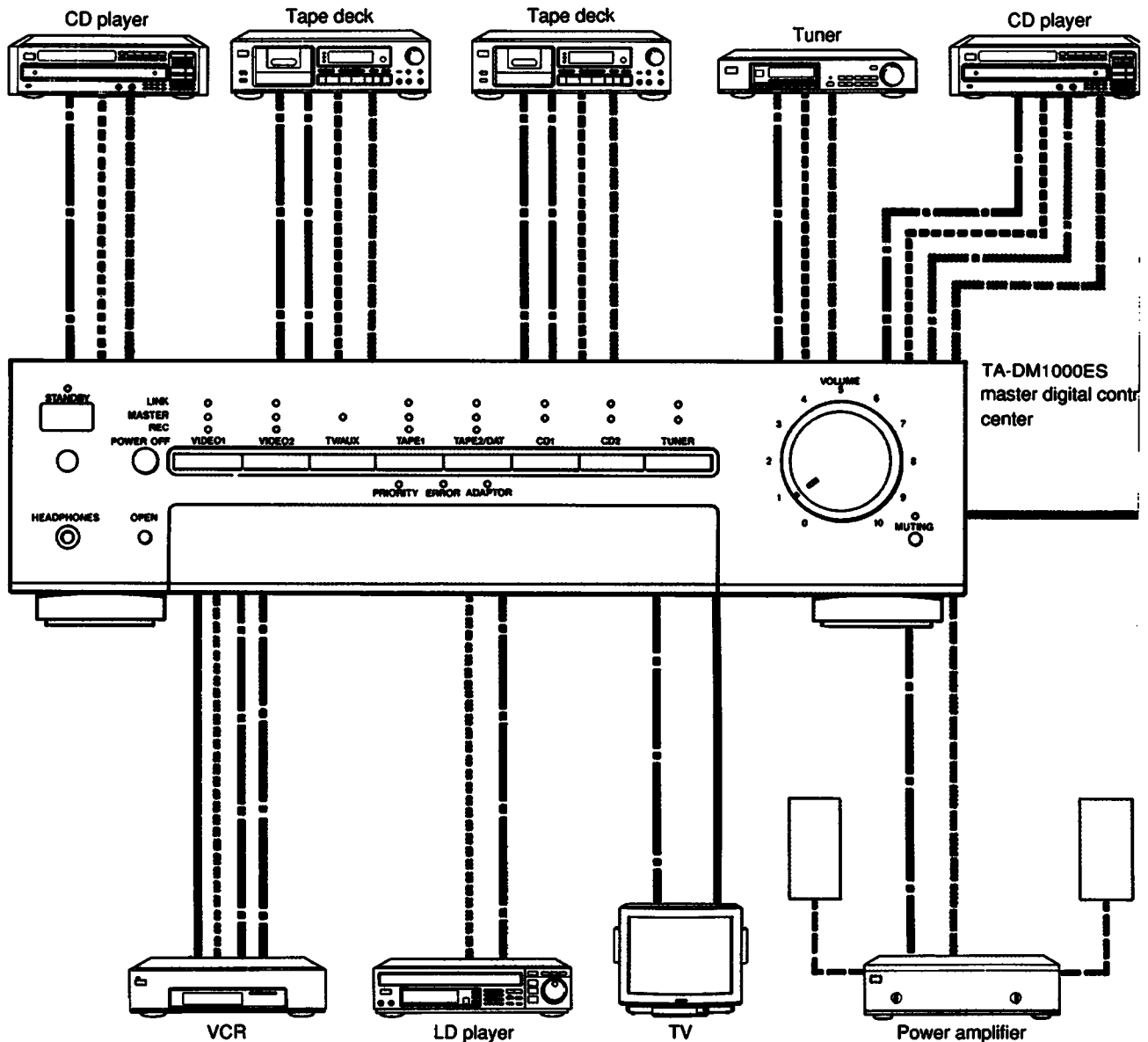
Press to select equipment to record a program source.46

# System Configuration

Here is a typical system configuration. Connect each piece of equipment referring to the pages that follow this section.

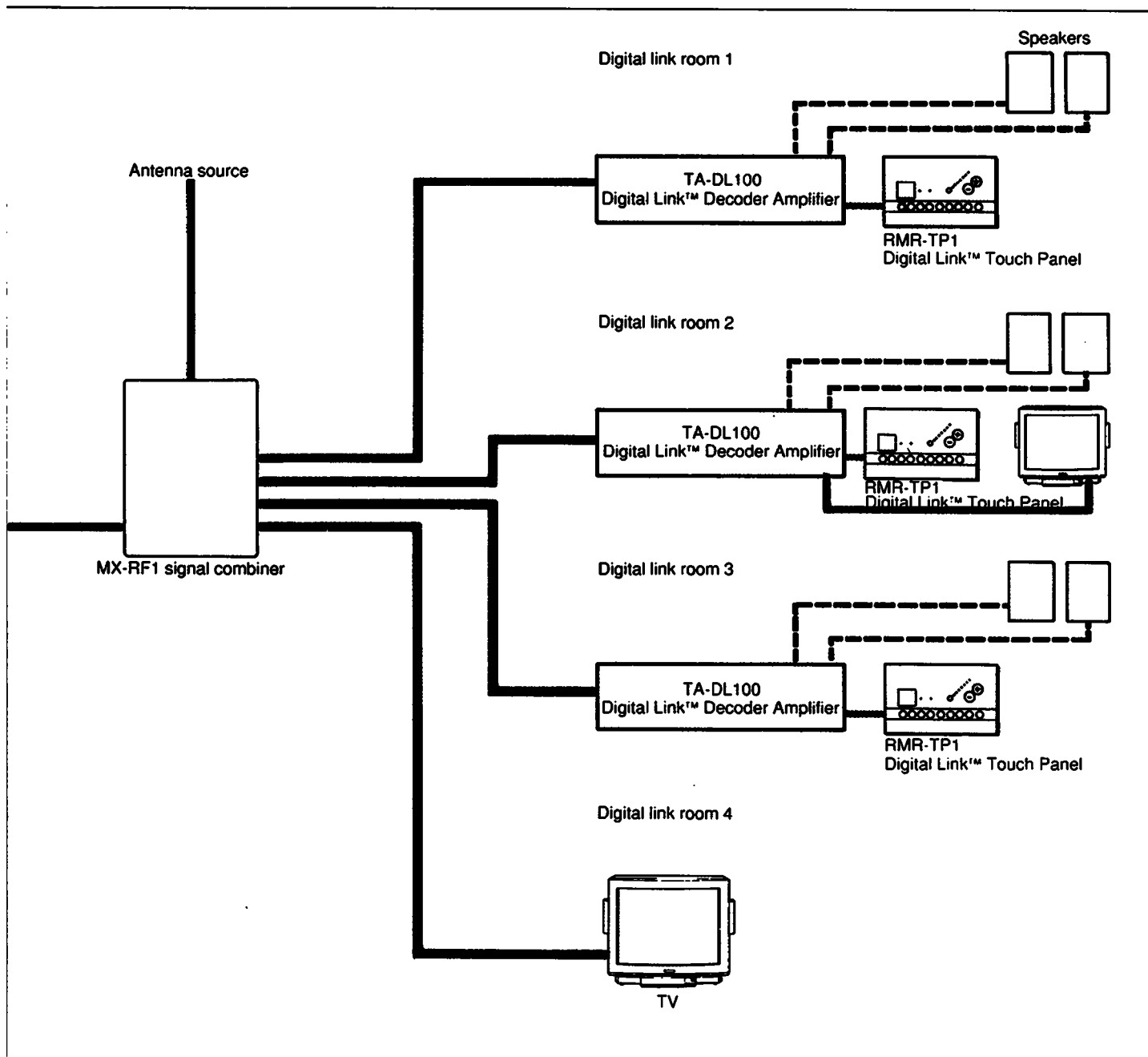
- 75-ohm coaxial cable (not supplied)
- · — · — Audio/video connecting cable (not supplied)
- · — · — Optical cable (not supplied)
- · — · — Sony Infrared Remote Control System cable (supplied, 4-pin type)
- · — · — Sony Infrared Remote Control System cable (supplied, mini type)
- · — · — AC power cord of each piece of equipment
- · — · — DIN cable of Digital Link™ Touch Panel
- · — · — Speaker cord (supplied for speakers)

## Master room



## Precautions

- Do not remove any enclosure of the unit when connecting or installing the equipment. Refer installation which requires opening of the unit to your nearest Sony ES dealer.
- When any wiring of the 75-ohm coaxial cable is required, consult your nearest Sony ES dealer.
- Installation of the 75-ohm coaxial cable should be performed in accordance with National Electrical Code and all applicable local codes.
- Before connection, be sure to turn off all equipment.
- Insert the plug fully. Loose connection may cause the noise.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- If noise occurs, leave enough space between each piece of equipment.
- Refer to the operating instructions of the corresponding equipment for connection.



# Connecting the Signal Combiner and Digital Link™ Decoder Amplifier

## When Installing the MX-RF1 Signal Combiner on the Wall

Locate a space large enough to accommodate the unit and accessible enough to connect the necessary coaxial cables.

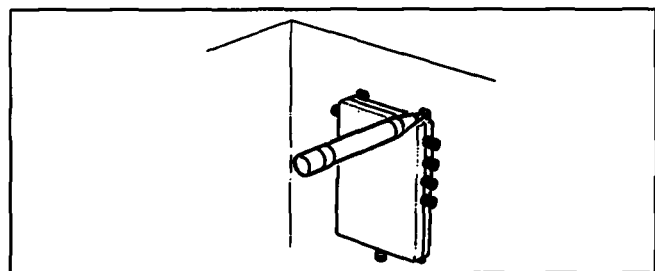
### Note

Be sure to complete installation before connecting the 75-ohm coaxial cables.

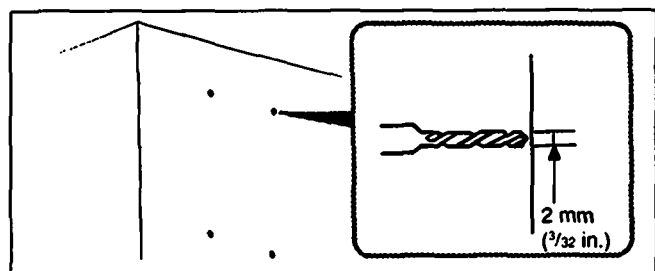
### If the space selected is a wooden surface

Use the four wood screws ( $\phi^{5/32}$  in.,  $1^{9/32}$  in. length).

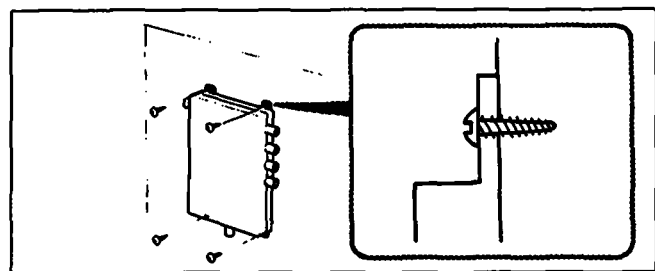
- 1 Mark the mounting hole locations.



- 2 Make four pilot holes approx. 2 mm ( $3/32$  in.) in diameter for the wood screws, using a nail set or drill.



- 3 Place the MX-RF1 signal combiner on the surface and tighten the screws.

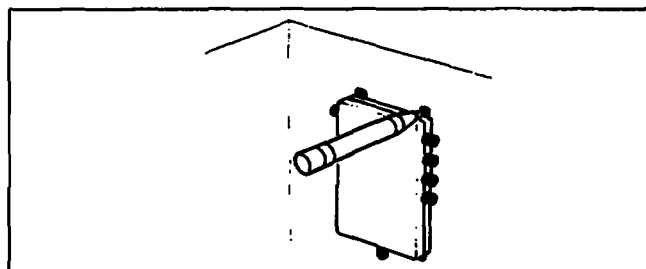


### Note

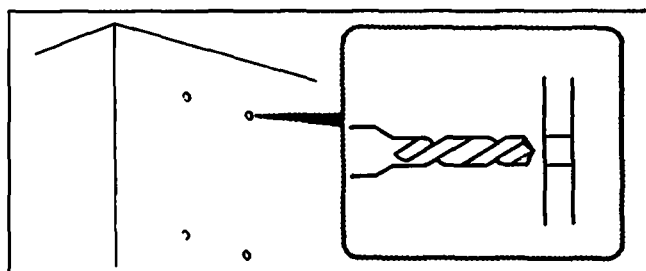
Install the signal combiner on the wall of at least 10 mm ( $1^{3/32}$  in.) thickness.

If the space is covered by wallboard or plasterboard Four screws ( $\phi^{5/32}$  in.) and screw anchors are required.

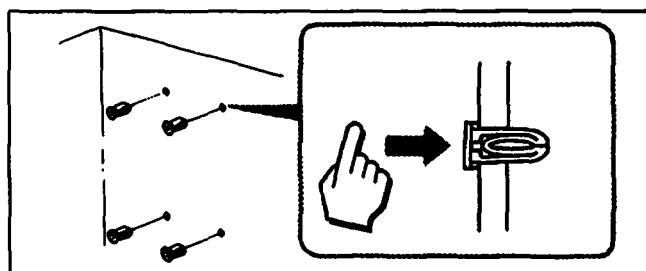
- 1 Mark the mounting hole locations.



- 2 Make four pilot holes whose diameter is suitable for the screw anchor.

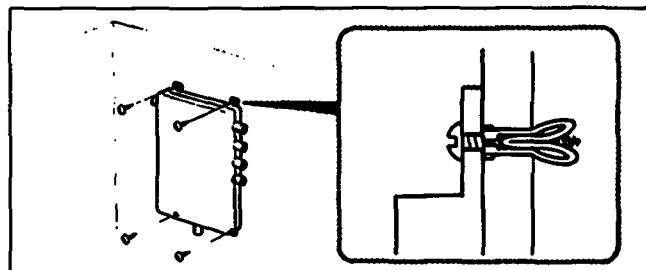


- 3 Push the screw anchor into the hole. Be sure not to push the screw anchor completely through the wallboard. The screw anchor should be inserted until it is flush with the wallboard.



- 4 Repeat step 3 for other mounting holes.

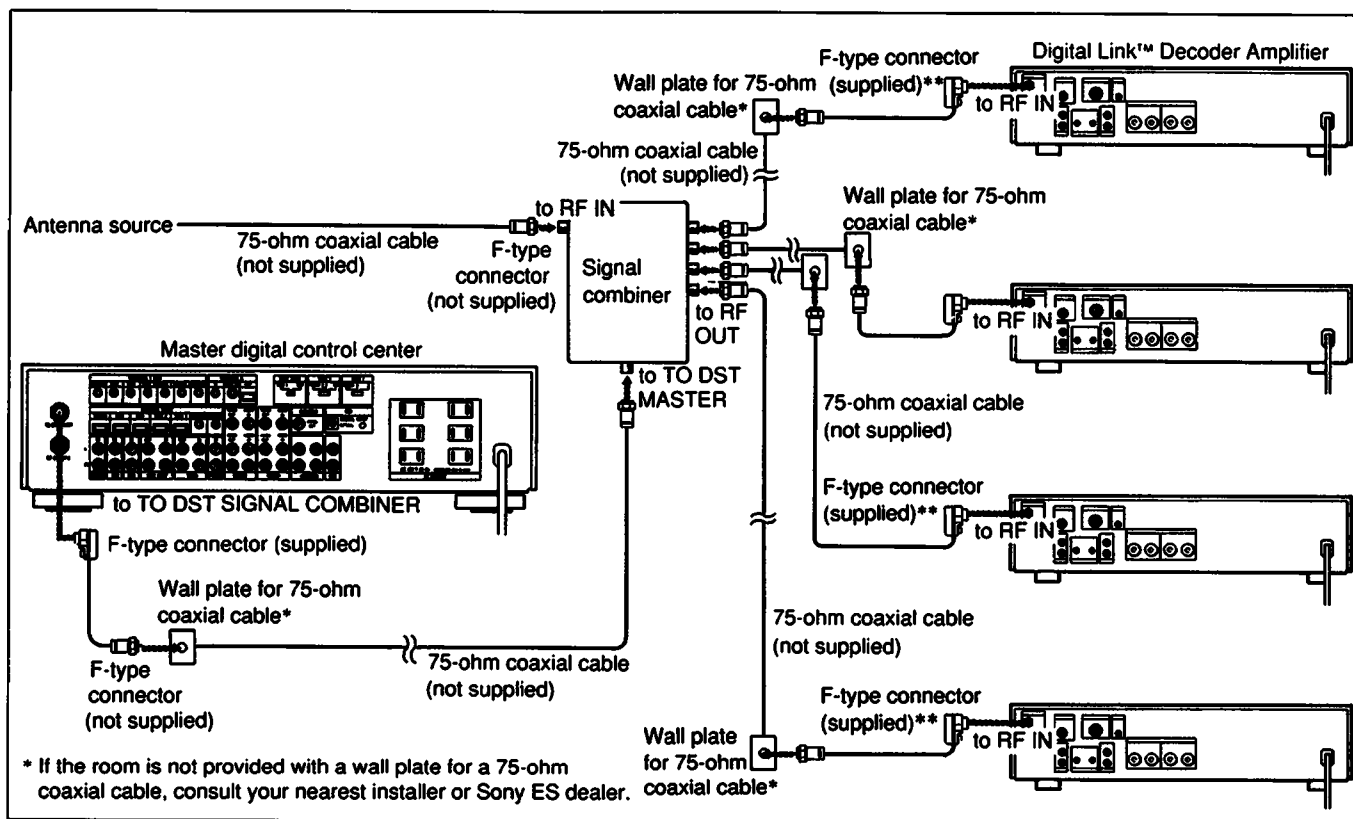
- 5 Place the MX-RF1 signal combiner on the surface and start a screw into the screw anchor. Be careful not to exert too much inward pressure on the screw anchor or you may push it completely through the wall.



- 6 Complete the above process for the remaining screws.

## When Connecting Four Digital Link™ Decoder Amplifiers or Fewer

Up to four digital link rooms can be connected to the DST system.



### Cable type and length

To obtain visible pictures, we strongly recommend the following cable.

	Master digital control center to signal combiner	Signal combiner to digital link decoder amplifier
Type	RG-59 or better	
Length	Up to 40 m (Approx. 131 ft.)	Up to 43 m* (Approx. 141 ft.)

\* Applies to the total length from the signal combiner to the TV set when you connect a TV set to the digital link decoder amplifier.

Do not use a cable with a grade worse than RG-59. Visible pictures cannot be obtained with such a cable.

### How to attach the F-type connector (supplied/not supplied)

See page 17.

### Caution

Be sure to connect the TO DST SIGNAL COMBINER jack of the master digital control center with the TO DST MASTER jack of the signal combiner. If other equipment is connected to the TO DST SIGNAL COMBINER jack, the equipment may be damaged.

- Install each splitter at a distance of up to 1 m (3.2 ft.) from the signal combiner. If a splitter is located more than 1 m (3.2 ft.) away from the signal combiner, visible pictures cannot be obtained.
- Do not connect more than 16 Digital Link™ Decoder Amplifiers. Otherwise, the DST system may function incorrectly.

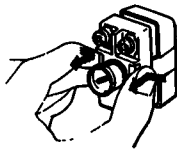


## Before Connection

Before connection, you must attach an F-type connector to each end of the coaxial cable.

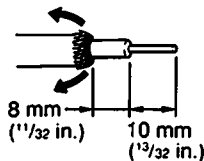
### Attaching the F-type connector (supplied)

- 1** Open the lid.

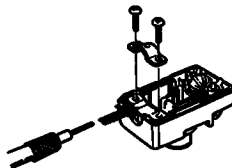


- 2** Strip the cable.

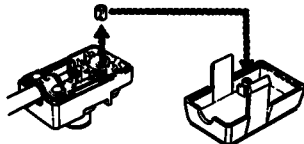
- ① Strip 18 mm ( $23/32$  inch) of the black polyvinyl jacket.
- ② Fold back the woven wire.
- ③ Strip 10 mm ( $13/32$  inch) of the white plastic leaving 10 mm of the center conductor.



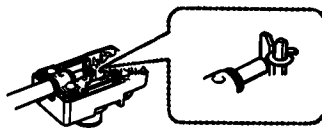
- 3** Loosen the screws and insert the cable.



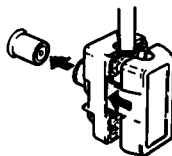
- 4** Remove the ring.  
(Put it on the projection on the lid.)



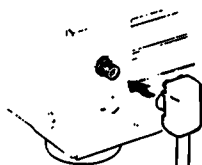
- 5** Coil the center conductor.



- 6** Snap the lid into place.

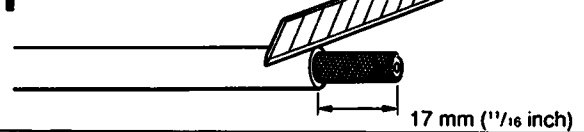


- 7** Insert the F-type connector into TO DST SIGNAL COMBINER or RF OUT on the master digital control center.

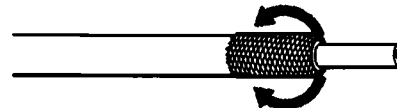


### Attaching the F-type connector (not supplied)

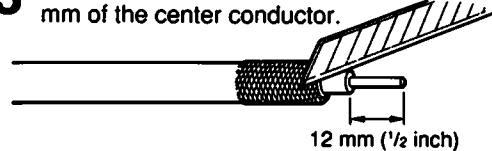
- 1** Strip 17 mm ( $11/16$  inch) of the black polyvinyl jacket.



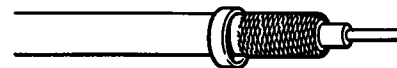
- 2** Fold back the woven wire.



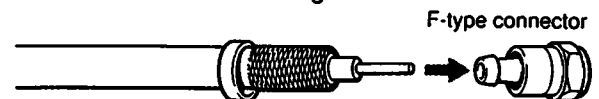
- 3** Strip 12 mm ( $1/2$  inch) of the white plastic leaving 12 mm of the center conductor.



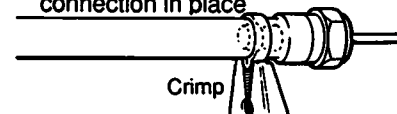
- 4** Slip the crimping ring over the cable.



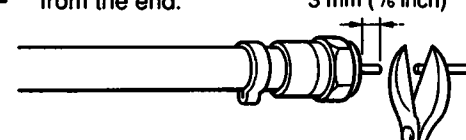
- 5** Insert the inner conductor into the F-type connector shaft and push the end of the cable into the connector as far as it will go.



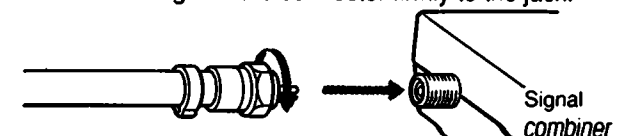
- 6** Slide the crimping ring over this assembly. Then pinch the crimping ring with pliers to hold the connection in place.



- 7** Cut the center conductor leaving 3 mm ( $1/8$  inch) from the end.

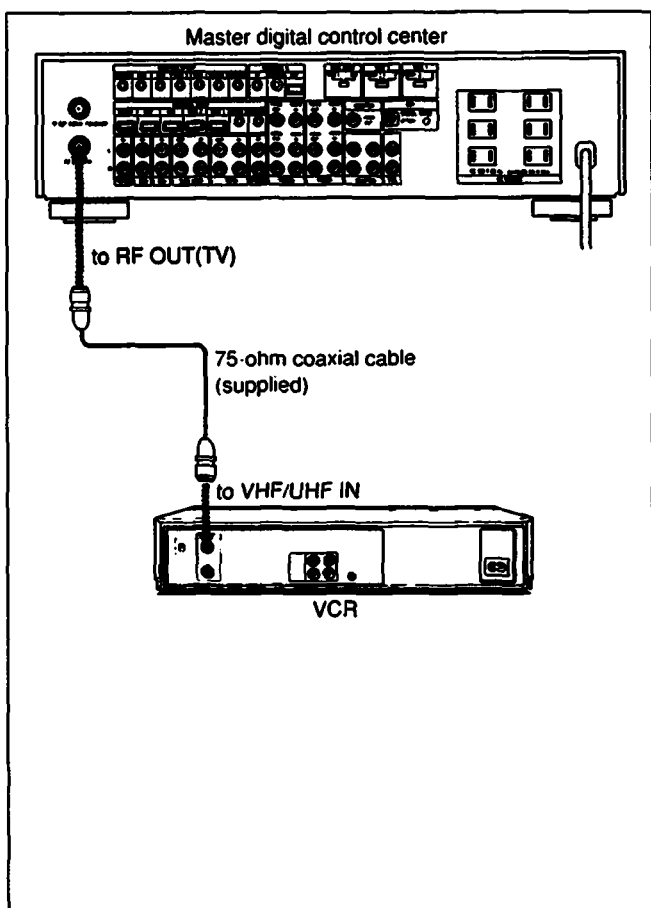


- 8** Insert the F-type connector into TO DST MASTER, RF IN or RF OUT. Screw and tighten the connector firmly to the jack.



# Connecting a VCR, Tuner or TV

## Connecting a VCR



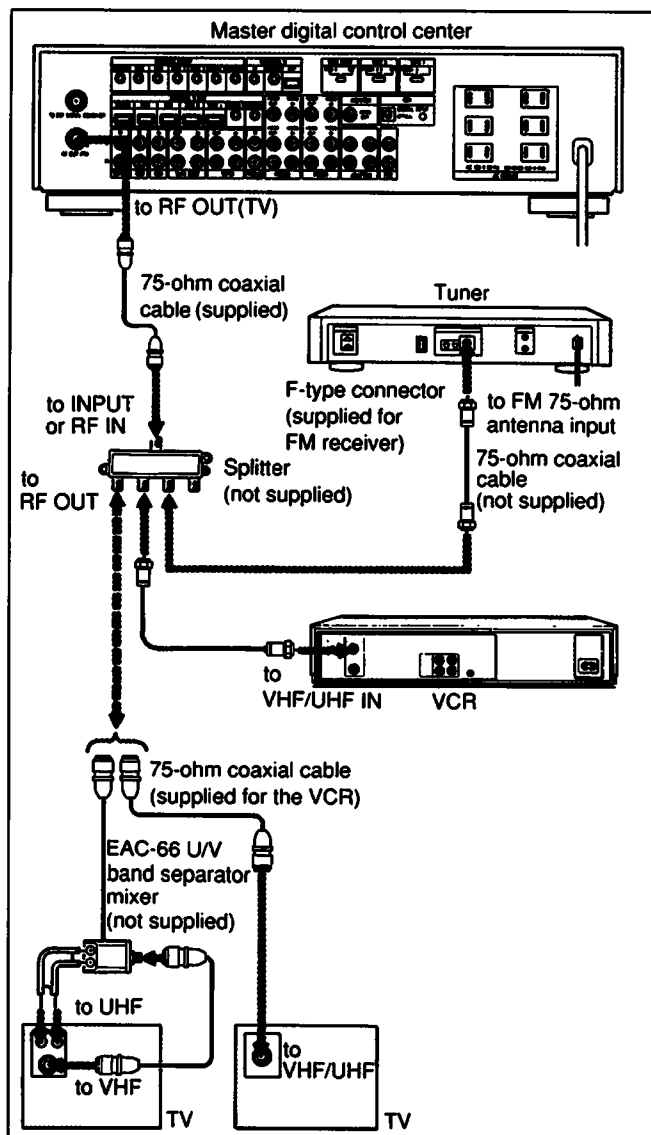
When you connect a TV with a VCR, refer to the operating instructions of the VCR.

**How to attach the F-type connector (supplied/not supplied)**

See page 17.

## Connecting a Tuner or TV

When you connect a tuner in the master room, use a splitter (not supplied) as illustrated on the next page. RF signals can be transmitted in parallel to a VCR and tuner. If you connect a TV as illustrated on the next page, you can watch CATV programs in the master room. Be sure to connect the TV to the MONITOR OUT jack of the master digital control center even in this case. (See page 22.)



**How to attach the F-type connector (supplied/not supplied)**

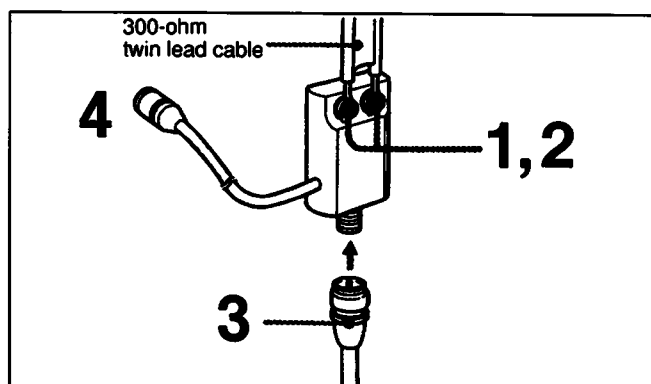
See page 17.

**How to attach the EAC-66 U/V band separator/mixer (not supplied)**

See the right column.

**Attaching the EAC-66 U/V band separator/mixer (not supplied)**

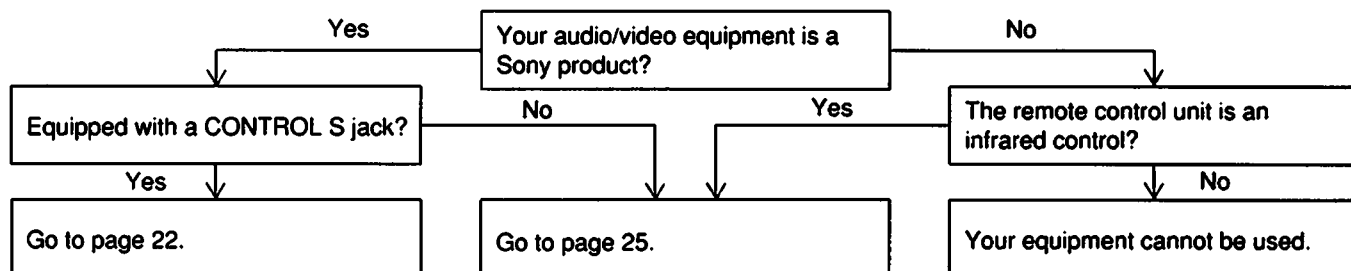
- 1** Loosen the screws on the U/V band mixer/separator.
- 2** Fit the 300-ohm twin lead cable on the UHF antenna under the screws.
- 3** Connect the 75-ohm coaxial cable to the U/V band mixer separator.
- 4** Connect the U/V band mixer/separator to RF OUT on the splitter.



# Before Connecting Your Audio/Video Equipment to the Master Digital Control Center

## Making Sure That Your Audio/Video Equipment Can Be Connected to the Master Digital Control Center

Using the following flow chart, first make sure that your audio/video equipment can be connected to the master digital control center, and proceed with connections.

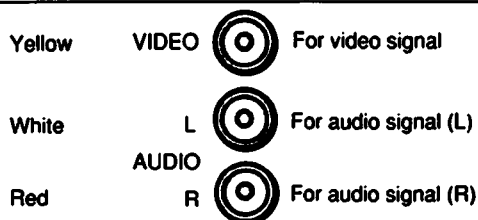


## About the Input/Output Jacks

### For audio/video signals

VIDEO and AUDIO jacks are distinguished by color.

Connect the cord so that the color of each plug corresponds to that of the jacks on the master digital control center and on the other equipment.



### For optical signal

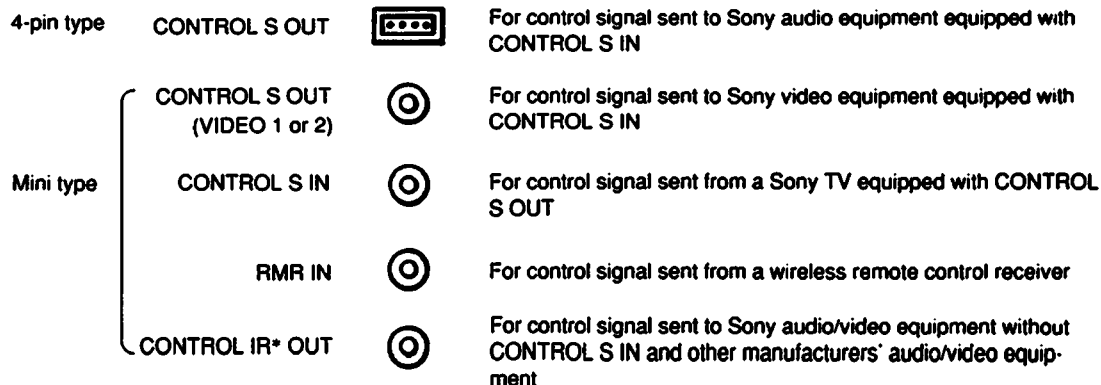
This master digital control center is equipped with a digital input jack for a CD player connected to the CD 1 jack. Connect to a CD player equipped with a digital (optical) output jack.



DIGITAL INPUT  
OPTICAL

### For control signals

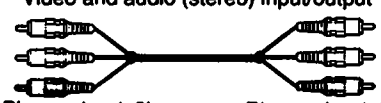
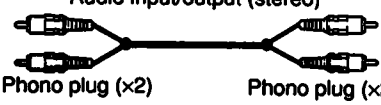

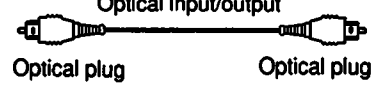
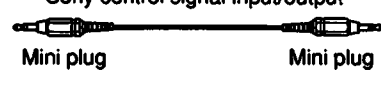
This master digital control center is equipped with two types of control input/output jacks. Each jack has the indication designating the equipment to be connected. Do not connect equipment other than that indicated.



\* IR is the abbreviation of Infrared Remote control system.

## Recommended Connecting Cords

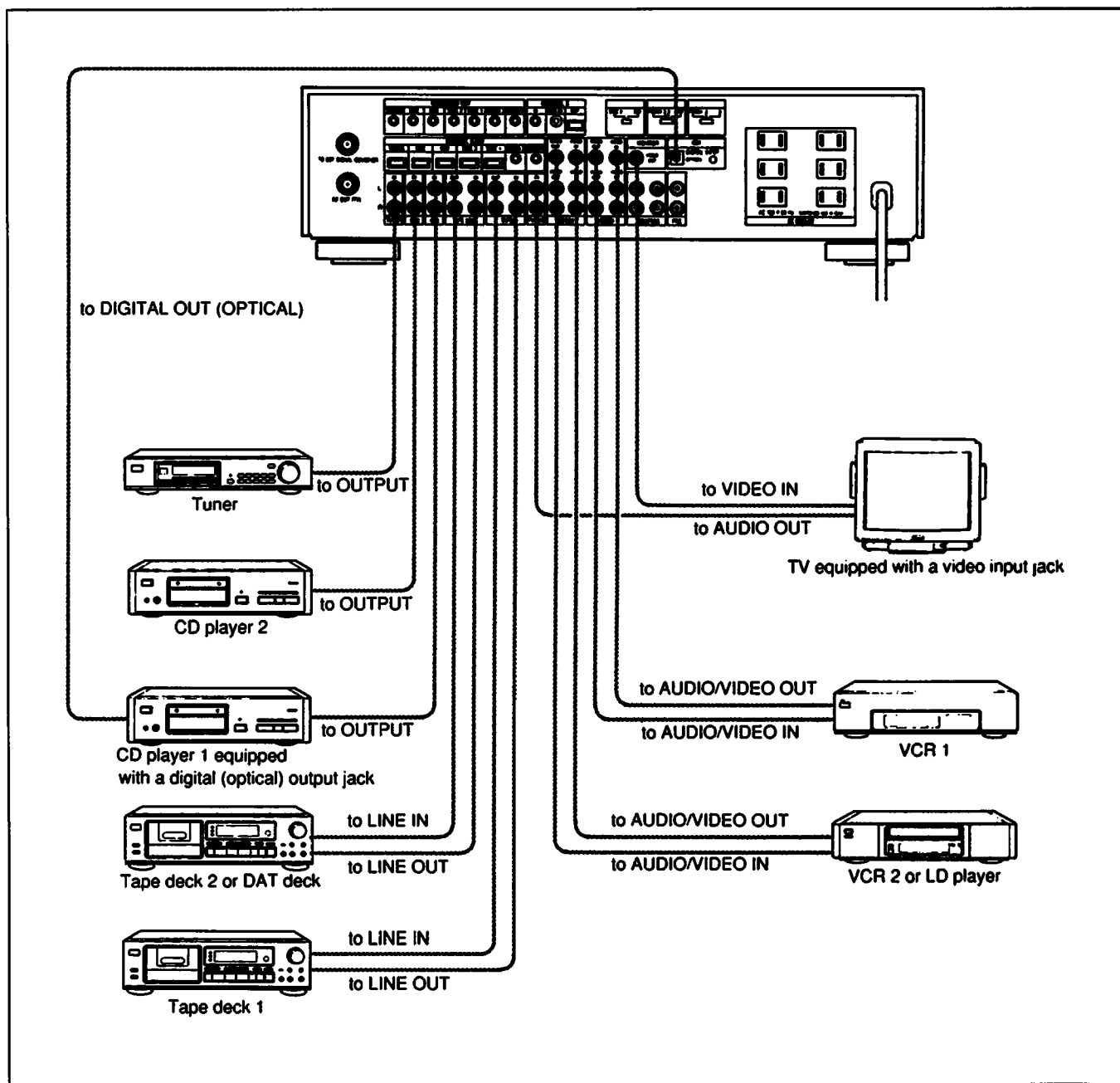
For connecting cords that are not supplied, the use of the following typical ones is recommended. Use a suitable cord according to the layout of your equipment.

<b>VMC-810S</b> (1 m/3 ft 3 in) <b>VMC-820S</b> (2 m/6 ft 6 in)	Video and audio (stereo) input/output  Phono plug (x3)      Phono plug (x3)
<b>RK-C74</b> (1.5 m/4 ft 11 in) <b>RK-C78</b> (2 m/6 ft 6 in)	Audio input/output (stereo)  Phono plug (x2)      Phono plug (x2)
<b>VMC-1S</b> (1.2 m/3 ft 9 in) <b>VMC-3S</b> (3 m/9 ft 9 in)	Video input/output  Phono plug (yellow)      Phono plug (yellow)
<b>POC-15</b> (1.5 m/4 ft 11 in)	Optical input/output  Optical plug      Optical plug
<b>RK-G69</b> (1 m/3 ft 3 in)	Sony control signal input/output  Mini plug      Mini plug

# Connecting Audio/Video Equipment

## Connecting Sony Audio Video Equipment Equipped with CONTROL S IN Jack

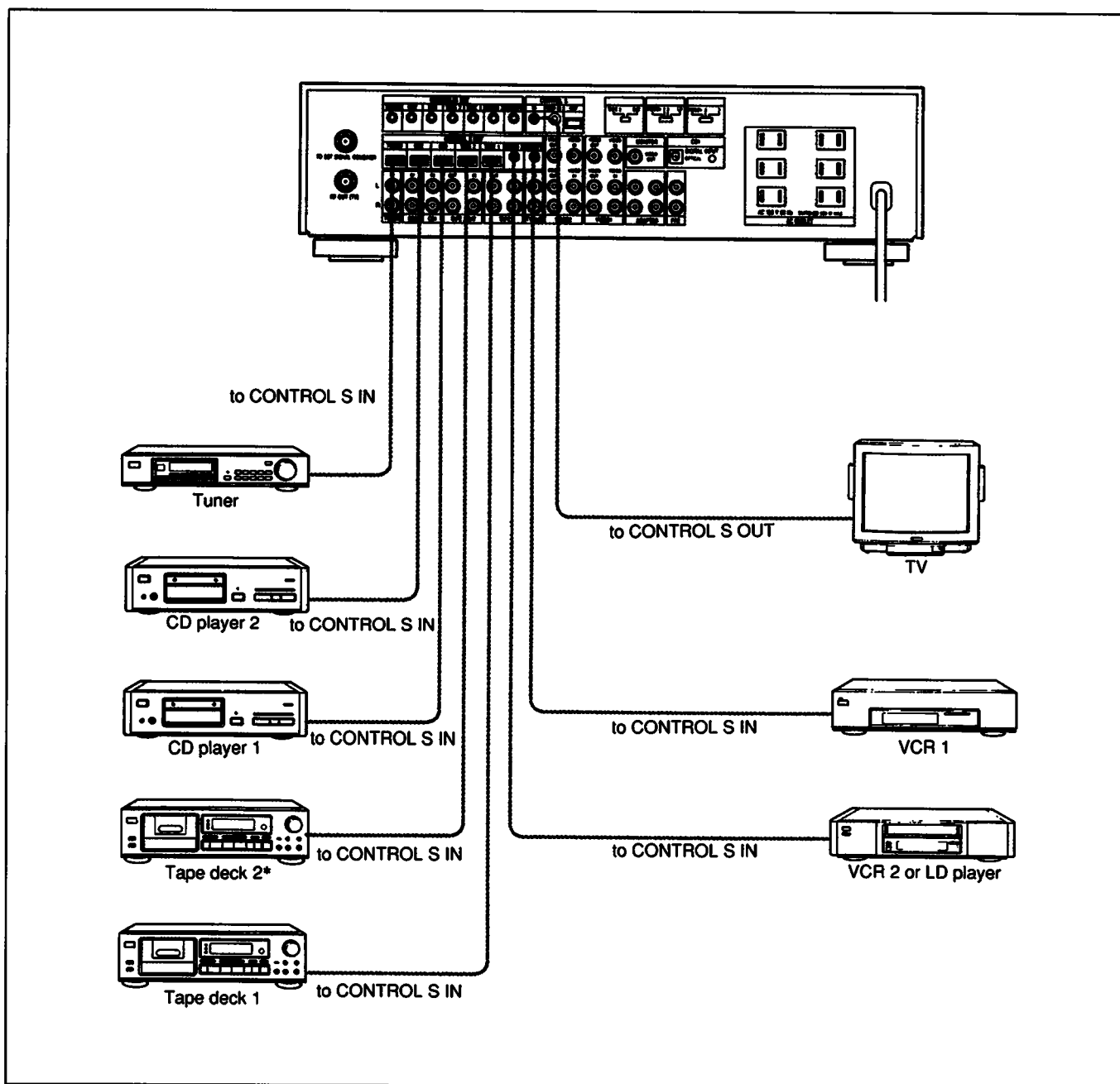
### Connecting audio/video cords



#### Note

When connecting an 8mm video cassette recorder to the DST system, be sure to connect it to VIDEO 1 jacks on the TA-DM1000ES master digital control center. Otherwise, the 8mm video cassette recorder may not operate.

## Connecting remote control cords



### Notes

- Be sure to connect the equipment which corresponds to the indication on the jack. If equipment other than that indicated is connected, the remote control for that equipment does not function.
- \*When you connect a DAT deck without a CONTROL S IN jack, connect the DAT deck with cable having an LED emitter. (See page 25.)

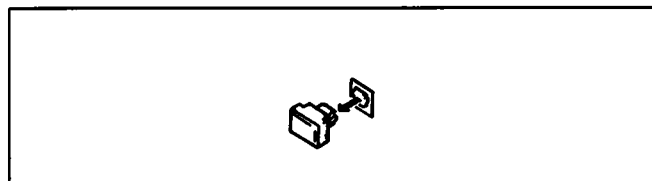
## Connecting a TV

- Be sure to connect the TV to the MONITOR OUT jack with a video connecting cord. Otherwise, you cannot watch a video playback picture on the TV.
- When the control signal cord is connected as illustrated on page 23, you can control the DST system by pointing the RM-P1 Remote Commander to the remote control sensor of the TV. Note that the remote control sensor of the master digital control center cannot receive control signals in this case.
- When your TV does not have the CONTROL S OUT jack, we recommend the use of a wireless remote control receiver. (See page 28.) In this case, put the wireless remote control receiver near the TV and point the RM-P1 Remote Commander in the direction of the wireless remote control receiver and TV.

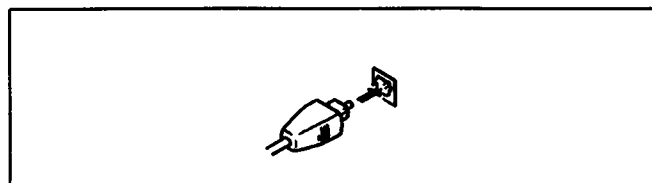
## Connecting a CD player equipped with a digital output to the CD 1 jack

- Connect a CD player which has a parallel output of digital and analog signals.
- Be sure to connect the CD player both to CD 1 IN (phono) and CD 1 DIGITAL INPUT (optical). The phono jack receives the audio signal to be played in the master room and optical jack receives the audio signal to be played in a digital link room.

### 1 Remove the protecting plug.



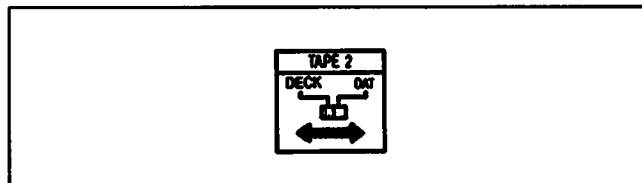
### 2 Insert the plug.



## Position of the selectors on the rear panel

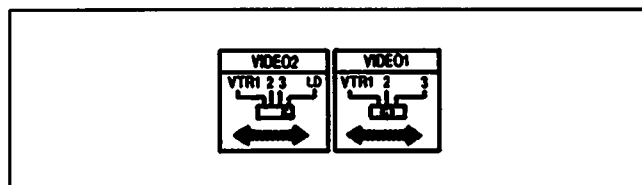
When you have connected Sony equipment to this master digital control center, set the selectors on the rear panel according to the following chart.

For tape deck or DAT deck connected to TAPE 2



Connected equipment	Position to be set
Tape deck	DECK
DAT deck	DAT

For the equipment connected to VIDEO 1 or VIDEO 2



Connected equipment	Position to be set
Beta VCR or the VCR whose remote control mode you set to 1.	VTR 1
8mm VCR or the VCR whose remote control mode you set to 2.	2
VHS VCR or the VCR whose remote control mode you set to 3.	3
LD player or MD (multi disc) player	LD



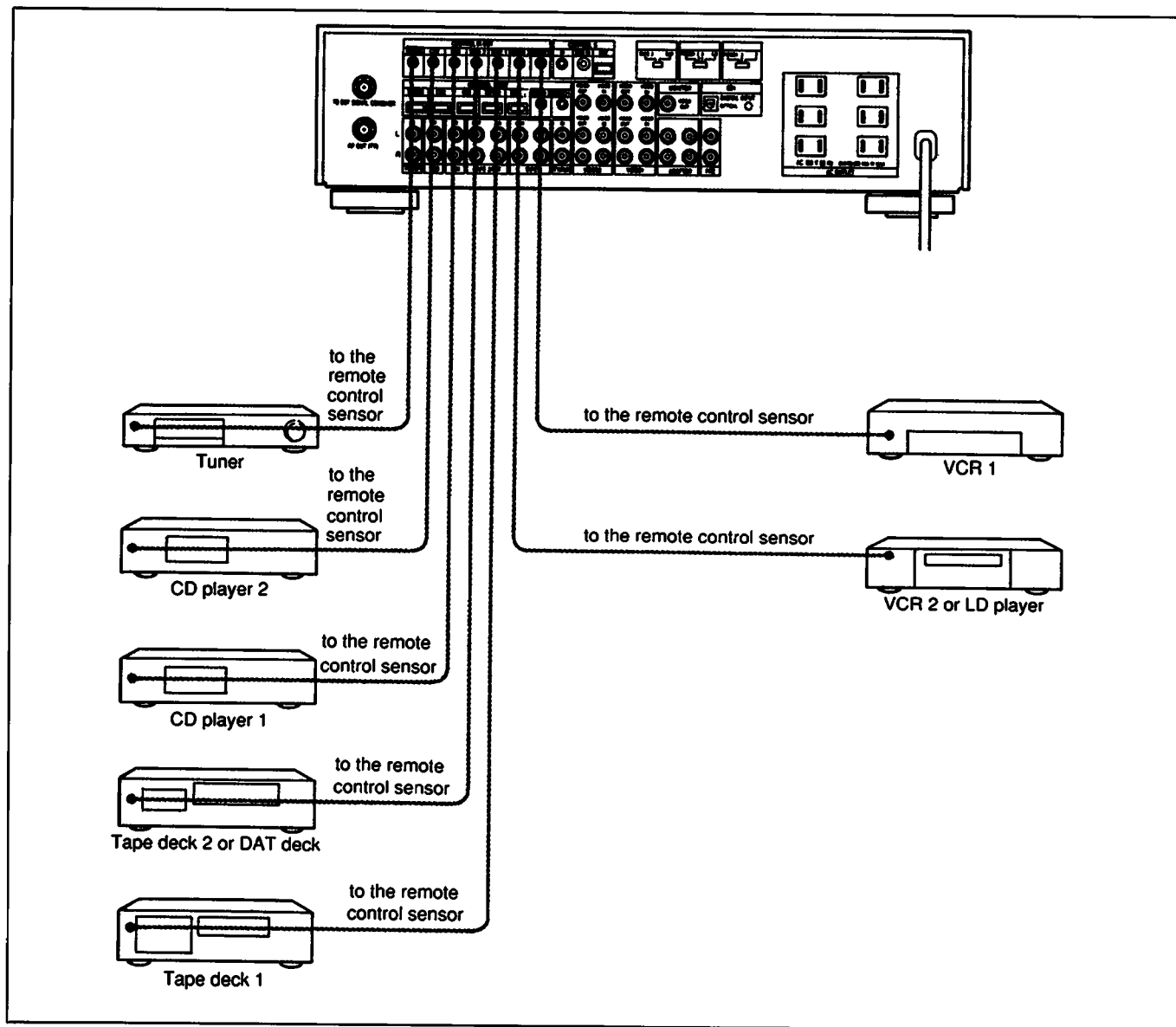
## Connecting Sony Audio/Video Equipment without CONTROL S IN Jack or Other Manufacturers' Audio/Video Equipment

### Connecting audio/video cords

Refer to page 22.

### Connecting remote control cords

Use a cable having an LED emitter for one end and a mini plug for the other end (not supplied). See the next page.



### Notes

- Be sure to connect the TV to the MONITOR OUT jack with a video connecting cord. Otherwise, you cannot watch a video playback picture on the TV.
- Do not connect another manufacturer's tuner. Only Sony tuners can be controlled by the RM-P1 Remote Commander.
- If Sony equipment is newly connected to the CONTROL IR OUT jack after another manufacturer's one has been connected, you must clear the previous remote control signal setting from the RM-P1 Remote Commander. (See page 34, "To clear all programmed signals") The remote control signal setting is automatically reset to control Sony equipment.

## Connecting Audio/Video Equipment

### **Attaching an LED emitter to the remote control sensor of your audio/video equipment**

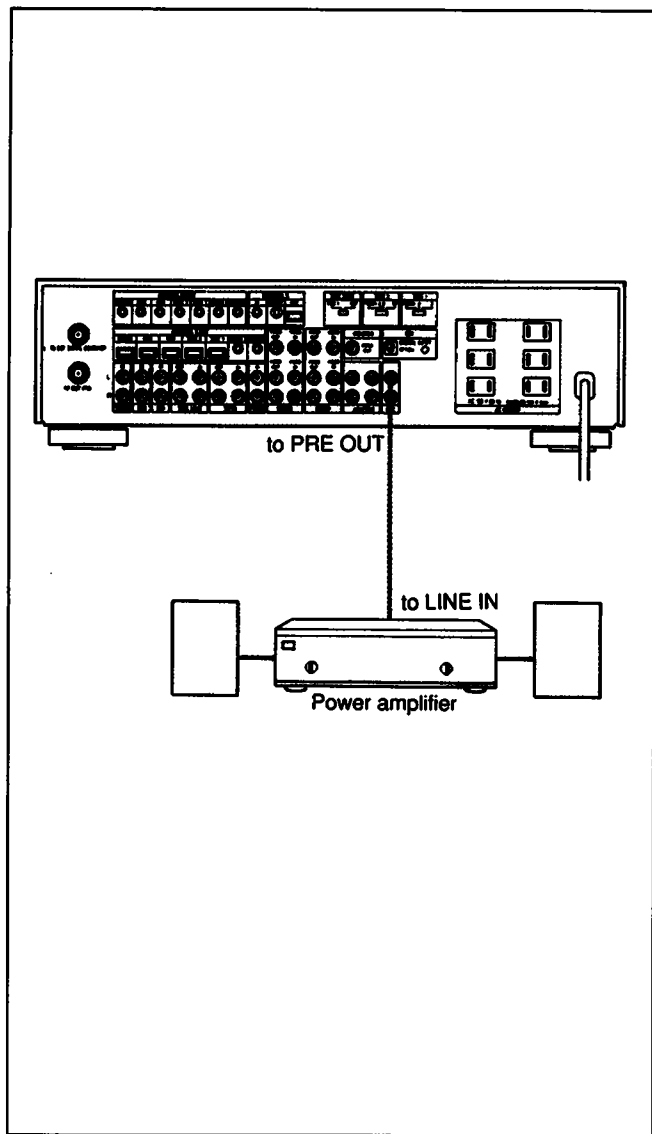
Attach the LED emitter with opaque adhesive tape so that the eye of the LED emitter will be facing the remote control sensor.

Be sure to cover the entire remote control sensor with opaque adhesive tape. Otherwise, your audio/video equipment may receive the signal from the RM-P1 and malfunction.

# Connecting a Power Amplifier or FM Receiver

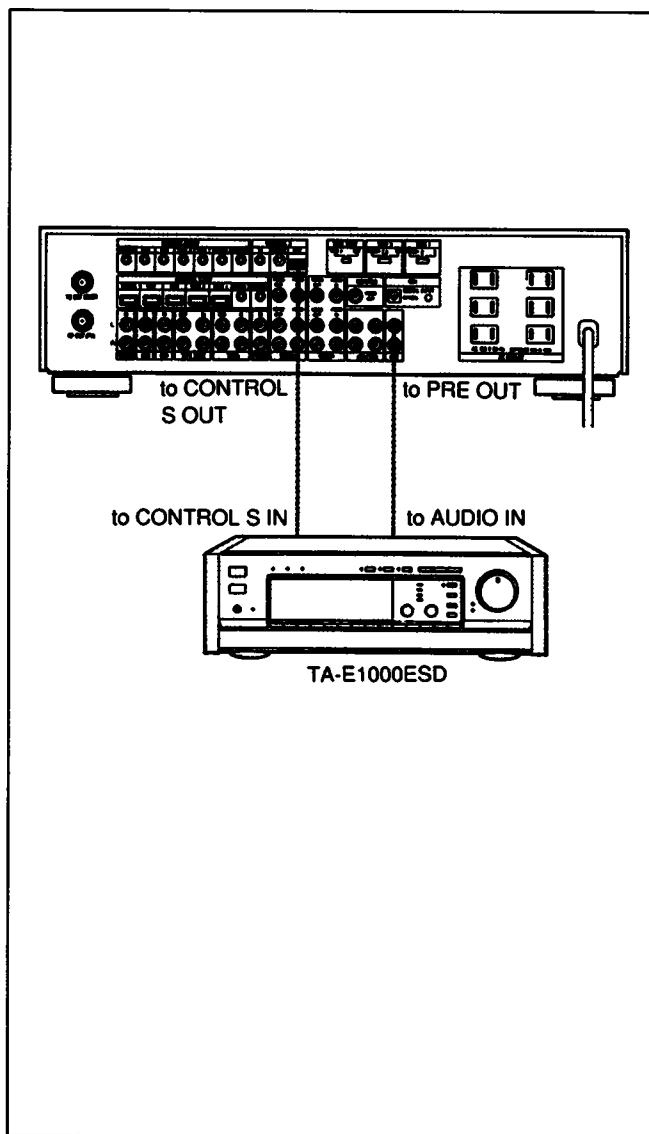
## Connecting a Power Amplifier Other Than the TA-E1000ESD

Connect a power amplifier to listen to sound from speakers.



## Connecting the TA-E1000ESD Amplifier

When the control cord is connected as illustrated below, you can control the TA-E1000ESD by pointing the remote commander (supplied for the TA-E1000ESD) at the remote control sensor of the master digital control center.



### Notes on connecting the TA-E1000ESD amplifier

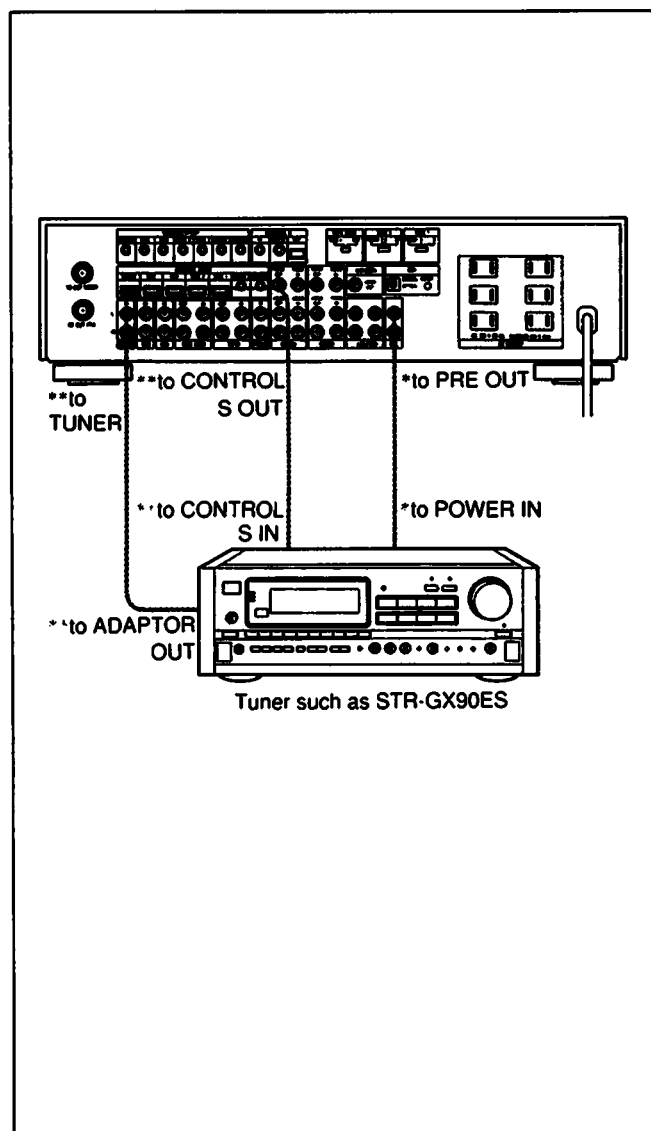
- Select a function except PHONO on the TA-E1000ESD amplifier.
- Set the volume control knob on the TA-E1000ESD amplifier at a medium level. Then, adjust the volume on the master digital control center at a desired level.

## Connecting a Power Amplifier or FM Receiver

### Connecting an FM Receiver Equipped with CONTROL S IN and POWER IN Jacks

When the control signal is connected as illustrated below, you can control the FM receiver by pointing the remote commander (supplied for the FM receiver) at the remote control sensor of the master digital control center.

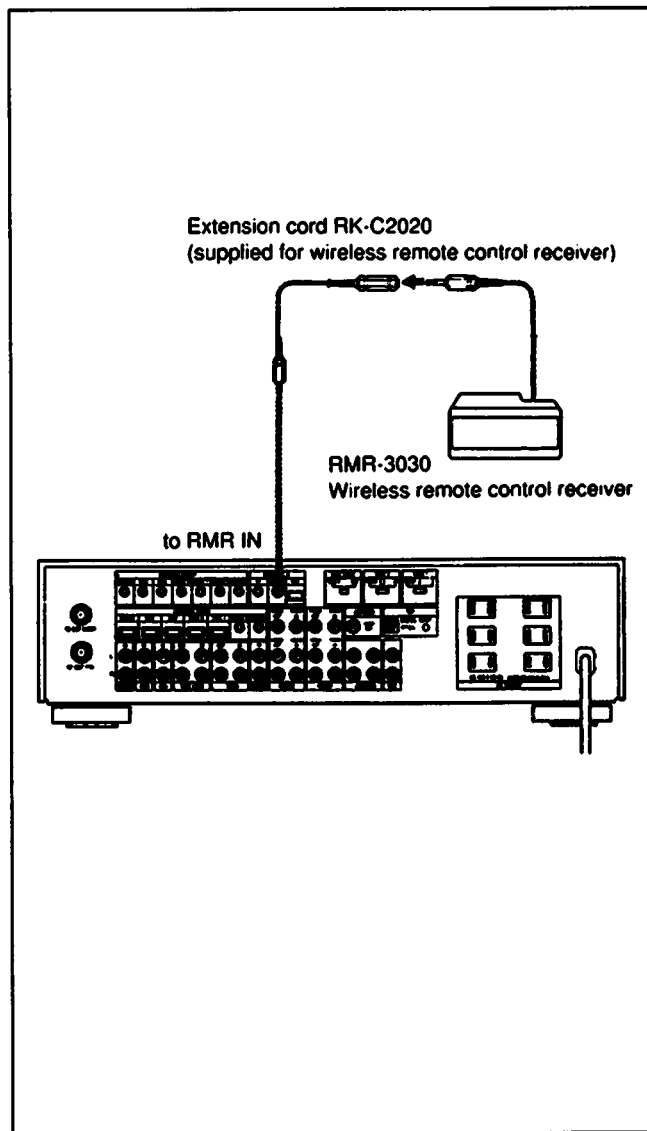
- When you use the FM receiver as a power amplifier only, make connection marked \*.
- When you use the FM receiver as a tuner only, make connection marked \*\* and select TUNER for the function on the FM receiver.
- When you use the FM receiver as a power amplifier and tuner, make both connections and select TUNER for the function on the FM receiver.



## Connecting Other Equipment

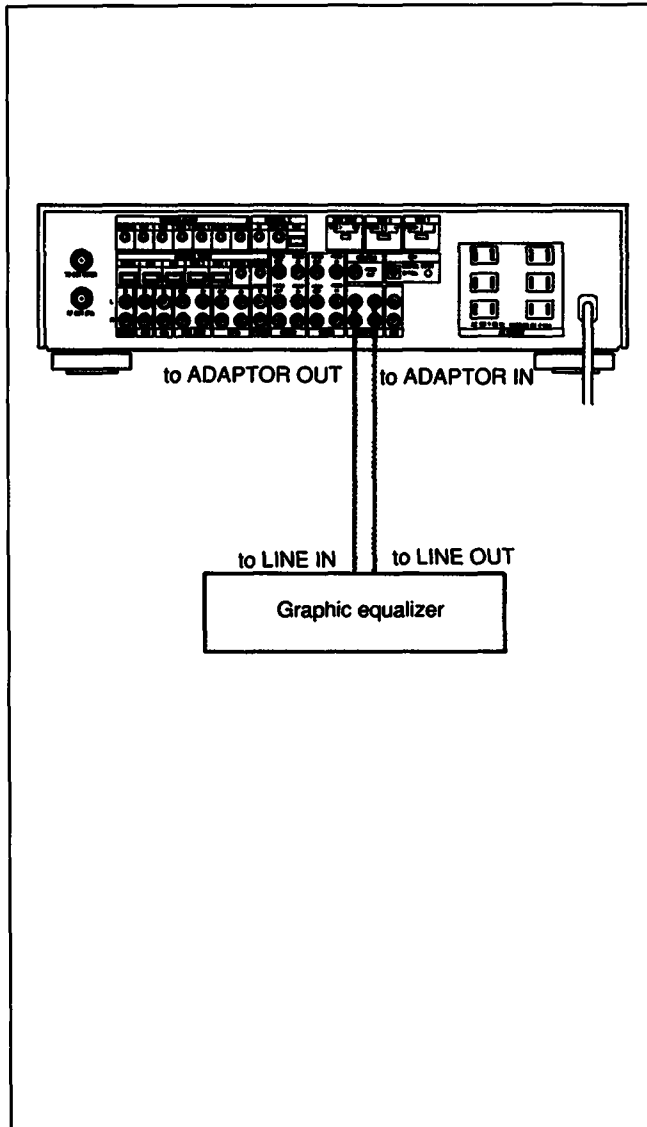
### Connecting a Wireless Remote Control Receiver Such As the RMR-3030K

- When the master digital control center is installed in a hidden location, for example, behind the cabinet, you can control the DST system by pointing the RM-P1 Remote Commander to the wireless remote control receiver.
- When your TV does not have the CONTROL S OUT jack, put the wireless remote control receiver near the TV. You can control the DST system including the TV by pointing the RM-P1 Remote Commander in the direction of the wireless remote control receiver and TV.



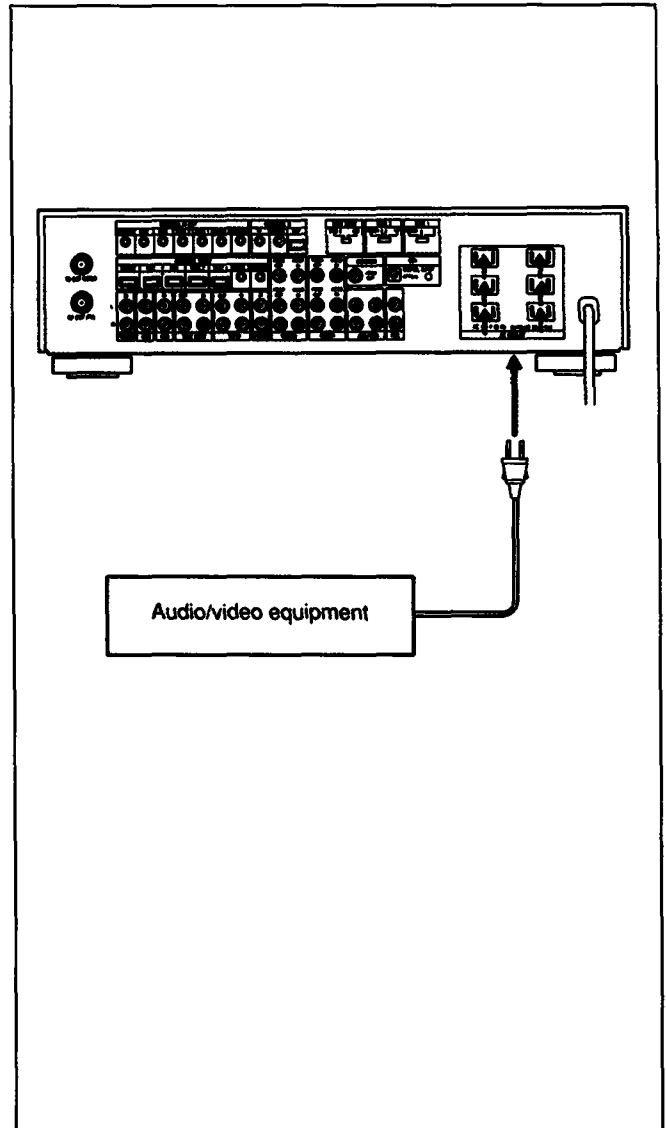
## Connecting the AC Power

### Connecting a Graphic Equalizer



Connect the AC power of all equipment except the followings:

- TV
- VCR or LD player that can be turned on and off with remote control signal.

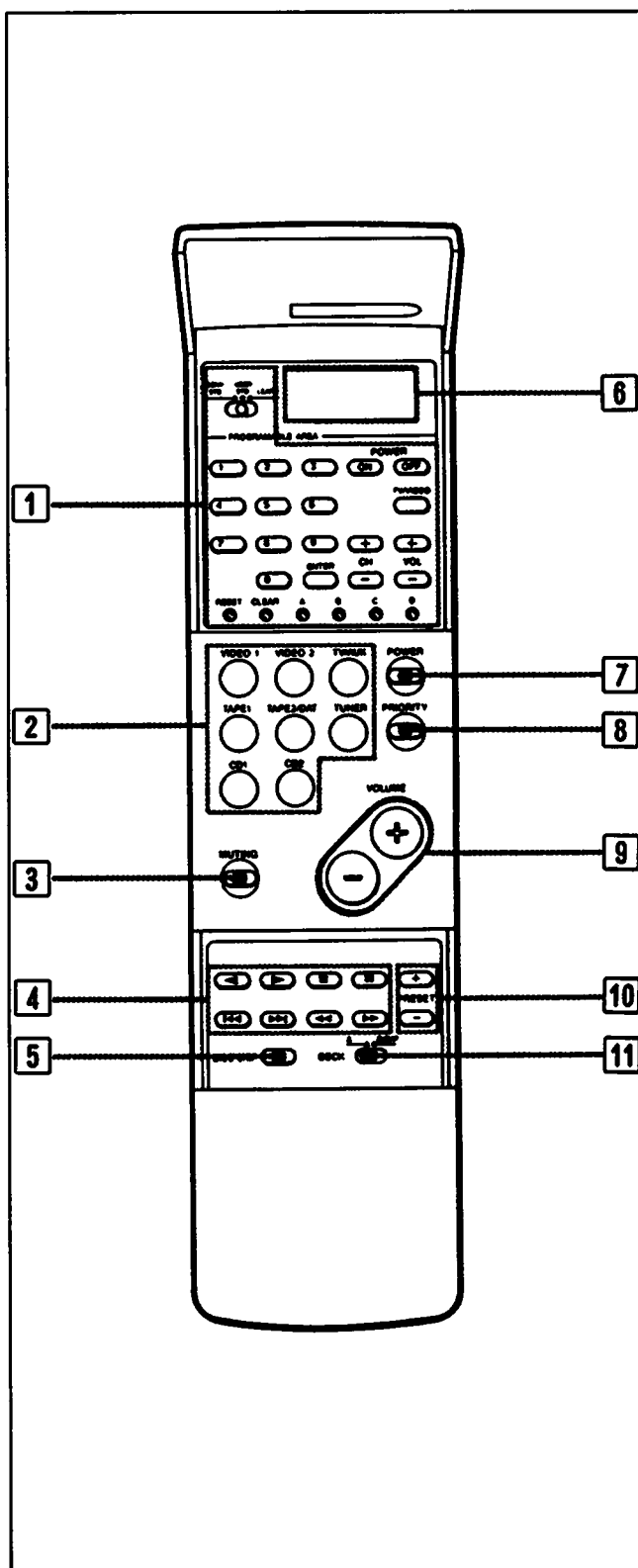
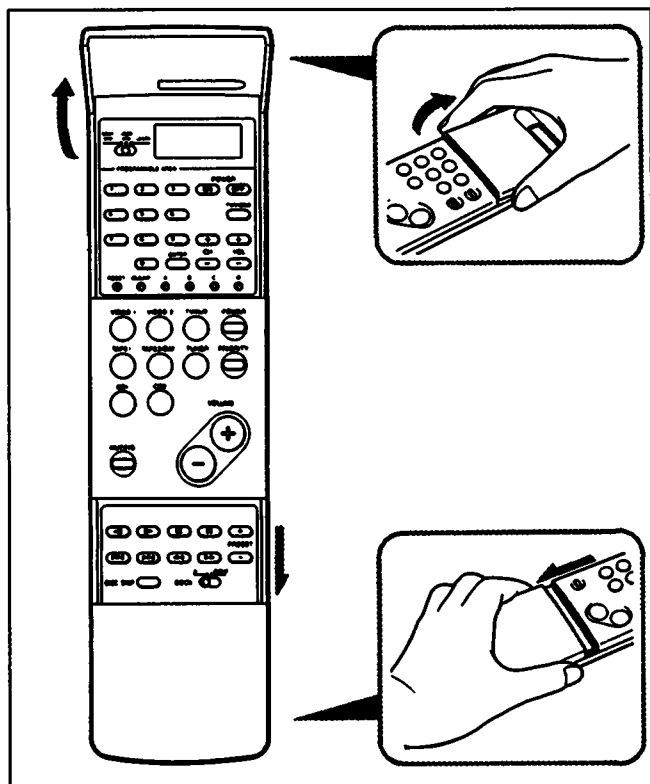


### Notes

- Be careful that the total power consumption of the equipment connected to AC OUTLET does not exceed 900 watts.
- Do not connect electrical home appliances such as an electric iron or fan to these outlets.

# Parts Identification

## How to open the lids of the Remote Commander



**[1] TV operation buttons**

Mode selector: Set to SONY STD (standard) to operate a Sony TV. Set to USER STD to operate another manufacturer's TV after programming each signal to this Remote Commander. Set to LEARN to program the signals of the remote commander of another manufacturer's TV.

Program number (1 to 0) and ENTER buttons: Select a TV channel.

POWER ON and OFF buttons: Turns on and off the power of the TV.

TV/VIDEO button: Selects the input signal for the TV installed in the master room, either a TV broadcast or VCR programs.

CH (channel) +/- buttons: Select a preset TV channel.

VOL (volume) +/- buttons: Adjust the TV volume.

RESET button: Press if the remote control operation does not work correctly.

CLEAR: Clears all programmed signals.

A, B, C and D buttons: Program the remote control signal for a consecutive video playback operation.

**[2] Function buttons**

Turns on the power of the system and selects VIDEO 1, VIDEO 2, TV/AUX, TAPE 1, TAPE 2/DAT, CD 1, CD 2 or TUNER.

**[3] MUTING button**

Press to reduce the sound temporarily to a low level (-20dB attenuation). Press again to resume the sound.

**[4] Operation buttons for VIDEO 1, VIDEO 2, TAPE 1, TAPE 2/DAT, CD 1 and CD 2**

◀: Playback of the reverse side of tape (only for Sony tape decks)

▶: Playback

■: Stop

⏸: Pause

⏮⏭⏭⏮: Selection search (only for LD or MD player, tape deck equipped with ⏮⏭⏭⏮ and CD player)

⏮⏭⏭⏮: Fast winding or manual search

**[5] DISC SKIP button**

Operable with a Sony CD player equipped with a multi-disc (5-disc) changer

**[6] Display window**

Displays the selected program source, transmitting wave and the indication of weak batteries. All indications in the display window will go off one hour after the last time you use the Remote Commander.

**[7] POWER OFF button**

Turns off the power of the selected program source.

**[8] PRIORITY button**

Activates operation buttons indicated in [4], [10] and [11]. When you press this button, the PRIORITY indicator of the master digital control center or the Digital Link™ Touch Panel you control lights.

**[9] VOLUME +/- buttons**

Adjust the audio level from the master digital control center or Digital Link™ Decoder Amplifier.

**[10] PRESET +/- buttons**

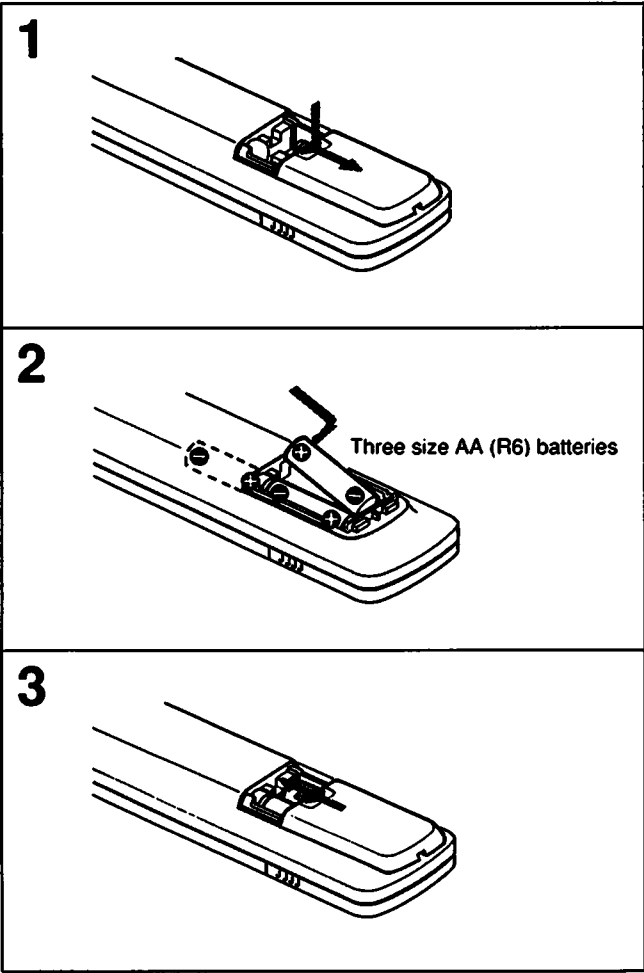
Operable with a Sony tuner. Selects a higher/lower preset number.


**[11] Tape DECK selector**

Selects A or B deck. When you select a DAT deck, set to B/DAT.

# Loading the Remote Commander with the Batteries

Before operating the Remote Commander, install the batteries as illustrated.

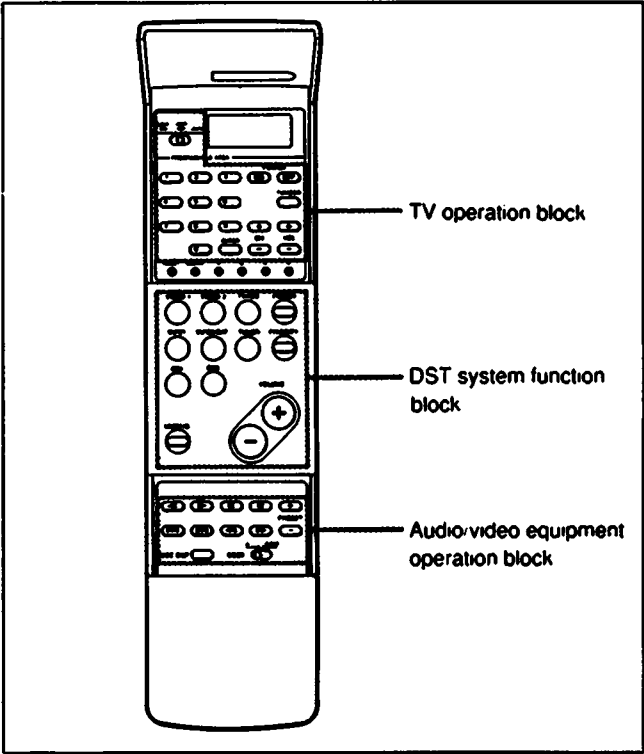


**When the batteries are run down**  
The  indication appears on the display window. Replace the batteries with new ones.

**Battery life**  
Normal operation can be expected for about six months using Sony SUM-3(NS), and one year using Sony AM-3(NW) alkaline batteries.

# Three Blocks on the RM-P1 Remote Commander

Note that the buttons on the RM-P1 Remote Commander are divided into the three blocks as shown below and that you need to program remote control signals according to your audio/video equipment or TV.



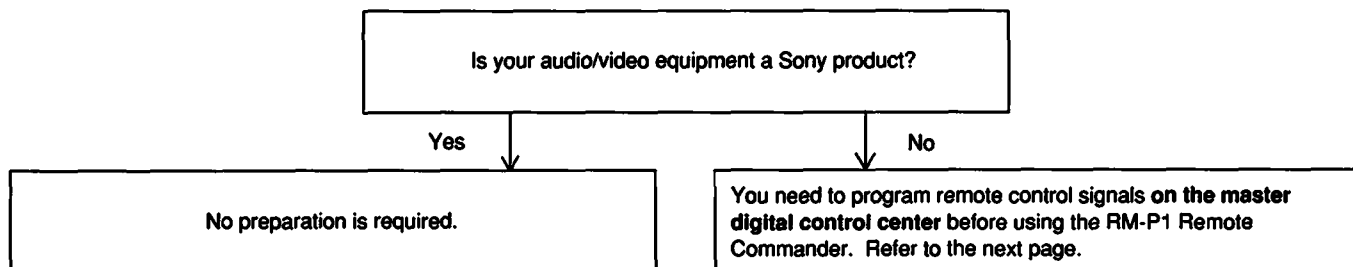
# DST System Function Block

DST system function block has program source selection and volume level setting buttons. These buttons are the same as the ones on an RMR-TP1 Digital Link™ Touch Panel.  
In addition, the PRIORITY button is provided in the DST function block to perform a variety of operations.



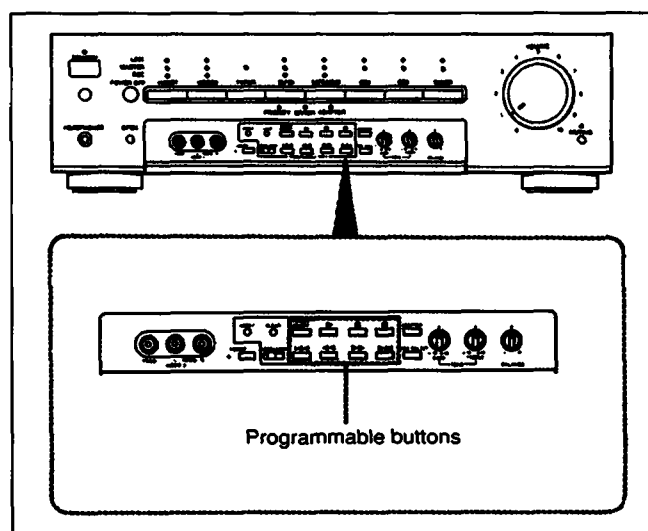
# Audio/Video Equipment Operation Block

Check the audio/video equipment connected to the master digital control center.



## Programming Another Manufacturer's Remote Control Signal on the Master Digital Control Center

Up to eight remote control signals for each piece of equipment connected to the CONTROL IR OUT jack can be programmed on the master digital control center. Once you program a signal, the corresponding button on the RM-P1 Remote Commander is operable.



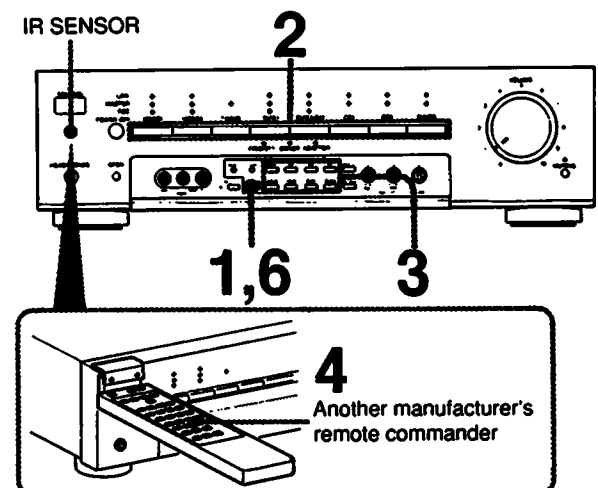
### Programmable buttons

Connected equipment	Programmable buttons							
	POWER ON/OFF	▶	■	⏏	⏮	◀	▶	⏭
VCR	⊙	○	○	○		○	○	
LD or MD player	⊙	○	○	○	○	○	○	○
Tape deck		○	○	○	○*	○	○	○*
DAT deck		○	○	○	○	○	○	○
CD player		○	○	○	○	○	○	○


#### Notes

- Once you program another manufacturer's remote control signals on the master digital control center, you cannot use the remote commander supplied for that audio/video equipment.
- Programmable buttons on the front panel of the master digital control center cannot be used for operating the system. Use these buttons to program another manufacturer's remote control signal.
- When your VCR or LD player can be turned on and off with the remote commander, be sure to program the signal of power on/off onto the master digital control center.
- \* Programmable only for a tape deck equipped with ⏮⏭ buttons.

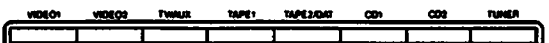
## How to Program Another Manufacturer's Remote Control Signals on the Master Digital Control Center



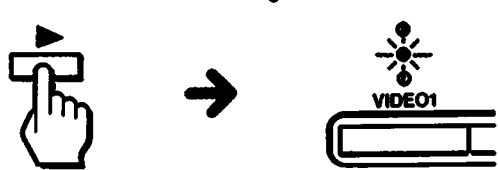
**1** Set the USER/LEARN selector to LEARN. MASTER indicators blink except the ones on TV/ AUX and TUNER. If you have already programmed any of the function buttons, its MASTER indicator lights.



**2** Press the function button corresponding to the jack on which another manufacturer's equipment is connected. The MASTER indicator on the selected function button blinks.

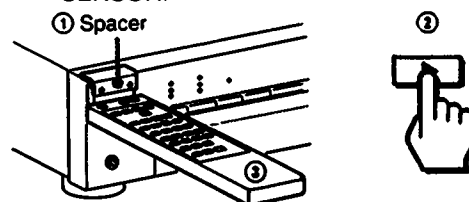


**3** Press the programmable button described on page 33. The MASTER indicator lights.



**4** Program the remote control signal of another manufacturer's equipment.  
**Example: When programming the ► button of the VCR connected to the VIDEO 1 jack**

- ① Place the supplied spacer as illustrated so that the IR SENSOR is covered.
- ② Press and hold the ► button of the remote commander for the VCR.
- ③ Attach the commander's head to the IR SENSOR.



When the MASTER indicator turns off and blinks, programming is completed.  
 If the MASTER indicator blinks rapidly without turning off, programming has not been completed. After the rapid blinking stops, go back to the step 3.

**5** Repeat steps 3 and 4 for the other programmable buttons and complete programming for the desired functions.

**6** Set the USER/LEARN selector to USER.



### Tips for programming

Another manufacturer's remote commander must:

- Be attached vertically to the IR SENSOR.
- Be immobile during programming operation.

### To clear all programmed signals

- 1 Set the USER/LEARN selector to LEARN.
- 2 Press CLEAR on the master digital control center with a pointed object such as a ball-point pen.

Note that it is impossible to clear the programmed signal(s) of just one button or one function.

### After programming

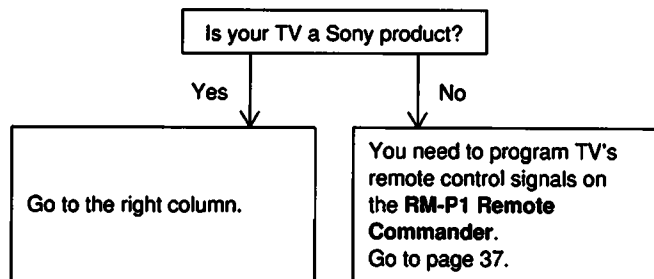
Operate the corresponding button on the RM-P1 Remote Commander to confirm that the designated signal has been programmed on the master digital control center.

### Notes on programming

- If the MASTER indicator blinks rapidly in the step 3, the memory capacity for that function is full. In this case, clear the programmed signals.
- Be sure to program the remote control signal corresponding to the buttons indicated on the master digital control center. If a signal other than the indicated one is programmed, remote control operation may function incorrectly.

# TV Operation Block

Check your TV.



## Programming Signals for Video Tape Playback Operation

Normally, to begin video playback you must press VIDEO 1 or VIDEO 2 and then select the video input source or the channel for video. By programming the buttons A to D\* on the RM-P1 Remote Commander, you can start video playback with just one press of the VIDEO 1/VIDEO 2 button.

For example, when you start video playback (VIDEO 1) in a digital link room, you need press VIDEO 1, channel 6, 6, and ENTER. However, once you programmed the buttons A to C, you can start video playback just by pressing VIDEO 1. This programming is applicable only to VIDEO 1 and VIDEO 2 functions.

### Notes

- If you have another manufacturer's TV, you cannot do this programming.
- You may not operate some Sony TV for video playback even if you programmed the buttons A to C. In this case, press the buttons on the TV operation block to select the video input source or channel for video playback.

\* This button is reserved for future use.

### Buttons to be programmed

When using the RM-P1 Remote Commander in the master room

Button on the RM-P1 Remote Commander	A
Video input select button on the Sony TV's remote commander	VIDEO 1, VIDEO 2 or VIDEO 3*

When using the RM-P1 Remote Commander in a digital link room

Button on the RM-P1 Remote Commander	A	B	C
Channel button on the Sony TV's remote commander	6	6	ENTER

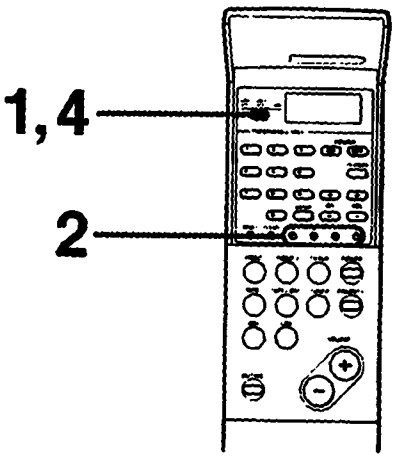
### Note on TV operation with the RM-P1 Remote Commander

It is desirable to use one RM-P1 Remote Commander for one room (TV) because only one manufacturer's remote control signal besides Sony's can be programmed on the RM-P1 Remote Commander.

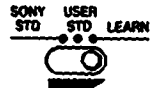
\* Select the button corresponding to the video signal input into the TV. If your Sony TV's remote commander has the TV/VIDEO button, this button cannot be programmed for video playback operation.

## TV Operation Block

### How to program Sony TV's remote control signals on the RM-P1 Remote Commander

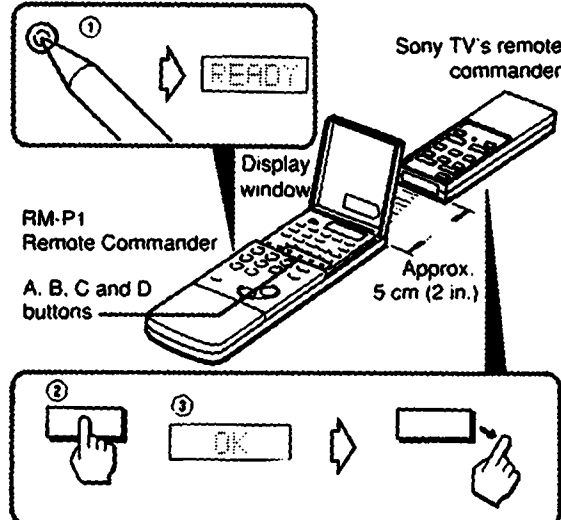


**1** Set the mode selector to LEARN.



**2** Program a signal.

- ① Press and hold the button (A, B, C or D) for which the remote control signal will be programmed, with a pointed object such as a ball-point pen, until "READY" appears on the display window of the RM-P1.
- ② Press and hold the button of the TV's remote commander whose signal is to be programmed.
- ③ Remove your finger(s) from the button(s) after "OK" appears on the display window. If "ERROR" appears, go back to step 2 ①.



RM-P1 Remote Commander

Display window

A, B, C and D buttons

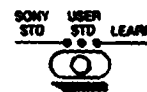
Sony TV's remote commander

Approx. 5 cm (2 in.)

**3** Repeat operation for each button to be programmed.

**4** Set the mode selector to USER STD or SONY STD\*.

To control a Sony TV



#### Tips for programming

Two remote commanders must:

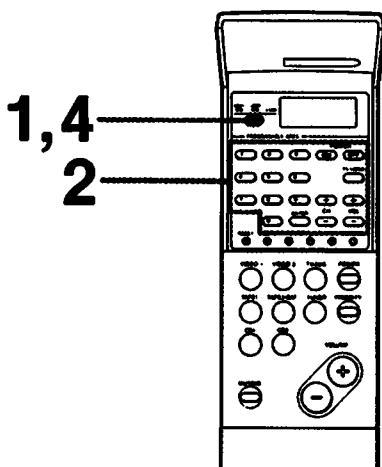
- Be facing straight across from each other.
- Be placed at a distance of approx 5 cm (2 in.).
- Be immobile during programming operation.

\*To start video playback after programming the button A, B, C or D

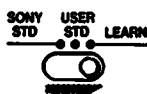
Be sure to set the mode selector to USER STD.

Otherwise, video playback will not start even if you press VIDEO 1 or VIDEO 2.

## How to Program Another Manufacturer's Remote Control Signals on the RM-P1 Remote Commander

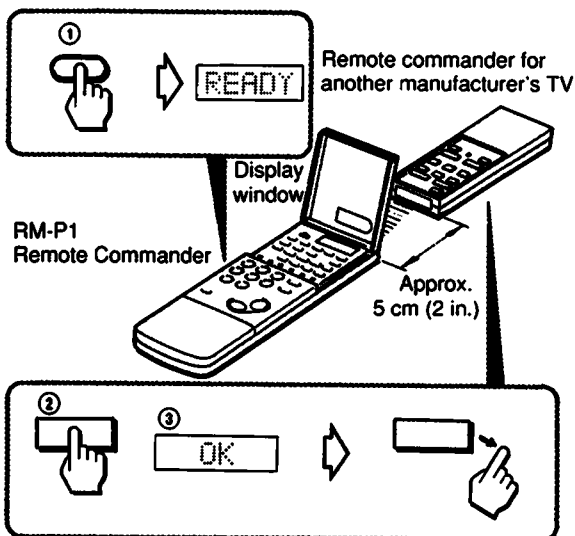


### 1 Set the mode selector to LEARN.



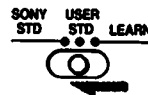
### 2 Program a signal.

- ① Press and hold the button for which the remote control signal will be programmed until "READY" appears on the display window of the RM-P1.
- ② Press and hold the button of the other manufacturer's remote commander whose signal is to be programmed.
- ③ Remove your finger(s) from the button(s) after "OK" appears on the display window. If "ERROR" appears, go back to step 2 ①.



### 3 Repeat operation for each button to be programmed.

### 4 Set the mode selector to USER STD or SONY STD.



### Tips for programming

Two remote commanders must:

- Be facing straight across from each other.
- Be placed at a distance of approx. 5 cm (2 in.).
- Be immobile during programming operation.

### After programming

Operate the programmed button on the RM-P1 Remote Commander to confirm that the designated signal has been programmed.

### If "ERROR" appears in step 2-③

The memory capacity is full. This occurs when other signals stronger than the remote control signals have been stored because the signals were programmed in a noisy environment or the remote commanders were placed too far apart from each other. In the above cases, clear the signals following the procedure described on next page and program again from the beginning under the proper conditions.

### Notes on programming

- Remote control signals of equipment of manufacturers other than Sony can be programmed only when they are compatible with the infrared wireless remote control system. Since the programmable commander can program only the signals output from another remote commander, it cannot control equipment that does not use a remote commander. Also, note that there are some special remote control signals that cannot be programmed.
- Do not attempt to use the RM-P1 Remote Commander with an air conditioner or other household appliances.

## TV Operation Block

### To program a new signal onto a previously programmed button

Follow the programming procedure.

The previously programmed signal is cleared and replaced by the new signal.

### To clear all programmed signals

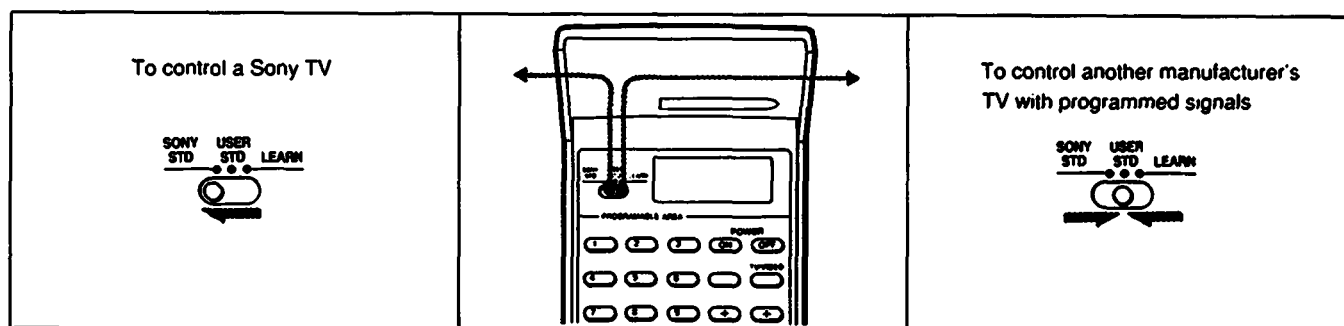
- 1 Set the mode selector to LEARN.
- 2 Press and hold CLEAR until "CLEAR" changes to "CLR OK" on the display window.

### Note

It is not possible to clear the programmed content of the just one button.

### Controlling a TV

By switching the mode selector as shown below, a single button alternately controls Sony TV and another manufacturer's TV.



### When a Sony TV cannot be remotely controlled

Program the signal in the same way as for another manufacturer's TV. In this case, even with Sony TV, set the mode selector to USER STD.

### If no signal has been programmed

RM-P1 Remote Commander can control Sony equipment even when the mode selector is set to USER STD.

### If the TV works incorrectly

Press RESET and operate again. The programmed contents of the buttons are not cleared by pressing RESET.

# Basic Operation

You can select a program source among VIDEO 1, VIDEO 2, TV/AUX, TAPE 1, TAPE 2 (or DAT), CD 1, CD 2 and TUNER.

## Preparation

Insert a cassette tape or a disc to be played back according to the program source.

### To play a video tape in the master room

- When you use a Sony TV, press TV/VIDEO on the RM-P1 Remote Commander to make the monitor screen appear on the TV. If you programmed the signal of VIDEO1, 2, or 3 on the A button of the RM-P1, you need not press TV/VIDEO.
- When you use another manufacturer's TV, press POWER ON and TV/VIDEO on the RM-P1 Remote Commander.

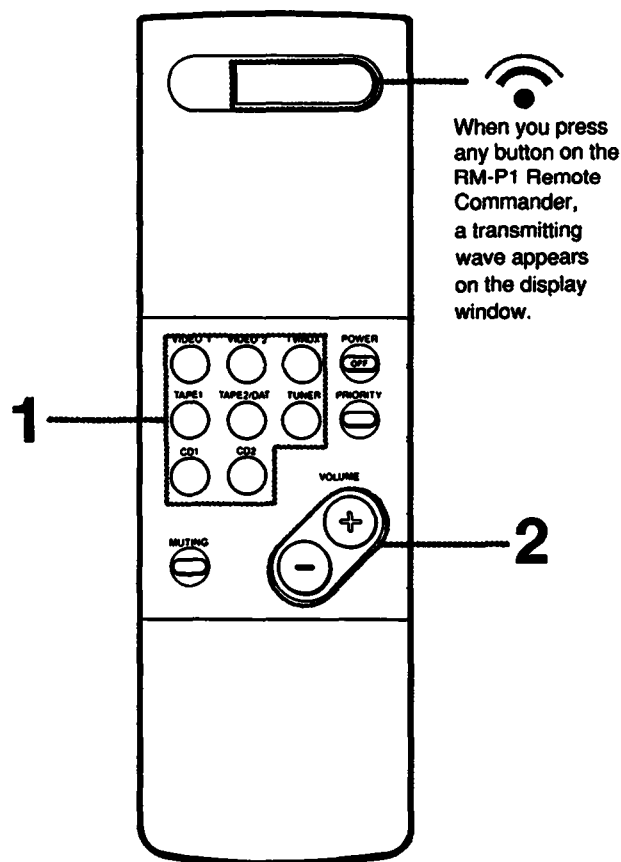
### To play a video tape in a digital link room

- When you use a Sony TV, program the buttons to be pressed for the setting of a TV onto the buttons A to C of the RM-P1 Remote Commander. (See page 35.)
- When you use another manufacturer's TV, press POWER ON, 6, 6 and ENTER on the RM-P1 Remote Commander.

### To watch a TV program

When you use another manufacturer's TV, press POWER ON on the RM-P1 Remote Commander to turn on the power of the TV.

## Operation



- 1 Press a function button to select the desired program source. The program source you selected appears on the display window of the RM-P1 Remote Commander.

If you want to listen to/ watch....	Press....
Video program	VIDEO 1 or VIDEO 2
Laser disc	VIDEO 2
TV program	TV/AUX
Taped program	TAPE 1 or TAPE 2/DAT
DAT program	TAPE 2/DAT
Compact disc	CD 1 or CD 2
Radio program	TUNER

- 2 Adjust the volume.

### To stop the playback

Press ■.

If the PRIORITY indicator of the master digital control center or the Digital Link™ Touch Panel is off, first press PRIORITY.

## Basic Operation

**To listen to/watch a different program source**  
Press the desired function button.

**To turn off the power of the system**  
Press POWER OFF\*. The indicator of the function will go out.

**\* Automatic power off**

The power of the DST system excluding TV will be turned off automatically 30 seconds after you pressed POWER OFF either in the master room or digital link room unless other room(s) are using another program source.

**When you watch a video tape or TV program on another manufacturer's TV**

Be sure to turn off the power of the TV. Even if you press POWER OFF on the DST system block of the RM-P1 Remote Commander, the power of that TV will not be turned off.

**When you press TV/AUX on the RM-P1 Remote Commander during video playback operation**  
Picture on the TV changes to the one of the TV tuner.

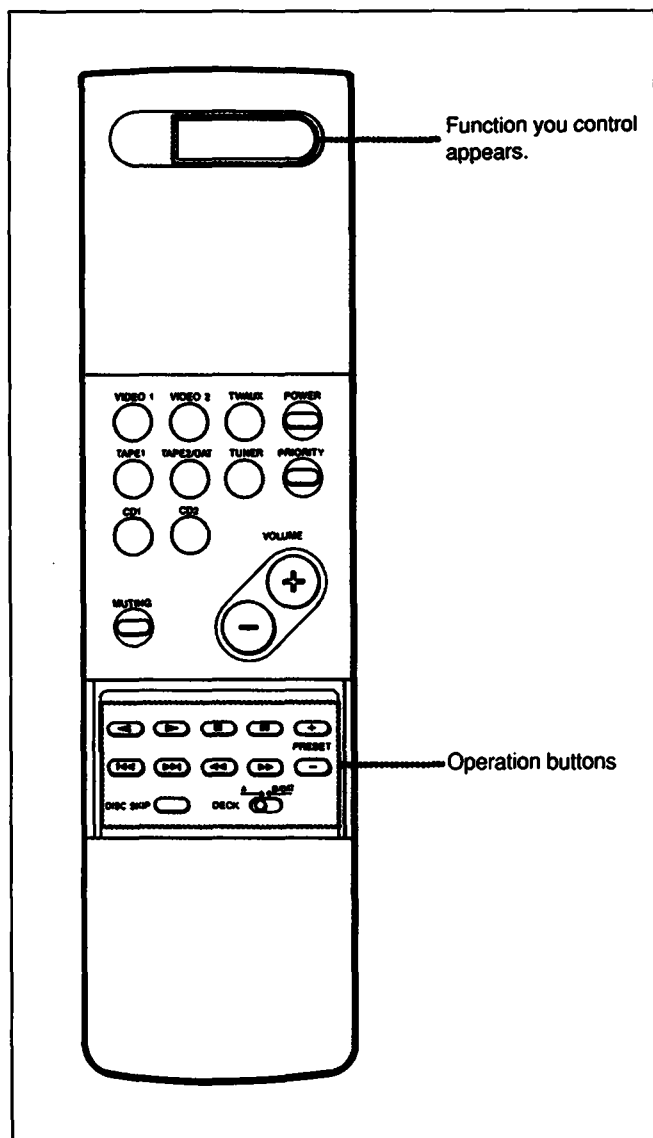
**Note**

When you use another manufacturer's VCR, LD or MD player, do not turn on and off the power of it independently. If you turn on and off the power of that equipment independently, its power may not be switched to the power of the DST system.



# Operation with Priority

The RM-P1 Remote Commander is equipped with the priority of the remote control. When you have the priority, various operations are possible for the function appearing on the display window, either in the master room or in a digital link room.



## Before operation

Check that the PRIORITY indicator lights on the master digital control center or Digital Link™ Touch Panel you control.

If this indicator is off, press PRIORITY on the RM-P1 Remote Commander.

## Video Tape Operation

### Available operation

Start playback with VIDEO 1, VIDEO 2 or ►.

You want to	Press
Stop playback	■
See a still picture (pause mode)	
Release the pause mode	or ►
Advance the tape rapidly	►►
Rewind the tape	◄◄

## Laser (Multi) Disc Operation

### Available operation

Start playback with VIDEO 2 or ►.

You want to	Press
Stop playback	■
See a still picture (pause mode)	
Release the pause mode	or ►
Locate a following chapter	►►
Locate a previous chapter	◄◄
Locate a particular point ahead of the current one	►►
Locate a particular point behind the current one	◄◄

## Operation with Priority

### Cassette Tape Operation

#### Available operation

Start playback with TAPE 1, TAPE 2 or ►.

You want to	Press
Stop playback	■
Stop playback temporarily (pause mode)	
Release the pause mode	or ►
Advance the tape rapidly	►►
Rewind the tape	◄◄
Change the playback side*	◄
Locate a following selection**	►►
Locate a previous selection**	◄◄

\* available only for Sony tape decks

\*\* available only for a tape deck equipped with the ►►|◄◄ buttons. The DECK selector is to be set to B.

### Compact Disc Operation

#### Available operation

Start playback with CD 1, CD 2 or ►.

You want to	Press
Stop playback	■
Stop playback temporarily (pause mode)	
Release the pause mode	or ►
Locate a following selection	►►
Locate a previous selection	◄◄
Locate a particular point ahead of the current one	►►
Locate a particular point behind the current one	◄◄
Skip to another disc*	DISC SKIP

\* Available only for a Sony CD player equipped with a multi-disc changer

### DAT Operation

#### Available operation

Start playback with TAPE 2 or ►.

You want to	Press
Stop playback	■
Stop playback temporarily (pause mode)	
Release the pause mode	or ►
Advance the tape rapidly	►►
Rewind the tape	◄◄
Locate a following selection	►►
Locate a previous selection	◄◄

When you use these buttons, be sure to set the DECK selector to B on the RM-P1 Remote Commander.

### Tuner Operation

#### Available operation

Start reception with TUNER.

You want to	Press
Locate a preset station	PRESET + or PRESET -

**When you operate the double cassette deck**  
Pressing of the function button on the RM-P1 Remote Commander activates the deck A operation regardless of the position of the DECK selector.

## About the Priority of Remote Control

### Purpose

To avoid mixing up remote control signals, the DST system allows only one room to control each program source. The room which has the "priority" can control that program source.

### What is "priority"?

The PRIORITY indicator on the master digital control center or digital link touch panel lights if the room has the priority. If you have the priority, you can control any operation available on the selected program source, by using the RM-P1 Remote Commander. (Refer to pages 41 and 42.) If you do not have the priority, you can listen to/watch the program source and adjust the volume, but you cannot activate any other operations. See the table below for details of the difference between a room WITH priority and a room WITHOUT priority.

### How the priority is assigned

- If no room is using a particular program source  
The room where the playback of that program source starts first will have the priority. Then the PRIORITY indicator lights on the master digital control center or Digital Link™ Touch Panel installed in that room.
- If room A is using a particular program source  
When the playback of that program source starts in room B, the priority for that program source has been assigned to room A. If a different program source is selected in room B, the priority for this new program source will be assigned to room B.

### How to obtain the priority

Press PRIORITY on the RM-P1 Remote Commander. If the PRIORITY indicator is off on the equipment you control, this indicator will light. Then, you can perform various operation with the RM-P1 Remote Commander.

### About "Automatic Power Off"

The "Automatic Power Off" function turn off the power automatically if you press ■ button and leave it for more than 10 minutes. If someone who has priority stops the playback/reception of the program source or turns off the power, it affects those who also listen to/watch the same program source in other rooms as well. The table below describes what happens when "Automatic Power Off" function is activated.

	A room WITH priority	A room WITHOUT priority
PRIORITY indicator	on	off
Things you can do		
(on the RM-P1 Remote Commander, master digital control center and/or Digital Link™ Touch Panel)	select a program source adjust the volume muting turn off the power	select a program source adjust the volume muting turn off the power
(on the RM-P1 Remote Commander only)	start, stop, pause for a moment, rewind or fast-forward locate a desired selection play the reverse side search for a disc tune in the preset station	obtain the priority
How the "Automatic Power Off" works		
(When you press ■ in a room with priority)	Playback/reception stops. *After 10 minutes, the PRIORITY indicator blinks. After 30 seconds, the power turns off automatically.	Playback/reception stops. *After 10 minutes, the PRIORITY indicator blinks. After 30 seconds, the power turns off automatically.
(When you press POWER OFF in a room with priority)	Power turns off.	PRIORITY indicator blinks. After 30 seconds, the power turns off automatically.

### \* During a 10-minute break of the program source playback/reception

When you want to continue the playback/reception in a room without priority, first press PRIORITY on the RM-P1 Remote Commander. During this 10-minute break, you cannot resume the playback/

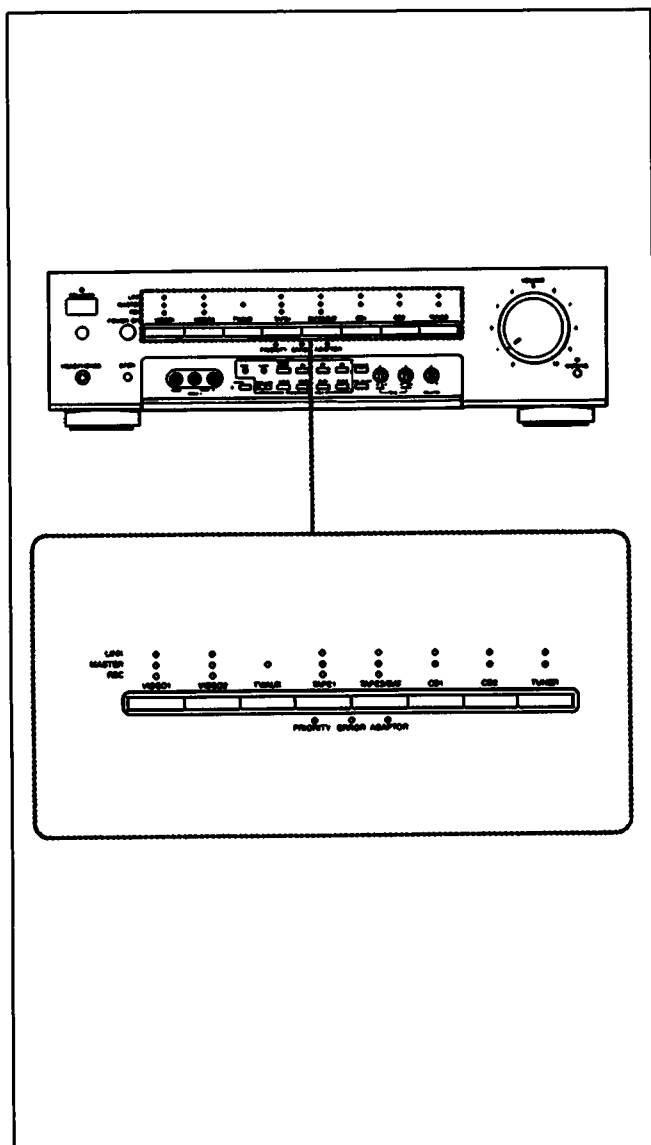
reception with the function button on the Digital Link™ Touch Panel nor master digital control center.

# About the Multi-Room Operation

In the DST system, several rooms are connected to the system and it is impossible to watch operations in other rooms. Unwanted operation may occur when you are playing a program source. This section explains the system of the multi-room operation and imaginable problems.

## Checking the Multi-Room Operation on the Master Digital Control Center

The MASTER and LINK indicators on the master digital control center allows you to check what program source(s) is used in the DST system.



Indicator on the master digital control center	MASTER	LINK
Condition	Lights in green	Lights in orange
What happens	Playback of a program source starts in the master room.	Playback of a program source starts in digital link room(s).
Condition	Goes off	
What happens	Playback/reception of the program source stops in the master room.	Playback/reception of the program source stops in digital link room(s).

## Available Program Sources for the Simultaneous Playback

In the DST system, audio/video signals to be transmitted simultaneously are limited as described below. When you want to select a different program source from the one played in the master room or other digital link rooms, note that up to five program sources is available simultaneously.

For the master room: any program source

For digital link rooms:

- CD 1

- Two audio sources with digital sound

- One video source with analog (monaural) sound from TV

VIDEO 1 and VIDEO 2 cannot be selected simultaneously in digital link rooms.

### Examples showing the maximum program sources played back simultaneously

		Master room	Digital link room 1	Digital link room 2	Digital link room 3	Digital link room 4	Digital link room 5	Digital link room 6	Digital link room 7
Example 1	Program source in use	VIDEO 1	CD 1	TAPE 2	VIDEO 2	TAPE 2	TUNER	CD 1	TV/AUX*
	Form of transmission in sound	analog	digital	digital	analog	digital	digital	digital	—
Example 2	Program source in use	CD 1**	VIDEO 1	CD 2	TAPE 1	TAPE 1	VIDEO 1	TV/AUX*	CD 1
	Form of transmission in sound	analog	analog	digital	digital	digital	analog	—	digital

#### \* When you select a TV program

TV programs can be selected in every room because the function of TV/AUX is independent of the system.

#### \*\* When you select CD 1 in the master room

The maximum number of program sources transmitted simultaneously becomes four.

#### If you cannot select a desired program source

- All transmissible audio/video signals are used according to the above table.

Example: when CD 1, CD 2 and TAPE 1 functions are used in more than three digital link rooms

You cannot select TAPE 2 in another digital link room.

- Someone is going to start recording in the master room. While the REC indicator of your desired program source blinks on the master digital control center, you cannot select that program source in a digital link room even if you press its function button.

#### How many rooms can select the same program source?

All rooms can select the same program source. In the DST system, one program source can be selected in up to 17 rooms including the master room.

## About the ERROR Indicator

The ERROR indicator lights in the following cases and shows that the DST system does not function correctly.

- The connection of 75-ohm coaxial cable within the DST system has not been performed correctly. Check the connection. Consult your nearest Sony ES dealer if necessary.

- The USER/LEARN selector on the master digital control center is set to LEARN when you play the same program source as the one played in the master room. You can continue to play that program source, but various operations with priority are not available even if you have the priority. You cannot select another program source, either.

# Recording

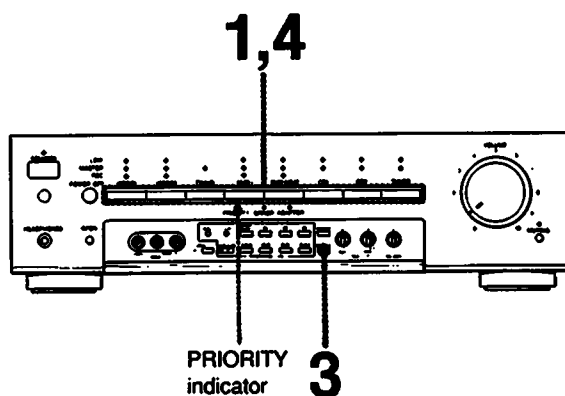
Note that you cannot perform recording

- by using the RM-P1 Remote Commander.
- on the Digital Link™ Touch Panel.

## Preparation

- Insert a blank tape, disc or recorded tape into each playback/recording equipment.
- To record a TV program  
Select a desired channel on the RM-P1 Remote Commander or TV.

## Operation



- 1 Press the function button to select the desired program source.
- 2 If the PRIORITY indicator on the front panel does not light, press PRIORITY on the RM-P1 Remote Commander to obtain the priority. When the PRIORITY indicator is lit, skip this step.
- 3 Press REC SELECT. The REC indicators blink in red. The program source with the REC indicator blinking can be recorded.\*
- 4 Press the function button to select a program source onto which you will record the one selected in step 1. The REC indicator lights in red on the selected function button.
- 5 Perform recording with the playback/recording equipment.
  - ① Set the equipment for recording in the recording mode.
  - ② Set the other equipment in the playback mode.

**To stop recording**  
Press REC SELECT.

### Notes on recording

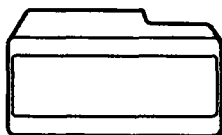
- If the REC indicator of your desired program source to be recorded does not blink, this program source is in use in another digital link room (s). To record onto this program source, first press PRIORITY on the RM-P1 Remote Commander.
- While the REC indicator blinks, program sources with these indicators on cannot be used in digital link rooms.
- When you want to dub a program source, select the same program source in step 1 and 4.

# Optional Accessories

The DST system can be expanded with the use of optional accessories other than the supplied ones. Refer to the following optional accessories for system expandability. For audio, video and control cords, refer to page 21.

## For the Master Room

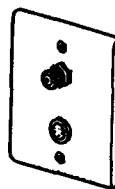
**For remote control of the system in a hidden installation**  
**RMR-3030K Wireless remote control receiver**  
 Install the wireless remote control receiver in a convenient location and point the RM-P1 Remote Commander at the wireless remote control receiver to control the system.



## For a Digital Link Room

**To install an RMR-TP1 Digital Link™ Touch Panel into the wall**

PC-3030 Connector wall unit



RK-MD3030 Mini DIN cable (male - male, 10 m/32 ft 6 in)



RK-MD3035 Mini DIN cable (male - male, 5 m/16 ft 3 in)

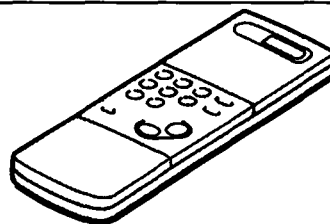


## For the DST system

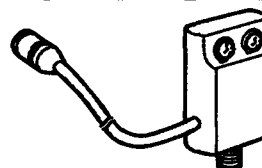
**To control the system from every digital link room with the priority**

**RM-P1 Remote Commander\***

\* One piece is supplied for the system.



**To connect a TV with UHF and VHF jacks**  
**EAC-66 U/V band separator/mixer**



# Specifications

## TA-DM1000ES master digital control center

### Amplifier Section

Frequency response	10 Hz – 20 kHz $\pm 0.1$ dB
Input sensitivity	150 mV, 50 kilo ohms
S/N	90 dB
Output voltage and output impedance	REC OUT: 150 mV, 470 ohms PRE OUT: 1.3 V, 50 ohms (nominal) HEADPHONES: 15 mV, 8 ohms; accepts low and high impedance headphones
Total harmonic distortion	Less than 0.015 %

### Video Section

Frequency response	50 Hz – 4.0 MHz
Video input sensitivity and input impedance	1 Vp-p, 75 ohms
Video output voltage and output impedance	1 Vp-p, 75 ohms

### Converter Section

A/D converter	Type: High Density Linear Converter Sampling frequency: 44.1 kHz
PCM encoding system	CD format
RF audio transmission frequency width/channel	3 MHz
RF audio modulation system	2 PSK modulation
RF video transmission frequency width/channel	10 MHz

### General

Power requirements	120 V AC, 60 Hz
Power consumption	Power on: 35 watts Standby: 12 watts
AC outlets	Six switched, total 900 watts
Dimensions (w/h/d)	Approx. 430 x 123 x 360 mm (17 x 4 <sup>7</sup> / <sub>8</sub> x 14 <sup>1</sup> / <sub>4</sub> inches)
Weight	Approx. 7.3 kg (16 lb 2 oz)

## RM-P1 Remote Commander

### Remote control system

	Infrared control
Power requirements	4.5 V DC, with three size AA (R6) batteries
Dimensions (w/h/d)	68 x 30 x 220 mm (2 <sup>3</sup> / <sub>4</sub> x 1 <sup>3</sup> / <sub>16</sub> x 8 <sup>3</sup> / <sub>4</sub> inches)
Weight	230 g (8 oz) incl. batteries

## MX-RF1 signal combiner

### Insertion Loss (Power of MX-RF1: OFF)

RF IN to TO DST MASTER	54 – 450 MHz: Max. 14 dB 450 – 880 MHz: Max. 16 dB
RF IN to RF OUT 1, 2, 3 or 4	54 – 450 MHz: Max. 10 dB 450 – 880 MHz: Max. 12 dB

### Gain (Power of MX-RF1: ON)

RF IN to TO DST MASTER	0 – 40 MHz: Less than –35 dB 54 – 450 MHz: +1 $\pm 4$ dB 500 – 880 MHz: +2 $\pm 4$ dB 475 $\pm 5$ MHz: –27 dB
RF IN to RF OUT 1, 2, 3 or 4	0 – 40 MHz: Less than –35 dB 54 – 450 MHz: +3 $\pm 4$ dB 500 – 880 MHz: +2 $\pm 4$ dB 475 $\pm 5$ MHz: –27 dB
TO DST MASTER to RF IN	0 – 40 MHz: Less than –70 dB 475 $\pm 5$ MHz: Less than –60 dB
RF OUT 1, 2, 3 or 4 to RF IN	All frequencies: Less than –60 dB
RF OUT 1, 2, 3 or 4 to TO DST MASTER	0 – 14 MHz: Less than –9 dB 15.5 $\pm 0.1$ MHz: –1 $\pm 3$ dB 17 – 880 MHz: Less than –9 dB
TO DST MASTER to RF OUT 1, 2, 3 or 4	16.5 $\pm 0.1$ MHz: –15 $\pm 3$ dB 475 $\pm 15$ MHz (–40 dBm input): –2 +1–2 dB 475 $\pm 15$ MHz (–55 dBm input): +11 $\pm 2$ dB

### General

Dimensions (w/h/d)	177 x 136 x 31 mm (7 x 5 <sup>3</sup> / <sub>8</sub> x 1 <sup>1</sup> / <sub>4</sub> inches)
Weight	450 g (1 lb)

### Accessories Supplied

Size AA (R6) battery (3)
F-type connector (2)
Remote control system cable (4-pin) (6)
Remote control system cable (mini) (2)
Spacer (1)
Screwdriver (1)
75-ohm coaxial cable with F-type connectors (1)

Design and specifications are subject to change without notice.



# Troubleshooting

Before proceeding through the check list below, examine the connections and the procedures outlined in this operating instructions. Should any problem persist after you have checked the following items, consult your nearest Sony ES dealer.

## Master Room Operation

If you cannot locate your problem in this chart, go to "System Operation."

### Sound

Problem	Cause	Solution
No sound is heard even if the volume is adjusted.	The power amplifier, speaker, or program source equipment are not connected correctly.	Connect the equipment correctly. (See pages 22 to 29.)
Sound is heard only at a very low volume.	The MUTING button has been pressed. (The indicator lights.)	Press the button to disengage.
One channel does not transmit audio, or the volume from the left and right speakers is unbalanced.	• The BALANCE control is not set appropriately.	Adjust the BALANCE control.
	• The power amplifier, speaker, or program source equipment is not connected correctly.	Connect the equipment correctly. (See pages 22 to 29.)

### VCR operation

Problem	Cause	Solution
The VCR does not function.	When another manufacturer's VCR is connected, the remote control signal of POWER ON/OFF has not been programmed on the master digital control center.	Program this signal. (See page 33.)
Playback/recording picture does not appear on the TV even if you press TV/VIDEO on the RM-P1 Remote Commander.	• The TV is not connected to MONITOR OUT on the master digital control center.	Connect the TV to MONITOR OUT. (See page 22.)
	• When another manufacturer's TV is connected, the power of the TV cannot be turned on through the system.	Press POWER ON and TV/VIDEO on the RM-P1 Remote Commander.
	• When another manufacturer's TV is connected, the remote control signals of POWER ON and TV/VIDEO (VIDEO 1, VIDEO 2 or VIDEO 3) has not been programmed on the corresponding buttons on the RM-P1 Remote Commander.	Program these signals. (See page 37.)
Picture on the TV does not disappear even if the power of the system turns off.	When another manufacturer's TV is connected, the power of the monitor TV cannot be turned off through the system.	Press POWER OFF for the TV on the RM-P1 Remote Commander.

## Compact Disc operation

Problem	Cause	Solution
CD 1 cannot be selected.	Your CD player has not a parallel output of digital/analog signals, and digital link room (s) uses CD 1.	Use a CD player with a parallel output of digital/analog signals for CD 1.

## Tape or DAT deck operation

Problem	Cause	Solution
Playback side does not change even if you press ◀ on the Remote Commander.	When another manufacturer's tape deck is connected, the signal of ◀ cannot be programmed on the master digital control center.	—
When you pressed ⏮ or ⏭ on the RM-P1 Remote Commander, tape operation does not function.	The DECK selector on the RM-P1 Remote Commander is set to A.	Set this selector to B.
When a double tape deck is connected, tape operation does not function correctly with the RM-P1 Remote Commander.	• The DECK selector on the RM-P1 Remote Commander is set to the one you do not control.	Set it to the one you control.
	• You shifted tape operation to the other deck without stopping the playback of the deck you controlled originally.	First stop the playback of one deck, then set the DECK selector on the RM-P1 Remote Commander.

## Tuner operation

Problem	Cause	Solution
You cannot operate the tuner with the RM-P1 Remote Commander.	Another manufacturer's tuner is connected to the master digital control center.	Connect a Sony Tuner.

## Remote control operation

Problem	Cause	Solution
The RM-P1 Remote Commander does not function.	• The batteries are exhausted.	Replace the batteries with new ones.
	• The commander head is not pointed toward the remote control sensor.	Point the commander head toward the sensor.
	• There is an object between the RM-P1 Remote Commander and the equipment you control.	Remove the object.
	• When a Sony VCR or tape deck is connected, the selector for remote control is not set correctly on the back panel of the master digital control center.	Set the selector correctly. (See page 24.)
	• When another manufacturer's VCR, tape deck or CD player is connected, remote control signals have not been programmed on the master digital control center.	Program necessary signals. (See page 33.) If the RM-P1 does not function even after programming, consult your nearest Sony ES dealer.
	• The master room does not have the priority.	Press PRIORITY to obtain the priority.
	• When you control the TV, the mode selector on the RM-P1 Remote Commander is not set correctly.	Set the mode selector correctly. (See page 38.)
	• Remote control signal of another manufacturer's audio/video equipment has not been programmed correctly.	Program the signal again. (See page 34.)
	• Sony audio/video equipment is newly connected to the CONTROL IR OUT jack on the master digital control center where another manufacturer's audio/video equipment had been connected.	Clear the remote control signal of another manufacturer's audio/video equipment referring to page 34. Note that pressing of CLEAR clears all remote control signals including the ones for other program sources.

## System Operation

Problem	Cause	Solution
Both of the master digital control center and the digital link decoder amplifier function incorrectly.	• They are connected incorrectly.	Check the connection and connect each piece of equipment correctly. (See pages 15 to 19.)
	• More than 16 digital link decoder amplifiers are connected.	Connect only 16 digital link decoder amplifiers.
	• The same room number is assigned to two digital link decoder amplifiers or more.	Check the ROOM NUMBER selector on each digital link decoder amplifier and identify the room number.
The ERROR indicator lights.	• Wrong connection of the system or unplugged cable.	Connect the system correctly. (See pages 15 to 19.) Check if the connection is loose.
	• The USER/LEARN selector on the master digital control center is set to LEARN.	Wait until the programming finishes.
When you select a program source in a digital link room, the program source cannot be selected and its function button flashes.	• Transmittable audio/video signals are occupied.	See page 45 and select another program source.
	• REC SELECT on the master digital control center has been pressed.	Wait until the recording starts in the master room or select another program source (See page 46.)
	• The USER/LEARN selector on the master digital control center is set to LEARN.	Wait until the programming finishes
The playback of a program source does not start even if you press the function button.	No disc or tape is loaded in the equipment.	Check the master room and load the desired disc or tape.
Picture is noisy.	• The transmission length of the video signal exceeds the level at which visible pictures are available.	See pages 15 and 16 and connect the digital link decoder amplifier within the described transmission length.
Picture does not appear during VCR operation in a digital link room.	Channel 66 for CATV is not selected on the TV.	Select channel 66 for CATV.
Playback/reception of the program source stops.	• Someone who has the priority for that program source stopped the playback or shifts to another program source.	Press PRIORITY on the RM-P1 Remote Commander and start playback/reception
	• Someone else stopped the playback on the equipment in the master room.	Check the equipment in the master room
Playback/reception of the program source stops and the power is turned off.	• Someone who has the priority for that program source turned off the power.	Press the function button for that program source.
	• Someone else turned off the power of the equipment in the master room.	Check the equipment in the master room
Unwanted operation occurs during playback/reception.	• Someone who has the priority for the same program source performed the operation.	Press PRIORITY on the RM-P1 Remote Commander to control the program source by yourself.
	• Someone else has controlled the equipment in the master room.	Check the equipment in the master room