

marantz®

Model SR880mkII User Guide

Audio/Video Receiver

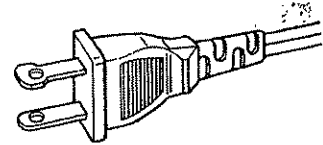
IMPORTANT SAFETY INSTRUCTIONS

READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

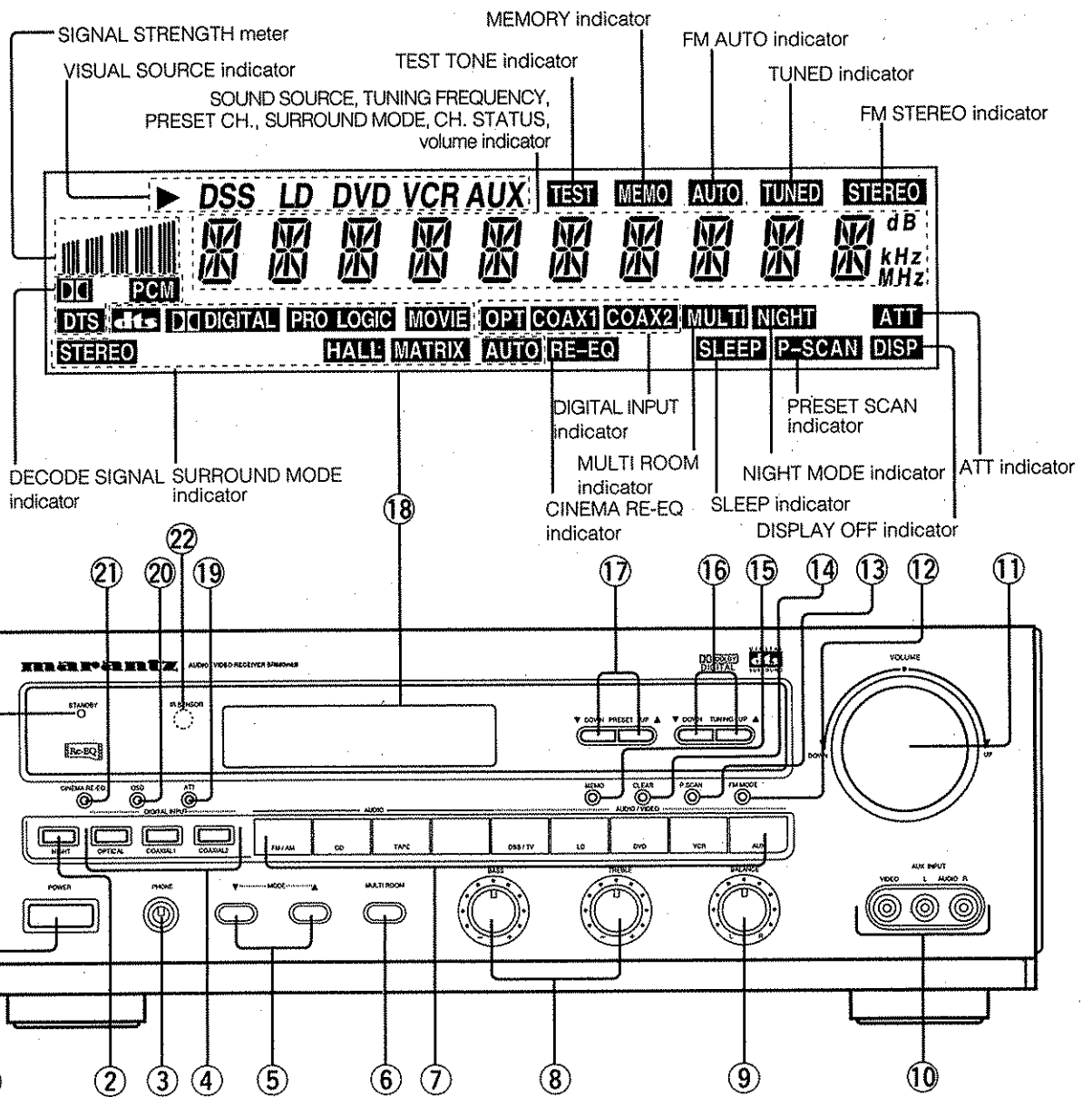
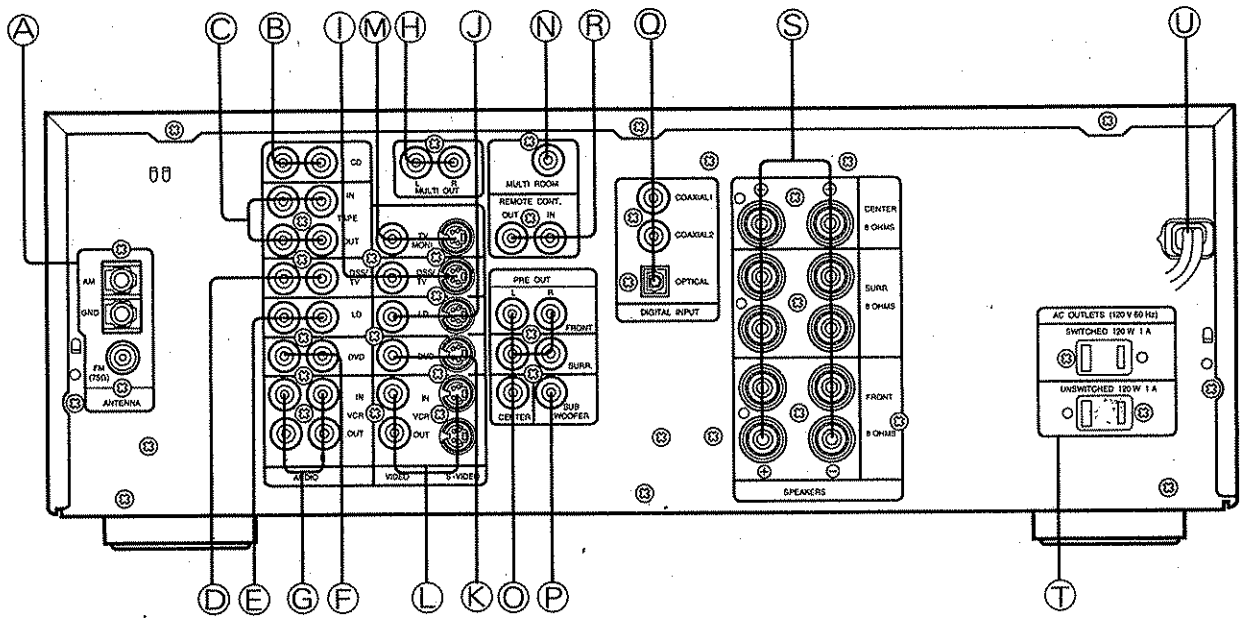
1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions-The safety and operating instructions should be retained for future reference.
3. Heed Warnings-All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions-All operating and use instructions should be followed.
5. Cleaning-Unplug this video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments-Do not use attachments not recommended by the video product manufacturer as they may cause hazards.
7. Water and Moisture-Do not use this video product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. Accessories-Do not place this video product on an unstable cart, stand, tripod, bracket, or table. The video product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9. Ventilation-Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the video product on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power Sources-This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.

11. Grounding or Polarization-This video product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.



AC POLARIZED PLUG

12. Power-Cord Protection-Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
13. Protective Attachment Plug - The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
14. Outdoor Antenna Grounding-If an outside antenna or cable system is connected to the video product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 1.
15. Lightning-For added protection for this video product receiver during a lightning storm, or when it is left un-attended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.
16. Power Lines-An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
17. Overloading-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
18. Object and Liquid Entry-Never push objects of any kind into this video product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.



LOCATION AND FUNCTION OF PARTS AND CONTROLS

REAR PANEL CONNECTIONS (See pages 3, 81 - 84.)

All connections to the rear panel should be made with entire power off to the system. To avoid mis-connection, it is advisable to connect one cable at a time between the different components. This is the safest way to avoid cross-connecting channels or mixing-up signal inputs with outputs.

A FM antenna terminal (75 ohms)

For connecting an external FM antenna with a coaxial cable, or for connecting a cable network FM source.

AM antenna and ground terminals

For connecting the supplied AM loop antenna. Use the terminals marked "AM" and "GND".

The supplied AM loop antenna will provide good AM reception in most areas. Position the loop antenna to the best reception.

B CD IN jacks

Connect to the CD player.

C TAPE IN/OUT jacks

Connect the IN jacks to the output (PLAY, OUT) jacks of the tape deck.

Connect the OUT jacks to the input (REC, IN) jacks of the tape deck.

D DSS/TV IN (AUDIO) jacks

Connect to the AUDIO output jacks of your Satellite tuner or TV tuner.

E LD IN (AUDIO) jacks

Connect to the AUDIO output jacks of the Laser Disc player.

F DVD IN (AUDIO) jacks

Connect to the AUDIO output jacks of the Digital Video Disc player.

G VCR IN/OUT (AUDIO) jacks

Connect the IN jacks to VCR's audio output (OUT) jacks.
Connect the OUT jacks to VCR's audio input (IN) jacks.

H MULTI OUT jacks

Connect to the input jacks of the amplifier used to drive the speakers in another room, used as a multi-room (Second zone).

I DSS/TV IN (VIDEO/S-VIDEO) jacks

Connect the TV IN jack to the video output of the Satellite tuner or TV tuner.

You can select the S-VIDEO or composite (VIDEO) according to the Satellite tuner or TV tuner.

J LD IN (VIDEO/S-VIDEO) jacks

Connect the LD IN jack to the video output of the LD player. You can select S-VIDEO or composite (VIDEO) according to the LD player.

K DVD IN (VIDEO/S-VIDEO) jacks

Connect the DVD IN jack to the video output of the DVD player. You can select S-VIDEO or composite (VIDEO) according to the DVD player.

L VCR IN/OUT (VIDEO/S-VIDEO) jacks

Connect the VCR IN jack to VCR's video output (OUT) jack.
Connect the VCR OUT jacks to VCR's video input (IN) jack.
You can select S-VIDEO or composite (VIDEO) according to the VCR.

M TV MONI. (VIDEO/S-VIDEO) output jacks

Connect the TV MONI jack to your TV's video input (VIDEO IN) jack. You can connect your video equipment by using either the S-VIDEO jacks or instead using the composite (VIDEO) jacks.

N MULTI ROOM jack

Connect to an third party multi-room remote control device, available from your Marantz dealer.

O PRE OUT jacks

Jacks for front, center and surround use are provided. Use these jacks for connection to power amplifier in case it is used.

P SUB WOOFER output jack

Connect to the MAIN IN jacks of the SUB WOOFER CHANNEL power amplifier.

Q DIGITAL INPUT jacks

Coax1/ Coax2 In Jack

This terminal connect to the digital products such as DVD, CD, LD and DSS.

Optical In Jack

This terminal is used for connection to the optical data stream Dolby Digital (AC-3) output of digital products such as DVD, CD, LD and DSS. To avoid dust contamination, leave the protective cap inserted unless the jack is in use.

IMPORTANT NOTE:

These input jack are for Dolby Digital (AC-3)/PCM/DTS digital signals only. Do not connect standard audio output to these digital input jacks.

R REMOTE CONT. IN/OUT terminals

Connect to a Marantz component equipped with remote control (RC-5) terminals.

S SPEAKER terminals

CENTER speaker output terminals

Connect to the center speaker.

SURROUND speaker output terminals

Connect to the surround (rear) speakers.

FRONT speaker output terminals

Connect to the front speakers.

T AC OUTLETS

Connect the power cables of components such as a cassette deck and CD player to these outlets. Both SWITCHED and UNSWITCHED outlets are provided. The one marked SWITCHED provides power only when the SR880mkII is turned on and is useful for component which you use every time you play your system such as an equalizer or your most-used sound source. The one marked UNSWITCHED is always live as long as the SR880mkII is plugged into a live outlet. A component connected here may be left on permanently, or may be switched off with its own power switch.

Caution:

In order to avoid potential turn-off thumps, anything plugged in here should be powered up BEFORE the SR880mkII is turned on.

U POWER cable

Plug into a household AC power outlet.

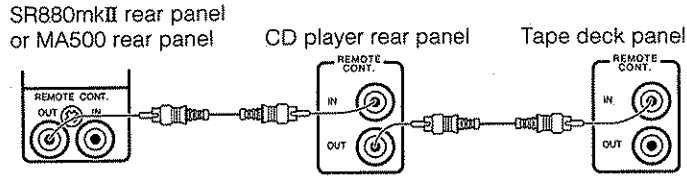
REMOTE CONTROL BUS CONNECTIONS

This unit is equipped with a remote control function. By connecting this unit's remote control jacks to a Marantz CD player or tape deck equipped with remote control (RC-5) jacks, it allows system remote control operation. Connect **REMOTE CONT. OUT** jack of SR880mkII to REMOTE CONT. IN of other Marantz equipment, i.e. CD player or Cassette deck, by using an RCA pin cable.

Note:

If a component equipped with remote control (RC-5) jacks has an INT/EXT switch on the rear panel, set the switch to EXT when using the system control function.

(Connection example)



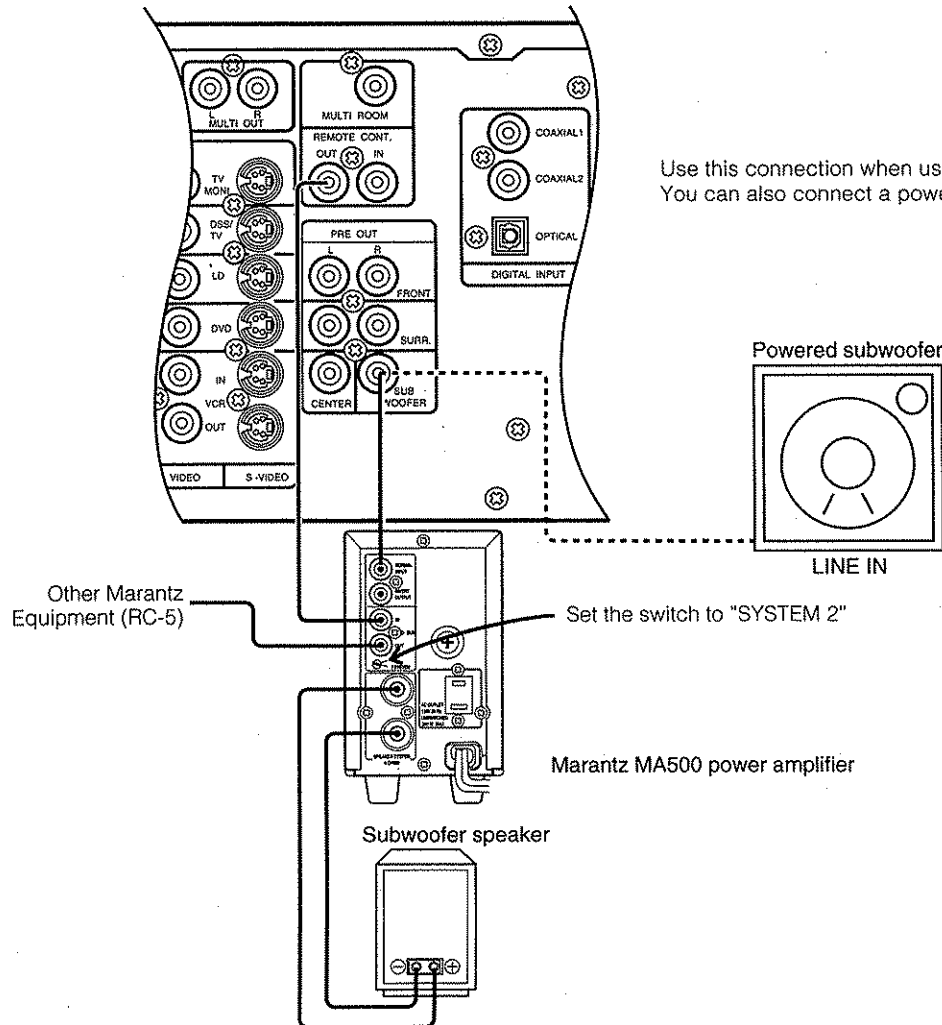
Controlling the power ON/OFF of a power amplifier connected to the SR880mkII through Marantz remote control

1. If you connect the MA500 power amplifier to the SR880mkII, set the Bus System Selector switch of the MA500 to "System 2". Now the MA-500 can be turned ON / OFF in synchronism with the power ON / OFF of the SR880mkII.

Notes:

- Be sure to connect the remote control bus before the procedure above.

CONNECTION FOR A SUBWOOFER



Use this connection when using a sub-woofer speaker. You can also connect a powered subwoofer.

BASIC OPERATION

LISTENING TO THE TUNER

1. Press the **POWER** switch ① to turn on the power.
2. Press the **AM/FM** button ⑦ to select the desired band.
3. Press the **TUNING ▲ UP** and **▼ DOWN** buttons ⑯ to tune in the desired station. Pressing once for less than a half second changes the frequency by one step. Pressing longer sequentially scans frequencies in the indicated direction. Releasing the button in this state activates the auto tuning function which automatically scans the frequencies until it reaches a station, at which point the TUNED and signal level indicators light and auto tuning stops.
4. If FM is selected, press the **FM MODE** button ⑫ to select the desired audio mode, stereo or mono.
5. Adjust the volume with the **VOLUME** control ⑬.
If necessary, adjust the tone controls (**BASS/TREBLE**) ⑧.

MODE button operation (Tuner Control)

When "AUTO" is on in the display, FM stations which broadcast in stereo will be received in stereo and the "STEREO" indicator lights. When "AUTO" is off, all the FM stations will be received in monaural regardless of whether or not they are broadcasting in stereo.

PRESETTING STATION

With this unit you can preset up to 50 FM/AM stations in any order. For each station, you can memorize the frequency and reception mode if desired. Stations can be preset either manually (by you) or automatically (by the tuner).

AUTO PRESETTING

This function scans the frequencies in the selected band and automatically presets all stations which can be received.

1. Select the **FM** band.
2. Tune in the lowest receivable frequency.
3. While pressing the **MEMO** button ⑮, press the **TUNING ▲ UP** button ⑯. Auto memory starts at this point.
4. "MEMO" will blink on the display.
5. When a receivable station is picked up, scanning stops and station is played for five seconds. During this period, the following operations are possible:
 - 1) The band can be changed using the **FM** or **AM** buttons ⑦.
 - 2) The mode can be changed using the **MODE** button ②.
6. If no button is pressed during this period, the current frequency is preset in location CH-2.
If you wish to skip current station, press the **TUNING ▲ UP** button ⑯ during this period, the current frequency is skipped and auto presetting continues.
7. Operation stops automatically when all 50 preset memory positions are filled or when auto scanning attains the highest end of all bands.
To stop the auto preset function in mid-operation, press the **CLEAR** button ⑭ or one of the input selectors.

MANUAL PRESETTING

As the SR880mkII is not equipped with the numeric buttons on the main unit, use the remote control unit for manual preset operation. Refer to "⑫ Ten keypad" on page 13.

1. Refer to the "Basic operation" section above to tune in a desired station.
2. Press the **MEMO** button ⑮.
"MEMO" starts blinking in the display. While "MEMO" is still blinking (approx. 5 seconds), enter a number from 1 to 50 using the number keys.
3. When a number has been properly input, "MEMO" stops blinking and goes out. The station is now stored in the specified preset memory location.
 - * When entering a single digit number (2, for example), either input "02" or just input "2" and wait for a few seconds.
 - * If a number other than 1-50 is entered by mistake, that number flashes in the display to indicate that it is invalid and the display returns to the original frequency display.

RECALLING A PRESET STATION

1. Direct selection method using the number buttons.
Select the desired preset station by entering one or two digits using the number buttons.
(Use the remote handset.)
2. Sequential selection method using the **PRESET ▲UP /▼DOWN** buttons ⑰.
Each press of the **▲UP** or **▼DOWN** button moves to the next or previous preset station. You can "fast forward" or "fast reverse" through the preset stations by holding down the **▲UP** or **▼DOWN** buttons. The operation continues until the button is released.
 - * If the **PRESET ▲UP** or **▼DOWN** button is pressed while the channel number is not displayed, the preset channel with the smallest preset number will be recalled.

PRESET SCAN TUNING

1. Press the **P.SCAN** (preset scan) button ⑱.
"P-SCAN" blinks on the display. (The preset station with the smallest preset number is recalled first. If no stations have been preset, CH"00" blinks in the display and the unit returns to the previous mode.)
2. Preset stations are recalled in sequence (CH-1 → CH-2, etc.) for 5 seconds each. Preset numbers that do not contain stations are skipped.
3. You can fast forward the preset stations by pressing the **PRESET ▲UP** button ⑰ continuously.
When the desired preset station is received, cancel the preset scan operation by pressing the **PRESET ▼DOWN** or **P.SCAN** button.

CLEARING PRESET STATIONS

You can remove preset stations from memory using the following procedure.

1. Recall the preset number to be cleared with the method described in "Recalling a preset station".
2. Press the **MEMO** button ⑮ "MEMO" blinks in the display for 5 seconds. While "MEMO" is still blinking, press the **CLEAR** button ⑭ "CLEAR" appears on the display to indicate that the specified preset number has been cleared.
 - * If desired you can clear all of the memory contents with a single operation, as follows:
Press the **MEMO** button ⑮, **CLEAR** button ⑭ and **TUNING ▲UP** button ⑯ simultaneously.

CAUTION:

Remember that the memory clear operation clears all memory including the volume level and surround mode memory and turns the power OFF.

DIGITAL INPUT SOURCE PLAYBACK

DIGITAL INPUT

1. Connect the digital output jack of the DVD or CD PLAYER with the DIGITAL input jack of the SR880mkII. For the COAXIAL input, use the VIDEO cable. For the OPTICAL input, use the dedicated optical cable.
2. Set the DISC to be played back at the PLAYER.
3. Press the **OPT**, **COAX1** or **COAX2** of the FUNCTION SELECTOR button (DIGITAL INPUT).
4. Play back the PLAYER.
5. Using the VOLUME control, adjust the volume.

CHANNEL STATUS INDICATOR

Channel status is displayed when digital input source is decoded. An ordinary Dolby Digital (AC-3) and DTS signals are indicated as "3/2.1". An ordinary Dolby Digital (AC-3) and DTS signals are organized 3 front channels (left, center and right channel), 2 surround channels (left and right channel) and 0.1 LFE signal. 2 channel stereo signal is indicated as "2/0"

Note:

The channel status of following software is indicated as "2/1", and "PRO LOGIC" is indicated as surround mode. The software is encoded as PRO LOGIC, though Dolby Digital (AC-3) signal is inputted.

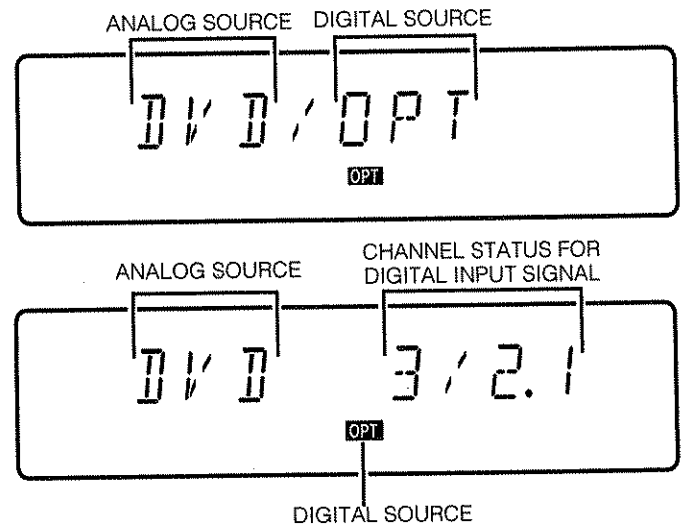
ANALOG AUDIO INPUT and DIGITAL INPUT

Selecting an analog audio source such as CD or TUNER outputs a selected analog audio signal at the TAPE OUT or VCR OUT. This output has no relationship with the selection of the FUNCTION SELECTOR button (DIGITAL INPUT). For example, selecting OPT for the digital SOURCE and selecting DVD for the analog audio source, OPT/DVD appear at the display, and at the SPEAKER OUT, the source connected to OPT is played back. However, the analog audio signal of the DVD is output to the TAPE or VCR OUT jack. In other words, even when OPT has been selected for the digital source, the analog source is selected and an analog audio signal is output at the TAPE or VCR OUT jack. Also, for the VIDEO signal, the DVD signal is output at the TV/MONI output jack. When a source without a VIDEO signal such as CD, the video signal of a source indicated in the VISUAL SOURCE INDICATOR of the display is output.

Note:

The digital source signal is not output to TAPE OUT or VCR OUT.

INDICATION OF FUNCTION SELECTOR



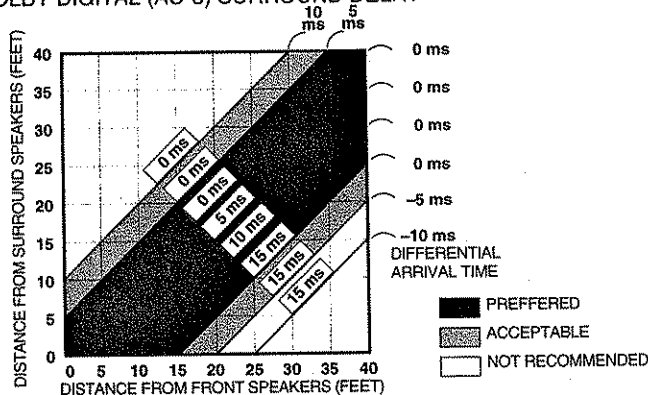
Delay time:

For the various surround sound modes, the surround sound information is delayed slightly, in order to compensate for the physical layout of your home theater speakers. This delay ensures that the main sounds from the front speakers and the surround sounds from the surround speakers arrive at the listening position properly synchronized. If the delay is not set correctly, the surround sound effect is not nearly so pleasing, and in fact can be distracting and annoying. The correct method to calculate the surround sound delay is as follows:

1. Measure the distance from the listening/viewing position to the plane of the front speakers and note the result. For example, we will use a 10 foot measurement from the listener's chair to the front speakers.
2. Measure the distance from the listening position to the location of the surround speakers. Ideally, the surround speakers will be mounted high up on the side walls immediately to the left and right of the listening position. For our example, we will use a 5 foot measurement from the listening position to the surround speakers.
3. Subtract the surround distance from the front distance. The result is the correct setting for proper delay time, in milli-seconds. For our example: 10 feet minus 5 feet=5. 5 msec of delay will achieve the proper surround decoding result.

It is widely misunderstood that lots of delay time is somehow preferable to a small amount of delay time. This is not the case. The amount of surround delay time is calculated so that the arrival time of the surround sound to the ears is "sync" with the arrival time of the front sounds to the ears. By overly increasing the delay time of the surround channel, this optimum sound arrival synchronization is altered, and the surround sound becomes "detached" from the main sound, destroying the spatial aspects of the surround sound. The Dolby delay time adjustment of 0 to 15 msec allows for a wide variety of home theater set-ups, room sizes, and listening positions.

DOLBY DIGITAL (AC-3) SURROUND DELAY



The relation between the selected surround mode and the input signal

The surround mode is selected with the MODE button of SR880mkII or the remote control unit. However, the sound of the speaker is as the relation between the selected surround mode and input signal. The relation is as follows:

Surround Mode	Input Signal	Output Channel				FTD Indicator		
		L/R	LS/RS	C	SW	Encoded	Surround Mode	Channel Status
STEREO	Dolby Digital (5.1 ch)	○	—	—	○	ⓧ	STEREO	3/2.1
	Dolby Digital (2 ch)	○	—	—	○	ⓧ	STEREO	2/0
	Dolby Digital (2 ch: Lt/Rt)	○	—	—	○	ⓧ	STEREO	2/0
	PCM-audio (Fs=96k)	○	—	—	○	PCM	STEREO	96 kHz
	PCM-audio (Fs=32k, 44.1k, 48k)	○	—	—	○	PCM	STEREO	2/0
	DTS (5.1 ch)	○	—	—	○	DTS	STEREO	3/2.1
DOLBY	Analog	○	—	—	○	—	STEREO	—
	Dolby Digital (5.1 ch)	○	○	○	○	ⓧ	D-Digital	3/2.1
	Dolby Digital (2 ch)	○	○(Mono)	○	○	ⓧ	Pro Logic	2/1
	Dolby Digital (2 ch: Lt/Rt)	○	○(Mono)	○	○	ⓧ	Pro Logic	2/1
	PCM-audio (Fs=96k)	—	—	—	—	(PCM)	(D-Digital or Pro Logic)	96 kHz
	PCM-audio (Fs=32k, 44.1k, 48k)	○	○(Mono)	○	○	PCM	Pro Logic	2/0
DTS (Chinema) (Music)	DTS (5.1 ch)	—	—	—	—	(DTS)	(D-Digital or Pro Logic)	no data
	Analog	○	○(Mono)	○	○	—	Pro Logic	—
	Dolby Digital (5.1 ch)	—	—	—	—	(ⓧ)	dts	no data
	Dolby Digital (2 ch)	—	—	—	—	(ⓧ)	dts	no data
	Dolby Digital (2 ch: Lt/Rt)	—	—	—	—	(ⓧ)	dts	no data
	PCM-audio (Fs=96k)	—	—	—	—	(PCM)	dts	96 kHz
MOVIE HALL MATRIX	PCM-audio (Fs=32k, 44.1k, 48k)	—	—	—	—	(PCM)	dts	no data
	DTS (5.1 ch)	○	○	○	○	DTS	dts	3/2.1
	Analog	○	○	○	○	—	Movie, Hall or Matrix	—
	Dolby Digital (5.1 ch)	○	○	○	○	ⓧ	Movie, Hall or Matrix	3/2.1
	Dolby Digital (2 ch)	○	○	○	○	ⓧ	Movie, Hall or Matrix	2/0
	Dolby Digital (2 ch: Lt/Rt)	○	○	○	○	ⓧ	Movie, Hall or Matrix	2/0
AUTO	PCM-audio (Fs=96k)	—	—	—	—	(PCM)	Movie, Hall or Matrix	96 kHz
	PCM-audio (Fs=32k, 44.1k, 48k)	○	○	○	○	PCM	Movie, Hall or Matrix	2/0
	DTS (5.1 ch)	○	○	○	○	DTS	Movie, Hall or Matrix	3/2.1
	Analog	○	○	○	○	—	Movie, Hall or Matrix	—
	Dolby Digital (5.1 ch)	○	○	○	○	ⓧ	D-Digital, Auto	3/2.1
	Dolby Digital (2 ch)	○	—	—	○	ⓧ	D-Digital, Auto	2/0
Note:	Dolby Digital (2 ch: Lt/Rt)	○	○	○	○	ⓧ	Pro Logic, Auto	2/1
	with Dolby Surround flag.	○	—	—	○	PCM	Stereo, Auto	96 kHz
		○	—	—	○	PCM	Stereo, Auto	2/0
		○	○	○	○	DTS	dts, Auto	3/2.1
		○	—	—	○	—	Stereo, Auto	—
		○	—	—	○	—	Stereo, Auto	—

Note: Dolby Digital (2 ch: Lt/Rt): signal with Dolby Surround flag. L/R : Front speaker LS/RS: Surround speaker C : Center speaker SW : Sub woofer speaker (): The indicator blinks

SET-UP AND CALIBRATION

After completion of all connecting arrangements, please do the following procedure for the set-up and calibration before play-back.

SPEAKER SELECTION

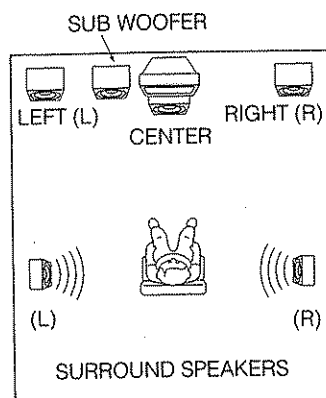
The home theater system you already have installed should function provided that there are left, center and right front speakers, left and right rear/surround speakers and a subwoofer. For best result we recommend that the front speakers be of the same type, with identical or similar driver units. This will deliver smooth pans across the front sound stage as the action moves from side to side.

Your center channel speaker is very important as over 80 % of the dialog from a typical motion picture emanates from the center channel.

Rear channel speaker need to be identical to the front channel speakers, but they should be of high quality. One of the benefits of Dolby Digital (AC-3) and DTS is that surround channels are full range, while they were frequency limited in earlier "Pro Logic" type systems.

Bass effects are an important part of home theater. For optimal enjoyment a subwoofer should be used as it is optimized for low frequency reproduction. If you have full range front speakers, however, they may be used in place of a subwoofer with proper setting of the switches in menu system.

Speaker system configurations (diagram, as currently used)



If possible, mount the surround speakers on the walls to the sides of the viewing area, 2-3 feet above seated viewers, firing straight across at each other.

SPEAKER SETTING

Since the SR880mkII may be used with a wide variety of speaker types, it is important that you adjust the speaker setting in menu system before using SR880mkII. Setting these menu will tell the SR880mkII what type of speakers you are using so that the audio outputs will be directed to the proper speaker.

In general, a "Large" speaker is defined as a traditional full range speaker that includes a woofer and is capable of reproducing sounds below 100 Hz. For the purposes of this product, a "Small" speaker is one that is not capable of delivering sounds below 100 Hz. Most "satellite" type speakers fall into this category. Before setting the menu make note of the type of front, center and rear speakers that will be used. For further clarification of your speakers' type consult the speaker owner's manual and look on the "specifications" page to find the frequency range.

When you have the information on your speakers, set the four setting as follows;

1) Front Speakers in Setup Menu 1/3

This setting determines the frequency range of the front left/right speakers. Select Large or Small depending on the type of speaker you will be using. The factory default setting is "Small".

Large: Select this position if you are using full range speakers that are capable of reproducing sounds below 100 Hz. In this position, the output to the front left/right output jacks is full range.

Small: Select this position if you have small, frequency limited satellite type speakers that do not reproduce sounds below 100 Hz. Do not select this position if your system does not include Sub woofer.

In this position, low frequency sounds are routed to the **SUBWOOFER OUTPUT** jacks.

2) Surround Speakers in Setup Menu 1/3

This setting determines the frequency range of the rear surround speakers. Select Large, None or Small depending on the type of speakers you will be using. The factory default setting is "Small".

Large: Select this position if you are using traditional, large speakers that are capable of reproducing sounds below 100 Hz. In this position, the output to the audio feed to the surround output jacks is full range.

None: Select this position if you will not be using any rear channel/surround speakers.

In this position the full range surround audio that would otherwise be routed to the surround channels will be mixed in with the **FRONT LEFT** and **FRONT RIGHT** audio.

Small: Select this position if you have small, frequency limited satellite type speakers that do not reproduce sounds below 100 Hz.

In this position, low frequency sounds are routed to either the **SUBWOOFER OUTPUT** or the **FRONT LEFT** and **FRONT RIGHT** speakers depending on the setting of the **SUBWOOFER** speaker.

3) Center Speakers in Setup Menu 1/3

This setting determines the frequency range for the center channel speaker. Select Large, None or Small depending on the type of center channel speaker installed. The factory default setting is "Small".

Large: Select this position if the center channel speaker is a large, full range model capable of reproducing sounds below 100 Hz.

In this position, the out put to the audio feed to the Center Channel output jack is full range.

None: Select this position if you will not be using any center channel speakers.

In this position the full range signal audio that would otherwise be routed to the center channel will be mixed in with the **FRONT LEFT** and **FRONT RIGHT** audio.

Small: Select this position if you have small, frequency limited satellite type speakers that do not reproduce sounds below 100 Hz.

In this position, low frequency sounds are routed to either the **SUBWOOFER OUTPUT** or the **FRONT LEFT** and **FRONT RIGHT** speakers depending on the setting of the **SUBWOOFER** speaker.

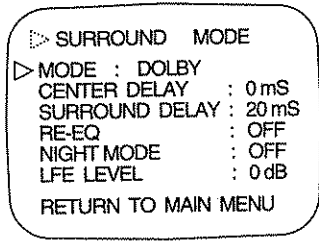
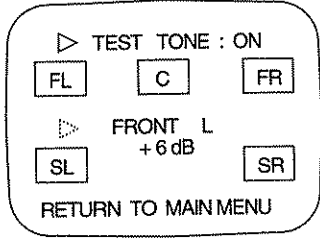
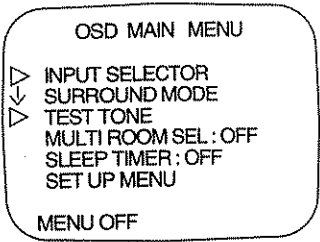
4) Subwoofer in Setup Menu 1/3

Set this setting to determine the routing of low frequency sounds for all channels. The factory default setting is "ON", to indicate that a subwoofer is present.

On: Select this position if the SR880mkII is connected to an amplifier or receiver equipped with a Subwoofer INPUT terminal, or if directly connected to a powered subwoofer.

Off: Select this position if a Subwoofer will not be used. In this position the low frequency sounds (below 100 Hz) will be routed to the **FRONT LEFT, RIGHT** terminals, depending on the setting of the speaker set up for those channels.

Note: Subwoofer cannot be set "Off" if the front speaker is set "Small".



7. Press cursor button ▲ or ▼ to move the cursor to "TEST TONE" and press the **OK** button.
 - You can use the cursor button ◀ or ▶ to move to the "TEST TONE MENU".
8. Press the **OK** button to turn on the TEST TONE. Note that a test signal noise will be heard from the FRONT LEFT CH speakers. Adjust the test signal noise output to the appropriate level by using the master volume control.
9. Press the **CH.SEL** (CH+, channel select button), each press changes the speaker channel generating the test tone in the following order:



After each press of the **CH.SEL** (CH+) button D6 on page 3 at AMP mode, adjust the level by using the **CH.LEVEL** ▲ and ▼ buttons D7, D8 on page 3 at AMP mode or cursor ◀ and ▶ buttons until the sound level from each speaker appears equal.

Note:
When either the **CENTER CH** or **SURROUND CH SET UP** set to **NONE** the test tone skips each channel. The test tone is not output to the subwoofer irrespective of ON or OFF selection.

10. When the balance between the volume levels of different speakers has been adjusted, stop the test tone generation by pressing the cursor button ▲ and ◀ or ▶ so that the cursor is set to other menu.
The volume levels of the speaker channels set above will be used in common for the **AUTO**, **DOLBY** and **DTS** surround modes.

11. Delay Time Setting

- ① On the MAIN MENU, move the arrow-shaped cursor to "SURROUND MODE" and press the **OK** button.
- ② Press cursor button ▼ to move the cursor to center or surround channel.
- ③ Select the desired delay time with cursor buttons ◀ and ▶.
- ④ Press the **OK** button or cursor button ▼ or ▲ to complete the setting.
Normally use 5 ms. Use 10 or 15 ms if you are much closer to the rear speakers than the front speakers.
In the **DOLBY** and **DTS** mode, the delay time is variable in the following sequence.



- ⑤ For more information about setting the delay time, please turn to Page 35.

Notes:

Once the delay time is set, it is stored automatically as a common setting with **DOLBY** and **DTS**. Unless it is set again, the same delay setting will be applied every time **DOLBY** and **DTS** is selected. Once this procedure for the set-up and calibration has been done, there should be no need to repeat it in daily use. A monthly check of channel levels is recommended; simply press the **TEST** button, followed by repeated pressing of the **CH.SEL** button to verify that all channels are operational and at the same level. Once done press the **TEST** button again to end the test.

12. **RE-EQ**
Switch the cinema RE-EQ to enable (ON) or disable (OFF) with ◀ or ▶ button.
13. **NIGHT MODE**
Switch the NIGHT MODE to enable (ON) or disable (OFF) with ◀ or ▶ button.
14. **LFE LEVEL**
Select the output level of the LFE signal include in the Dolby Digital or DTS signal:
The level is ordinarily set to 0 dB. The level is selectable 0 dB, -10 dB, -20 dB, -30 dB, -40 dB, -50 dB, -60 dB, -70 dB, -80 dB, -90 dB, -100 dB, -110 dB, -120 dB, -130 dB, -140 dB, -150 dB, -160 dB, -170 dB, -180 dB, -190 dB, -200 dB, -210 dB, -220 dB, -230 dB, -240 dB, -250 dB, -260 dB, -270 dB, -280 dB, -290 dB, -300 dB, -310 dB, -320 dB, -330 dB, -340 dB, -350 dB, -360 dB, -370 dB, -380 dB, -390 dB, -400 dB, -410 dB, -420 dB, -430 dB, -440 dB, -450 dB, -460 dB, -470 dB, -480 dB, -490 dB, -500 dB, -510 dB, -520 dB, -530 dB, -540 dB, -550 dB, -560 dB, -570 dB, -580 dB, -590 dB, -600 dB, -610 dB, -620 dB, -630 dB, -640 dB, -650 dB, -660 dB, -670 dB, -680 dB, -690 dB, -700 dB, -710 dB, -720 dB, -730 dB, -740 dB, -750 dB, -760 dB, -770 dB, -780 dB, -790 dB, -800 dB, -810 dB, -820 dB, -830 dB, -840 dB, -850 dB, -860 dB, -870 dB, -880 dB, -890 dB, -900 dB, -910 dB, -920 dB, -930 dB, -940 dB, -950 dB, -960 dB, -970 dB, -980 dB, -990 dB, -1000 dB.

3 CLONE

The RC-18SR has the ability to "replicate" itself, downloading all of its internal pre-programmed and user-programmed commands to another RC-18SR or RC2000MKII. This button is used when you wish to "teach" another RC-18SR or RC2000MKII all of the customized commands you've already programmed in this RC-18SR.

4 POWER ON and OFF

These two buttons are used to turn the main component's (amplifier or receiver) AC power on and off. We provide both ON and OFF commands so that your A/V system is remote compatible with external infrared controllers, such as in-wall key pads, etc.

5 SOURCE ON/OFF

This button is used to turn the AC power on and off to any of your A/V source components that have their own remote control turn-on and turn-off commands, such as TV, laser disc player, VCR, etc.

6 MACRO 1-4

Each of these 4 buttons can be programmed with a "string" of commands, called a macro, to initiate a sequence of remote codes to achieve a particular result. For example, a macro button could be programmed to turn on the main system power, then turn on a particular source component (such as a laser disc player), then turn on the TV set, set the TV to AUX video input, and then adjust the surround processor to the home theater surround decoding mode, then activate the laser disc player's PLAY function. This means that by pressing one macro button, you can achieve the same result as pushing up to 20 buttons in sequence.

7 DIRECT

With today's high performance A/V systems, it is not unusual for each component in your system to have dozens of specialized command functions. If we were to duplicate all of those commands for each component onto the RC-18SR key pad, we could easily exceed 300 buttons for an entire home theater system, which would result in either a huge key pad, or buttons of infinitesimal size. The DIRECT command buttons (4 on each side of the LCD display, 8 total) work with the PAGE buttons (4 pages for each source component) to provide up to 32 dedicated specialized functions for each of the 11 function input selectors. Each DIRECT function may also be provided with an alpha-numeric function indicator visible in the LCD display. You may even change the displayed name of each function to another name, if you wish.

8 PAGE

Used to select any 1 of the 4 pages of 8 functions for each DIRECT button, as explained above.

9 FUNCTION

Press one of these buttons once or twice to select a particular source component. For example, to set the amplifier or receiver to the laser disc input, press the LD button twice within 2 seconds. Along with the source selection, special functions may become available (the DIRECT keys), as well as activating the transport function keys, so that you can now directly operate the laser disc player from the RC-18SR. If you wish, you may even re-program the status indicators in the LCD window to reflect your own particular function name whenever that source (function) button is selected.

Here are the button names and their functions:

- LD** : Laser disc player
- TV** : Television
- VCR1** : Video cassette recorder
- DSS/VCR2** : Digital satellite decoder or second video cassette recorder
- AUX** : Can be used for an auxiliary source component
- TUNER** : AM/FM tuner, or AM/FM tuner section of a receiver
- CD** : Compact disc player or changer
- TAPE** : Audio tape deck, or digital audio recorder
- AMP** : Amplifier or receiver control functions
- DVD** : Digital video disc player
- CD-R/MD** : CD-Recorder or mini disc player

Note:

Press a function selector button only once to select the LD player, etc. Remember, when you press a function selector button only once, the RC-18SR will not send out a remote control code to instruct the amplifier or receiver to change to that corresponding input, but the RC-18SR keypad and DIRECT function commands will provide the selected component's specialized remote control codes. Press a function selector button twice within 2 seconds to change the function of the amplifier or receiver.

For example, if you press the LD function button twice within 2 seconds, the amplifier or receiver's input will immediately be switched to the laser disc input, and the keypad and DIRECT function commands for laser disc operation will be activated. Press the CD function button only once, the amplifier or receiver's input will not switch to the CD input, however the RC-18SR keypad and DIRECT function commands for compact disc operation will be activated.

We have provided 11 popular function command selector buttons, based upon the typical input selections available with most quality A/V amplifiers (or receivers) including popular Marantz models.

The function button DSS/VCR2 is a little different from the others, in that when you press this button, the RC-18SR will send out a command to the amplifier or receiver to switch to the DSS input, and then the RC-18SR keypad and DIRECT function commands will be configured for DSS (digital satellite system) control. We have included DSS commands within the RC-18SR's pre-programmed memory for RCA brand DSS equipment. If you have another brand of DSS, you can "teach" the RC-18SR with the remote control codes of your equipment.

10 LCD window

The LCD window provides a wealth of information, including function selection name, DIRECT function names, learning and programming steps, as well as useful indicators for battery status, and other helpful indicators. The LCD window features back-lighting, making it easy to view when the room light is very low.

11 Volume up (+) and down (-)

Used to raise and lower the main system volume level. Note that these buttons are clearly the largest size, and are conveniently located and contoured for easy operation, even in low lighting.

12 Ten keypad

Like a telephone key pad, the ten number buttons (0-9) are used to enter numeric digits. They are useful for finding a specific track on a CD, or to tune a pre-set radio station, etc. The "0" button performs the same operation as the "CLEAR" button on the SR880mkII main unit.

13 MEMO

This button is used to program your CD player's track memory, or to enter a VCR recording program, and can be used to provide the MEMO function included with other components in your system.

14 CLEAR

This button is used to cancel certain memory or programming operations. It operates differently from the "CLEAR" button on the SR880mkII main unit.

15 Transport control functions

These buttons provide transport commands for your source components, such as laser disc player, CD player, VCR, audio tape deck, etc., and are dependent on the function source selected. For example, when the RC-18SR is set to LD (laser disc) mode, the transport keys will operate the laser disc player's PLAY, STOP, PAUSE, FAST FORWARD, FAST REVERSE, NEXT and PREVIOUS track functions. Change the RC-18SR function selector to VCR, and these keys will then operate the VCR's transport command functions, etc.

RC-18SR BASIC OPERATION

USE Mode:

As supplied from the factory, the RC-18SR is already permanently programmed with many pre-set commands common to Marantz and Philips equipment, as well as other brands of components that utilize the Philips RC-5 remote control language.

1. If the RC-18SR is in another mode (LEARN, etc.), press the operation mode button [1] with the tip of a paper clip, until the USE indication appears.
2. Press one of the function buttons [9], to change to another component's commands such as LD (refer to Figure 1).

Figure 1



3. "LD" will be indicated within the LCD window, and the function codes will be set to operate the laser disc player. Press the function button again within 2 seconds and the amplifier or receiver's input changes to laser disc.
4. Now you can operate the laser disc player. When a button is pressed, the symbol indicates that a remote code is being transmitted. Note that for a particular source component, not every button may have a command programmed for it. In that case, nothing would be indicated.
5. Using the **DIRECT** buttons D-1 through D-8 and PAGEs 1 through 4, up to 32 different specialized commands are available for each FUNCTION, up to a total of 352 specialized commands (32 direct commands times 11 functions). Note that for any particular function selector, not all 32 direct commands may be provided and/or named as supplied from the factory.
6. For example, the RC-18SR is supplied from the factory with 3 pages of DIRECT commands for the LD (laser disc) function. To change pages, press the page direction ◀ or ▶ buttons [8]:

Page 1: MODE: Side A/B laser disc playback functions

Page 2: L D: Specialized laser disc functions

Page 3: R E C: Recording from laser disc to VCR functions

At this point, you may wish to put this guide aside temporarily, and begin using the RC-18SR with your A/V system. If you already have any Marantz components, or Philips and/or other brands of components that use the RC-5 remote control language, you can begin controlling those components with the RC-18SR right away. Take some time to become comfortable with the operation of the RC-18SR. We think that its intuitive key pad layout and easy to read LCD window will permit you to quickly become familiar with its operation.

If you do not have any Marantz or other brands of components that use the Philips RC-5 remote control language, then you may wish to proceed to the next section, which will describe the steps necessary to "teach" your RC-18SR remote codes from other components you may have in your system.

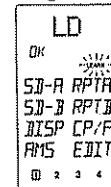
LEARN mode:

The RC-18SR has the ability to learn remote codes for just about any component in your A/V system. If the original component was supplied with an infrared remote control, its commands can be learned by the RC-18SR. If you have another brand of laser disc player, for example, you can program the RC-18SR with its codes. For example, we'll show you how to "teach" the RC-18SR commands from another brand of laser disc player.

1. Using a sharp point (such as the tip of a paper clip), press the operation **MODE** button [1]. Each time you press the button, the mode within the LCD display, the LEARN indicator will begin blinking.
2. Place the laser disc player's supplied infrared remote controller so that its transmitter window (usually at the top) is facing the receiving infrared sensor window [2] of the RC-18SR (at the bottom), about 5 cm (2 inches) apart.

3. Press the LD function button on the RC-18SR.
4. Press the play button [5] on the RC-18SR.
5. Press and hold the corresponding **PLAY** button on the laser disc player's remote transmitter until the "OK" indicator appears in the RC-18SR LCD window (see Figure 2) or the beep sounds emit (if the beep sound function is set).

Figure 2



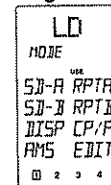
If the "AGAIN" indicator appears in the RC-18SR LCD window, it means that for some reason the command was not properly learned. Repeat steps 3, 4 and 5 above.

In the unlikely event that an infrared command cannot be learned by the RC-18SR, "NG" (no good) will appear in the LCD window, meaning that the command is not "learnable". The RC-18SR has been tested for compatibility with a very wide range of infrared remote control frequencies and data word lengths, but in some very rare instances, it may not be possible to learn a particular remote control command.

Continue to "teach" the RC-18SR the rest of the source transmitter's transport function commands, such as **STOP, PAUSE, NEXT, PREVIOUS, FAST FORWARD** and **REWIND**, by repeating steps 3, 4 and 5 above.

6. Proceed to learn the numeric "10 keys" from the source transmitter to the RC-18SR's 10 key numeric pad [12] by repeating steps 3, 4 and 5 above.
7. For each additional function, such as TV, VCR, etc., repeat steps 3, 4 and 5 above. During the LEARN operation, if any button is not pressed within 1 minute, the RC-18SR will revert back to the previous operating mode.
 - To make a function button learn a code, switch the input function then press the button again.
8. After memorizing all desired remote codes, press the operation mode button [1] with the tip of a paper clip, and select the USE mode. The LCD display window will continue to display the USE indicator, and all of the newly memorized codes will be available (see Figure 3).

Figure 3



For any button for which a new code was not learned, the factory programmed RC-5 code will still transmit as usual.

Note:

POWER ON/OFF [4] code can be learned regardless of the function button selection:

Programming the DIRECT mode buttons [7]:

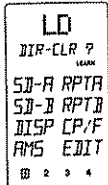
The following example will show how to memorize the SIDE-A function command of another brand of laser disc player into the D1 direct button.

1. Using a sharp point (such as the tip of a paper clip), press the operation **MODE** button [1] to switch the RC-18SR to LEARN mode.
2. Place the laser disc player's supplied infrared remote controller so that its transmitter window is facing the receiving infrared sensor window [2] of the RC-18SR about 5 cm (2 inches) apart.
3. Press the **LD** function button [9] on the RC-18SR.
4. Using the direct function page keys ◀ and ▶ [8], set the direct function to Page 1. Press the **D-1** button [7] on the RC-18SR.

Erasing the memory assigned to a DIRECT buttons:

All codes and names which were previously memorized for each of the functions (such as TV, LD, VCR, etc.) in pages can be erased. Press and hold the **CLEAR** button [14] and press the < or > button [8] 2 times. You will see the "DIR- CLR?" (direct button - clear?) indication in the LCD window (see Figure 5). If you wish to go ahead and clear all of the memorized codes for that **DIRECT** button (8 buttons x 4), press the **OK** button

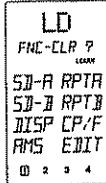
Figure 5



Erasing the memory assigned to each function command set:

All codes and names which were previously memorized for each of the functions (such as TV, LD, VCR, etc.) can be erased. Press and hold the **CLEAR** button [14], and press the function button that you want to erase 2 times. You will see the "FNC - CLR?" (function - clear?) indication in the LCD window (see Figure 6).

Figure 6



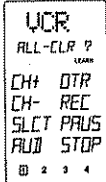
If you wish to go ahead and clear all of the memorized codes for that function button, press the **OK** button within the cursor keys [16]. After clearing the memory contents for that function, the RC-18SR will restore any factory programmed RC-5 codes for the function, if any, or will simply be empty.

If you want to cancel the memory clear operation, do not press the "OK" button, but instead simply touch any other button. When you clear all the commands associated with a function button, all of the learned direct function commands (D-1 through D-8, pages 1 through 4) and control buttons, ten keypad, etc are cleared as well.

Complete erasure:

While holding the **CLEAR** button [14] depressed, press both of the **ON** and **OFF POWER** buttons [4] simultaneously; "ALL-CLR?" is displayed on the LCD window (see Figure 7).

Figure 7



If you wish to finalize the complete erasure process, press the **OK** button within the cursor keys [16]. If you do not wish to proceed with the complete erasure process, simply press any key other than **OK**. Remember, the RC-5 codes as supplied from the factory cannot be erased from memory, but they can be replaced with different codes as you wish.

- The all-clear operation takes about 15 seconds after the **OK** button is pressed.
- By now, you have learned how to memorize codes from other brands of components, including changing the various function, status, and direct function names.

Before continuing on to the more advanced RC-18SR programming techniques, you may wish to continue "teaching" the RC-18SR remote control with any or all other commands for other components in your system. When you feel you've transferred as many different commands from other components into the RC-18SR as you'd like, and possibly changed some or all of their names as well; then feel free to proceed to the next section.

ADVANCED PROGRAMMING TECHNIQUES

Macro mode:

The word "macro" is used to describe a series of specific steps carried out in sequence. For example, a word processing program can use macros to carry out common repetitive typing tasks. During the day to day operation of an A/V system, you might often find yourself pressing the same combination of remote control buttons.

The RC-18SR features the ability to "learn" a sequence of infrared commands, and "assign" that sequence to a single button, called a **MACRO** button [6]. Then, when you want to achieve a specific result, you can activate a macro button to begin sending out a series of commands. For example, suppose you wish to activate your A/V system, and watch a movie on laser disc. A single macro button could send out the following commands in this suggested sequence:

- Turn the main amp power on, then turn the TV power on, then switch the TV to the AUX video input, then change the amp to the laser disc (LD) input, then turn the LD player power on, then activate the LD play command, then set the amp surround sound mode to Dolby Pro Logic.

The above 7 step sequence can be programmed into a single macro button, and can be used anytime you want to watch a LD movie. Other macro functions could be used for CD listening, or any other sequence of steps that you regularly perform while controlling your A/V system.

Macro commands are available when the RC-18SR is set to USE mode.

To program a macro, first identify which commands you wish to memorize, and note if any commands must be in a specific order (for example, before you can activate an amplifier's surround mode, the amp must first be turned on).

1. Press the **MACRO** [2] operation mode button with the tip of a paper clip. Within the LCD window, the MACRO indication appears, then the LEARN indicator starts blinking (see Figure 8).

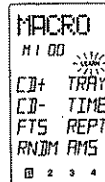
Figure 8



If a macro was previously programmed, one or more of the numeric indicators at the bottom of the LCD window will appear with a box around it.

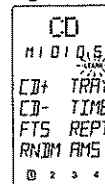
2. Press macro button 1 [6] to begin memorizing the various codes. In the LCD display window the indicator "M1-00" appears in the status line (see Figure 9).

Figure 9



The "M1-00" indication signifies Macro number 1, no steps yet programmed. As each macro step is programmed, the "00" indicator will advance by one digit-"01", "02", etc. After the first macro step is programmed, two additional digits (with a decimal in between) become visible at the end of the status line, showing the timing value for each step (see Figure 10).

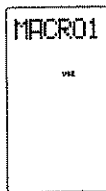
Figure 10



Using the macro function(s) you have programmed:

1. Press the desired **MACRO** [6] button. The corresponding macro number will appear at the bottom of the display window, OR if a macro has been programmed under a function button, press and hold that function button for 3 seconds. The LCD display window will indicate the macro number in the LCD window (see Figure 12), or if a macro is programmed under a function key, the status line will display the macro under function buttons as follows:

Figure 12



Macro under function button:	Status line shows:
LD	"LD" as the first 2 characters in the line
TV	"TV" as the first 2 characters in the line
VCR1	"VC" as the first 2 characters in the line
DSS/VCR2	"DS" as the first 2 characters in the line
AUX	"AX" as the first 2 characters in the line
TUNER	"TU" as the first 2 characters in the line
CD	"CD" as the first 2 characters in the line
TAPE	"TP" as the first 2 characters in the line
DVD	"DV" as the first 2 characters in the line
CD-R/MD	"CR" or "MD" as the first 2 characters in the line
AMP	"AP" as the first 2 characters in the line

2. The macro sequence will begin, and the remote control codes will be sent from the RC-18SR and the display will show the names of the transmitted codes.
3. When the macro transmit sequence has ended, the RC-18SR will return to the same mode as before the macro function was initiated.

Now that we've explained how to program a macro, perhaps the following suggested example can help you become more familiar with the process:

(to switch the RC-18SR to CD, then initiate CD playback, and go to track 3 on the CD)

1. Press the **MACRO** [2] operation mode button with the tip of a paper clip.
2. Press one of the **MACRO** buttons (1 through 4).
3. Press the following buttons:
 - CD function selector, then numeric key pad 3, then transport control key pad PLAY key. (see Figures 13, 14, and 15)

Figure 13

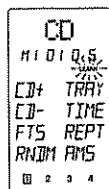
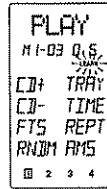


Figure 14



Figure 15



Note that this sequence will operate a Marantz CD player (or any other CD player equipped with the RC-5 remote control language). If you have another brand of CD player, you may wish to check its owner's manual to see if direct track selection is possible via remote, or if the macro sequence needs to be adjusted according to the programming steps required by your CD player.

4. Press the **MACRO** [2] button with the tip of a paper clip. The RC-18SR will revert to the normal mode (see Figure 16).

Figure 16



5. To execute the new macro sequence, press the appropriate **MACRO** button (1 through 4) that you chose at the beginning of the above programming sequence. (see Figures 17, 18, and 19)

Figure 17

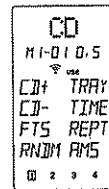


Figure 18

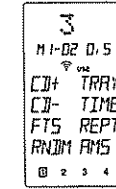


Figure 19



Note:

If you would like to cancel the MACRO function, press the **STOP** [6] button.

Now, we'll show you another macro programming example, with a more sophisticated sequence:

(activate the main amplifier's power on, switch the source to laser disc, switch the amplifier's surround mode to PRO LOGIC or Dolby Digital, switch on the television, switch to the television's AUX video input, power on the laser disc player, and begin laser disc playback).

1. Press the **MACRO** [2] operation mode button with the tip of a paper clip.
2. Press one of the **MACRO** buttons (1 through 4).
3. Press the following buttons: POWER ON, LD, AMP, direct function D-2 (Dolby mode) on page 1, TV*, SOURCE ON, direct function D-3 (VIDEO input selector) on page 1, LD*, SOURCE ON, and PLAY.
4. Press the **MACRO** [2] button with the tip of a paper clip. The RC-18SR will revert to the normal mode.
5. To execute the new macro sequence, press the appropriate **MACRO** button (1 through 4) that you chose at the beginning of the above programming sequence.
 - Note that the function selector buttons TV and LD marked with an asterisk (*) in this macro sequence do not actually send out infrared codes, but simply change over the RC-18SR's programmed memory code banks for those respective functions.

If you would like to clear the MACRO programmed sequence(s), press and hold the **CLEAR** [14] button and simultaneously press the appropriate **MACRO** button (1 through 4) or function button. "MR1-CLR?" (macro 1-clear?) appears in the LCD window. Release the buttons, and then press the **OK** button (within the cursor control buttons), and the macro is erased. If you do not wish to erase the macro, simply press any other button (but not the **OK** button).

CLONE mode:

Duplicating the memory contents of one RC-18SR to another RC-18SR or RC2000MKII.

For a complete home theater system, with numerous components from many different manufacturers, you may find that you have stored dozens, even hundreds of different codes, along with specialized names, macros, etc. We have provided a very quick and simple procedure that allows you to download the entire customized memory contents of one RC-18SR remote control into another RC-18SR or RC2000MKII.

AUX	2 VCD/PHI 1 (for REST only)	1 CD+ 2 CD- 3 OSD 4 SCAN 5 A/B 6 SLOW 7 8	selects disc up selects disc down OSD on/off selects time search repeat A to B slow forward
	3 VCD/PHI 2 (for REST only)	1 PBC 2 KARA 3 IND+ 4 IND- 5 SEL 6 RTN 7 NEXT 8 PREV	selects play back control selects karaoke program selects video index up selects video index down selects in PBC returns in PBC next previous
	4 VCD/PHI 3 (for REST only)	1 CD+ 2 SHUT 3 OVEW 4 RESM 5 CHAN 6 FADR 7 8	selects disc up selects shutter function selects digest function selects last paly function selects channel selects MPX/vocal fader
MD (for REST only)	1 MODE 1	1 MD-A 2 MD-B 3 RPT 4 DISP 5 EJECT 6 AMS 7 RNDM 8 LP	select MD A select MD B select repeat modes select display modes eject automatic music scan randam display selects SP/LP mode
	2 EDIT	1 EDIT 2 CHAR 3 DEL 4 ENT 5 AMRK 6 SYNC 7 PROG 8	selects edit mode selects character mode selects delete selects enter selects auto marker syncro REC selects program mode
	3 REC	1 MD 2 RECP 3 PAUS 4 STOP 5 TAPE 6 REC 7 PAUS 8 STOP	command MD (no output) REC-pause pause stop command tape (no output) record pause stop
CD-R (for USA only)	1 REC	1 INPT 2 INCR 3 SYNC	select input source increments track number activates SYNCRO. recording

CD-R	1 REC	4 REC 5 TRAY 6 DISP 7 FINL 8 BLNK	records pause opens/closes tray dispaly mode finalize (writes TOC) records blank
	2 MODE	1 PROG 2 REPT 3 FTS 4 FAST 5 VOL+ 6 VOL- 7 IDX+ 8 IDX-	activates program mode activates repeat mode activates FTS mode searches FAST increases volume decreases volume increases index decreases index

TAPE	1 MODE	2 TP-B 3 DIR 4 TIME 5 TRAY 6 AMS 7 REC 8 PAUS	selects tape deck B auto-reverse direction time display tray open/close automatic music scan record pause
	DVD	1 MODE1 2 MODE2 3 KARAOKE 4 REC	<p>1 ANGL 2 TITL 3 SUBT 4 MENU 5 OSD 6 AUD 7 SET 8 RTN</p> <p>selects angle selects title menu selects sub title selects main menu activates on screen display selects audio selects setup menu returns to menu</p> <p>1 SLOW 2 LPLY 3 RNDM 4 RPT 5 A/B 6 +10 7 T/C 8 ZOOM</p> <p>slow forward last play function shuffle play function repeat modes repeat A to B digit entry +10 title and chapter zoom mode on/off</p> <p>1 ONOF 2 ONCE 3 MELO 4 VOCL 5 MODE 6 3-D 7 VSLF 8 VSLR</p> <p>karaoke on/off once more play again melody play vocal support play karaoke modes surround processor on/off very slow forward very slow reverse</p> <p>1 VCR1 2 REC 3 PAUS 4 STOP 5 MD 6 REC 7 PAUS 8 STOP</p> <p>selects VCR1 control (no output) record pause stop selects MD control (no output) record pause stop</p>
LD	1 MODE	1 SD-A 2 SD-B 3 DISP 4 AMS 5 RPTA 6 RPTB 7 CP/F 8 EDIT	side A side B display on/off automatic music scan Repeat A start point Repeat B stop point selects chapter or flame activate tape edit function
	2 LD	1 MSP+ 2 MSP- 3 FRM+ 4 FRM-	increases CAV multi-speed decreases CAV multi-speed frame advance frame reverse

LD	2 LD	5 MS-F 6 MS-R 7 AUD 8 D/CX	CAV multi-speed forward direction CAV multi-speed reverse direction Stereo, left only, right only channel digital audio, analog audio, CX NR
	3 REC	1 VCR1 2 REC 3 PAUS 4 STOP 5 VCR2 6 REC 7 PAUS 8 STOP	commands for VCR 1 control (NO output) record pause stop commands for VCR 2 control (NO output) record pause stop
TV	4 VCD (for REST only)	1 PBC 2 KARA 3 IDX+ 4 IDX- 5 SEL 6 RTN 7 NEXT 8 PREV	selects play back control selects karaoke index up index down play or select audio stop or select return next track previous track
	1 MODE (for USA only)	1 A/CH 2 100S 3 VID 4 INFO 5 VOL+ 6 VOL- 7 MUTE 8 OSD	alternate channel 100's video information increases TV volume decreases TV volume mute sound on/off activates on screen display
LD	2 MODE/MENU (for USA only)	1 S-PI 2 S-SO 3 S-CH 4 5 MENU 6 ADV 7 STAT 8	smart picture smart sound smart channel menu advance status
	3 PIP1 (for USA only)	1 PIP 2 SWAP 3 FREZ 4 POSI 5 SIZE 6 STRO 7 PREV 8 RPLY	PIP on/off PIP swap PIP freeze PIP position PIP size PIP strobe PIP preview PIP instant replay
LD	4 PIP2/REC (for USA only)	1 CLR 2 SLOW 3 4 5 VCR1	PIP clear PIP slow motion

OTHER FUNCTIONS

The Marantz RC-18SR includes the ability to tailor the lighting features according to your preferences. As supplied from the factory, the RC-18SR has lighting features (and lighting timings):

The lighting time is set at the factory for a period of 2 seconds which you can change if you prefer a different lighting time. If you wish to maximize battery life, you can de-activate the lighting function entirely.

There is also a lighting button **[20]**, so that in any light situation, you can activate the backlighting feature. The lighting time in this case is set at the factory for a period of 2 seconds, which you can also change. If you wish to conserve battery power, you can deactivate the lighting function entirely.

RC-5 Shipped destination:

As mentioned earlier in this guide, the RC-18SR is provided with many commands from the factory with infrared codes conforming to the Philips RC-5 remote control language (used by Marantz, Philips, and some other companies). We have provided two different RC-5 command code sets in the RC-18SR, according to the local requirements of different markets and the different types of remote control codes used in those markets. One code set is for North American (USA) users, while the other code set is for REST users. Your RC-18SR has been set at the factory for USA (United States) codes. It can be easily changed, if you wish.

Set-Up:

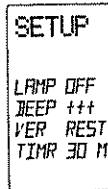
To change the lighting time(s), or the destination setting, please follow these steps:

- Select the SETUP mode, by holding the **MEMO** button **[13]** and at the same time pressing the **OK** button within the cursor keys **[16]**. (see Figures 26 and 27).

Figure 26



Figure 27



LAMP - Lighting function ON or OFF and TIME

Press the D-5 direct function button, and you can then set the time (in seconds) directly using the numeric key pad **[12]** buttons. A time figure consisting of only 1 digit can be input by pressing the figure then waiting for 2 seconds or input "0" before entering a desired digit. You can set time in the range from 0 up to 60 seconds (More time would use up more battery life than fewer seconds). "2" is set when shipped from the factory. To set "OFF" input "0".

BEEP sound

The beep sounds when any buttons are pressed.

The beep sound level can be set by pressing the **D-6** button. The display indicates "+" indication and the beeps are sounded by pressing the **D-6** button. The "+" indication is followed, by another the "+" indication as the beep sound is increased; + → ++ → +++ → ++++

When the "++++" appears, this is the maximum. If the **D-6** button is pressed once more, it will reset to OFF.

"#" is indicated in the LCD window when the beep sound is set.

Note:

The beep sound is different between the function buttons and other buttons.

VER

Press the **D-7** direct function button to switch between USA and REST.

If you need to change this function, we recommend that you make the change before you begin "learning" any new infrared codes for other brands of equipment in your system.

Note:

The name of the **DIRECT** buttons will be erased if the USA/REST

Battery life:

- Battery life will vary from user to user, if the remote is used constantly or only occasionally, including the amount of backlighting usage. We feel that you can expect the batteries to last about 4 months, based upon 15 remote control operations per day (every day), and 3 lighting operations per day (every day). If the remote is used more often, and if the lighting times are set to longer times than the factory settings, then the battery life may be shortened somewhat.

- As explained earlier in the guide, the RC-18SR's sophisticated battery conservation system will advise you long before the battery power is fully exhausted, and will further warn you to replace the batteries by simply becoming inoperative at a certain point. The customized memory contents and user-adjusted settings will still be retained in memory. When you install a fresh set of batteries, the memory contents are protected always, because the RC-18SR uses the non-volatile memory. Alkaline (and the newer lithium) types are recommended for longest battery life.

As you become more familiar over time with how you are using the RC-18SR in your A/V system, you may wish to consider reducing the lighting time(s) if possible, as this can help to extend the battery life.

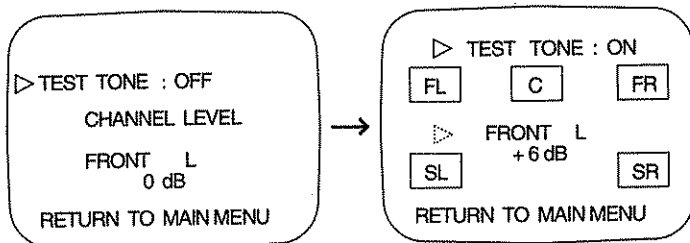
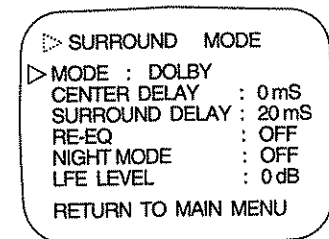
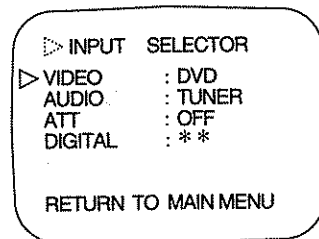
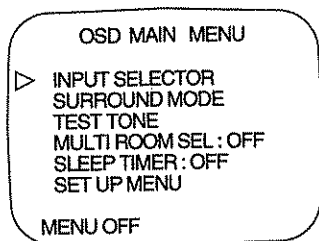
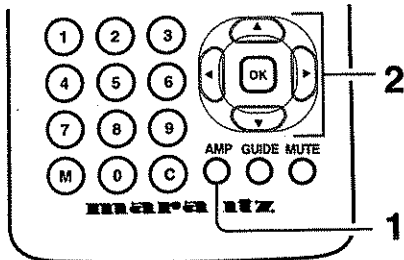
Adjustment of the LCD contrast

- The LCD contrast can be adjusted as follows;

Enter SETUP mode of the RC-18SR by pressing the MEMO and OK button. Press the VOL+ to increase the LCD contrast. Press the VOL - to decrease the LCD contrast. Press the OK button to end this setting and return the original operation.

2. On-screen menu system

The SR880mkII incorporates an on-screen menu system, which makes various operations possible by using the cursor and **OK** buttons on the remote handset. The settings made with these buttons are also shown in the on-screen display.



Note:

While "OSD MENU" is selected, the back screen color will change depending on the selected menu. However, the back screen is always displayed in black if the S-VIDEO jack is used.

1. Press the **AMP** button.
2. Press any one of the cursor buttons (**▲**, **▼**, **▶**, **◀** and **OK** buttons) to display "MAIN MENU" of the on-screen display menu. Arrow-shaped cursor "▶" can be moved up and down with cursor buttons **▲** and **▼**.
When selecting the input source, press the **OK** button with the display as shown on the left.

2. INPUT SELECTOR

- VIDEO:** Select the video source with the **◀** or **▶** button.
AUDIO: Can select the audio source with the **◀** or **▶** button when the digital source is selected.
ATT ON/OFF: Select ATT. ON/OFF with the **◀** or **▶** button.
DIGITAL: Select the digital source with the **◀** or **▶** button. To determine each source, display the desired source and press the **OK** button or the **▲** or **▼** button.
 After the above, press the **▼** or **▲** button to move "▶" to "RETURN TO MAIN MENU" and press the **OK** button to return to "MAIN MENU".

3. SURROUND MODE

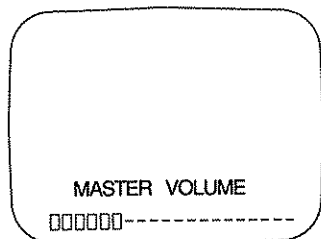
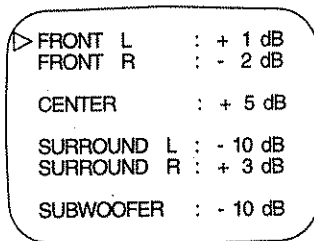
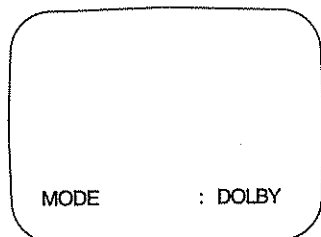
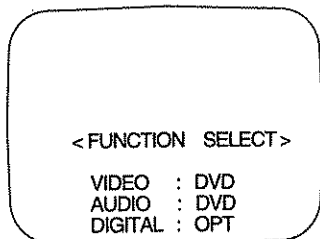
- MODE:** Select the surround mode with the **◀** or **▶** button.
DELAY TIME: (CENTER, SURROUND) Select the delay time with the **◀** or **▶** button.
Note: The DELAY CONTROL is available only when the AUTO, DOLBY or DTS mode is selected. The SURROUND CH DELAY has a time difference of 15ms between Dolby Digital (AC-3) and PRO LOGIC modes. This function is offset when PRO LOGIC is decoded.

4. TEST TONE

- When "TEST TONE" is selected on "OSD MAIN MENU" and press the **OK** button, the test tone starts from the front L-CH speaker. Press the **OK** button to select the test tone channels. Adjust the level of test tone from each channel with the **LVL+**, **LVL-** or **◀/▶** buttons of the RC-18SR. The current volume level is shown at the center of the display.
Note: The test tone can be generated only when the surround mode is AUTO, DOLBY or DTS. The test tone is not output to the subwoofer irrespective of ON or OFF selection.

3. Other On Screen Information

When a button is pressed while the on-screen function is activated by the Main unit or remote, the information associated with the button is displayed on the TV screen.
Disappears automatically in about 5 seconds after the button is pressed.



1. When a function selector button is pressed

VIDEO: Displays the current video source. When **DSS/TV, LD, DVD, VCR** or **AUX** is selected with the function selector, both **AUDIO** and **VIDEO** shows the same name.

AUDIO: Displays the current audio source.

DIGITAL: Displays the current digital source.

Note:

The name of the source to played back from the Speaker is displayed in void characters.

2. When a button related to SURROUND mode is pressed

MODE: Displays the current Surround mode as follows:
AUTO, DOLBY, DTS CINEMA, DTS MUSIC, HALL MATRIX, MOVIE, STEREO.

3. When the CH+, a LVL+ or LVL- button is pressed:

Every time the **CH+** button is pressed, the cursor of the channel is moved in order of **FRONT L → FRONT R → CENTER.....** When one of the **LVL+** or **LVL-** buttons is pressed while a channel name is displayed with cursor, the level display varies.

Only the usable channels which are determined depending on the **SURROUND** mode, **SPEAKER SETTING** is displayed.

4. Displayed when the MASTER volume is varied or a button of the remote handset is pressed:

The box display changes to "□" at 0 dB.

Multi Room Selector

The Multi Room Selector is a function which allows you to listen to the same or a different source in a room other than the room in which the SR880mkII is located. To use this function, multi room remote control unit and remote control signal receiver available from your Marantz dealer are necessary. The operations possible with the multi room function are explained briefly below. For details, refer to the instruction manual supplied with the multi room remote control unit and receiver.

1. Press the **MULTI ROOM** button ⑥. The unit enters multi room mode and "MULTI" lights on the display.
(Multi room mode can be selected even when the SR880mkII **POWER** switch ① is set OFF (STANDBY) from the multi room with remote control.)

Immediately after pressing the **MULTI ROOM** button ⑥ ON, the source can be selected and the output level can be set by following the displayed menus.

- 1) Press the **MULTI ROOM** button ⑥, the display indicates "SEL. SOURCE" and flashing the MULTI indicator for about 10 seconds. In this time, you can select the function by pressing the function button (FM/AM, CD, LD, etc)
- 2) After above, the display indicates "MULTI VOL" "VOLUME xx dB" for about 5 seconds. In this time, you can set the volume level of the multi room.

Caution:

If the main room is active (not standby mode), you cannot select the band except the band of the main room. For example; if the FM band is selected in the main room, you cannot select the AM band in the multi room.

The operating procedure for this is the same as the Multi-room operations using the remote handset.

2. In multi room mode, the multi room remote control unit can be used in the multi room to operate the following functions.
You can select a tuner preset channel and tuning up or down, or PLAY PAUSE, FF, REW or STOP a CD player or tape deck connected to the SR880mkII. When operating the tuner, use the **PRESET ▲UP** and **▼DOWN** buttons ⑦ to select from CH1 to CH50.

Note:

If the tuner is selected, one or more radio stations must be memorized in the preset channels.

Multi Room Selector Operation

1. Press the SR880mkII's **MULTI ROOM** button ⑥ or press the multi room remote control unit's **MULTI ROOM** button, or select the desired source with the selector from the MULTI ROOM. Any of these operations will put the SR880mkII into multi room mode and "MULTI" will light in the display.
2. Press the multi room remote control unit's **VOL.UP** button to set the desired sound volume.

Note:

If the Multi-room volume has been set to "FIXED" with "MULTI ROOM VOLUME." in "SETUP MENU 3/3", it is not possible to adjust the volume level from the other room.

To listen to a CD in the multi room

This procedure lets you operate a compatible Marantz CD player connected to the SR880mkII from the multi room.

1. Select CD on the multi room remote control unit.
 2. Press CD PLAY on the multi room remote control unit.
 3. Press the VOL.UP button on the multi room remote control unit to set an appropriate volume level.
- A compatible cassette deck can be operated in the same manner.

Note:

When using the multi room function, make sure the SR880mkII's **MULTI ROOM remote control jack** and the multi room remote control receiver are connected by co-axial cable terminated with RCA plugs.

- Always be sure to turn the power off after using the multi room function.

When the MULTI-ROOM FUNCTION is operative, POWER to the SR880mkII in the MAIN-ROOM is turned ON. When the MULTI-ROOM function is not being used (or is finished being used) turn MULTI-ROOM OFF. POWER to the SR880mkII is also turned OFF.

GENERAL MALFUNCTION

If the equipment malfunctions, this may be because an electrostatic discharge or AC line interference has corrupted the information in the equipment memory circuits. Therefore:

- disconnect the plug from the AC line supply
- after waiting at least three minutes, reconnect the plug to the AC line supply
- re-attempt to operate the equipment

ERROR MESSAGES

When the display indicates some error messages (e.g. ERROR **), unplug the power cable immediately. Contact your dealer, nearest Marantz distributor or the Marantz service center in your area.

HOW TO RESET THE UNIT

Should the operation or display seem to be abnormal, reset the unit with the following procedure.

On the main unit is turned on, press and hold the MEMO, CLEAR and TUNING UP buttons simultaneously.

Remember that the procedure will reset the settings of the function selector, Surround mode, delay time, TUNER PRESET etc., to their initial settings.

Memory backup

- In case a power outage occurs or the power cord is accidentally unplugged, the SR880mkII is equipped with a backup function to prevent memory data such as the preset memory from being erased. The memory functions are backed up for up to about one week.