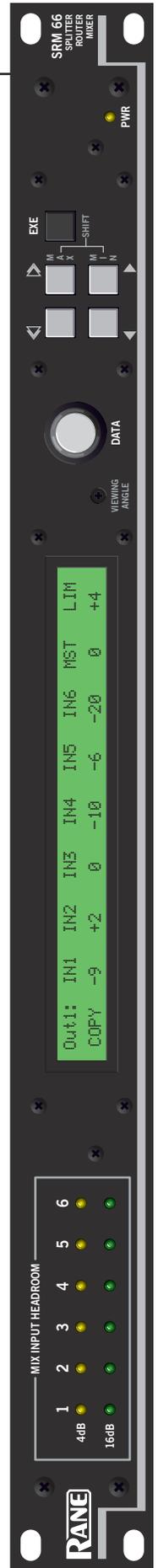




SRM 66

SPLITTER / ROUTER / MIXER



IMPORTANT SAFETY INSTRUCTIONS

For the continued safety of yourself and others we recommend that you read the following safety and installation instructions. Keep this document in a safe location for future reference. Please heed all warnings and follow all instructions.

Do **not** use this equipment in a location where it might become wet. Clean only with a damp cloth.

This equipment may be installed in an industry standard equipment rack. We recommend that all mounting holes be used, providing the best physical support. The equipment may be used as a table top device, although stacking of the equipment is dangerous and not recommended.

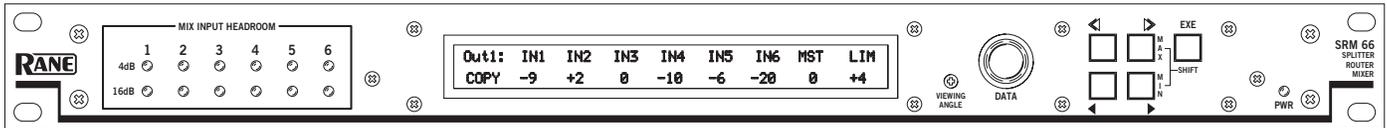
Do not directly block any of the ventilation openings. If rackmounting, please provide adequate ventilation. Equipment may be located directly above or below this unit, but note that some equipment (like large power amplifiers) may cause an unacceptable amount of hum or may generate too much heat and degrade the performance of this equipment.

Protect the power cord and plug from damage caused by being walked on or pinched. Protect the line cord, where it exits the unit, from excessive strain. Only use attachments and accessories specified by Rane.

Unplug this equipment during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug damage, spilled liquid, fallen objects into an opened chassis, exposure to rain or moisture, a dropped unit, or abnormal operation.





Quick Start

Before complaining about having to install the **SRM 66** in the rack *twice* (because you forgot to set the internal highpass filters ahead of time), take note that the very first (non-joke) line in this manual is: *Before installing the SRM 66 in a rack, be sure the internally switchable 80 Hertz highpass filters are set as desired. They are shipped with the filters in the OUT (disabled) position. (See the bottom of page Manual-2 to enable these filters.)* If you were smart enough to read this much of the manual, this paragraph may already have saved you a few minutes of your life – you’re welcome. If you’ve learned the hard way, hopefully you’ve learned an important lesson – read at least the first line in the manual first.

Make all connections with the power and amplifiers *off*. The **SRM 66** is fully balanced and equipped with removable 5-position Euroblock connectors. Inputs and Outputs are arranged on Euroblocks in pairs, i.e., 1&2, 3&4, 5&6.

Be sure the **FP LOCK** switch (on rear) is in the *out* position to enable programming from the front panel.

Apply power so the **PWR** LED lights and LCD screen glows with the **SRM 66** welcome marquee. During initialization, the startup muting circuit immediately starts counting down from 40 in the Limiter Gain Reduction area of the display. Adjust the **VIEWING ANGLE** with a miniature screwdriver if necessary.

With signal applied to the Inputs, watch the **MIX INPUT HEADROOM** indicators. These verify correct setting of the Output of the previous device and the rear panel Input **GAIN** switches. Adjust so that **4 dB** lights during peaks.

Navigating the LCD Edit pages is simple. The top buttons marked << and >> are the left/right Page scroll buttons. These navigate to Output pages 1 through 6, the assign *Outputs to Output Group* page, the assign *Remote to Group* page, the assign *Group to Master Remote* page, the *Group Levels* page, and the *Memory* page.

The bottom buttons marked < and > are the left/right cursor buttons. These select the (underlined) parameter to edit.

Rotating the **DATA** knob changes the parameter setting.

Let’s start by navigating to Output 1’s page. Move the cursor under **IN1**. With a signal driving Input 1 and a working amplifier connected to Output 1, adjust the **DATA** knob to the desired level. Adjust any other Input going to Output 1. **MST** controls the Master level of Output 1. **LIM** sets the Limit Threshold of the Limiter circuit for Output 1.

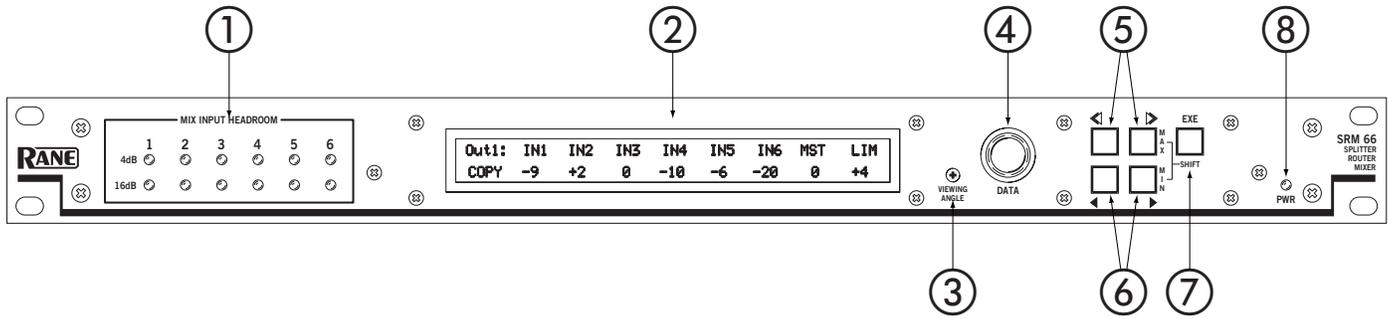
To Copy settings from Output 1 to any other Output, move the cursor to **COPY**. Press the **EXE** button. The display now reads **Paste**. Change the page to the one you want these same settings in, and press **EXE** again. The settings have now been pasted into the new Output.

Settings may be Stored and Recalled in the Memory Page. To Store, select the **Store** field, select a Memory number with the **DATA** wheel and press **EXE**. To Recall, select the **Recall** field, select a Memory number with the **DATA** wheel and press **EXE**. Look deeper into this manual for information on remote control of Memories, level adjustments and, the most powerful feature of the SRM 66, Output Groups which “link” Output levels. A Master Remote feature allows controlling the level of any Output Groups assigned to it.

For best signal control and dynamic range, *turn the Master Output off when no Inputs are routed to a given output.*

CAUTION: Never connect anything except an approved Rane power supply to the thing that looks like a red telephone jack on the rear of the SRM 66. This is an 18 VAC center tapped power input. Consult the Rane factory for a replacement or substitute.

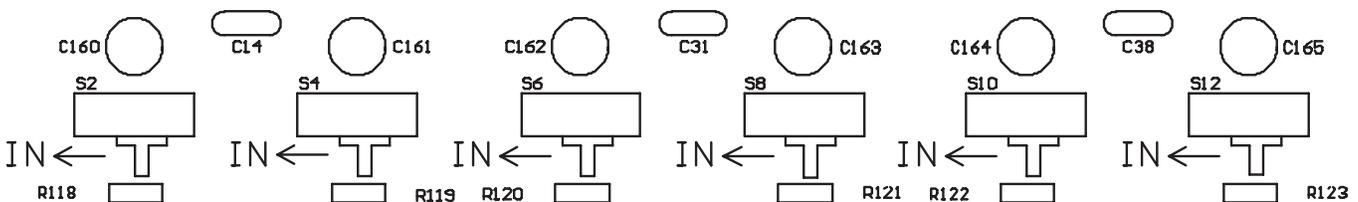
Front Panel Description



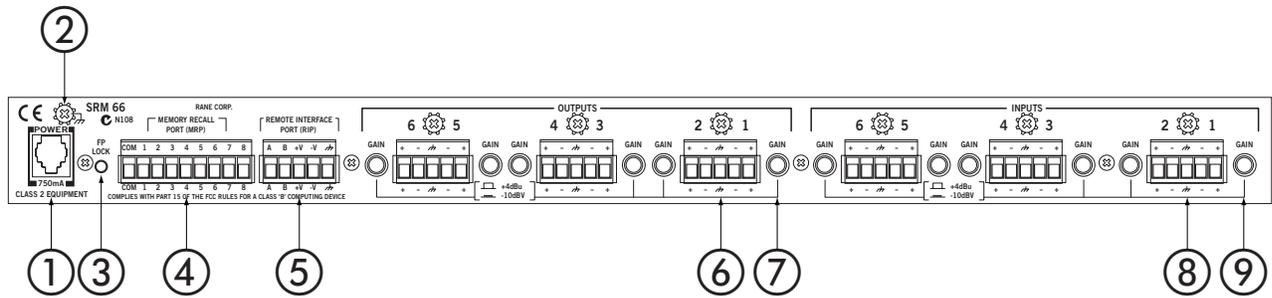
- ① **MIX INPUT HEADROOM meters.** These assist setting of the rear panel GAIN switches as well as the output level of the preceding device. The 16 dB and 4 dB LEDs indicate the *remaining headroom* for each of the six Inputs. Optimal settings allow the 4 dB LEDs to flash only during signal peaks.
- ② **Edit Pages.** This 2x40 backlit LCD screen displays the Edit pages for controlling and revealing all the functions of the SRM 66 (see ⑤). Refer to the OPERATION section on page Manual-4 for details.
- ③ **VIEWING ANGLE adjust.** This recessed adjustment allows optimizing the LCD display contrast for various vertical viewing angles.
- ④ **DATA wheel.** Allows adjustment of a field parameter after it is selected with the Page (see ⑤) and Cursor (see ⑥) buttons. Turning the DATA wheel clockwise increases the parameter, and turning it counterclockwise decreases the parameter.
- ⑤ **Page buttons.** The Previous Page << and Next Page >> buttons scroll through all 10 Edit pages. When the EXE button is held and MAX >> is pressed, the selected parameter jumps to its highest value (see ⑦).
- ⑥ **Cursor buttons.** The Previous < and Next > cursor buttons scroll through each of the adjustable fields on each page. These buttons select each adjustable parameter along the bottom row by moving the underline left < or right >. When any parameter is selected, the DATA wheel adjusts that parameter. When the EXE button is held and MIN > is pressed, the selected parameter jumps to its lowest value (see ⑦).
- ⑦ **EXE (Execute) button.** Several commands are implemented with this button. Holding down EXE while pressing MAX >> alters the selected parameter to its highest nominal value. Holding down EXE while pressing MIN > alters the selected parameter to its lowest value or Off. Pressing EXE when the Copy, Paste, Recall, Store, and Zero commands are selected executes that function.
- ⑧ **Power indicator.** In case the backlit Edit display isn't enough assurance, this yellow indicator glows anytime adequate power is applied to the SRM 66, alerting you to its *on* condition.

Internal 80 Hz High Pass Filters

Each Output of the SRM 66 features an internally switchable 80 Hz highpass filter. These filters roll off low frequencies. This is useful in small sound reinforcement systems or for use with constant voltage line transformers. These switches are shipped from the factory in the OUT position. If you wish to enable any or all of the filters for each Output, it will be necessary to remove the unit's top cover before installation. Locate the switches near the center of the board, as shown below. S2 = Output 1, S4 = Output 2, S6 = Output 3, S8 = Output 4, S10 = Output 5, and S12 = Output 6.



Rear Panel Description



- ① **POWER input connector.** Use only an RS 1, or other Remote AC power supply approved by Rane. This unit is supplied with a remote power supply suitable for connection to this input jack. Consult the factory for a replacement or a substitute. This unit's power input is designed for an AC supply, delivering 18 volts, from a center-tapped transformer capable of supplying at least the 750 mA of current demanded by this product. Using any other type of supply may damage the unit and void the warranty.
- ② **Chassis ground point.** A #6-32 screw is supplied for chassis grounding purposes. Units with external power supplies such as this SRM 66 supply do not ground the chassis to earth through the line cord. This chassis connection is critical and in most installations, required by law. Many chassis ground this point to an amplifier chassis ground or directly to the grounding screw on a grounded AC outlet cover by means of a wire secured on both ends with star washers to guarantee proper contact. See the Chassis Grounding note on the next page.
- ③ **FP LOCK button.** When pressed *in*, locks out all front panel control except for Group Levels and Memory Recall. The SR 1L remotes (sold separately) are also able to control Group Levels with FP LOCK engaged. The user is able to view, but not edit, all Edit pages.
- ④ **MEMORY RECALL PORT (MRP).** This Port allows any remote switch to recall any of the system Memories. The first eight Memories recall with simple switch closure to a single pin. A "binary" wiring mode allows access to more complex Memory recall functions. See Figure 8 on page Manual-8. Complete programmability of the MRP is possible using the *Edit MRP Configuration* feature found in SRM Exchange software. See *DSC 1 & SRM Exchange software* on page Manual-9.
- ⑤ **REMOTE INTERFACE PORT (RIP).** This Port supports up to seven optional SR 1L "Smart" digital Remote controls (see page Manual-6). Each Remote may be assigned to adjust the Level of any one of the six SRM 66 Output Groups or the Master Group.
- ⑥ **OUTPUT GAIN switches.** These assist setting the optimal gain structure of the Output stage, depending on what the following device would like to see (or hear). Balanced signals usually require a +4 dBu setting (button *out*), and unbalanced signals usually require the -10 dBV setting (button *in*).
- ⑦ **OUTPUTS.** These balanced Euroblock connectors may be wired balanced or unbalanced. See page Manual-1 or the RaneNote, "Sound System Interconnection" later in this manual for assistance.
- ⑧ **INPUT GAIN switches.** These assist setting the optimal gain structure of the Input stage, depending on the level from the previous device. Balanced signals usually require a +4 dBu setting (button *out*), and unbalanced signals usually require the -10 dBV setting (button *in*). Use the MIX INPUT HEADROOM meters as a guide for determining GAIN switch position (see ① in the Front Panel Description).
- ⑨ **INPUTS.** These line-level balanced Euroblock connectors may be wired balanced or unbalanced. Microphones require a preamplifier (see the Rane MS 1B for a solution). See the next page and the RaneNote "Sound System Interconnection" elsewhere in this manual for assistance with various wiring options.

SRM 66 Connection

Balanced Operation

Connect the '+' to '+', '-' to '-', and shield to shield. Use only when driving from a true balanced source and driving to a true balanced destination — either transformer coupled or active drive.

Unbalanced Operation

To avoid nasty side effects such as hum and noise – which are consequences of unbalanced operation – keep cable lengths as short as possible. For lengths longer than ten feet, use a transformer such as a Rane BB 44x.

Coming from an unbalanced source, the SRM 66's Input uses two conductors plus a shield; connect '+' to '+', the unbalanced source ground to '-', and the cable shield to the SRM 66's ground.

Going to an unbalanced device using a single conductor plus a shield, connect '+' to '+', leave '-' unconnected and connect the cable shields at both ends to ground.

Combination Operation

For combined balanced and unbalanced operation, use whichever half of the above instructions apply for each end. See the "Sound System Interconnection" RaneNote included with this manual for more information on cabling and grounding requirements.

Chassis Grounding

If after hooking up your system it exhibits excessive hum or buzzing, there is an incompatibility in the grounding inside a unit(s) or between units somewhere. Your mission is to discover how your particular system wants to be grounded. Try these things:

1. Try combinations of lifting grounds on units that are supplied with ground lift switches or links. Other than in your own home, it is illegal and unsafe to use 2-prong to 3-prong AC line cord cheaters, even though this is a common (short term) remedy. Using such "cheaters" can (and has been known to) electrocute or kill people. [Ace Frehley and Keith Richards survived; Keith Relf (The Yardbirds) and John Rostill (The Shadows) did not.]
 2. If your equipment is in a rack, verify that all chassis are tied to a good earth ground, either through the AC line cord grounding pin (3rd prong) or the rack screws to another grounded chassis.
 3. Units with outboard power supplies may *not* ground the chassis through the line cord. Make sure these units are grounded either to another chassis which is earth grounded, or directly to the grounding screw on a grounded AC outlet cover.
- Please refer to the RaneNote "Sound System Interconnection" (elsewhere in this manual) for further information.

FP Lock

The recessed FP LOCK switch (on the rear) locks out all front panel control except for Group Levels and Memory Recall. With FP LOCK engaged, the SR 1L Remotes are able to control Group Levels, and all Edit Pages are viewable but not editable.

Operation

The User Interface

All SRM 66 programming is done with the Data wheel and the front panel buttons using one of the eleven LCD pages. Each page consists of the page name, multiple parameter fields and possible Command fields and status indicators.

To navigate between pages use the Next Page (>>) and Previous Page (<<) buttons. Within a page the Next (>) and Previous (<) buttons move the cursor to each field.

Above each parameter field is a label indicating its function. Once the cursor is positioned beneath the desired parameter field, turn the Data wheel clockwise to increase the value and counter-clockwise to decrease it. To quickly jump to extreme maximum or minimum values, hold down the Shift (EXE) button and press either the MAX (>>) or MIN (>) buttons. For added safety, executing MAX for the Input mix levels sets the level to unity or zero gain, not +6 dB which is the actual maximum.

Command Fields

Most pages contain a Command field. Here you can Copy settings from the current page to the clipboard, Paste settings from the clipboard, Recall page settings from memory, and Zero all page settings.

To access a command, position the cursor under the Command field, use the Data wheel to select the desired command (not all commands are available in all pages) and press the EXE button.

Clipboard

There are actually three separate clipboards in the SRM 66: one for an Output's settings (shared by all Outputs), one for the Remote to Group settings, and one for the Output to Group settings. Using the clipboard can greatly simplify and speed setting up multiple Outputs or multiple Memories. *The clipboard settings are lost whenever power is removed.*

Status Indicators

Next to the page name in many pages is a Status Indicator. In the Output pages it shows the current amount of Limiter gain reduction or startup muting. If there is no gain reduction being applied, the field is blank. On the Memory page an asterisk (*) appears in this field whenever the current working Memory does not match the last recalled Memory.

Programming the SRM 66

Programming each SRM 66 Output requires only one edit page as in Figure 1. Note that unique Input mix levels are possible for each Output. All adjustments are in 1 dB steps.

The following parameters define each Output:

- IN1 Input one mix Level +6 dB to -25 dB, Off
- IN2 Input two mix Level +6 dB to -25 dB, Off
- IN3 Input three mix Level +6 dB to -25 dB, Off
- IN4 Input four mix Level +6 dB to -25 dB, Off
- IN5 Input five mix Level +6 dB to -25 dB, Off
- IN6 Input six mix Level +6 dB to -25 dB, Off
- MST Master mix Level +0 dB to -59 dB, Off
- LIM Limit Threshold Max (0 dB) to -28 dB re: clip point.

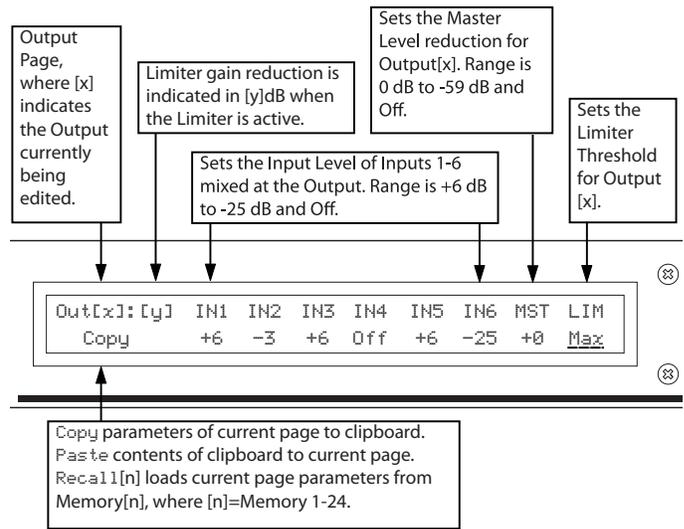


Figure 1. Output Edit Page

Output Groups

The SRM 66 uses Output Groups to link the attenuation level and Limiter gain reduction of one or more Outputs. Any one of the seven possible SR 1L remote controls can then be assigned to control an Output Group Level. The SRM 66 can also assign any number of the six possible Output Groups to a Master Group. Any number of the seven possible SR 1L Remotes can then be assigned to control the Master Group Level. Understanding and utilizing the power of Groups is essential to harness the power and versatility of the SRM 66.

The Output to Group Assign page is shown in Figure 2. Outputs can be assigned to 1 of 6 Output Groups or no Group (*off*). For example, a stereo Output pair would typically be assigned to the same Output Group in order to ensure that the two stereo Outputs limit together and are controlled by the same Output Group Level. Output Group Levels may be controlled from the Group Level page shown in Figure 3 or by any SR 1L remote assigned to the Group on the Remote to Group page shown in Figure 5.

The Group to Master Remote assignment page is shown in Figure 4. Any number of the six (6) possible Output Groups can be assigned to the Master Group. The Level of all Output Groups assigned to the Master Group can be controlled by the MST control on the Group Level page shown in Figure 3 or by any SR 1L remote assigned to the Master Group on the Remote to Group Assign page shown in Figure 5. This feature allows SR 1L remotes to independently control the level of up to six Zones while allowing one or more Master Remotes to control the level of all Zones.

Group Level parameters are *independent* of mix Input level and Output Master level. *Group Levels are not affected by Memory changes.* See the APPLICATIONS section for more discussion on fully utilizing Group functionality.

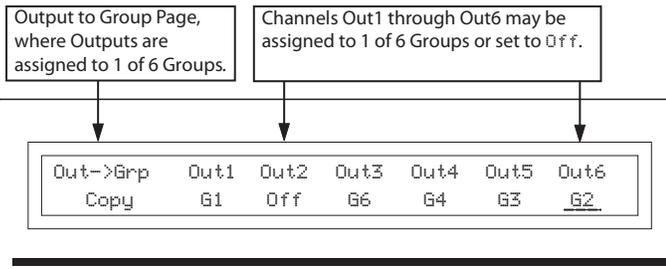


Figure 2. Output to Group Edit Page

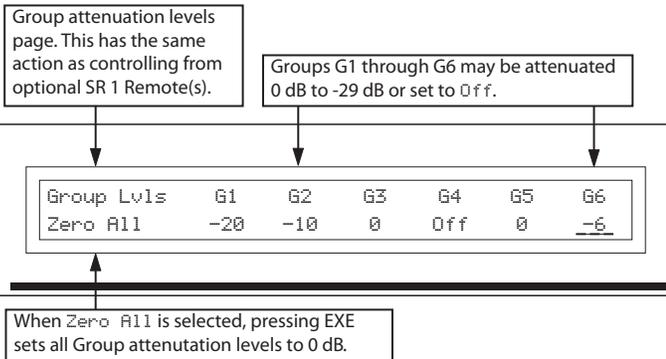


Figure 3. Group Levels Edit Page

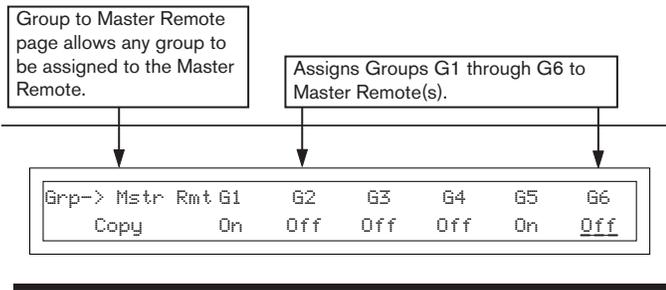


Figure 4. Group to Master Remote Assign Page

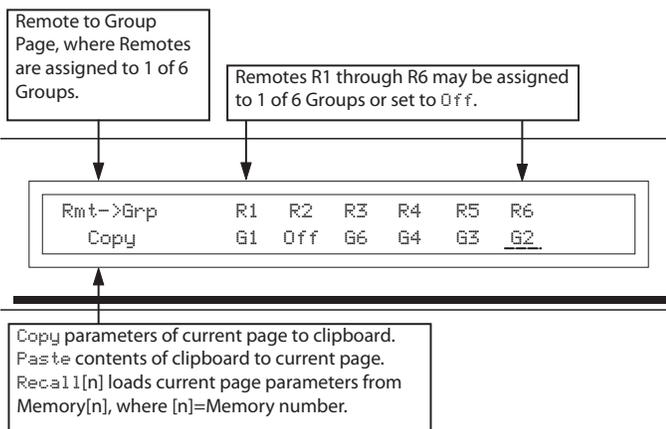


Figure 5. Remote to Group Assign Page

Remote Interface Port (RIP)

Modes

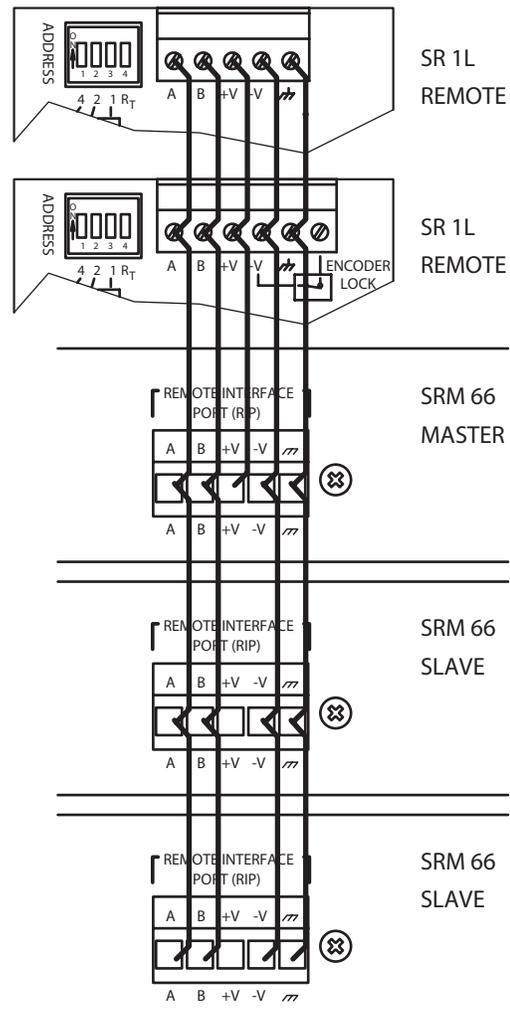
There are three Remote Interface Port modes. The default RIP mode allows communication to SR 1L Remotes.

When using the DSC 1 accessory, the RIP parameter must be set to DSC. (See DSC 1 & SRM Exchange Software.)

When using the SRM 66's Master Slave feature, RIP must be set to SLAVE. A single SR 1L can control Output Groups across multiple SRM 66's. For information on Master/Slave functionality, see the RaneNote "Advanced Applications of the Ingenious SRM 66 and SR 1L."

SR 1L Remotes

The SRM 66 provides a Remote Interface Port which supports up to seven optional SR 1L "Smart" Remote controls. The SR 1L has 31 LEDs to indicate the Group's current attenuation setting of 0 to 29 dB in 1 dB steps, the last step is OFF. It is designed to mount in a standard U.S. electrical box with a minimum depth of 2 1/4 inches, and can be covered with a standard Decora® plate cover. (Decora is a registered trademark of Leviton). See the SR 1L Data Sheet for hookup and operation.



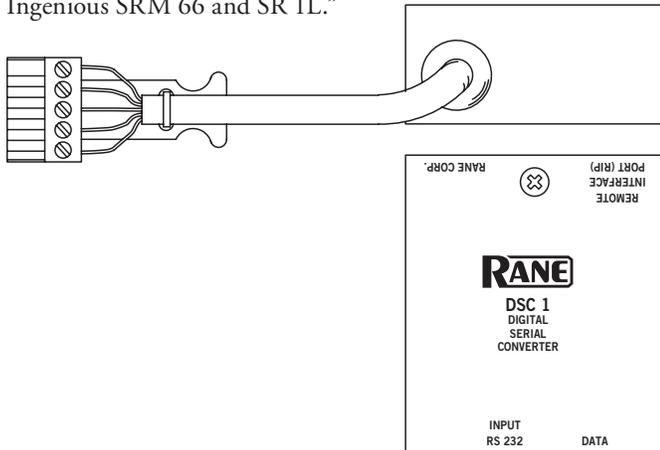
Do not connect V+ between Master and Slave units.

Figure 6. Multiple SR 1L Remote and SRM 66 wiring

DSC 1 & SRM Exchange

The optional Rane DSC 1 accessory provides a bridge to connect a PC's RS-232 port and the SRM 66's Remote Interface Port. Coupled with the included SRM Exchange Software, the DSC 1 allows the exchange of settings between an SRM 66 and SRM Exchange. Once the settings are obtained by the PC, they can be manipulated, stored in a file, printed for future reference or sent to subsequent SRM 66s. SRM Exchange software can be downloaded from www.rane.com. The software allows SRM 66 programming "offline" without an SRM 66 present; however, the DSC 1 is required to download these settings to the SRM 66. See the DSC 1 Data Sheet for hookup and operation.

For programming the Memory Recall Port using the Edit MRP button, see the RaneNote "Advanced Applications for the Ingenious SRM 66 and SR 1L."



Memories

24 non-volatile Memories can save up to 24 system configurations. Each Memory contains these parameters:

Mix Source Routing	Input 1-2-3-4-5-6 to each Output
Mix Source Levels	+6 dB to -25 dB for each Output
Master Level Reduction	+0 dB to -59 dB for each Output
Limit Threshold	Max (0 dBr) to -28 dBr, each Output
Output to Group Assignments	
Remote to Group Assignments	

Memories are stored and recalled using the Memory page shown in Figure 7.

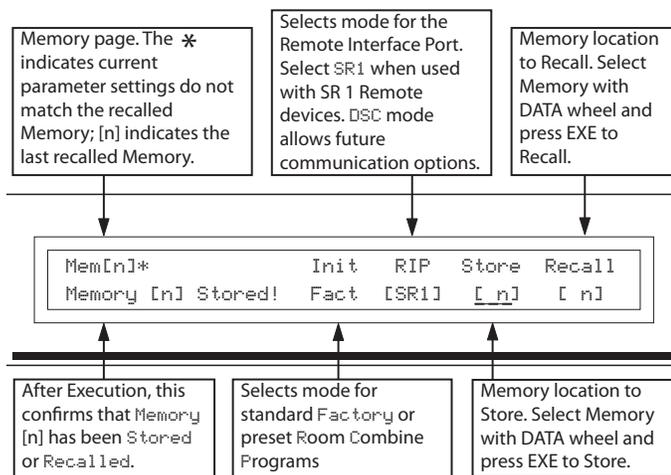


Figure 7. Memory Page

Memory Recall Port

In addition to the Memory page, the SRM 66 provides a Memory Recall Port (MRP). This port allows remote switch closures to recall any of the twenty-four system Memories. The first eight Memories recall with simple switch closures on the eight MRP pins (see the Normal section of Table 1).

A binary wiring mode allows accessing all 24 Memories (see the Binary section of Table 1). Simply hardwire connect the Memory Recall Port (MRP) terminals numbered 5, 6 and 8 to the COM terminal. This will enable the unit to accept binary memory recall input and yield 24 memories.

"Paging" mode provides installers an easy way to configure a system which uses a single switch (such as a push-to-talk mic switch) to toggle between two sequential Memories to change source levels. See Figure 8 and Table 1.

MRS 4 Memory Recall Switch

The optional MRS 4 accessory provides a simple solution to recalling four Memories from a remote location. The MRS 4 mounts in a standard U.S. electrical box with a minimum depth of 2.25" (5.5 cm). If connected to the MRP in Normal mode, this remote allows up to 4 Memories to be recalled. See the Normal section of Table 1 on the following page. See the MRS 4 Data Sheet for hookup and operating instructions.

RCP 3 and RCP 4 Room Combining Panels

The optional RCP 3 (three-room combining panel) and RCP 4 (four-room combining panel) accessories show a graphical representation of the rooms to be combined. Operation is very intuitive. To combine adjacent rooms, the end user simply pushes the button that straddles the desired rooms. Once the button's color becomes green, the rooms are "combined". To uncombine the adjacent rooms, the end user simply re-pushes the button. The button's color now becomes black, identifying the room's status as "uncombined."

The RCP 3 and RCP 4 panels mount in a standard 19" rack and utilize a single rack space. To create a "room combining system", the installer only has to connect the RCP 3 (or RCP 4) to the MRP, and 3 (or 4) SR 1L's to the RIP of an SRM 66. See the RCP Data Sheet for hookup and operating instructions.

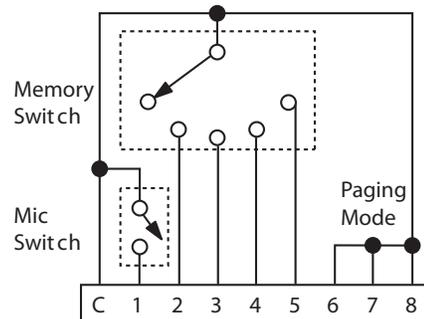


Figure 8. MRP Wiring

1	2	3	4	5	6	7	8	Mode	Result
1	0	0	0	0	0	0	0	Normal	1
0	1	0	0	0	0	0	0		2
0	0	1	0	0	0	0	0		3
0	0	0	1	0	0	0	0		4
0	0	0	0	1	0	0	0		5
0	0	0	0	0	1	0	0		6
0	0	0	0	0	0	1	0		7
0	0	0	0	0	0	0	1		8
0	0	0	0	0	1	1	1	Paging	1
1	0	0	0	0	1	1	1		2
0	1	0	0	0	1	1	1		3
1	1	0	0	0	1	1	1		4
0	0	1	0	0	1	1	1		5
1	0	1	0	0	1	1	1		6
0	0	0	1	0	1	1	1		7
1	0	0	1	0	1	1	1		8
0	0	0	0	1	1	1	1		9
1	0	0	0	1	1	1	1		10
0	0	0	0	0	1	0	1	Binary	no change
1	0	0	0	0	1	0	1		1
0	1	0	0	0	1	0	1		2
1	1	0	0	0	1	0	1		3
0	0	1	0	0	1	0	1		4
1	0	1	0	0	1	0	1		5
0	1	1	0	0	1	0	1		6
1	1	1	0	0	1	0	1		7
0	0	0	1	0	1	0	1		8
1	0	0	1	0	1	0	1		9
0	1	0	1	0	1	0	1		10
1	1	0	1	0	1	0	1		11
0	0	1	1	0	1	0	1		12
1	0	1	1	0	1	0	1		13
0	1	1	1	0	1	0	1		14
1	1	1	1	0	1	0	1		15
0	0	0	0	1	1	0	1		16
1	0	0	0	1	1	0	1		17
0	1	0	0	1	1	0	1		18
1	1	0	0	1	1	0	1		19
0	0	1	0	1	1	0	1		20
1	0	1	0	1	1	0	1		21
0	1	1	0	1	1	0	1		22
1	1	1	0	1	1	0	1		23
0	0	0	1	1	1	0	1	24	

MRP and RIP Connections

When wiring to Euroblocks, a minimum wire gauge of 22 is preferred for reliability. If the ground or shield wire is left shorter, it acts as a strain relief for the other wires. Cable with a flexible jacket is easier to use and less likely to damage the connections. Avoid stripping excess insulation. Inspect wires for nicks that may lead to wire breakage. Fully insert each wire in the appropriate socket and tighten the screw. Turn the power to the unit *off* until all connections are made.

Wire Types

Variations in wire type do not greatly affect the performance of the remote controls. However, 22-gauge stranded wire with a flexible jacket is recommended. You may use 5-conductor unshielded remote control signal cable for shorter runs (less than 200 ft.) or 4-conductor (2 pair) shielded remote control signal cable (use the shield as the GND return) for longer runs (200 to 1000 ft.). The type of wire required is influenced by your installation and local electrical codes. Rane Corporation does *not* provide or source cable. Please contact your local retail or wholesale outlet, *not* the factory.

The following is a short list of suitable cable types:

CONSOLIDATED ELECTRONIC WIRE AND CABLE

Plenum cable:

Unshielded remote control signal cable CAT. #9896

Shielded remote control signal cable CAT. #9877 or #9852

WEICO WIRE & CABLE INC.

Communication and control cable:

Multiconductor, unshielded CAT. #7606

ALPHA

Communication and control cable:

Multiconductor, unshielded CAT. #1175C

BELDEN

Unshielded remote control signal cable CAT. #88741

Shielded remote control signal cable CAT. #88723

Applications

One of the best ways to grasp the true versatility of the SRM 66 is to observe one in action.

Figure 9 shows an installation using one SRM 66 to distribute sound throughout an entire manufacturing facility. Each Output can have different mix Inputs and Levels. For example, the offices may mix in a different page source than the shop floor. Also note that all three of the shop floor Outputs may have different mixes, Master Levels and Limiter thresholds.

The use of Output Groups allows a large variety of Remote / Output combinations. In this example both the offices and lobby have their own Remotes to control their own Output Levels, while the shop floor has two Remotes, either of which can control the level of all three Output Levels assigned to them.

The example shown in Figure 10 demonstrates a system using the SRM 66 for room combining. The fact that Group configurations can be different in each Memory adds the versatility of linking multiple Remotes together in one condition while separating them in another. In Memory 2, the Master can control both Output Groups, while permitting individual control within each divided room.

One thing to keep in mind in such a situation is the Group's Level is *not* stored in each Memory. This allows you to change Memories without it resetting the Group's Level each time. If a different Group Level is desired you can change the Group assignments. For example, in Figure 10 (Memory #2) you could assign Output 1, Output 2 and Remote 1 to Group 3. When you changed from Memory #1 to Memory #2 the Group's Level would change to the last value set for that Group. If your application requires no change in Level between Memories, simply keep the Group Level assignments (to Outputs and Remotes) intact between Memories.

Other applications for the SRM 66 are time of day clocks with contact closure outputs which adjust the level and/or distribution of audio for scheduled events. Or connect the SRM 66's

MRP through a relay to the power switches on noisy machinery to increase and decrease background or paging audio during use in manufacturing facilities.

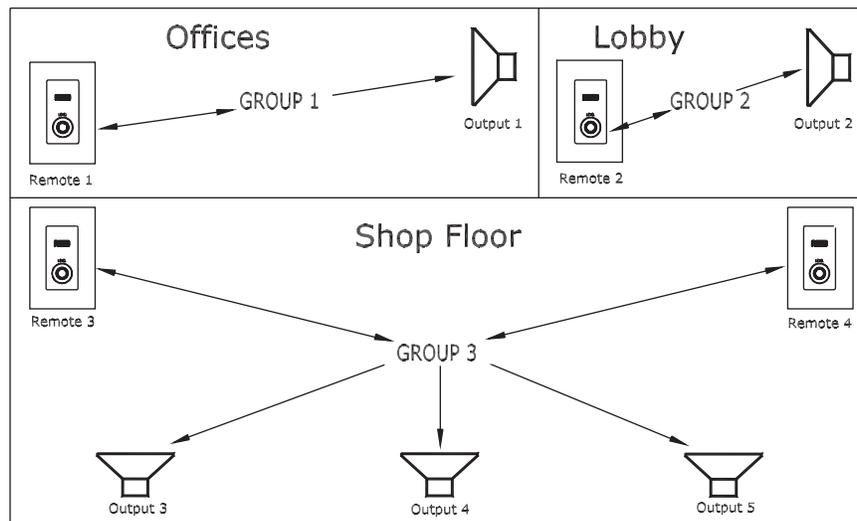


Figure 9. Manufacturing Facility System

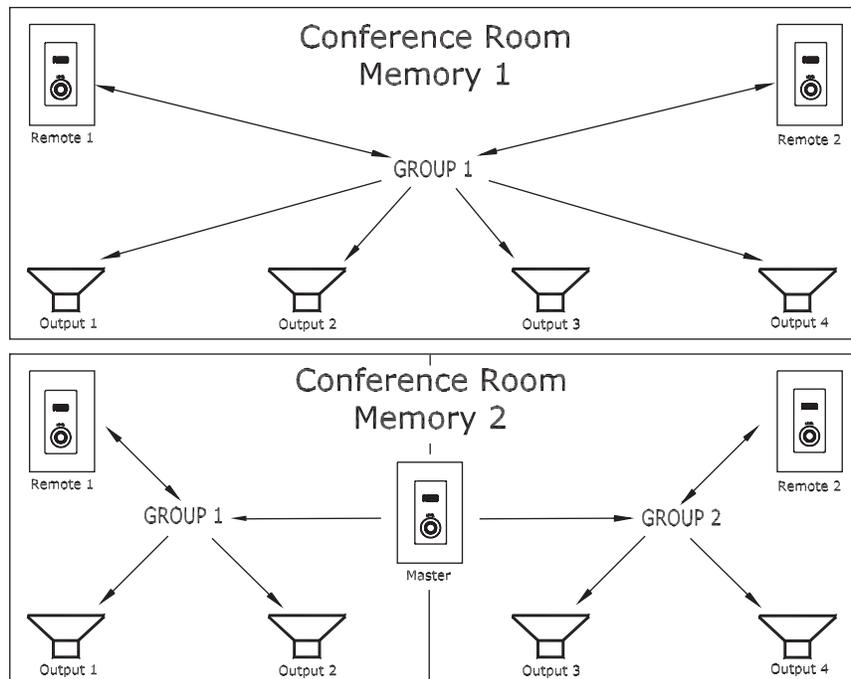


Figure 10. Room Combining System

AMX & Crestron

For AMX or Crestron room controller applications, see RaneNotes “Using a Control System with an SRM 66” and “Using SR 1Ls with other Rane Products” available from the Rane website. Two more advanced SRM 66 features are discussed in “Advanced Applications of the Ingenious SRM 66 and SR 1L.” Master/Slave functionality is covered, where one SR 1L remote can control Output Groups across multiple SRM 66s. SR 1L room controller applications are greatly simplified using Master/Slave mode; AMX software for this application is also available from Rane. *Edit MRP Configuration* can eliminate the costly, time consuming and labor intensive diode logic that is occasionally required in applications with multiple contact closure sensors. This feature is provided via the completely programmable SRM 66 Memory Recall Port using SRM Exchange software (see the DSC 1 Data Sheet).

To externally control an SRM 66 from an AMX or Crestron, first read “Using a Control System with an SRM 66.” There are 3 modes of operation for the SRM 66 (RIP, DSC, SLAVE). To externally control the SRM 66 (with AMX or Crestron) you must use either DSC or SLAVE mode. DSC allows for full access, while SLAVE only controls SRM 66 Group Levels and Memories. If all you need is to control output levels and memories, SLAVE mode is by far the easiest.

AXCENT3 Wiring:
SRM 66 AMX Description
GND 5 Shield
A 4 & 6 Data +
B 1 & 9 Data -

Protocol:
RS-485 9600 kb, 1 Stop, 8 Data, No Parity
AMX demo programs (www.rane.com/srm66.html):
DSC mode SRM_DSC.AXS
SLAVE mode SRMSLAVE.AXS

Note the SR 1Ls do not need to be connected. The programs scan for the SR 1Ls during power-up, and if they are not found they are ignored.