

Setting up the Personal Mixing System

This document describes the basic setup procedures and signal flow for the Roland Personal Mixing (PM) System. It includes "How-to" information when using the PM system with

- the V-Mixing System; or
- a standalone Digital Snake when using a different console.

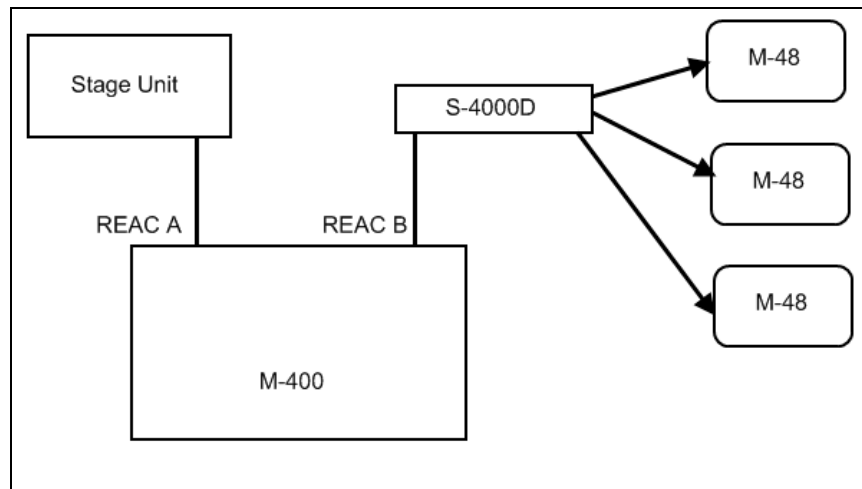
Please also refer to your M-400 and M-48 documentation for details on Personal Mixing.

Setting up the Personal Mixing (PM) System with your V-Mixing System

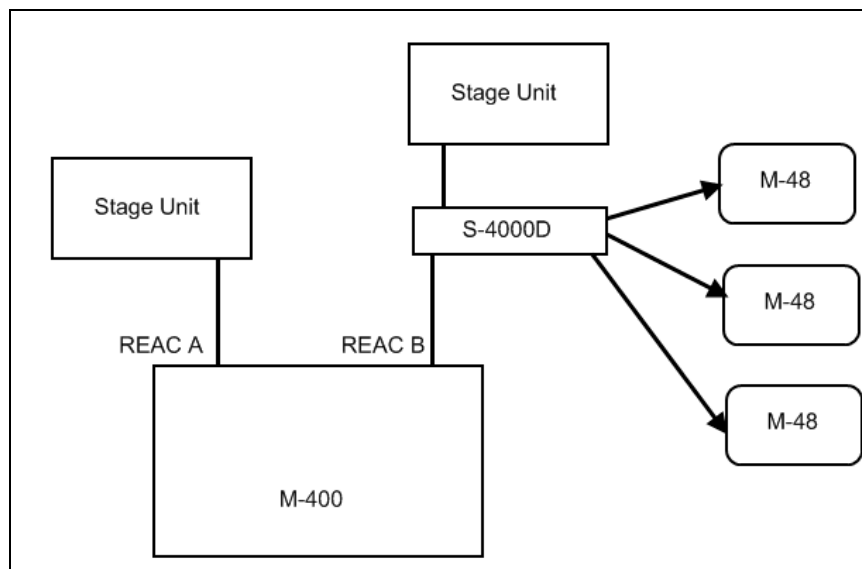
The basic signal flow in the V-Mixing PM system is:

Inputs > Faders > REAC B Output Patchbay > S-4000D > M-48 units

If you have just one Stage Unit, plug it into REAC A of the M-400. You can then plug your S-4000D Splitter directly into REAC B as shown below.



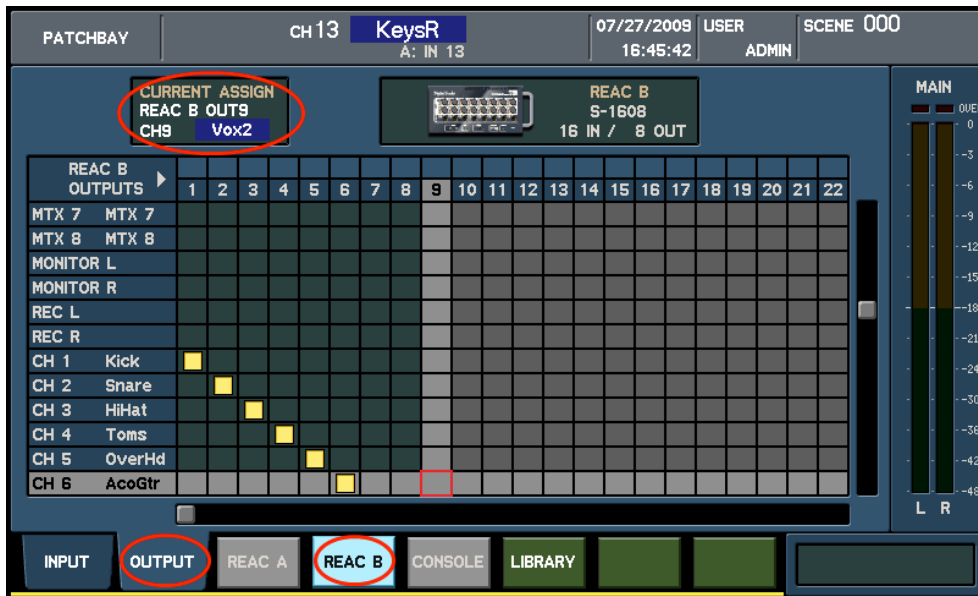
If you have two Stage Units, use the S-4000D to "split" the REAC B network.



Once you have your basic architecture set, you need to set up your M-400 to mix your live sound. This means patching inputs (from REAC A, REAC B, the console itself, or a combination of the three) to the 48 faders on your M-400 console. This is done in the Patchbay. Manually patch your desired inputs to faders (up to 48 faders maximum). You should then name each fader. The screen shot below shows inputs 1-12 from REAC A assigned to fader channels 1 through 12.



Once you have assigned inputs to faders, you need to "feed" up to 40 sources to your M-48 PM System. This is done in the REAC B Output Patchbay. Use this Patchbay to decide which 40 sources you desire to have shared among the performers using M-48 units. Remember you can send up to 40 sources, so be clever about what 40 sources you send. It may be Faders (direct out's), AUX SENDS, Matrices, etc, in any combination.

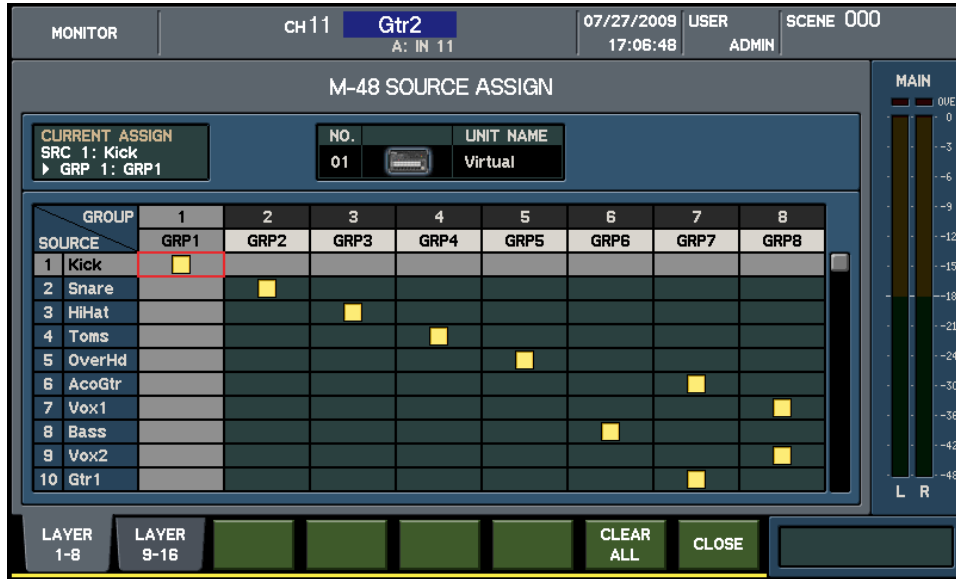


It's a good idea to set faders destined for the PM system to be "Pre-Fader" or "Pre-EQ". This is done in the individual Fader menu screen (CH DISP).

Once you have assigned up to 40 sources in the REAC B Output Patchbay, you can then set up each individual M-48 unit to associate any of those sources into 16 stereo Groups. Each performer can then have control over their 16 Groups.

One of the strengths of the RSS PM system is the ability to customize each M-48 unit with a mix unique to that performer. For instance, the drummer would probably like to have individual level control of kick, snare, hi hat, etc. So we'll put kick in one group, snare in another group, hi hat in another group, etc as follows

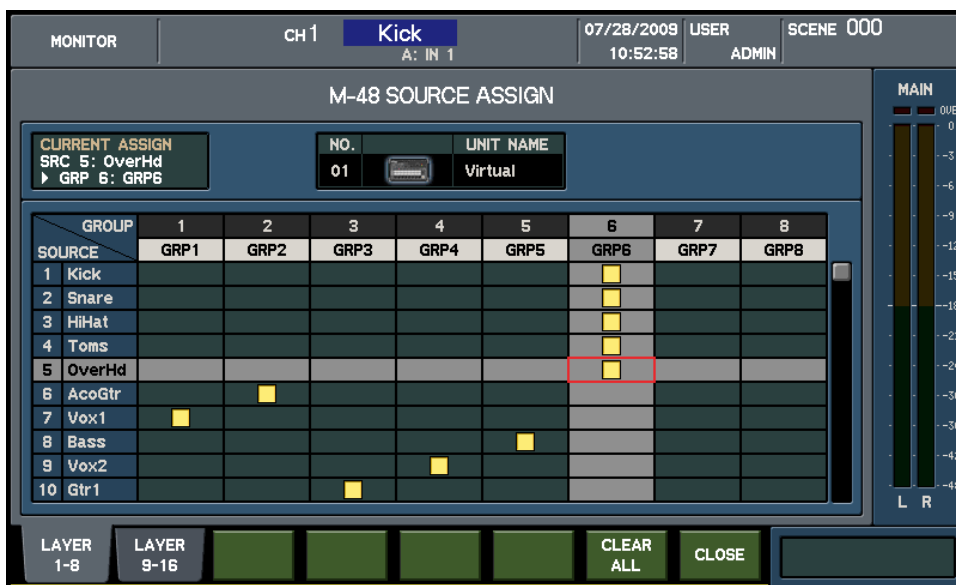
To set which REAC B Output sources go to which Groups (Knobs) in the drummer's M-48 unit, press MON DISP > F8: M-48 MANAGER > [highlight drummer's M-48] > F2: SETUP > F4: SOURCE ASSIGN.



Here, you can patch SOURCES to GROUPS. As you can see, the drummer will have his Kick on Group 1, Snare on Group 2, Hi Hat on Group 3, etc. In this case, the drummer requested that the bass come right after the drums (on Group 6), and the Acoustic and Electric guitars be placed together on one Group and the vocal mics be placed together on another Group (8). This way, he/she has one knob for guitars (Group 7) and one knob for singers (Group 8).

Now let's set up the lead singer.

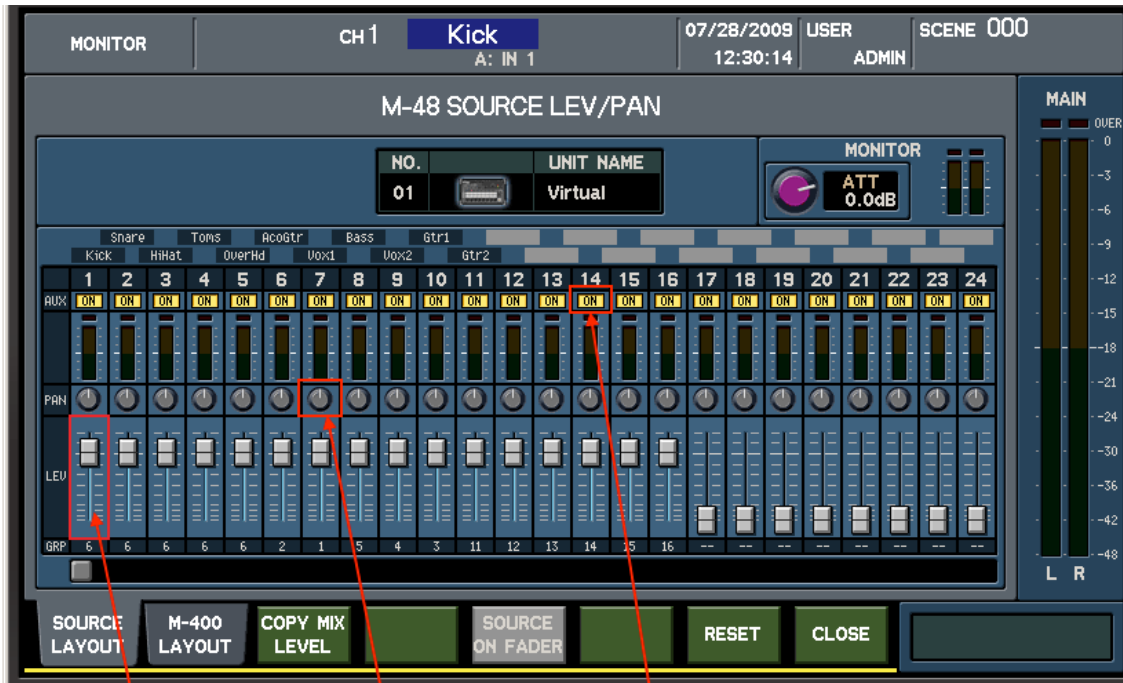
To set which REAC B Output sources go to which Groups in the vocalist's M-48 unit, press MON DISP > F8: M-48 MANAGER > [highlight vocalist's M-48] > F2: SETUP > F4: SOURCE ASSIGN.



Our vocalist wants her own voice on Group 1. She also wants her acoustic guitar on Group 2. We gave her individual control over the electric guitarist's instrument and vocals, as well as independent control over bass. But all the drums were put on one Group (Knob 6).

You can press F2: LAYER 9-16 to gain access to Groups 9-16 and assign sources to them as needed.

The Source Level/Pan window (below) allows you to fine-tune the 40 REAC B Output sources that are being sent to each M-48 unit. This screen allows you to customize how much level/pan is fed from your REAC B Sources to a particular M-48 unit. This is particularly important when you have more than 2 sources assigned to a single stereo group.



Level:
Adjusts audio level sent from Source > M-48

Pan:
Adjusts pan level of Source going to M-48

AUX:
Do you want this Source to appear on the M-48 AUX?

Note that settings made here essentially constrain the MIN/MAX possibilities that your performer has on their M-48 controls. If you set a level very low, the performer can turn their Group Volume way up, but that volume will be capped by your settings in the Source Level/Pan menu. In the same way you can adjust the panning window of multiple sources within a stereo group. After this is set, when the performer adjusts their panning knob, the group of sources would pan left to right keeping their relative positioning.

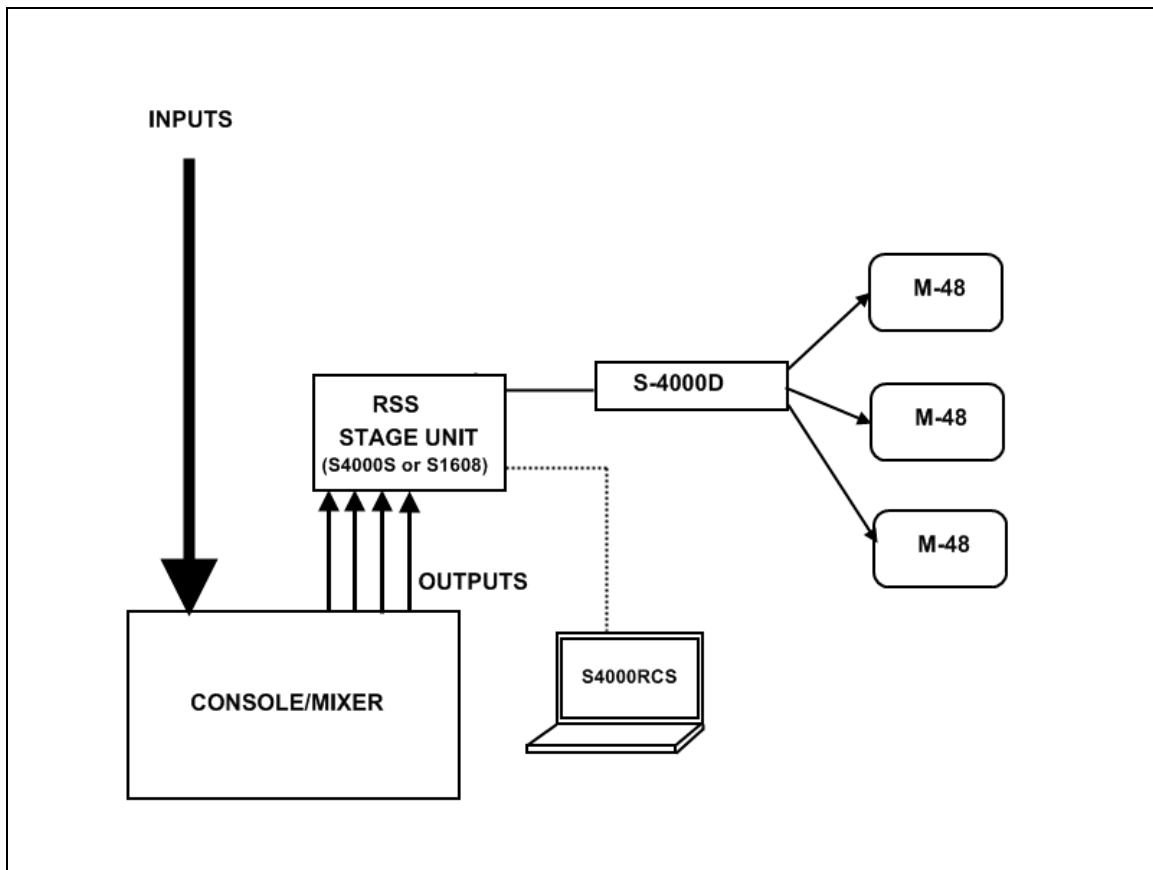
For details on settings, features and controls please refer to your M-400 and M-48 documentation.

Setting up the Personal Monitoring (PM) System with your Standalone Digital Snake

You can use the PM system even if you don't have the V-Mixing System.
The basic signal flow in the Standalone PM system is:

Inputs > Your Mixer > Outputs > Digital Snake Unit {controlled by S4000RCS} > S-4000D > M-48 units

Simply send up to 40 sources from your mixing console to the inputs of an S-4000S or S-1608 Stage Unit. Sources can be direct outs, AUXs, Matrices, etc. The S-4000D will distribute those sources to your M-48 units. All the PM settings and controls you find on the M-400 V-Mixer are available in the free S-4000 RCS program.



You'll need to connect a laptop to the 9-pin RS-232 port on your RSS Stage Unit. This may require an USB-RS232 adapter if your computer has no RS232 port.

Make sure your Stage Unit's firmware and S4000RCS software are all up-to-date. Check at www.rolandsystemsgroup.com.

Once connected, the S4000RCS lets you adjust the levels of your Inputs.



Similar to the SOURCE ASSIGN function in the M-400, the S4000RCS M-48 Manager has the "# ASSIGN" feature that lets you patch Inputs to Groups.

In this scenario, we have already labeled the groups in our M-48 and have assigned Kick, Snare, Hi Hat and other sources to Groups that we the drummer prefers.

Drummer - M-48 Source Assign

Source: 1 Group: 1 Kick

Source	Group 1-16							
	1 Kick	2 Snare	3 HiHat	4 Tom	5 OverHd	6 Perc	7 Bass	8 Piano
1	X							
2		X						
3			X					
4				X				
5					X			
6					X			
7							X	
8						X		
9						X		
10								
11								
12								
13								
14								
15								X
16								X

The S4000RCS also has a Source/Level control very similar to the one in the M-400.



Troubleshooting

If you can't hear a source in your M-48, follow this signal path from beginning to end.

- Is your Input Source active? The dots above the INPUT channel in the REAC Input Patchbay should be lighting Yellow or Green.
- Have you properly patched the Input to a Fader?
- Does that Fader show audio levels?
- Is that Fader Pre-Fader or Pre-EQ? Is it un-muted?
- Is that Fader patched to the proper output port in REAC B Output Patchbay?
- Is your Fader assigned to a DCA and if so, is that DCA turned up.
- Is that REAC B Output Port properly patched to an M-48 Group?
- Is the Source Level/Pan for that Source set properly?
- Is that M-48 Group un-muted? Is another Group Solo'ed?
- Is your Group VOLUME set high enough to hear?
- Is your M-48 Volume up? Is its ATT (attenuation) at 0.0dB?
- Are your headphones/in-ear/monitor/wedge turned up and working?

This line of inquiry - from input to final output - should reveal where the problem is.

Remember to make sure the V-Mixing System, RSS Digital Snake components and S4000RCS software all work together, be sure to have all the *latest firmware and software updates*.

Find all updates at our website, www.rolandsystemsgroup.com.

If you have any questions about setting up your PM system call our Technical Support department at 1-800-380-2580.