



# MULTI STEREO LINE MIXER



Rev 3.0 – November 2022

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## INTRODUCTION

What is our *Multi Stereo Line Mixer*?

*MSLM* is a professional/line level device (+4dB) thought of as the ultimate solution for the “golden rack era” lovers out there. It can be defined as a complete and very compact (only 1U rack high) overall device or central piece of your entire rack system. It can do a lot to take care of your signal.

It's not new that, over the years, we've taken care of a lot of various systems. We started our entire career by paying homage to the most iconic object of the '80s, the Tri Stereo Chorus, on which our “The Wave – True Analog Multichorus” was based on. We spent countless hours testing and playing that amazing gem and, of course, trying to understand the specific habitat that surrounded it.

Fast forward, after a few years of many rigs and many custom line mixers built, we focused our minds in making an object that could resume the most requested features that many players asked us, and try to pack all of them in 1U rack format.

We carefully looked at all the previous requests and tried to write down all the key features of the rack systems we built, diving into three main “stages”.

## THE CONCEPT

To properly understand how this system works (yep, this is not a simple mixer...it's a lot more!), first of all you need to understand how a guitar rack systems was intended to work.

Most of the time, the starting point was the pre-amplified guitar signal, or a slaved signal coming from a loaded amplifier.

From here, people used to place an “audio looper” as the first object of the whole chain; this is a device that could turn on/off serial processors such as equalizers, compressors, chorus, etc. More often, that looper was also used as audio splitter, sending the signal into some other processors such as detuners, delays, reverbs, etc.; instead of turning the output signals of those devices back into the looper, they were sent into a mixer. This is what we usually call “parallel routing”.

The finishing touch, as some guys like Mike Landau and many others used to do, is to put other processors in series after the mixing stage (i.e. PCM42s by Lexicon), in order to add another “color” to the system.

Then, at the last stage, the stereo signal was amplified by a stereo power amplifier.

So, the average entire “classic” guitar rack system (so far) is always made at least by two pieces (but usually more than two): a looper and a mixer. Just for the control part of the system, with very limited routing possibilities indeed.

More often, those loopers and mixers were custom tailored to personal specifications and very few were made for “generic” use; so, this kind of environment wasn't so changed during the last 20 years at least (or maybe more).

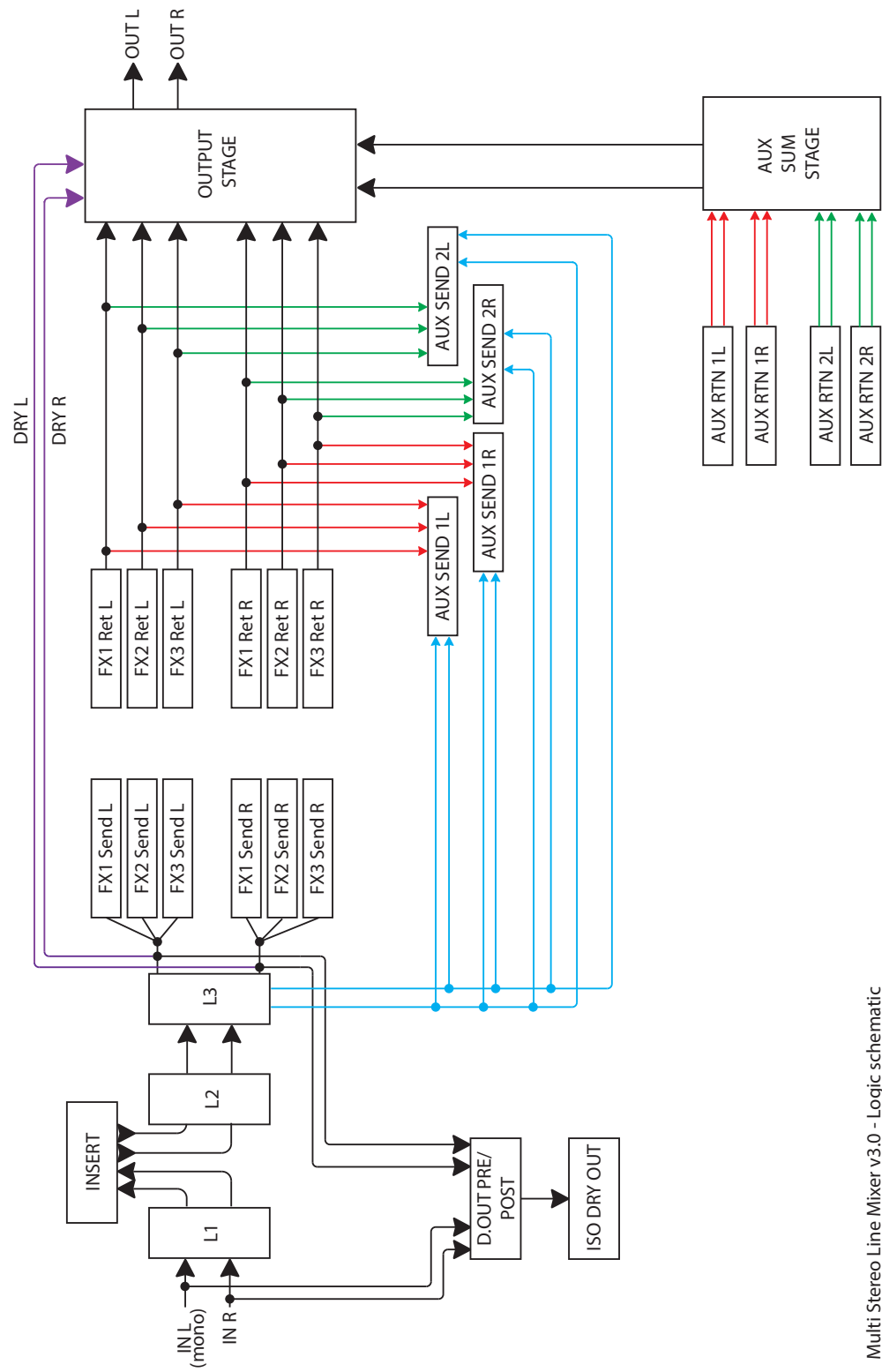
## TECHNICAL DATA

Input impedance: 2,2 Mohm  
Output impedance: 100 ohm  
Send impedance: 100 ohm  
Return impedance 1 Mohm

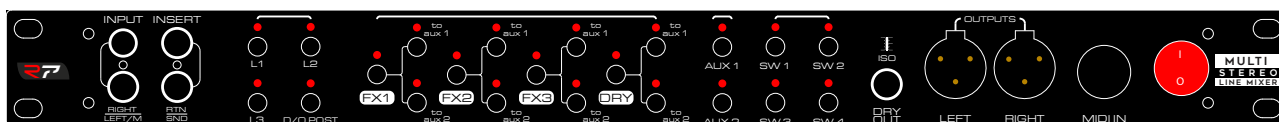
Multi Stereo Line Mixer operate at professional audio level, which is +4 dBu.  
0 dBu is equal to .775 volts. +4 dBu is 4 decibels greater than .775 volts, which is 1.228 volts.

To obtain best signal to noise ratio, is highly suggested to use audio equipment able to operate at +4 dBu, or to select +4dBu where possible. It is also highly recommend to use all same standard (I.E. to not mix +4 dBu level units with -10 dBv level units).

LOGIC SCHEMATIC



Multi Stereo Line Mixer v3.0 - Logic schematic  
RedSeven Amplification  
November 2022



## FRONT PANEL

(left to right)

1. INPUTS: Left (MONO) and Right (STEREO) inputs, they replicate back inputs. Note: only one stereo couple must be used per time.
2. INSERT: mono/stereo insert, between LOOP1 and LOOP2, though as VOLUME PEDAL insert or any other mono or stereo devices you want to permanently place here.
3. L1-L2-L3 buttons: these buttons turn on/off the three serial loops. When red light is on, the loop is active.
4. D/O OUT post button: this button toggle the position of dry output. When the red light is on, DRY output is taken after loop 3 (L3), when off, is taken at the very input of the mixer (before L1).
5. FX1 to FX3 buttons: these buttons turn on/off the three main parallel FXs. When red light is on, the effect is on.
6. DRY button: this button turn on/off DRY path. When the red light is on, DRY path is on.
7. To Aux 1 and To Aux 2 buttons: these buttons activate a secondary path from each main FX 1 – 2 – 3- and DRY to one or both AUX loop. When red light is on, this path is activated.
8. AUX 1 & 2 buttons: those buttons activate auxiliary loop 1 & 2 (AUX 1 & 2). They are two additional loops that can receive signals from each main parallel loops (FX 1 – 2 – 3) and DRY.
9. SW 1 – 2 – 3 – 4 :buttons: this buttons turn on/off Switch 1 – 2 – 3 – 4. When the red light is on, Switch 1 – 2 – 3 – 4 are active.
10. DRY OUT: this is a transformer isolated dry output. Ideal for W/D/W application or in case you want a copy of your original signal. Can be taken at very input or after loop 3.
11. MAIN OUTPUT (balanced): main output of entire mixer. Fully electronic balanced, with XLR connectors. They are a copy of back outputs and they can be used at same time (back and front pair).
12. MIDI INPUT: midi input connectors, wired in parallel to back midi input connector. They should be used one at time, to avoid any issue. Pin 6 & 7 can carry phantom power, if the phantom power injection input in the back is used.
13. POWER BUTTON: it turn on/off the device. Do not turn it down when audio is running or when your amplifier is on: this can cause loud noise.



## BACK PANEL

(left to right)

1. POWER CONNECTOR: 90V to 240V AC accepted. MSLM can be powered worldwide without any issue. Be sure to use a proper grounded cable.
2. MIDI INPUT/THRU: midi input and output socket. Midi input is wired in parallel to front midi input connector. They should be used one at time, to avoid any issue. Midi thru is a buffered copy of midi input, so the midi signal is let thru without any modification.
3. Phantom Power Injection. You can add an external power source, either AC or DC to phantom power your midi board. The power supply will be carry thru Pin 6 & 7 of MIDI INPUT connectors.
4. SW1/2: stereo connector for switch 1 and 2. You need a proper Y cable to use both of them.
5. SW3/4: stereo connector for switch 1 and 2. You need a proper Y cable to use both of them.
6. OUTPUTS (L/Mono and R): mixer main outputs. Unbalanced signal.
7. AX2R (Right and Left): Return of AUX2 loop, both right and left.
8. AX1R (Right and Left): Return of AUX1 loop, both right and left.
9. AX2S (Right and Left): Send of AUX2 loop, both right and left.
10. AX1S (Right and Left): Send of AUX1 loop, both right and left.
11. FX3R (Right and Left): Return of FX3 loop, both right and left.
12. FX2R (Right and Left): Return of FX2 loop, both right and left.
13. FX2R (Right and Left): Return of FX1 loop, both right and left.
14. FX3S (Right and Left): Send of FX3 loop, both right and left.
15. FX2S (Right and Left): Send of FX2 loop, both right and left.
16. FX1S (Right and Left): Send of FX1 loop, both right and left.
17. L3R and L3S: Send and Return for Loop 3 (L3).
18. L2R and L2S: Send and Return for Loop 2 (L2).
19. L1R and L1S: Send and Return for Loop 1 (L1).
20. IN L/Mono and R: main inputs of MSLM.

## INPUT SECTION

The input section is located either in front and rear panels of MSLM. The mixer can accept both mono or stereo signals. Matter of fact MSLM is a true fully stereo machine. If you're facing a mono input signal ingoing to MSLM, you must use L/Mono input.

From this point forward, once you decided to split from a mono to stereo signal, we HIGHLY suggest to keep your signal in stereo, in order to avoid the crash of stereo image or unwanted phase problems. You need to be very careful in making your cables in order to perform your system at the best of its possibilities.

## THREE MAIN STAGES

Our MSLM is based on the creation of three main pieces:

### 1 – Serial processing (Loops L1 – L2 – L3)

*A serial audio loop is a very simple passive circuit act to bypass/put in line a particular device into signal path.*

We placed three mono/stereo loops at the very beginning of the signal chain, after the input stage. You can hit the mixer with both a mono or stereo signal. Electric guitar always has a monophonic signal, usually.

All three audio loops (L1 – L2 – L3) can be used both in mono or in stereo, they are able to auto split signal from a mono input/stereo output devices, making the signal from mono to stereo.

You need to understand once you split the signal into a stereo one, you can't go back to mono, cause you'll crash the stereo image!

**IMPONTANT!** *There's only one way to do this in a compact format as MSLM, and it's to always use TRS jack, equally as if you're using both mono or stereo devices. This is a mandatory feature.*

*By using mono jack connectors (also if in presence of mono signal) in this part of MSLM, you'll cause some improper use and you'll not be pleased with sonic results.*

Please, always keep in mind this point.

How to wire those connectors? It's very simple (drawing in the next page):

- A. If you want to use a **MONO** signal, you just need to use a cable made of one MONO (TS) jack and one STEREO (TRS) jack. You need to solder the TS jack as standard mono jack, while the TRS jack with the TIP and RING together as the HOT portion of the signal, and SLEEVE as ground.
- B. If you want to use a **STEREO** signal, you just need to use an Y cable made of two MONO (TS) jack ends and one STEREO (TRS) jack. You need to solder TS jacks as standard mono jacks, while the TRS end just soldering the TIP as LEFT and RING as LEFT of the signal, SLEEVE as ground.

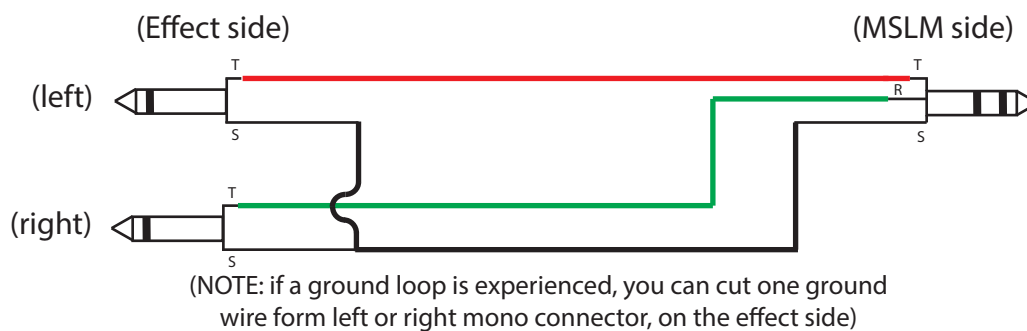
That's all.



### Ex. A - cable for a MONO connection with MSLM



### Ex. B - cable for a STEREO connection with MSLM



Let's assume we want to patch in our MSLM few common units, like:

- DBX160 compressor in L1 (mono in / mono out);
- TC electronic 1140 equalizer in L2 (mono in / mono out);
- Tri Stereo Chorus in L3 (mono in /stereo outs);

In this particular situation, we will use following methodology, keeping in mind we must use ONLY TRS CONNECTORS for MSLM side:

- DBX160 in L1. We'll use A method for both input and output connector;
- TC1140 in L2. We'll use A method for both input and output connector;
- Tri Stereo Chorus in L3. We'll use A method for input and B for output connectors.

Once the connectors are made, if you turn on your three loops (L1 – L2 – L3) you should listening at the compressor and equalizer from both left and right output of the mixer, indiscriminately, while you should listen at the chorus in stereo, facing different audio processing from left to right, as the machine is intended to work.

----- INSERT POINT -----

An insert point (a passive interruption of audio signal) is placed between LOOP 1 and LOOP 2. When nothing is plugged in, this insert point is automatically bypassed.

The goal of this insert point is to place a volume pedal (either mono or stereo), in order to have an removable overall master volume under your foot. This insert is buffered, so low impedance volume pedal is suggested for the best feel.

NOTE: as per L1 – L2 – L3, two special cables are required to make this insert point working. You need to look at “EX 1” at page 9 to understand how to solder this cable.

-----

## 2 – Parallel processing or “MIX 1” (FX1 – FX2 – FX3)

These are the three main parallel processors. Everything is coming from the return jacks of L3 (mono or stereo) will be split into three mono or stereo sends, in order to feed FX1/2/3 inputs plus a dedicated fourth path, for dry signal (this last one is internal).

These three processors are connected in parallel, one to each other.

Returns of these four audio paths (three processors plus dry path) will be directly summed to the output stage.

How to wire (FX1 – FX2 – FX3)?

No more special cable needed, from this point on, you can use standard ¼’ or 6.3mm MONO (TS) jack. Each device has the ability to be connected in full stereo mode (stereo input/stereo output) into the mixer.

Let’s dig a bit deeper. Scenarios at this point can be quite a few.

### ***1 – All three serial loops are mono (L1 – L2 – L3), but my first parallel processor has stereo input (FX1). How do I split a mono signal into a stereo one?***

MSLM will do it for you. You only just need to connect both of FX1 send jacks to the input jacks of your device, MSLM will send an exact copy to both inputs of what is coming from the mono output of L3.

### ***2 – First two serial loops are mono (L1 – L2) but third loop is stereo (L3), my first parallel processor has stereo input (FX1). How do I connect my parallel processors?***

Self-answering question. The devices putted in L3 will split the signal for you, you only just need to connect both of FX send jacks to the input jacks of your device.

This configuration can be also applied if two or all three loops (L1 – L2 – L3) are wired in stereo.

### ***3 – One or more of the serial loop (L1 – L2 – L3) or at least the last one (L3) are stereo, but my first parallel processor FX1 has mono input, how do I need to connect it?***

There’re two possible ways to do it. If you are ok to send only one side of L3 to mono input of FX1, you can use the left side, with a simple mono cable.

If you want to send the entire stereo signal, collapsing what is coming out of L3 into a mono send, you need to create a special Y cable, with three mono jacks. Two jack will be placed into FX1 sends, the third one with both cables soldered together, will be insert into your processors’ input jack.

NOTE: by collapsing both FX1 sends into a mono signal, will NOT affect FX2 and FX3 sends. You will maintain the stereo image intact.

### 3 – Auxiliary processing or “MIX 2” (AUX 1 – AUX 2)

We gave the possibility to final user to go even more “deeply into the hole” with two full stereo auxiliary loops. These two loops (processors) can be fed by the returns of each one of three main parallel processors (FX1/2/3), or even by dedicated internal dry signal coming out of L3.

Doing this way, mixer can be configured into two different modes (without touching a cable!):

- 5 parallels: five full stereo processors can be placed in parallel, one to each other;
- 3 + 2 (dual mode): three full stereo processors, connected in parallel one to each other, can be also placed into other two other stereo processors, connected in parallel one to each other as well.

Again, you can switch from these two modes in real time, by selecting them from the front panel and without touching any cable:

#### ***What are the advantages of using AUX processing?***

Well, they're multiple. Most of the iconic sounds back in the days were obtained by placing one particular devices into another, and not in parallel. By upping the game, also group of effects in parallel to each other were placed in series into another group of effects.

This is also a very creative processing. Let's talk about a stereo delay and a stereo reverb for example. What's the most correct way to wire them? The most correct answer is to wire them in parallel, since they are both time based effect, so their processing should start from the same exact moment. But, why not to be a little more creative? Why, for example, to hear the reverb coming only on delay repeats and not on dry signal, giving a wired sense of space and depth?

Let's try to configure this, starting from:

- Our standard dry signal;
- Stereo Delay into FX1;
- Stereo Reverb into AUX1.

What can I do from now?

Well, by always keeping our dry signal active (DRY), we can proceed in two different ways:

#### ***DELAY // REVERB:***

- We turn on DRY button (we let the dry signal coming to the speakers);
- we turn FX1 button on (we activate the parallel send to our delay devices);
- we turn AUX1 button and DRY's "to AUX1" button both on (we're sending the dry signal into reverb, for a parallel processing, leaving FX1's "to AUX1" button off).

What I should expect to hear? A nice regular ambient, where delay's repeats and reverb's reflections start from the exact same time, give us an all around classis space.

#### ***DELAY -> REVERB:***

- We turn on DRY button (we let the dry signal coming to the speakers);
- we turn FX1 button on (we activate the parallel send to our delay devices);
- we turn AUX1 and FX1's "to AUX 1" buttons on (we're sending the output of delayed signal into reverb, for a two stages serial processing).

What I should expect to hear? A bit more wired effect, since you're experienced a wired thing, such the reverb is listened only on delays repeats and not on dry signal.

Saying we set our delay at 500ms, you're hearing nothing for 500ms, then the very first delay repeat and then only from that moment the reverberation. By increasing delay feedback, you will hit more and more reverb always later, like 1000, 1500, 2000ms later than your dry signal, so a "bouncing" reverb is what you're experiencing.

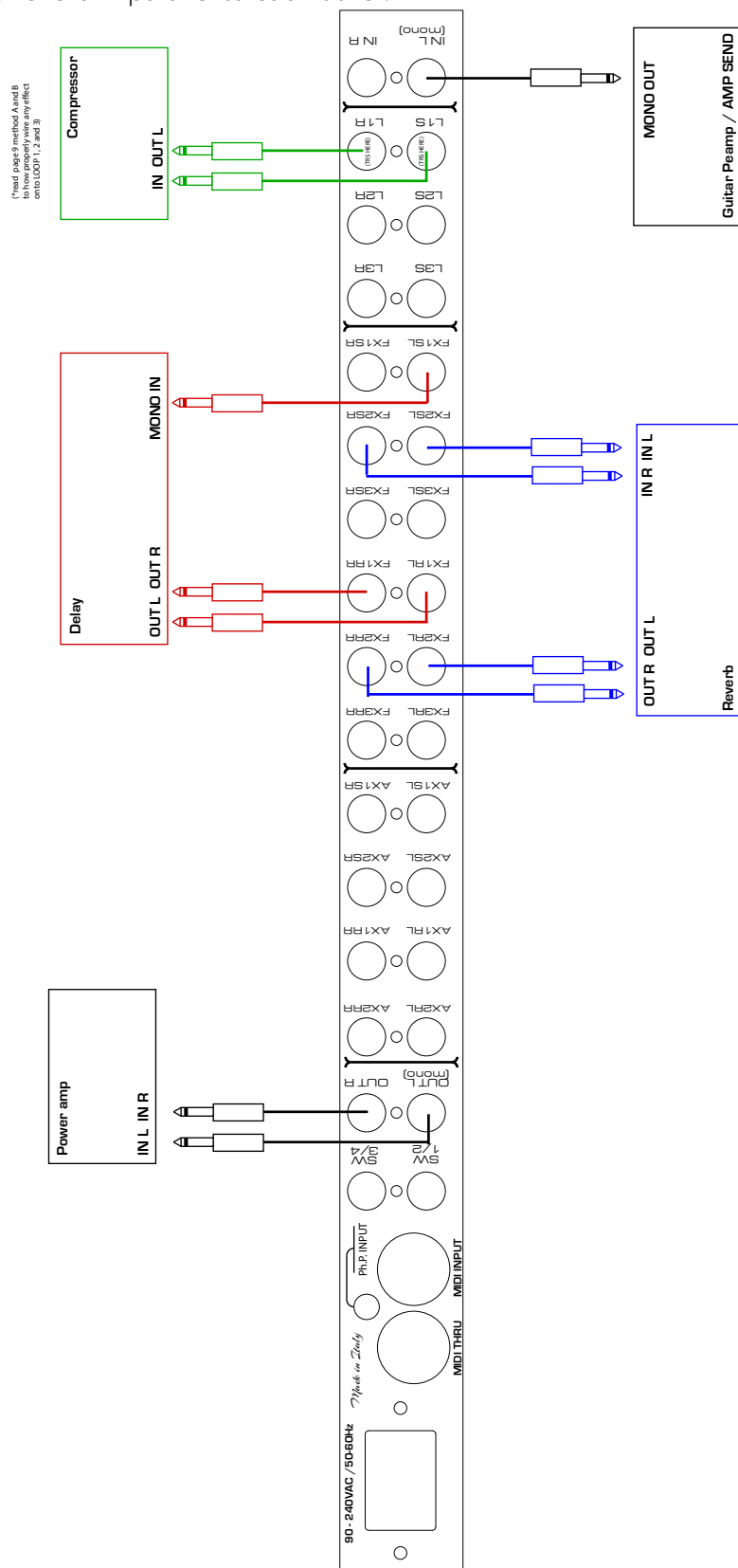
You wanna go deeper?

Try to patch a pitch based effect into AUX2, and play with a delay, a reverb and a pitch shifting with all these possibilities.

## WIRING EXAMPLES

### 1 – Simple wiring: one FX in series into other two in parallel to each other

In this example we have a mono compressor in series, into a mono input/stereo output delay and a stereo reverb in parallel to each other.

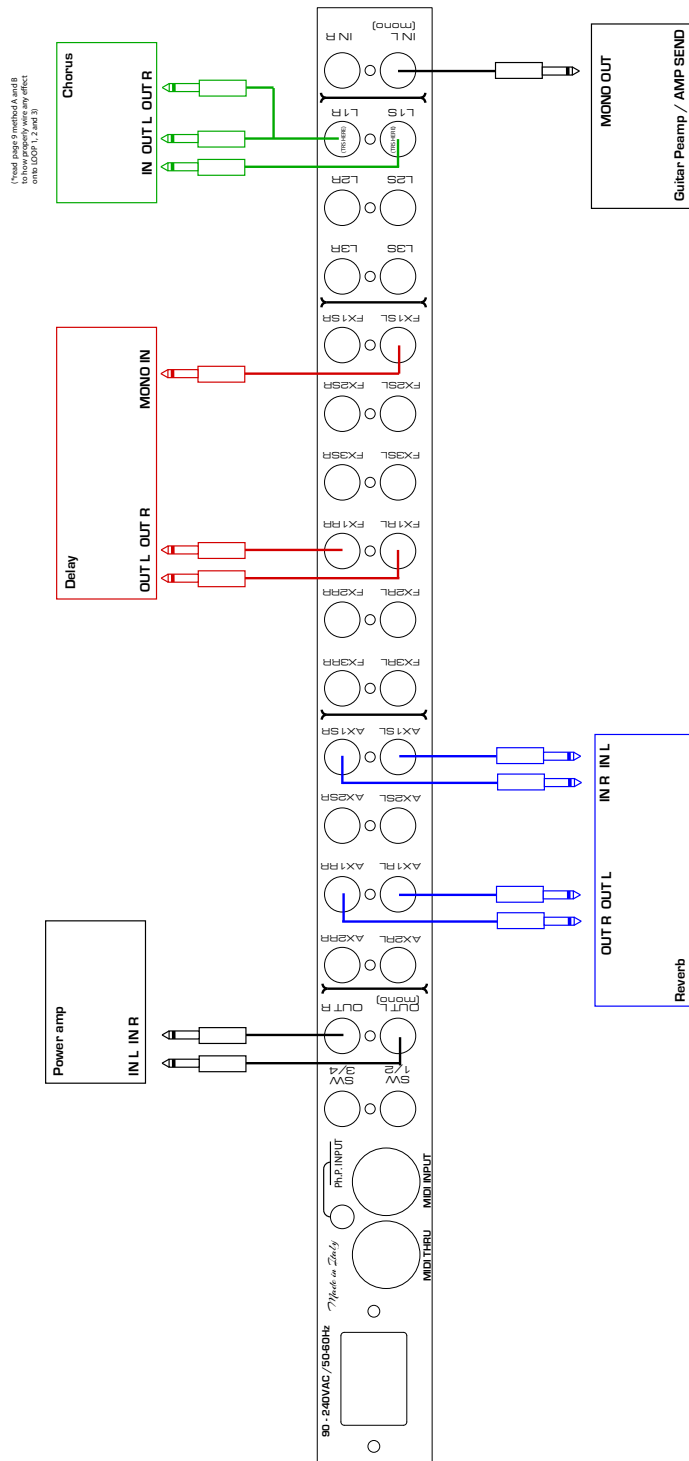


## 2 – Mixed Serial and Parallel: a chorus (in series), into a delay (in parallel), into a reverb (in parallel).

In this example we have a mono in / stereo out chorus in series, into a mono input/stereo output delay (first mixing stage), again into a stereo reverb (AUX mixing stage).

Remember, you can select the level of your delay goes into your reverb by increasing “AUX 1” pot’s FX1 on front panel.

You can also place the reverb in parallel to delay as per EX1, by increasing “AUX 1” pot’s DRY on front panel.



### *3 – “TALES rack – Late ‘80s /early ‘90s session rack”*

In this example we'll explain how to set up a complex system, quite similar, if not the same, used by many session men of the late '80s, early '90s. We will name also a few common units used in that period, to make the example more familiar.

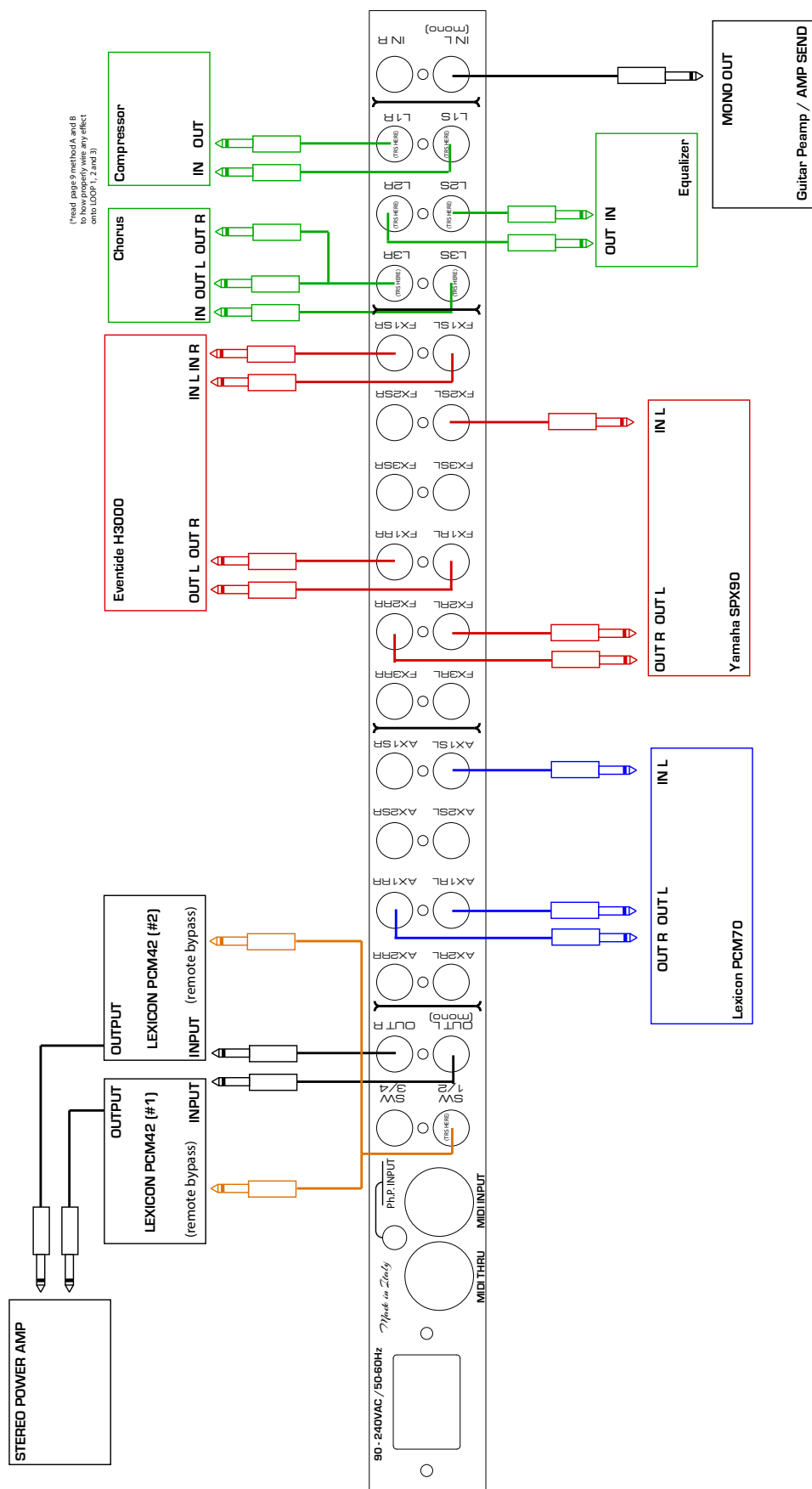
Each system of that era was a bit different of course, so take this as a starting point to build your own sound. The actual stricture of this mixer lets you decide the wiring of a few thing in real time, but let's dive in:

As starting point, we have the three first fx in series: compressor (*L1*), eq (*L2*), and a stereo chorus(*L3*).

At this point, the signal is sent to an Eventide H3000 (*FX1*) and a Yamaha SPX90 (*FX2*).

The second mixing stage (AUX stage) is composed by a Lexicon PCM 70 (*AUX 1*).

The last touch, as some players use to have, is couple Lexicon PCM42s in series after the whole mixer, remoted by control switches (*SW 1 & 2*)





Simple but effective W/D/W rig, using the DRY OUTPUT features. In this example we use an equalizer to pre-shape the tone of the DRY signal (we can also choose if we want the equalizer in wet cabinets or not) and an harmonizer parallel to a stereo delay to achieve that big and open lead sound.



## **DIRECT OUTPUT or D-OUT (selectable)**

A dedicated dry output is available for an easy Wet/Dry/Wet scenario, or if you'd like to have an unprocessed dry path to be recorded in your DAW or sent wherever you need. This output is placed in front panel and it's isolated from main ground with a high grade audio transformer.

We also gave user the ability to select where this dry output is taken: PRE (D/OUT button off) is right at the very input of the mixer. You will have a copy of signal coming from inputs jacks. POST (D/OUT button on) this will take your signal after L3. Very useful if you'd like to have the serial processing in your center cabinet. No gain or attenuation applied, output from D/OUT is 1:1 in volume, compared to main input signal.

## **SWITCH 1/2 and 3/4**

Four function switches are available, in order to turn on/off external devices' features (amps, preamps, fx, etc.). They can be both activated by front panel's buttons or via MIDI CC.

SW1/2: TIP is SW1, RING is SW2, SLEEVE is ground.

SW3/4: TIP is SW3, RING is SW4, SLEEVE is ground.

SWITCHES 1,2,3 and 4 can work in "Latching" or "Exclusive" modes:

- Latching: you can turn on or off each one of four function switches independently. Perfect for activate remote function of amps and rack gear in general.
- Exclusive: in this mode, last switch pressed is turned on, other three off. This mode is suitable for selection of multi channels amps' channel, when ideally you want only one channel on at time.

To perform selection between Latching or Exclusive mode, you need to:

- Press together SW1 and SW3 for three seconds and "L1" led will blink for three times. This is confirmation you're in LATCHING/EXCLUSIVE SWITCH SELECTION MODE. Any other buttons is now not working.
- To perform the selection you need to look at "SW1" button. With SW1 on = Exclusive mode, with SW1 off = Latching mode.
- Once you selected desired mode, you need to press "L1" button to exit LATCHING/EXCLUSIVE SWITCH SELECTION MODE. "L1" led will blink three time and, everything will turn back at last buttons combination right before you entered in this mode.

## **DEDICATED DRY PATH**

We've taken care of the dry signal, placing a dedicated and extremely well buffered audio buss only for dry signal coming after L3, right into the output stage. Your signal will never sound better than this, especially when mixing other 5 units together.

There're many mixers out there who modify original signal according to the number of connected units. Let's stop this massacre.

This dedicated dry path is also useful for a quick "kill dry" selection (DRY button OFF), if you don't want any dry signal in your L/R speakers.

## BALANCED OUTPUTS

Two balanced outputs are available on the front panel. They are specular copies of the back outputs. They are very convenient if you want to quick wire your system to your DAW/mixer for example.

NOTE: while back outputs are auto-switched to become mono/stereo depending if you plug Left/Mono jack only or Right/Stereo also, front panel XLR are thought to be STEREO only (one signal panned 100% right and one 100% left). In order for this to happen, there must be two jacks connected on back panel Left/Mono and Right/Stereo outputs.

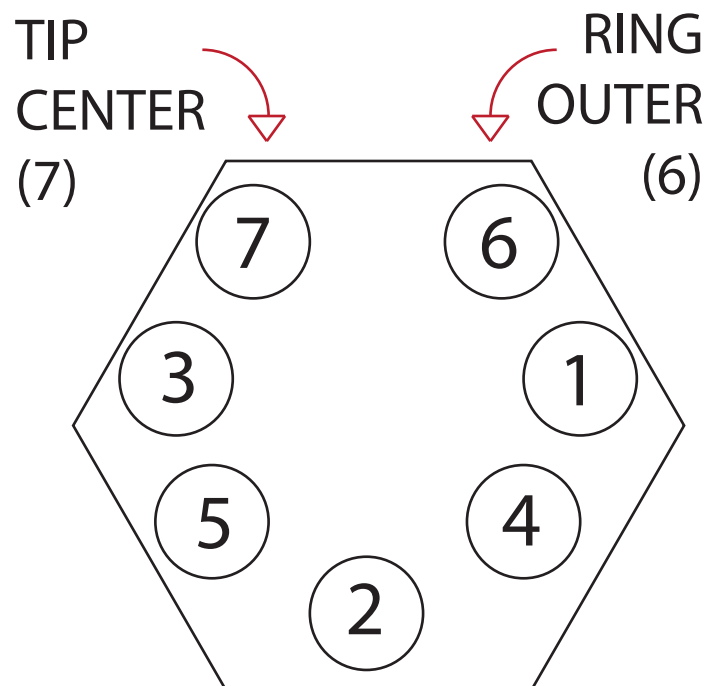
If your will is to use front panel XLR output only and you don't care about sound at back outputs, you can use two dummy jack in order to activate internal switches and keep stereo image hard panned.

## MIDI (MIDI CHANNEL, MIDI Control Changes, MIDI Phantom Power)

MSLM has couple MIDI INPUT and a MIDI THRU ports.

One 7 PIN midi INPUT connector is placed on the back of the mixer, the other on front panel out of convenience of connection. They are internally wired in parallel, so they must be used only one at time.

Pin 6 and 7 are wired to the back "Ph.P Injection" connector, and this is where you can plug an external power supply to power your midi board. This connector can operate at 9-12 V DC or AC at 2A MAX.



(Both front and back panel 7 PIN MIDI INPUT connector, front view)

MSLM can operate with all 16 midi channels available, one at time (not OMNI mode). It will be shipped with MIDI CH1 already stored, but you can change it with following procedure.

Once MSLM is turned on and no midi signal is coming thru it, you need to:

- Press together SW2 and SW4 for three seconds and "D/OUT POST" led will blink for three times. This is confirmation you're in MIDI CHANNEL SELECTION MODE. Any other buttons is not working now
- Now, you need to look at buttons named FX1 – FX2 – FX3 – DRY. The on/off status combination of these four buttons will determinate which midi channel are you going to save. To change the status of a button, you just need to press it, until it turns red, or press it again to turn it off.

Consulting the following chart, you will be able to select whatever MIDI CHANNEL you like to use:

<i>MIDI CHANNEL</i>	<i>FX1</i>	<i>FX2</i>	<i>FX3</i>	<i>DRY</i>
<i>1</i>	OFF	OFF	OFF	OFF
<i>2</i>	OFF	OFF	OFF	ON
<i>3</i>	OFF	OFF	ON	OFF
<i>4</i>	OFF	OFF	ON	ON
<i>5</i>	OFF	ON	OFF	OFF
<i>6</i>	OFF	ON	OFF	ON
<i>7</i>	OFF	ON	ON	OFF
<i>8</i>	OFF	ON	ON	ON
<i>9</i>	ON	OFF	OFF	OFF
<i>10</i>	ON	OFF	OFF	ON
<i>11</i>	ON	OFF	ON	OFF
<i>12</i>	ON	OFF	ON	ON
<i>13</i>	ON	ON	OFF	OFF
<i>14</i>	ON	ON	OFF	ON
<i>15</i>	ON	ON	ON	OFF
<i>16</i>	ON	ON	ON	ON

Let's say you want to use MIDI CH9, you need to set up:

- FX1 button = ON
  - FX2 button = OFF
  - FX3 button = OFF
  - DRY button = OFF
- Once you selected the exact combination of buttons corresponding to the desired MIDI CHANNEL, you need to press "D/OUT POST" button to exit MIDI CHANNEL SELECTION MODE. At this point, "D/OUT POST" led will blink three times and everything will turn back at last buttons combination right before you entered in this mode.

Now you're ready to receive MIDI messages on your desired MIDI CHANNEL.

MSLM is able to receive a series of MIDI Control Changes messages to turn on/off status of each function.

All CC numbers available are in the following list, by keeping in mind we consider the single value of each CC like 0 = off, 127 = on.

L1: CC100  
L2: CC101  
L2: CC102  
D/OUT POST: CC 103

FX1: CC104  
FX2: CC105  
FX3: CC106  
DRY: CC107

AUX1: CC108  
AUX2: CC109

SWITCH1: CC110  
SWITCH2: CC111  
SWITCH3: CC112  
SWITCH4: CC113

To AUX 1 (FX1): CC114  
To AUX 2 (FX1): CC115  
To AUX 1 (FX2): CC116  
To AUX 2 (FX2): CC117  
To AUX 1 (FX3): CC118  
To AUX 2 (FX3): CC119  
To AUX 1 (DRY): CC120  
To AUX 2 (DRY): CC121

## TROUBLESHOOTING

- MSLM IS NOT TURNING ON  
Check the power cord, sometimes it will be loose and cannot make good contact with IEC socket. Replace it. You possibly don't turn on the power button on the front. Be sure to turn it into "position 1".
- MSLM IS TURNING ON BUT WITH NO SOUND  
The first thing to make sure is to turn on the "DRY" red illuminated button on the front panel.

If all the buttons are off, you won't hear any sound. We highly suggest to turn everything off beside DRY at the very beginning.

- I'M NOT ABLE TO MAKE MT MSLM COMMUNICATE WITH MY MIDI SENDING DEVICES  
Be sure to use a proper working standard 5 DIN midi connectors. Check two or three cables at least, most of the time the problem is a defective one.
- MIDI CABLE IS FINE BUT I CAN'T STILL USING MIDI IN A PROPER WAY  
There're multiple operation to make before using MSLM with a midi devices. We suggest to check "MIDI" section of this manual, you will find a point by point operations to make the experience as quick as possible.

For any problem and in any moment you can contact a qualified tech at: [info@redeven-amplification.com](mailto:info@redeven-amplification.com)

We will replay to you as soon as possible.

## WARRANTY DESCLAMER

Please, do not try to open the device in any case. For any problem contact your seller or write to us. Any inexpert person should not even think of do anything inside this unit. RedSeven Amplification offer a standard two year fully warranty for any component (except to wear subjects). By removing the top or by making any modification to the original state will violate standard warranty and RedSeven Amplification will not responsible for any damage to people, things or animals.

Revision 3.1  
December 2022

## REVISION NOTES:

V3.0 (November 2022): introduction of this manual.

V3.1 (December 2022): clarification on how to properly use front panel XLR outputs for a correct stereo image.

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