



Masotti Guitar Devices

Loop Rail

User's manual



Welcome to Masotti Guitar Devices world and thank you for your choice. Our challenge is to bring new ideas in guitar amplification, exploring new techniques and adopting the "no compromise" philosophy.

Loop rail is a true bypass looper. It manages up to eight pedals in direct mode as well as via MIDI. Noise switch is absent thanks to the microprocessor clickless technology, developed by MGD and adopted in all our products.

IMPORTANT:

**BEFORE SWITCH ON THE DEVICE, PLEASE READ CAREFULLY THE
IMPORTANT SAFETY NOTES AT PAG. 8**

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General description.

Loop Rail is a 1 rack-unit looper. It is completely true bypass and manages up to eight loops in direct mode, via pushbuttons on front panel, as well as via MIDI by Program Changes and Control Changes. Switch is completely noiseless thanks to our clickless technology based on microcontroller.

Trough the 8 front pushbuttons, user can activate or exclude directly the effects in the signal path. Via MIDI program changes, an arbitrary combination of the 8 loops (stored as follows) can be recalled. Via MIDI control changes, each loop can be activated and excluded directly. The three ways (pushbuttons, PC and CC) can be used in the same time for the best flexibility. Combinations can be stored in a very easy way.

Loop status is clearly indicated by the red led contained in the corresponding pushbutton. Finally, Loop rail contains four isolated power supplies dedicated to power the effects. Three channels deliver 9VDC-100mA, the fourth deliver 9VDC up to 250mA.

Front and rear panels.



On the front panel, from left side we can find the pushbutton for storing, the eight pushbuttons for the corresponding loops, four leds for power supplies status.



On the rear panel, from right we can find input jack, eight send/return connectors for loops, out jack, four couples of 2.1mm connectors from power supplies (negative centre), MIDI IN and MIDI THRU, fuse socket, ground lift switch and IEC power plug.

Normal functioning.



Loop Rail is powered directly from mains. It is switched ON by simply inserting the plug of the power cord in the wall socket. **Warning:** first connect power cord to Loop Rail and then insert the plug in the wall socket.

Immediately after power ON, Loop rail test the loops and then it's ready to work as follows:

- Direct mode by the eight pushbuttons: you can activate and exclude each loop;
- Recall of combinations through Program changes: each arbitrary combination can be recalled sending a PC on channel 1 (other channels upon request);
- Direct mode by PC: you can activate or exclude the loops by sending PCs from 111 to 118;

d) Direct mode by CC: you can activate or exclude the loops by sending Control changes from 85 to 92, don't care about value (ON/OFF etc.);

the four modes described above are co-existing and they can be used at the same time, giving the best flexibility in live situations.

At every MIDI command, the Active/Prog pushbutton blinks for about 0.5s.

MIDI programming.



For maps programming, please see the following sequence:

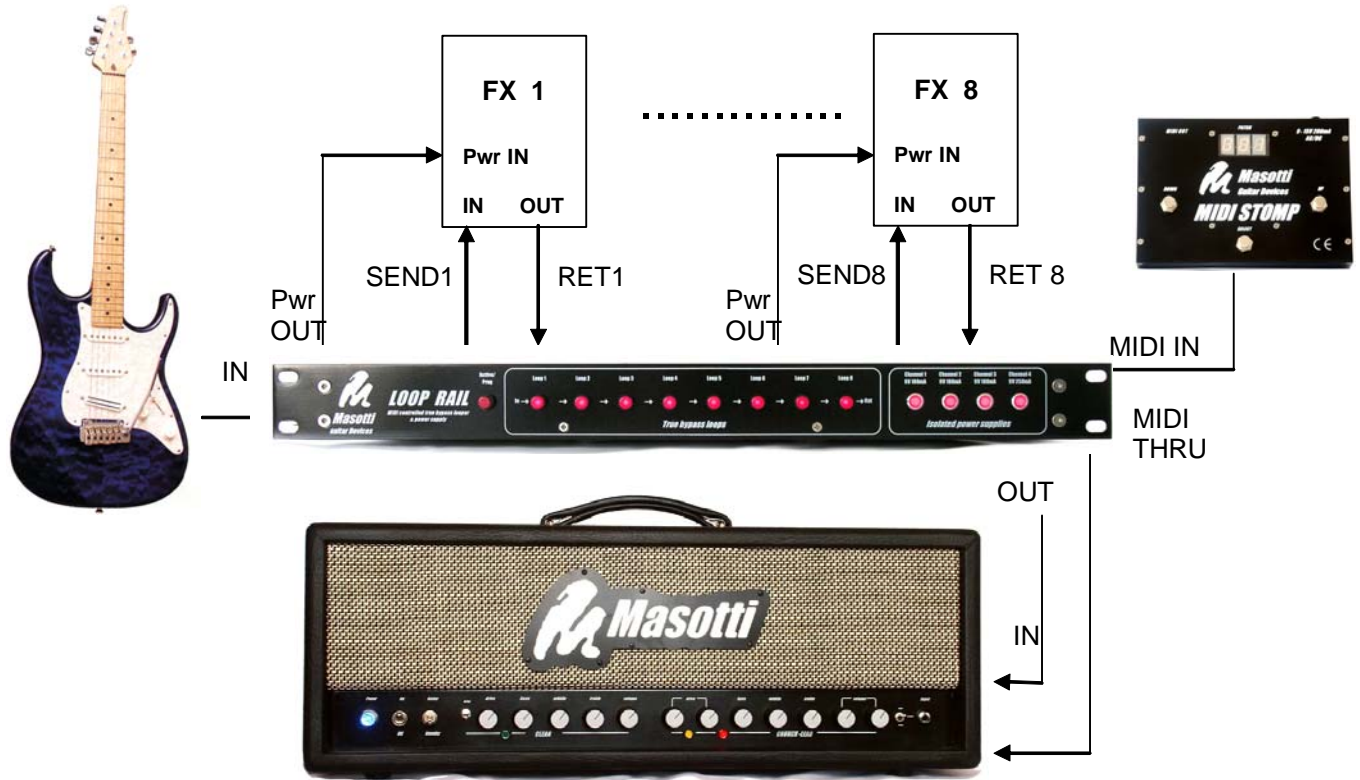
- 1) Switch ON and connect MIDI controller to MIDI IN connector of Loop Rail; channel must be #1.
- 2) Switch ON Loop Rail as described above.
- 3) Push Active/Prog pushbutton; after about 0.5s the button is lit and it indicates that Loop Rail is ready to store.
- 4) Configure the loops by pushbuttons as desired.
- 5) Send the Program changes in which you want to store the map. At every store process, Active/Prog LED is off for about 0.5s. Please note that PCs from 111 to 118 are reserved for direct mode and they cannot use for memory store.
- 6) Repeat points 4 and 5 according to your needs.
- 7) Press ACTIVE/Prog pushbutton. After 0.5s it's OFF and indicates that Loop Rail is ready for normal functioning.

You can go from normal mode to prog mode and back in any time by pressing Active/Prog button.

Connections.

In the following picture you can find the standard connections for Loop Rail.

TYPICAL CONNECTIONS - DIRECT AND MIDI MANAGEMENT



Power supply

Loop Rail is powered at 230V 50Hz AC. Power consumption is about 20VA. Fuse is rated at 100mA-T delayed type and it must be replaced with an identical one.

Isolated power supplies

On the rear panel you can find four couples of connectors for pedals power supply. Each couple is connected to a power supply which current capability is indicated both on front and rear panel. Each power supply is galvanically isolated from the others, so it's possible to connect two channels in series for 18V voltage or it's possible to power some fuzzes with positive to ground. For further informations, please refer to PW4 manual or contact MGD.

WARNING: if one of the leds of power supplies on the front is OFF, a short-circuit on the connections is present. Disconnect immediately each plug of the corresponding channel and check cables and connectors in order to remove short circuit. Power supplies are self-protected against overload and short-circuit and after a few minutes channel is restored automatically.

Effects sequence.

A start trace for connecting the effects can be the following:

- 1) wha wha: if it is true bypass, it can be connected also before the TB6. Of course, in this case it's not possible to manage it via MIDI;
- 2) dynamics effects (booster and compressors);
- 3) distortions: overdrives, distortors and fuzzes;

- 4) modulations: chorus, flanger, phaser;
- 5) ambients: delays and reverbers.

An optional volume pedal can be placed both immediately after the guitar, before Loop Rail input (as instrument volume control) or after the chain, after Loop Rail out as master volume.

This sequence is only a trace and it has to be modified according to personal needs and preferences.

Intconnecting cables and connectors.

True bypass systems, if correctly projected and built, introduce a negligible signal loss when they are in bypass. Loop rail is equipped with gold plated relays and connectors and it is wired with silver plated, teflon isolated cables. When in bypass, its electrical equivalent length corresponds to about 1m of good quality cable. Nevertheless, when loops are active, signal passes through external connectors and cables and, of course, through the effects. So, it's very important to use best quality components and to use short cables.

However, a good buffer before the chain is recommended in all complex true bypass systems in order to compensate impedance mismatches and signal loss between different pedals.

Warranty.

Warranty is 2 (two) years according to EU laws. Warranty is not valid if the device is opened or partially modified without our authorization. No responsibility is due for Masotti Guitar Devices for damages to human, animals or things originated by a manumission or a different use of Loop rail as described in this manual.

Important safety notes

TB6 is projected and engineered to comply to EU safety and electromagnetical compatibility CEI EN 60065, EN 55103-1 and EN55103-2. CE mark indicates the compliance. Furthermore, even if ambient policy of MGD limits at the minimum the use of potentially polluting components, according to current EU laws customer must waste this device in special sites.



In order to avoid shock or hurt risks, you should follow carefully the indications reported in this manual and in the next list:

- **Never open the case. No serviceable parts inside. For service, refer to MGD or qualified and skilled personnel.**
- **Never remove any screw.**
- **Don't expose Loop Rail to rain, water sparks, excessive humidity, chemical vapours, heavy dust, heat fonts, strong vibrations.**
- **Never introduce in rear plugs objects different than corresponding connectors.**
- **After storage or transport at very low temperatures, wait about 30 minutes before switch the unit ON.**
- **Always use CE-approved and good conditions mains chords. Never break or remove earth plug!**
- **Before switch Loop Rail ON, check mains value.**
- **Replace fuse only with an identical type, following the data written on the rear panel.**
- **In case of fuse blowing not due to extraordinary reasons (like violent mains variations, thunderstorms or lightening), don't attempt to replace it but please contact MGD or a qualified service.**

Technical specifications.

8 ways true bypass system.

Power supply: 230V 50Hz 20VA

Parasitic capacitance with loop in bypass: <100pF.

Switch time: < 50ms.

Ambient conditions: 10-40°C, 30-90% humidity no condensation.

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Tel. +39 0761 458076

URL: www.masottiamp.it

For info, please contact us at info@masottiamp.it