

**PM**

THINK LESS. CREATE MORE.

# μLOOP

BYPASS LOOPER &  
USB MIDI INTERFACE

This device was created and designed to empower your creativity.

It is the result of many long nights and early mornings. It is born from the desire to bridge the gap between musician and instrument, and we want to say a huge thank you for your support. Our brand is built around a strong community and we hope you love your new PIRATE MIDI creation as much as we do.

The PIRATE MIDI team.

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# DEVICE DESCRIPTION

introduction to your new bypass looper



4 mono loops or 2 stereo loops in an enclosure that fits under the smallest pedalboards - only 22mm thick. Plus a USB MIDI Interface!

This MIDI-controlled bypass looper and USB MIDI interface is unmatched for its compact size and its affordability.

Stereo buffered output with JFET muting for silent switching.

You can also change the MIDI Out mode to an Aux Switch input and switch the relays or presets with an Aux footswitch - no MIDI required!

Split-Y TRS to TS cables needed to access 4 mono loops.

# TECHNICAL SPECS

all important specification

## DIMENSIONS

**Metric** (129x57x22 mm)

**Imperial** (5" x 2.2" x 0.86")

## WEIGHT

**Metric** (190g)

**Imperial** (6.7 oz.)

## INPUTS/OUTPUTS

**Stereo TRS** Input & Output

**Stereo or Mono Split** Sends & Returns

## POWER REQUIREMENT

**9 Volts DC** (@ 250 mA)

## BOX CONTENTS

**1x  $\mu$ Loop MIDI Bypass Looper**

**1x USB type C cable**

**1x Getting Started Card**

## LINK TO DOWNLOADS:

<https://learn.piratemidi.com/downloads/firmware-updates>

# HARDWARE LAYOUT

quick overview of top interface



- 1 USB type C (cable included) for USB MIDI, editing the device with the web editor, and firmware updates.
- 2 2.1mm 9v DC barrel jack - as standard on most effects pedals and power supplies.
- 3 Dedicated 1/8" (3.5mm) TRS MIDI In conforming to the MIDI.org specification.
- 4 Dedicated 1/8" (3.5mm) TRS MIDI Out conforming to the MIDI.org specification (Type A). This can power a CME WIDI Jack.

Mode can be changed to work as an Aux Switch input. (planned update)

- 5 1/4" TRS Stereo Audio Input and Output Jacks.

# HARDWARE LAYOUT (CONT.)

quick overview of other inputs and outputs



**6** 1/4" (6.35mm) TRS Audio Send/Return Jacks.

**7** Relay Indicator LEDs to show whether a channel is currently active or bypassed.

**8** Power and MIDI activity LED

# QUICK START

Getting started with the basics

## 1. Connecting Power

Power the  $\mu$ Loop with a 2.1mm centre negative 9V DC power supply.

The  $\mu$ Loop requires 250mA to function correctly. The device will not operate correctly using USB power only.

## 2. Connecting MIDI to switch loops

You can take your  $\mu$ LOOP straight out of the box, plug in a MIDI controller, and send CC's to switch the loops.

CC Numbers 0 to 3 control the 4 loops in Mono mode, and 0 & 2 control the loops in Stereo mode. When you take it out of the box, the  $\mu$ LOOP will be in **Stereo mode**.

See the MIDI Implementation on page 20 for full details. For Audio diagrams, see page 16 onwards.

## 3. USB MIDI Interface

Any MIDI sent to the MIDI In TRS port on the  $\mu$ Loop can be passed through to the USB MIDI port on the device. Likewise with USB MIDI being passed to the MIDI out TRS port.

Even without using the audio loop function, the  $\mu$ Loop can be used as a USB MIDI interface.



**Check that your  $\mu$ LOOP firmware is up to date.** Updates are released periodically adding new features and bug fixes. Go to:  
<https://learn.piratemidi.com/downloads/firmware-updates>



# QUICK START (CONT.)

Getting started with the basics

## • QUICK TIP

To go mono (4 channels) you'll need to use Y-split TRS to dual TS cables. They can be purchased from lots of online music/guitar retailers.

## Cable/Adapter Suggestions

### MIDI

- <https://piratemidi.com/en-au/products/3-5mm-to-din5-adapter>
- <https://piratemidi.com/en-au/products/right-angle-3-5mm-to-din5-adapter-1pc>
- <https://piratemidi.com/en-au/products/widi-jack-by-cme?variant=39439507423284>

### AUDIO or MIDI

- <https://piratemidi.com/en-au/products/3-5mm-to-6-35mm-trs-adapter>

### AUDIO

- <https://www.rockboard.de/en/cables-and-connections/flat-trs-to-midi-cables-1>
- <https://www.rockboard.de/en/cables-and-connections/rockboard-flat-patch-y-splitter-cable-20-cm-7-78-black-rbo-cab-f-y-20-bk>
- <https://www.rockboard.de/en/cables-and-connections/rockboard-flat-patch-y-splitter-cable-50-cm-19-1116-black-rbo-cab-f-y-50-bk>
- <https://www.rockboard.de/en/cables-and-connections/rockboard-flat-patch-y-splitter-cable-30-cm-11-1316-black-rbo-cab-f-y-30-bk>
- <https://www.tourgeardesigns.com/collections/flat-y-splitter-cables>
- <https://ebssweden.com/content2/accessories/patch-cables-connectors/>

# 1. DEVICE INTERFACE

What it all does

## 1/4" (6.35mm) TRS Audio Jacks

The 1/4" TRS jacks on the  $\mu$ LOOP are used for Stereo Input, Stereo Output, and Stereo or Dual-Mono Send>Returns for the audio loops. Stereo/Mono mode is selected using MIDI commands as per the table on page 21.

## 1/8" (3.5mm) TRS MIDI In & Out Ports

The MIDI In port is a Type A TRS MIDI port for receiving MIDI messages that are intended to control the relay switching port, or for passing through to the USB when being used as a compact USB MIDI interface.

The MIDI Out port is also a Type A MIDI port. This port will send MIDI messages from the USB MIDI, and pass it onto other devices, or it can be used to daisy-chain MIDI devices so that your  $\mu$ LOOP doesn't have to be the last MIDI device in the chain.

The MIDI Out port can also be used to plug in a TRS 3-way aux switch to control the loops without needing to use MIDI at all. Deeper customisation for this will be available through the web editor soon.

## Power/Data LED

The LED in the corner will flash on when the device is powered. When MIDI data is passing through the device - either via USB or the 1/8" (3.5mm) TRS MIDI ports - the LED will flash. Normally the light will be off.

## Channel 1 & 2 Relay LEDs

Each Loop has two paths (Left and Right) which are split when in mono mode. The Labelled 1L/1R, 2L/2R LEDs on the device will be lit when the loop is engaged, and dim when the loop is bypassed.

These loops are manually controllable via MIDI commands listed on page 21.

Presets are a saved combination of which loops are bypassed or engaged. There are 127 preset slots on the device, which can be recalled via MIDI.

## 2. POWER

let's turn this thing on and get going

Power your  $\mu$ Loop with a centre-negative 9v DC jack (2.1mm) commonly used for guitar pedals.

 Centre-Negative DC Power

### Power Requirement

If you're using a 9v DC power supply, please make sure it is able to supply the required 250mA.



# 3. PRESETS & MIDI CHANNEL

Saving your settings

## Preset Up & Down

There are **127 presets** available for you to customise. Sending **MIDI CC 16** will advance to the next preset, and sending **MIDI CC 17** will go to the previous preset.

## Save A Preset

To save the current settings as a new preset, send **MIDI CC 15** and the current preset will be saved with the current settings. So you would go to the preset you want to set, then set the relays to your desired states with CCs 1-4, and then send CC 15 to save the settings to that preset.

## Go to a Preset

To go directly to a particular preset, you can use CC's or PC's. Send **MIDI CC 18** with your chosen preset number as the value (0-127). Or send a **MIDI PC** message of your chosen preset number (0-127).

## MIDI Channel

Out of the box, your  $\mu$ Loop will respond to any MIDI channel. If you want to change the MIDI channel so that it only listens to MIDI messages sent with its specific channel number, send a MIDI message of **CC 19**.

If the value is set to 0, the channel will be set to "Omni" . The  $\mu$ LOOP will respond to messages sent on any MIDI channel.

If the value is set from 1-16, the channel will be set to a channel from 1-16.

If the value is set from 17-127, the  $\mu$ LOOP will detect the MIDI channel of the **next** incoming message, and adopt the same channel.

## 4. USB MIDI INTERFACE

An interface for your pedalboard

The  $\mu$ Loop is a class-compliant USB MIDI device. You can plug it into any USB host device like a PC, Mac, Phone, or Tablet and you will see the 1 In/1 Out MIDI device show up in apps that support MIDI devices. This means you can send MIDI into and out of your computer using the  $\mu$ Loop!

It does not have USB host capability, so it cannot connect to a MIDI controller directly via USB nor power anything via the onboard USB port.

Sending the appropriate MIDI from your USB device to the  $\mu$ Loop will allow you to engage or bypass loops and recall/save presets from your computer.

MIDI Thru to and from the 3.5mm TRS jacks can be switched on and off with **CC's 21 & 22**. See the MIDI Implementation chart on page 21 for details.



# 5. AUX SWITCH INPUT

No MIDI required!

## 3-Way Aux Switch

By plugging a TRS 3-way switch into the MIDI Out port of your  $\mu$ Loop, you can toggle the loops without using any MIDI at all. This could be super helpful for controlling a non-MIDI pedal that happens to be hiding away in an awkward spot on your pedalboard or rack.

To change the MIDI Out jack to Aux Switch mode, send a MIDI message to the  $\mu$ LOOP.

**CC 20, Value 127**

To customise what function is assigned to each Aux switch, you will need to use the web editor at [edit.piratemidi.com](http://edit.piratemidi.com) (coming soon for  $\mu$ Loop).

By default, the switch buttons will be assigned to Preset Up & Preset Down.

The PIRATE MIDI Aero (Coming Soon) is an aux switch AND a MIDI controller. It would be an excellent companion for this feature!

# 6. AUDIO ROUTING

From there to here, from here to there

## Audio Signal Path

The  $\mu$ Loop has full stereo series signal path, unless you split the loops to act as series mono loops. The ¼" TRS input and output are stereo, and the four ¼" TRS send and return jacks are TRS.

In stereo mode, you can use TRS cables to connect stereo effects that use TRS jacks, or you can use split-Y TRS to dual TS cables to connect mono pedals (or stereo pedals that use two TS jacks).

**Full Stereo Signal Path:** Input (L+R) > Loop 1 (L+R) Send > Loop 1 (L+R) Return > Loop 2 (L+R) Send > Loop 2 (L+R) Return > Output (L+R)

**Full Mono Signal Path:** Input (Tip) > Loop 1L (Tip) Send > Loop 1L (Tip) Return > Loop 1R (Ring) Send > Loop 1R (Ring) Return > Loop 2L (Tip) Send > Loop 2L (Tip) Return > Loop 2R (Ring) Send > Loop 2R (Ring) Return > Output (Tip)

## Muting

The  $\mu$ Loop has a stereo buffered output with JFET muting for silent switching. The JFET muting can be switched on or off for the left and/or the right output channel with MIDI CC's as detailed in the MIDI implementation table in chapter 8.

## Stereo & Mono

Using Stereo mode, everything is stereo TRS from input to output. If you want to switch to mono, loop 1 (1L and 1R) and loop 2 (2L and 2R) are individually switchable between stereo and mono.

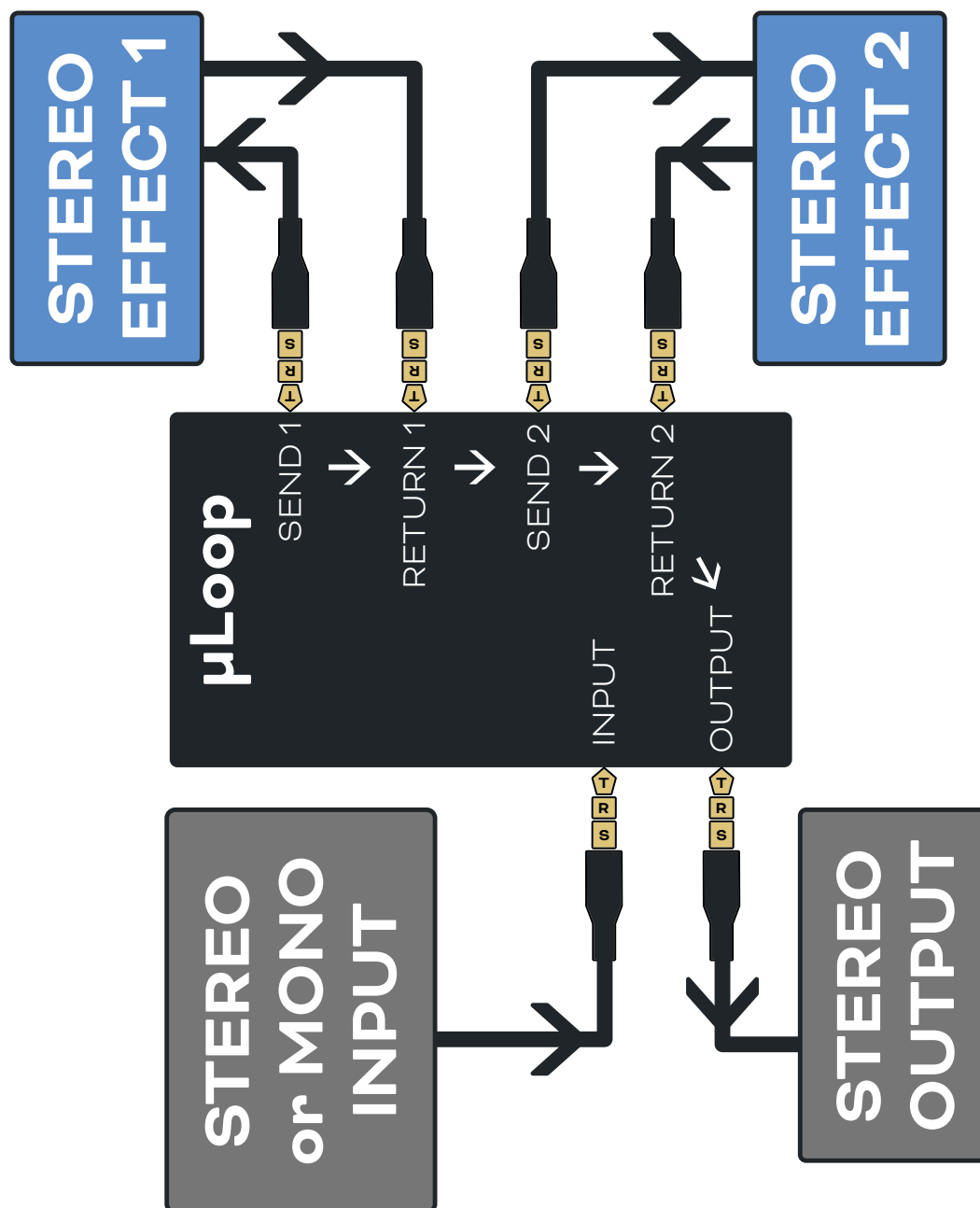
This makes the following signal path possibilities:

1. Input > Stereo > Stereo > Output
2. Input > Mono > Mono > Stereo > Output
3. Input > Stereo > Mono > Mono > Output

Please note: there is no onboard summing or splitting for the stereo>mono or mono>stereo signal.

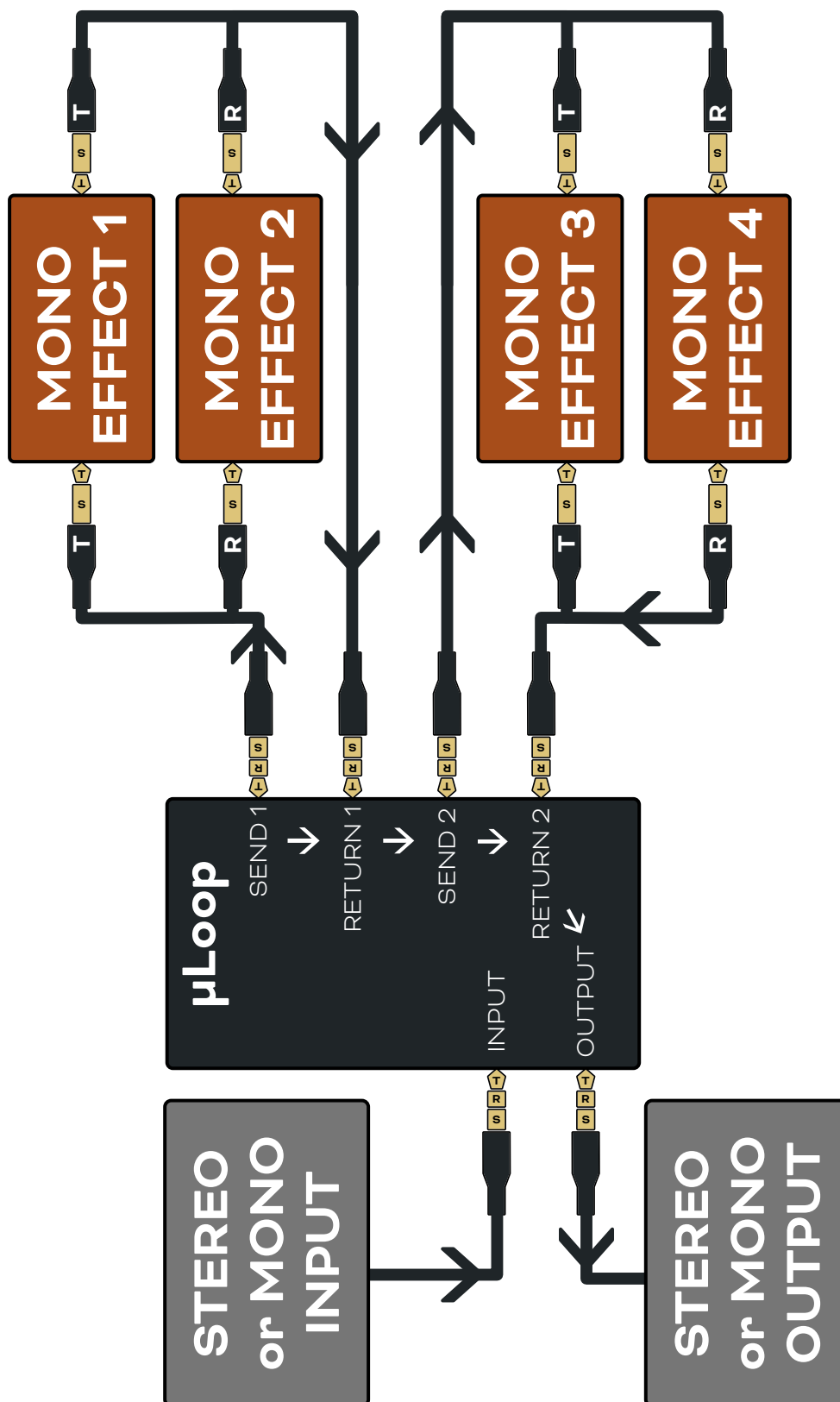
# 7. DIAGRAMS

Some ideas for using the bypass looper



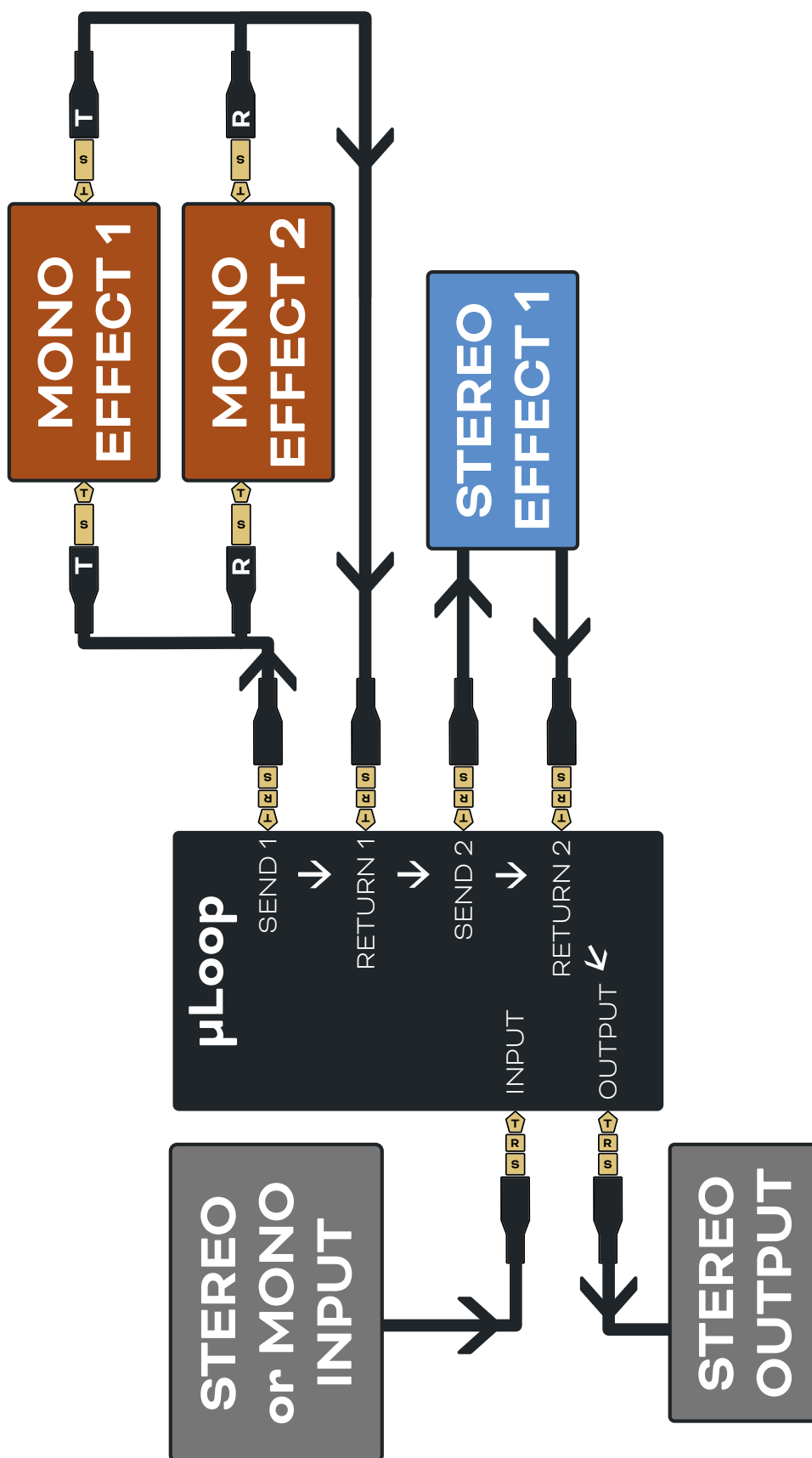
# 7. DIAGRAMS (CONT.)

Some ideas for using the bypass looper



# 7. DIAGRAMS (CONT.)

Some ideas for using the bypass looper





# 7. DIAGRAMS (CONT.)

Some ideas for using the bypass looper.

# 8. MIDI IMPLEMENTATION

Controlling the  $\mu$ LOOP with external MIDI commands

The  $\mu$ Loop can be controlled by MIDI from an external MIDI device via the dedicated MIDI In (3.5mm TRS) or USB MIDI.

Details on setting the MIDI channel are found in chapter 3.

These MIDI assignments are included in the PIRATE MIDI Device Library. If you are using a BRIDGE controller, you can probably ignore this part!

**The table is on the next page...**

# 8. MIDI IMPLEMENTATION (CONT.)

Controlling the  $\mu$ LOOP with external MIDI commands

FUNCTION	MIDI CC#	VALUE
<b>Loop Control</b>		
Loop 1: Stereo or Left	1	0=Bypass, 127=Engage 64=Toggle
Loop 1: Right - Inactive when Loop 1 is in stereo mode	2	0=Bypass, 127=Engage 64=Toggle
Loop 2: Stereo or Left	3	0=Bypass, 127=Engage 64=Toggle
Loop 2: Right - Inactive when Loop 2 is in stereo mode	4	0=Bypass, 127=Engage 64=Toggle
Loop 1 Mode	5	0=Mono, 127=Stereo
Loop 2 Mode	6	0=Mono, 127=Stereo
<b>Preset Control</b>		
Save Current Settings to Current Preset	15	Any (0-127)
Preset Up	16	Any (0-127)
Preset Down	17	Any (0-127)
Go to Preset 'x'	18	0-127
Go to Preset 'x' (PC)	PC	0-127
<b>Device Settings</b>		
Left Output Switch Muting	7	0=Inactive, 127=Active
Right Output Switch Muting	8	0=Inactive, 127=Active
Set Mute Time	9	0-127 (set as milliseconds - factory default = 5ms )
Set MIDI Channel	19	Any (0-127) - See chapter 3
MIDI Out/Aux Switch Mode	20	MIDI Out=0, Aux Switch=127
USB MIDI Thru to MIDI Out	21	Off=0, On=127
MIDI In Thru to USB MIDI	22	Off=0, On=127

# SUPPORT & WARRANTY

Technical help & guarantee

Thanks for purchasing a  $\mu$ Loop!

If you have any questions, please feel free to contact us via **support@piratemidi.com** or use technical support on **www.learn.piratemidi.com**.

Manufacturing defects are covered by our warranty. Please contact us if your device is defective.

Australian domestic customers are covered by Australian Consumer Law which requires repair or replacement for devices that do not fulfil their advertised purpose.

International (Non-Australian) customers are covered by our own workmanship guarantee. We aim to create a satisfactory outcome for every single customer. Please contact us if you have an issue with your device.

Customer-caused damage may be repairable for a fee. We offer repair services for most components that receive damage. Contact us for details.



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AUSTRALIA**





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