The GigRig Ltd
Unit 85 Basepoint Business Centre
Swindon
SN5 7EX

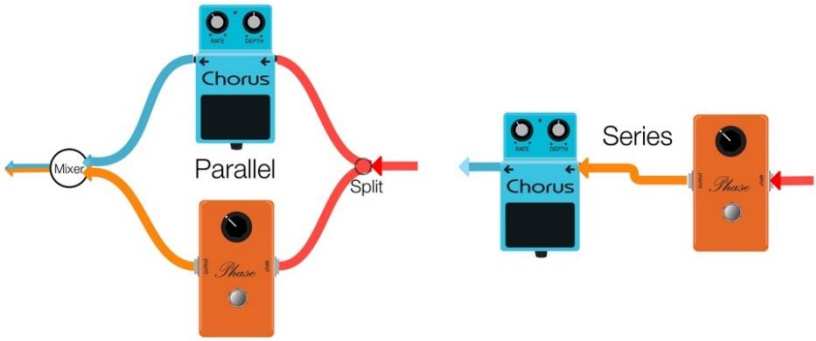
TheGigRig™ Wetter Box Manual

1. SELECT INPUT STEREO/MONO
2. MIX/BLEND CONTROL
3. OPTOKICK FOOTSWITCH
4. GAIN CONTROL LOOP B RETURN
5. GAIN CONTROL LOOP A RETURN
6. EFFECTS LOOP A RETURN
7. EFFECTS LOOP A SEND
8. MAIN INPUT
9. PHASE LOOP B RETURN
10. MIX/BLEND SELECT
11. REMOTE SWITCH INPUT
12. EXPRESSION PEDAL INPUT
13. EFFECTS LOOP B SEND
14. EFFECTS LOOP B RETURN
15. OUTPUT LEFT (MONO)
16. OUTPUT RIGHT (STEREO)

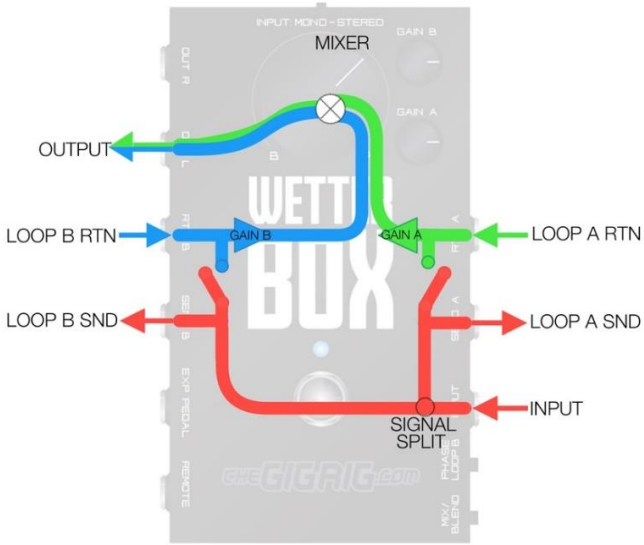
GLOSSARY

- **INPUT MONO/STEREO:** If your INPUT to the Wetter Box is Mono, set the switch to MONO. If your signal path is stereo (using a TRS cable), set to STEREO.
- **MAIN INPUT:** Connect your guitar here (if using STEREO, use a TRS Cable).
- **GAIN CONTROL LOOP B RETURN:** Use this to control the Gain of LOOP B.
- **GAIN CONTROL LOOP A RETURN:** Use this to control the Gain of LOOP A.
- **EFFECTS LOOP A SEND:** Connect a patch cable (TRS, if STEREO) from here to the Input of the effects pedal in LOOP A.
- **EFFECTS LOOP A RETURN:** Connect a patch cable (TRS, if STEREO) from here to the Output of the effects pedal in LOOP A.
- **EFFECTS LOOP B SEND:** Connect a patch cable, (TRS, if STEREO) from here to the Input of the effects pedal in LOOP B.
- **EFFECTS LOOP B RETURN:** Connect a patch cable (TRS, if STEREO) from here to the Output of the effects pedal in LOOP B.
- **OUTPUT LEFT (MONO):** Connect to Amp for Mono Output.
- **OUTPUT RIGHT (STEREO):** Connect second Amp for STEREO output.
- **OPTOKICK FOOTSWITCH:** Press this to engage/disengage the Wetter Box.
- **MIX/BLEND SELECT:** Push to select between MIX or BLEND modes of operation.
- **MIX/BLEND CONTROL:** Use this dial to either MIX or BLEND LOOP A and LOOP B together**.**
- **PHASE LOOP B RETURN:** Use this to flip the Phase on LOOP B when required.
- **REMOTE SWITCH INPUT:** Plug in a Mono (TS) cable here to control the wetter box remotely from any latching Footswitch.
- **EXPRESSION PEDAL INPUT:** Connect an Expression Pedal here for alternative MIX/ BLEND Control operation.
- **DC INPUT:** Plug in your DC power here. You'll need a supply capable of 185mA using a standard 2.1mm centre neg connector. PLEASE NOTE - if you are using TheGigRig Modular Power Supply you may power the Wetter Box direct from a Distributor as the power is isolated internally.

How the Wetter Box Works



In a standard **series** signal path the signals are fed one into the other.
In a **parallel** path the signal is split and fed separately into each effect, then mixed together before the output.



This is how the Wetter Box works:

1. The signal enters the Wetter Box via the main **INPUT**
2. The signal is then split into 2 separate signals
3. These two signals are sent to effects loops **A** and **B**
4. If nothing is plugged into the effects loop, the signal simply bypasses the loop
5. The signal from the **Loop Return** (or if the loop is empty, the signal directly from the split) is fed into the **Gain** stage
6. These signals are then mixed and sent to the **Output**

Blending a Pedal in Parallel with your Direct Signal

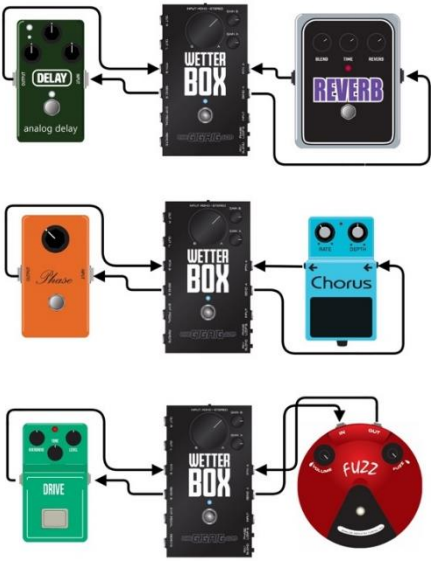
1. With your pedals and the Wetter Box correctly powered, connect your guitar to the **INPUT** and connect **OUT L** to your amp. Please note, in standard **MONO** operation you will only get signal out of **OUTPUT L**
2. Connect a pedal (in this case an analog delay) to **LOOP B** of the Wetter Box
3. When the **MIX CONTROL** on the Wetter Box is switched to **A** you'll hear only your direct signal. With the **MIX CONTROL** switched to **B** you'll hear the sound from your effects pedal
4. You can balance the sound of the delay with the **GAIN CONTROLS**

GAIN CONTROLS:
Both Wetter Box loops have independent **GAIN CONTROLS** to help balance the level between the effects in the loops. These circuits are positioned after the loop return. Think of these as a master volume that let you boost or cut the level. Remember that these circuits are still active, even if you don't have a pedal in the loop.

MIX CONTROL:
Use the **MIX CONTROL** to blend between LOOP A and LOOP B. If a loop is empty (as is LOOP A in this example), that loop becomes your direct signal.

With the **MIX CONTROL** set to LOOP B, set your delay to the maximum desired level. As you turn the control towards the LOOP A, your delay will get quieter and your direct sound will take over.

Blending 2 Pedals Together



You can choose any two pedals to blend.

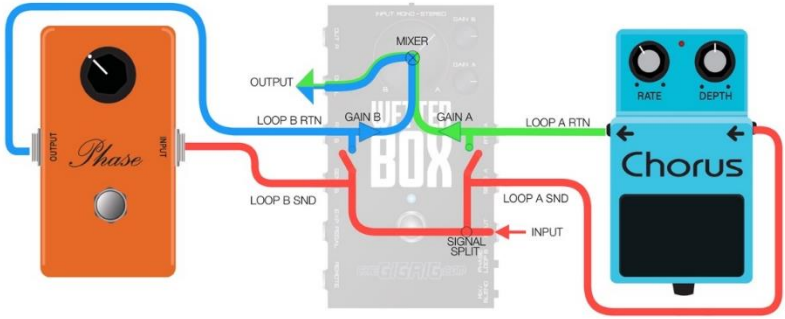
1. With your pedals and the Wetter Box correctly powered, connect your guitar to the **INPUT** and connect **OUT L** to your amp (please note - in standard **MONO** operation you will only get a signal out of **OUT L**)

2. From the **SEND** of LOOP A, connect a patch lead to the input of your pedal, then connect the output of the pedal to the **LOOP A RETURN**

3. Connect your second pedal to LOOP B in the same way

Setting the Gain Controls:

1. Start with the pedals turned off (so they are in their bypass state)
2. Turn the Wetter Box ON by pressing the **FOOTSWITCH** (Blue LED)
3. Turn the Wetter Box **MIX CONTROL** to "**A**", so **LOOP A** is **100%,** and **LOOP B** is **0%**
4. Toggle the Wetter Box on and off, increasing or decreasing the level of **GAIN A** until it matches the bypassed level
5. Turn the **MIX CONTROL** all the way to "**B**" and repeat the process



Now turn the pedals on and use the **MIX CONTROL** to seamlessly blend between them.

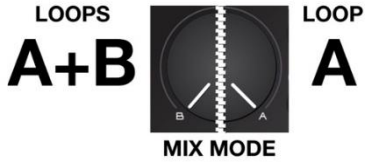
Phase Loop B

On the side of the Wetter Box you'll see a push button **PHASE LOOP B.** When you mix two signals together 'in phase' they combine and when you mix them 'out of phase' they cancel each other out. No matter where you are in the sweep between LOOP A and LOOP B, both signals - as long as they're in phase - will always equal 100%. However, if one of the pedals is out of phase, you'll notice the signal gets quieter as they combine. If this happens, press the **PHASE LOOP B** button to reverse the phase on LOOP B.

The difference between MIX and BLEND

These are the two modes of Wetter Box operation.
In **BLEND** mode (**MIX/BLEND** Select in OUT position) you blend between LOOP A and LOOP B.

MIX mode adds LOOP B on top of LOOP A.



For example, if you put a reverb pedal in LOOP A, then a delay pedal in LOOP B, you can **MIX** the delay on top of the reverb without reducing the reverb. This works well with pedals that have a KILL DRY or 100% Wet feature.

Using an Expression Pedal

Plugging an expression pedal into the **EXP PEDAL Input** disconnects the master **MIX** knob, enabling you to blend your effects in real time.
You can use any commercially available expression pedal with a pot value of between 10K and 100K (most are 50k and work well).
It's also worth noting that no audio is present in the expression pedal, it simply uses a controlled voltage that informs the circuit of the blend ratio.

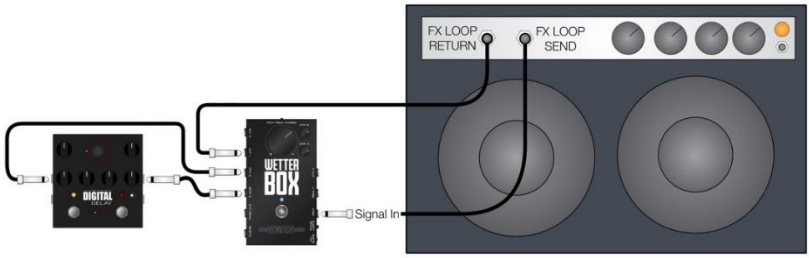
Using a Remote Switch

The **REMOTE Switch** allows you to turn the Wetter Box on and off remotely. Any latching switch can now control the ON/OFF state of the Wetter Box. This feature is useful if you're using the Wetter Box in conjunction with your amps FX Loop as it eliminates the need for two long audio cable runs. Simply leave the Wetter Box at the amp and switch it on/off remotely.

Connecting the Wetter Box to your Amps FX Loop

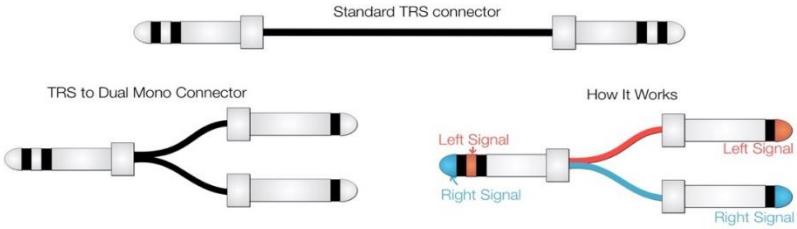
1. Connect the **SEND** from the amps FX loop to the **IN** of the Wetter Box
2. Connect the **OUTPUT** of the Wetter Box to the **FX RETURN** of your amp

For maximum functionality from your amps FX loop, try a delay pedal set to 100% wet effect (Kill Dry) and mix that on top of your pre-amp tone.



Using the Wetter Box in Stereo

The Wetter Box can be used with stereo pedals. The entire signal path of the Wetter Box is stereo including the gain controls. The stereo capabilities are accessed using TRS to Dual Mono connectors which enable you to blend your stereo signals in parallel.

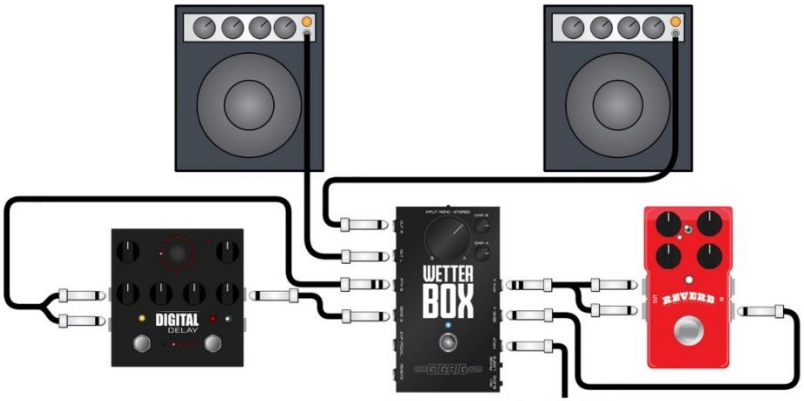


MONO Send/Stereo Return

You can switch the Wetter Box to operate in either Mono or Stereo. If in Mono, insert a standard patch cable and switch to Mono. When in Stereo simply insert a TRS to Mono Connector and switch to Stereo.

The example below shows two pedals with Mono inputs and Stereo outputs. To set up this signal chain:

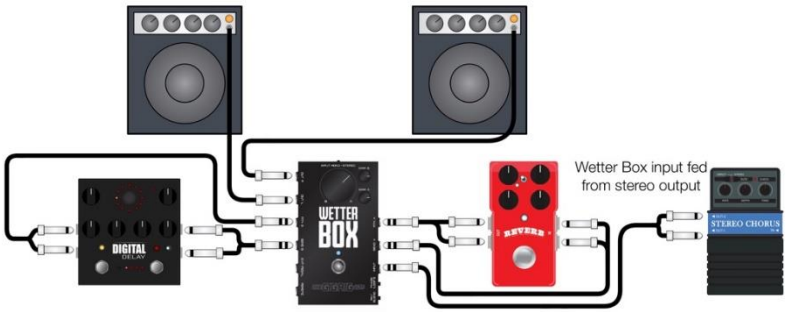
- Make sure the switch is set to Mono
- LOOP A Send to LOOP A pedal Input
- Pedal A stereo Outputs to dual Mono Jacks (of Y-cable)
- TRS Jack (of Y-cable) to Loop A Return
- LOOP B Send to LOOP B Pedal Input
- Pedal B Stereo Outputs to dual Mono Jacks (of Y-cable)
- TRS Jack (of Y-cable) to Loop B Return



Standard MONO Input

Stereo Input to Wetter Box

You can also feed the Wetter Box with a true stereo signal using a TRS to Dual Mono connector. In this scenario we are feeding the **INPUT** of the Wetter Box with a stereo signal from a stereo chorus.



The entire signal path is true stereo but you need to change the input switch on the Wetter Box from **MONO** to **STEREO.**

True Bypass or Trails Mode

There are two bypass states in the Wetter Box: True Bypass and Trails Mode.

TRUE BYPASS: This is the default mode for the Wetter Box (all circuitry bypassed) and is indicated by the BLUE led.

TRAILS MODE, which enables your delay/reverb to 'spill over' into bypass mode, is exclusive to LOOP B.

By leaving LOOP A empty and putting a delay pedal in LOOP B, you can mix the repeats on top of your original signal. Then when you hit bypass the repeats will trail over onto your bypass tone. Trails mode is indicated by the RED led.

Switching between True Bypass and Trails Mode

1. Unplug the power to the Wetter Box
2. Hold down the foot switch
3. Whilst holding down the foot switch, plug the power back into the Wetter Box
4. The LED will flash, keep holding for 3 seconds, then release. You have now switched your Wetter Box to bypass state

To revert, simply repeat

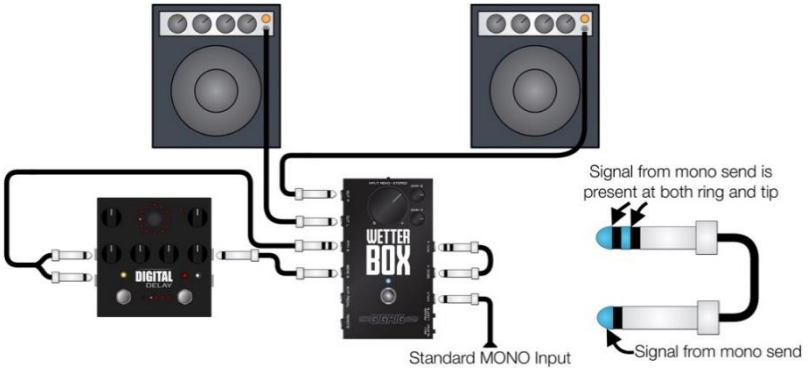
Using Delay/Echo Trails - MONO

Here's an example of using the Wetter Box to get delay trails in a MONO setup.

- Turn Trails mode on (red LED) & push IN the MIX mode button
- Leave LOOP A empty - this will be your direct signal
- Remember that in TRAILS mode the GAIN CONTROL for LOOP A is active, even when the pedal is bypassed
- Set delay to 100% WET or KILL DRY so there's no direct signal from the delay, only repeats
- The MIX control will now blend between your direct signal (LOOP A) AND your direct signal plus the delay (LOOP A + LOOP B)
- Now, when you turn the Wetter Box OFF using the footswitch, you'll hear the repeats from the delay pedal trail over the direct sound

PLEASE NOTE - If your delay doesn't have a Kill Dry or 100% wet feature (many older analog delay pedals don't), simply select **BLEND** instead of **MIX**. With the MIX control turned to LOOP B, set your delay pedal with the maximum level of delay required.

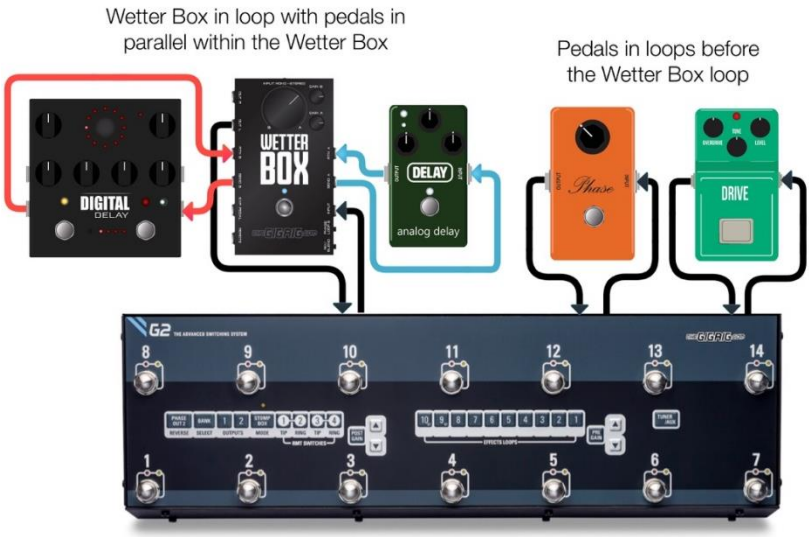
Using Delay/Echo Trails - Stereo
To make this work you'll require a MONO to DUAL MONO TRS connector.



- Mono signal to delay pedal input
- Stereo outputs of the delay pedal feed both sides of the stereo LOOP B return, using a dual MONO/Stereo TRS connector
- LOOP A - MONO send/Dual MONO return (both sides of the stereo return are fed by the mono send from LOOP A using a MONO/Dual MONO TRS cable as above).
- Now when you blend in your delay pedal, the stereo signal from the delay will blend in parallel with the input signal (in both left and right channels)

A Tip on Powering your Wetter Box
Under the Phase and WET/MIX pushbuttons is the 9V, 2.1mm centre neg DC input. The Wetter Box will need a supply capable of delivering 185mA to operate properly. If your current power supply doesn't have this capability, we suggest either purchasing the optional Wetter Box power supply from the website or checking out TheGigRig Modular power solutions. If you're already using TheGigRig Modular Power Supply, you may power the Wetter Box directly from a Distributor as the Wetter Box power is internally isolated so there's no need for a high current adapter.

Using the Wetter Box with G2 or Quartermaster



Think of the Wetter Box as another effects pedal and any sounds you create with it are selected by including it in a loop of the G2 or Quartermaster.

In the example above, we're blending a short analog delay with a long digital delay:

- The Wetter Box is placed in the last loop of G2
- When that loop is activated it will be fed by any pedals before it
- Using an expression pedal in conjunction with this set up means that when the Wetter Box loop is selected, you can blend between your long and short delay in real time

Don't forget, the Wetter Box is stereo so you can integrate it into the G2's stereo loops and blend stereo reverbs and delays in parallel.

Another way to integrate the Wetter Box with G2 is utilize the Wetter Box's **REMOTE SWITCH.** This enables you to activate the Wetter Box by connecting it to one of the G2's Remote Switches, controlling it within a G2 preset.

Warranty:
The GigRig warrants the product to be free from defects in material and workmanship for a period of 2 years from the original date of purchase. If the product fails within the warranty period, The GigRig will repair or, at our discretion, replace the product and cover the cost of return shipping to the original purchaser. This warranty covers defects in manufacturing discovered while using this product as recommended by TheGigRig. This warranty does not cover loss or theft, nor does the coverage extend to damage caused by misuse, abuse, unauthorized modification, improper storage, lightning or natural disasters. Damage caused by any of the above circumstances may result in a non-warranty repair fee.

Legal:
In the case of malfunction, the purchaser's sole recourse shall be repair or replacement, as described in the preceding paragraphs. The GigRig will not be held liable to any party for damages that result from the failure of this product. Damages excluded include, but are not limited to, the following: lost profits, lost savings, damage to other equipment and incidental or consequential damages arising from the use, or inability to use, this product. In no event will The GigRig be liable for more than the amount of the purchase price, nor to exceed the current retail price of the product. The GigRig disclaims any other warranties, express or implied. By using the product, the user accepts all terms herein.

Technical Specification
Supply Voltage - 9V DC (2.1mm centre negative connector)
Max current - 185mA
Input Drive Levels (Line level compatible)

True Bypass:	Input impedance = Source impedance
	Max input level = Source maximum
Buffered/Trails Bypass:	Input impedance = 1MΩ
	Max input level = +/- 8.5V

Outputs Left (mono) and Right (stereo)

True Bypass mode:	Bandwidth = Source bandwidth
	Output impedance = Source impedance
	Max output Level = Source Level
	Gain=0dB(V)
Bypass – Trails mode:	Bandwidth = 10Hz – 85KHz
	Output impedance = 27Ω
	Noise = 3nV/√Hz
	Max output Level = +/- 8.5V
	Gain=+6dB(V)