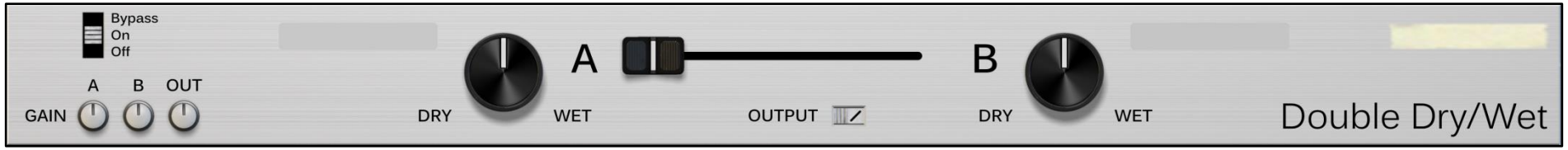
Double Dry/Wet

Linear Parallel Mixer



ANDREW RUSSELL

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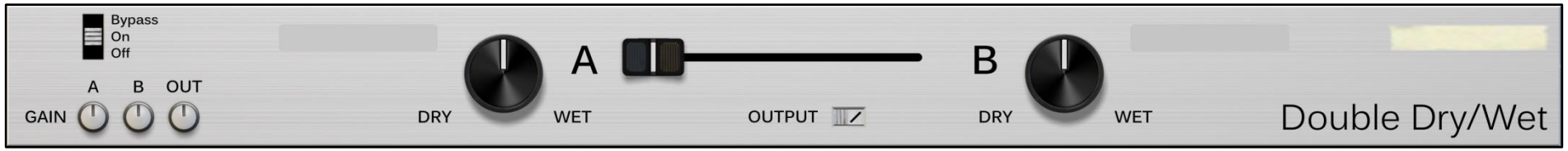

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Double Dry/Wet
Version 1.0 (manual rev 2)

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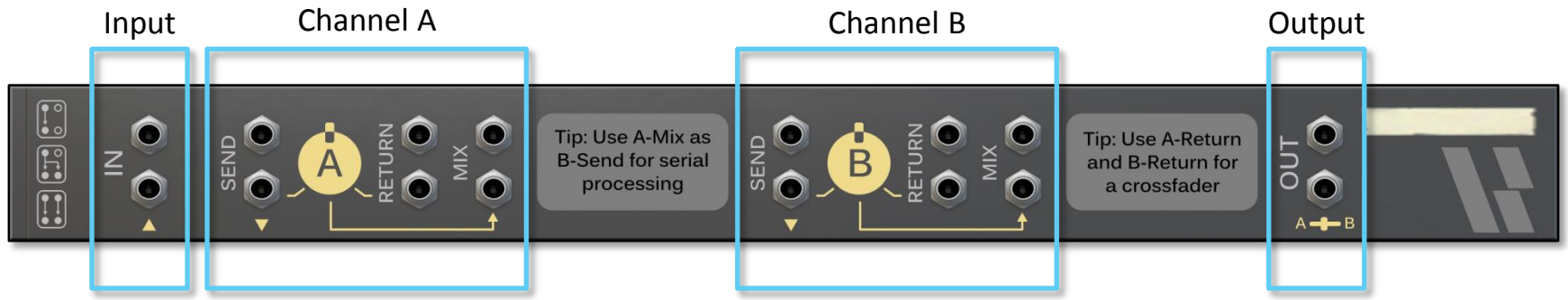
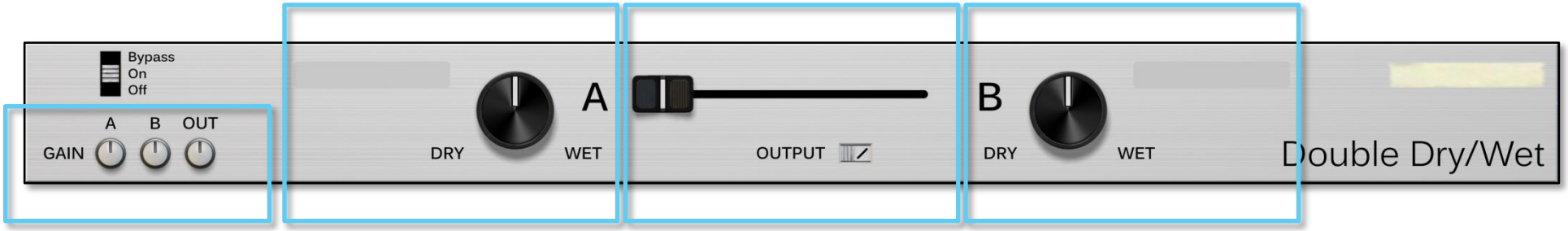
Compatible with Reason 7.1.1 and later

Device **Section Overview**

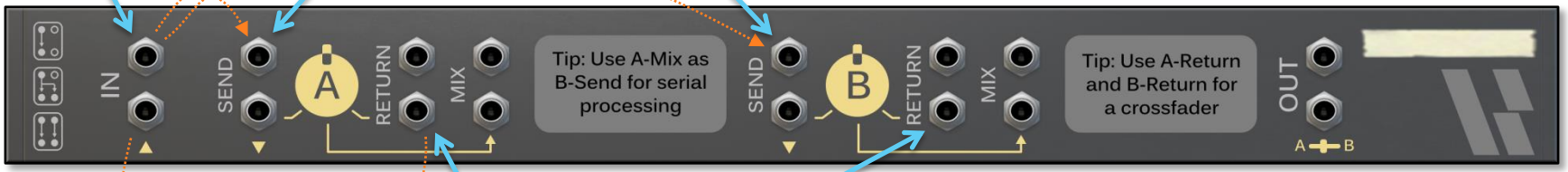




Channel A and **B** signal path

(1) Connect the dry input signal to Input

(2) The dry Input signal is sent out of A Send and B Send



(3) Return ('wet') signals can be plugged into A Return and B Return

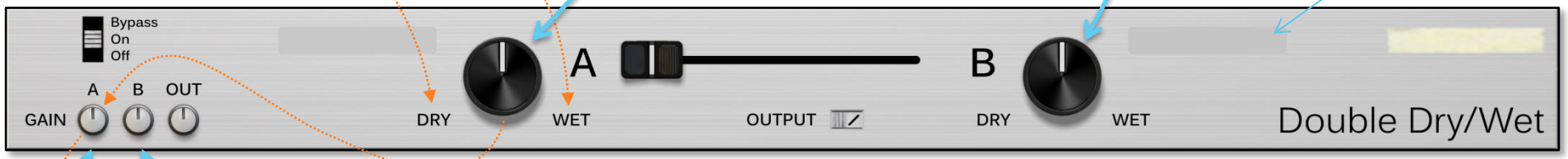
(4) If nothing is plugged into a return socket, then Input is used instead for that channel's 'wet' signal

Only showing Channel A

(5) A Dry-Wet mixes between Input and A Return

(5) B Dry-Wet mixes between Input and B Return

This is a channel strip
You can write something here



(6) The amplitude of the outputs of A Dry-Wet and B Dry-Wet is modulated by A Gain and B Gain respectively

(7) The outputs of A Gain and B Gain are sent to A Mix Out and B Mix Out respectively

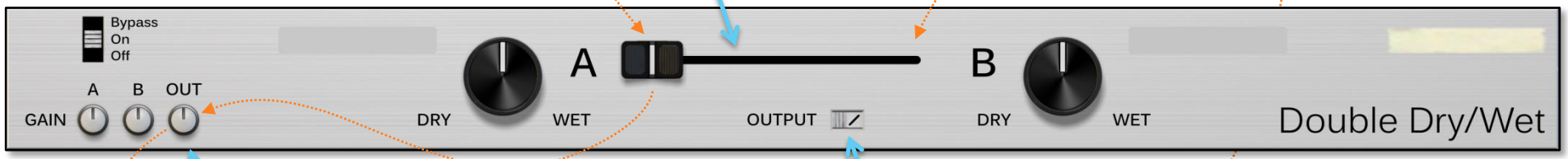
Output signal path

(7) The outputs of A Gain and B Gain are sent to A Mix Out and B Mix Out respectively

(10) The output of Output Gain is output from Output

(8) Output Mix mixes between A Mix Out and B Mix Out

Off: All outputs are made silent
Bypass: All outputs receive the dry Input signal



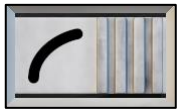
(8.1) Output Fader Mode selects whether the Output Mix is Linear or Constant Power (page 6)

(9) The amplitude of Output Mix is modulated by Output Gain

Select the correct mixing mode to maintain a perceptually consistent sound level when fading between two signals

When two signals are correlated, use a Linear mix

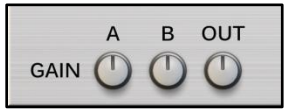
- A Linear mix is a good choice when mixing between the dry version of a signal, and the same signal passed through an effect
- Or between two parallel effects, as in Double Dry/Wet
- The Dry/Wet knobs in Double Dry/Wet *always* perform a Linear mix



When two signals are un-correlated, use a Constant Power mix

- A Constant Power mix is a good choice when performing a cross-fade between two different tracks (see page 10)

A word on **Gain Controls**



The gain controls in Double Dry/Wet are amplitude-based and range from 0% to 200%, with 100% at the centre position.

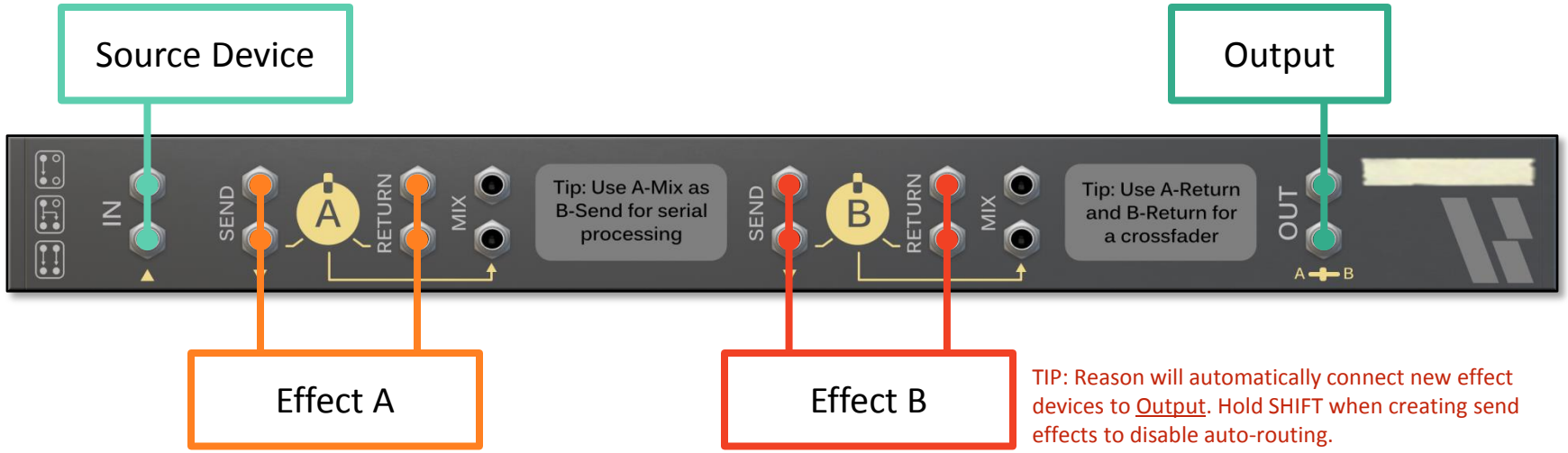
This is unlike the more familiar decibel (dB) gain controls found elsewhere in audio software.

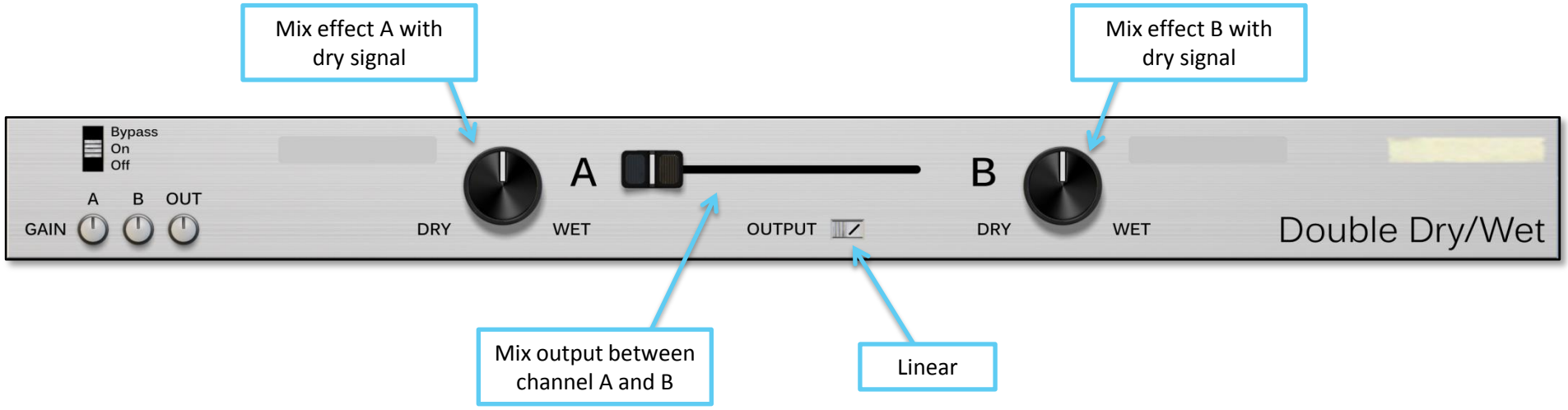
Measuring gain using amplitude makes sense in conjunction with linear mixing. For example: setting a channel's dry/wet knob to 50% and setting the channel's gain to 200% will pass through both signals at 100% volume (i.e.: the signals will be added together, see page 12).

Note that, while each gain control only goes up to 200% (6 dB), you can achieve up to 400% (12 dB) and even 800% (18 dB) gain by combining gain controls in series (see pages 15 and 16 respectively).

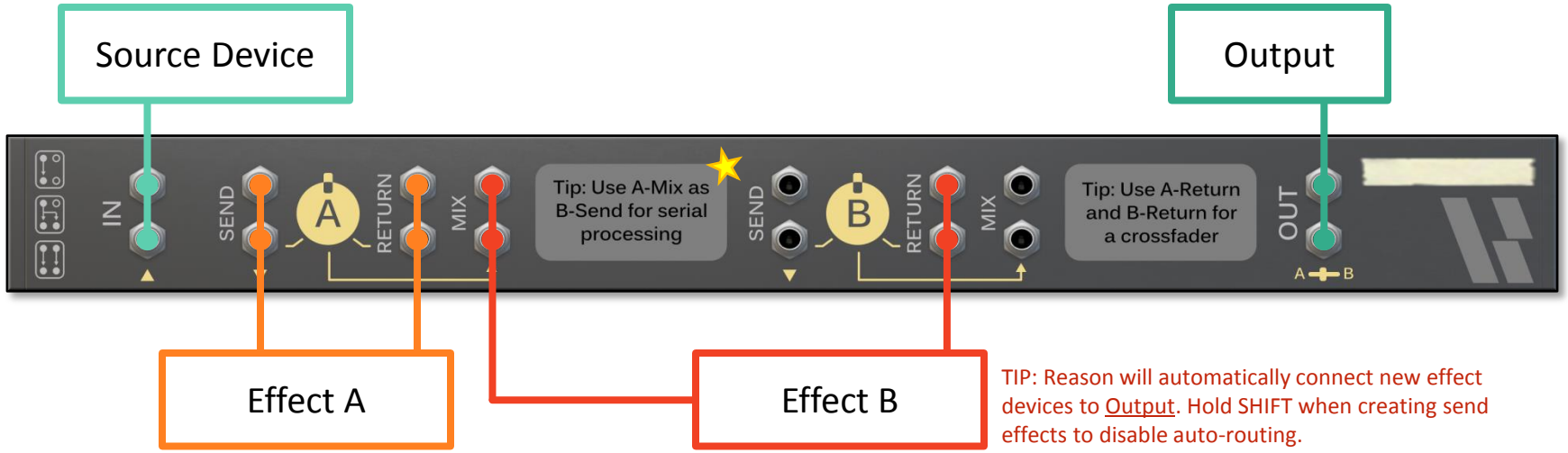
18 dB	800%
12 dB	400%
6 dB	200%
3 dB	141%
1 dB	112%
0 dB	100%
-1 dB	89%
-3 dB	71%
-6 dB	50%
-12 dB	25%
-20 dB	10%
-∞ dB	0%

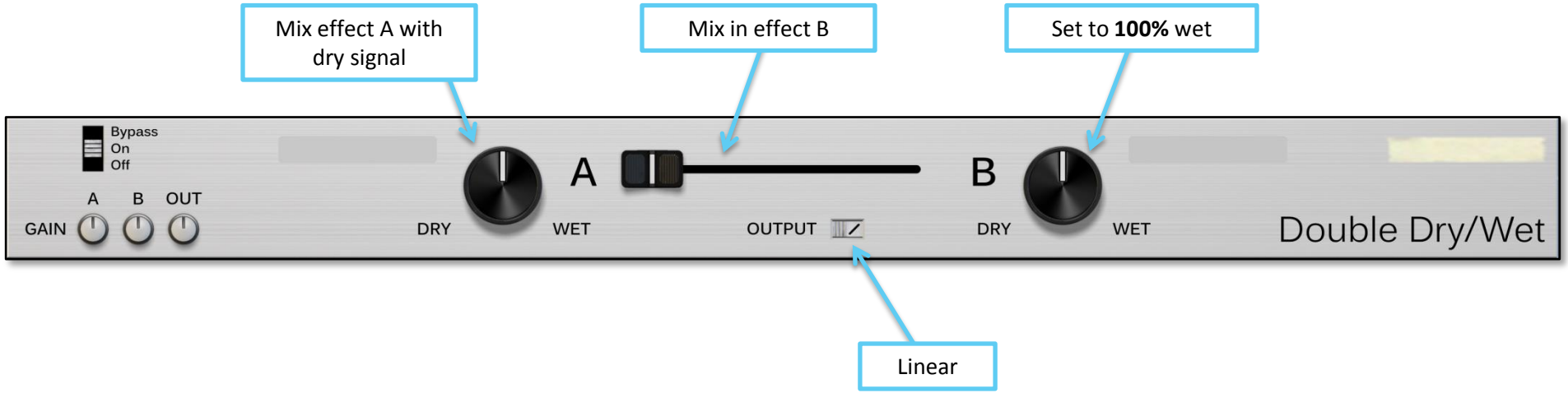
Recipe: **Parallel Dry/Wet**



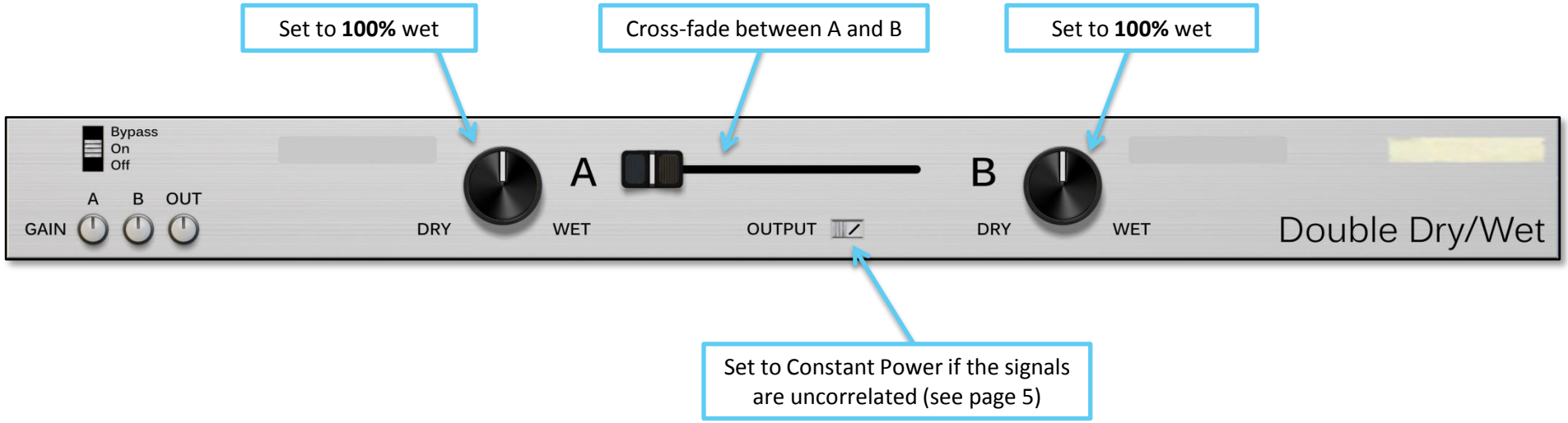


Recipe: **Serial Dry/Wet**

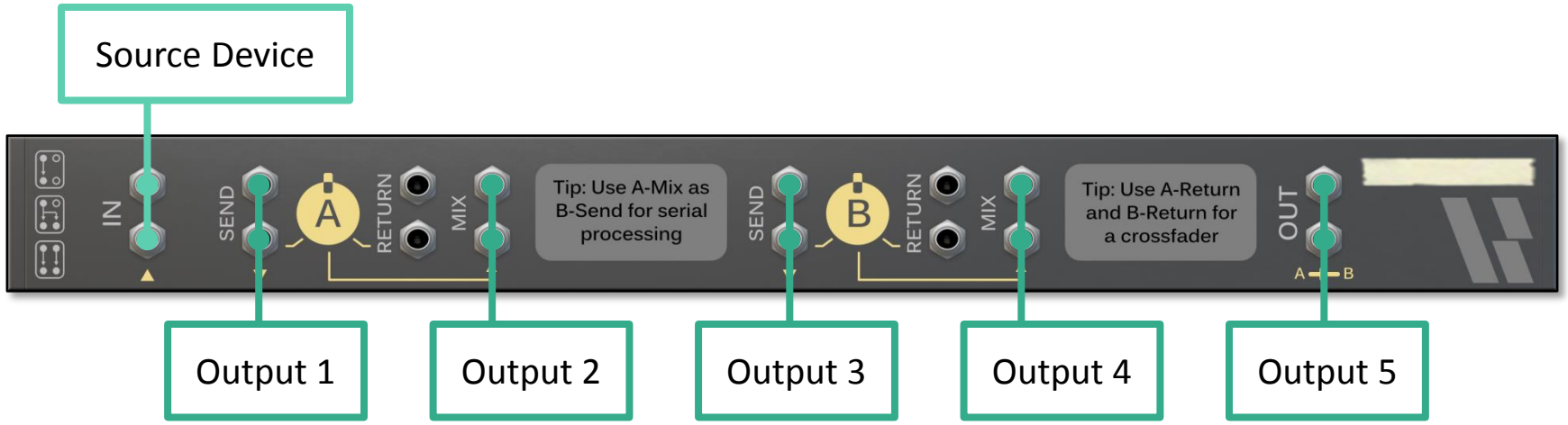




Recipe: **Cross-fader**

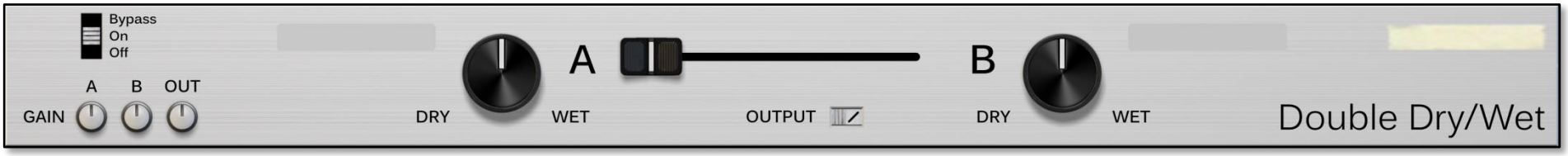


Recipe: **5x Audio Splitter**

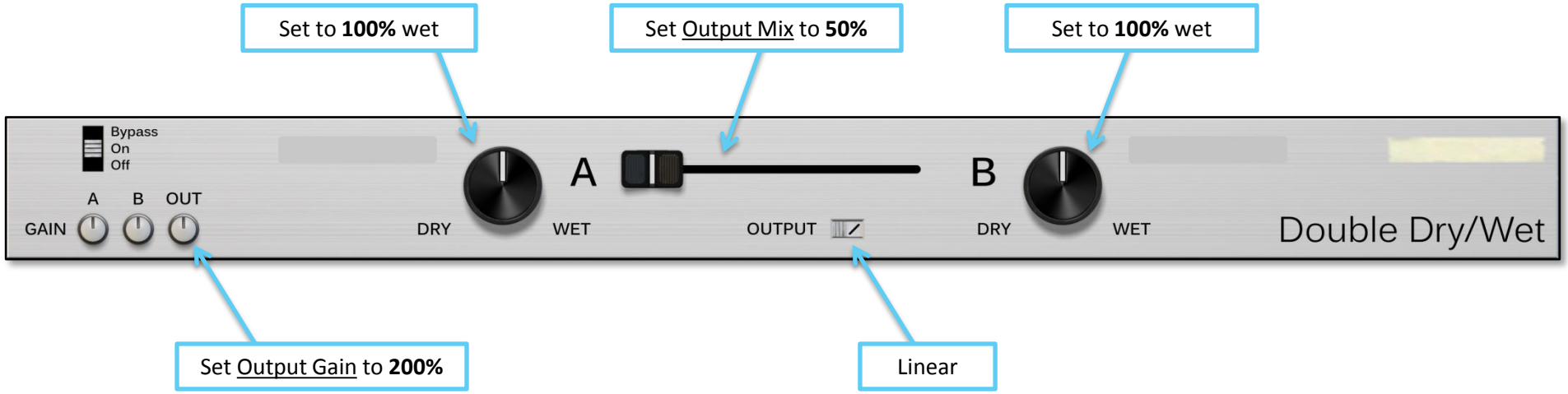


Set all controls to **100%**

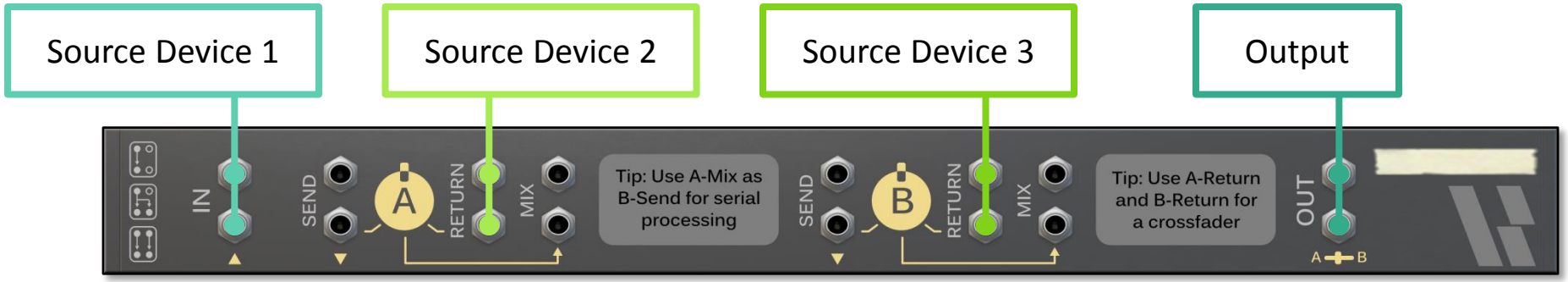
Optional: Set device to Bypass

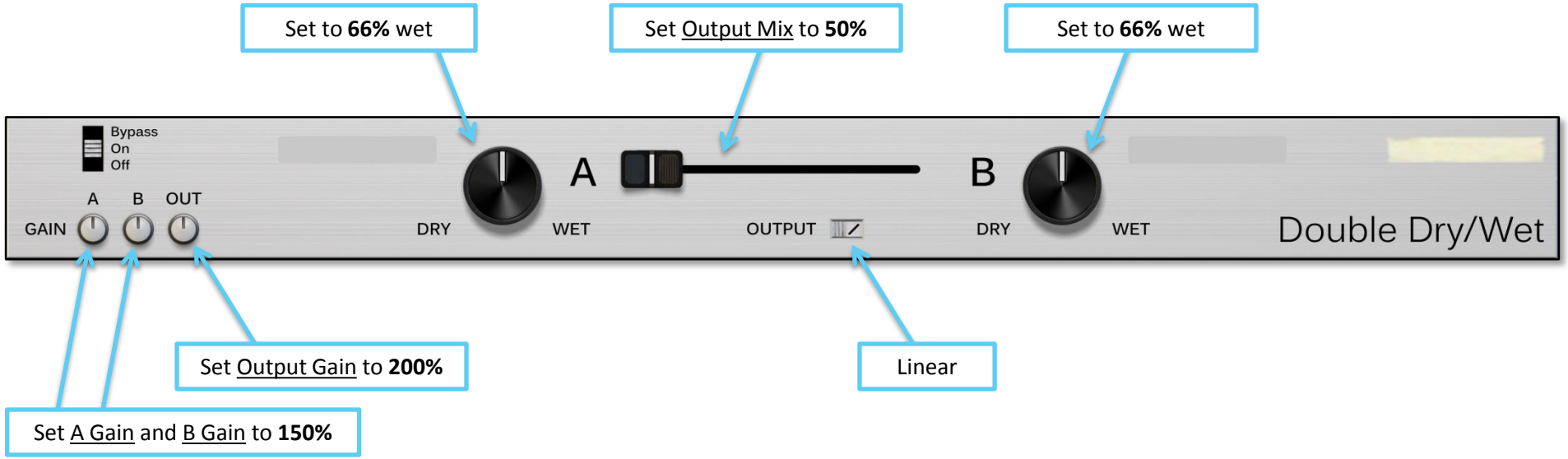


Recipe: **2x Audio Merger**

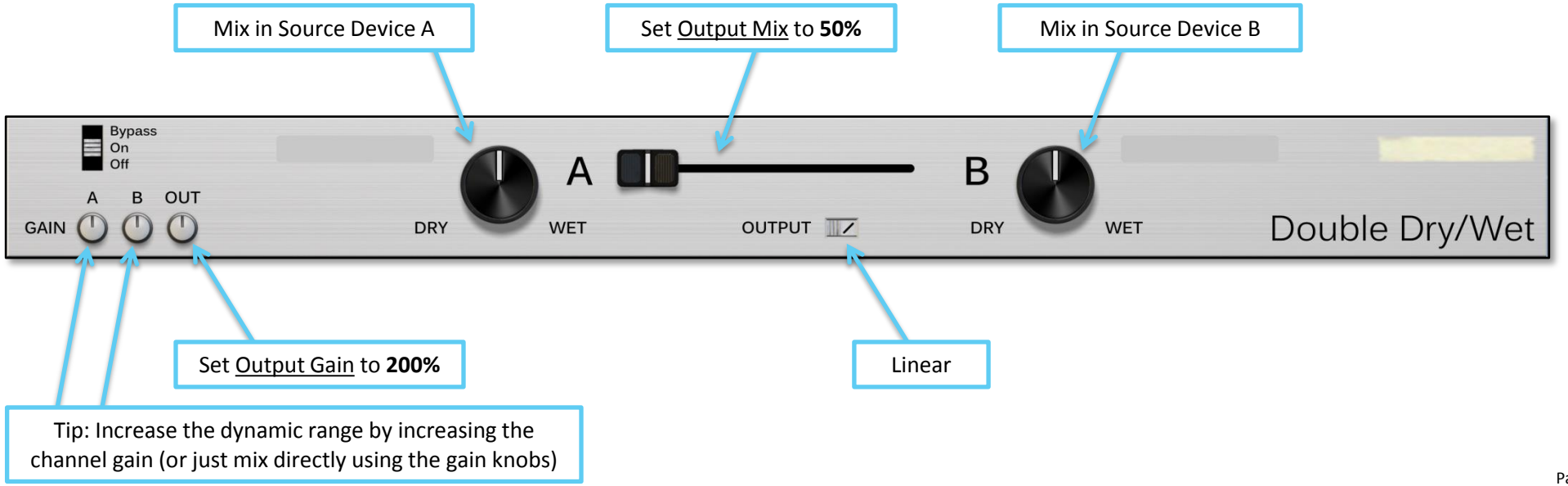


Recipe: **3x Audio Merger**

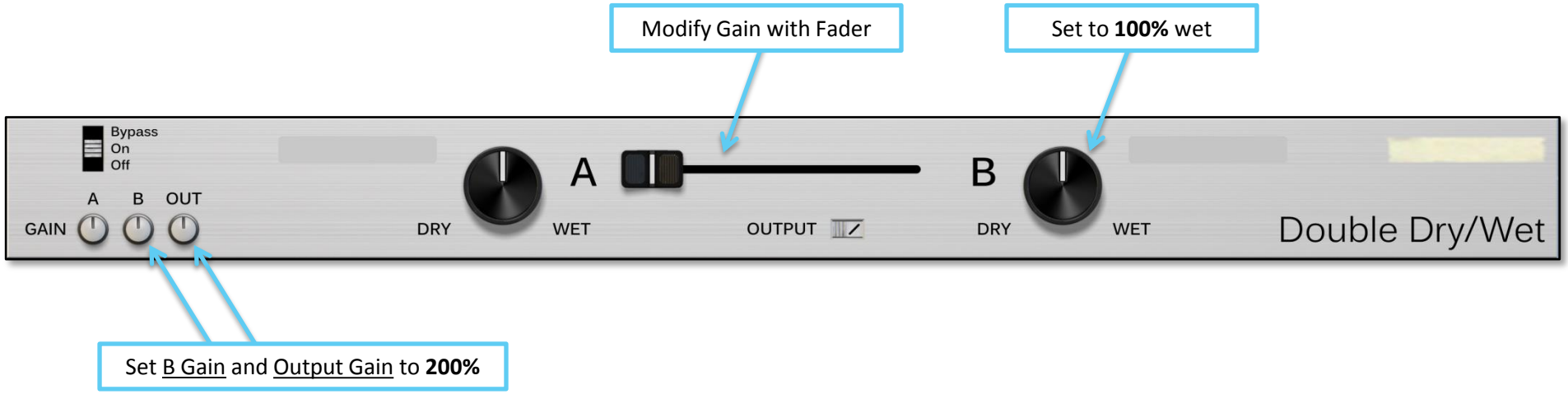




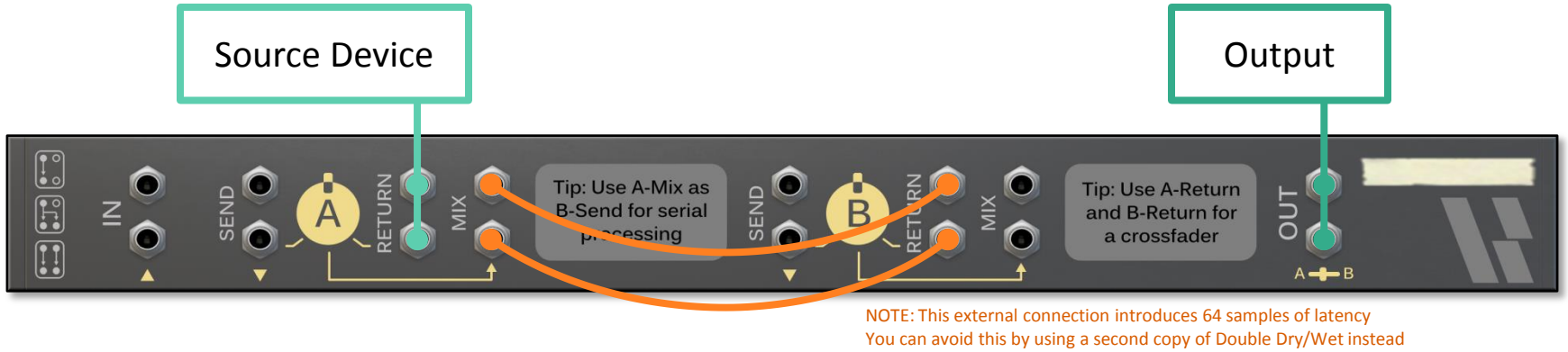
Recipe: **2 Channel Mixer**

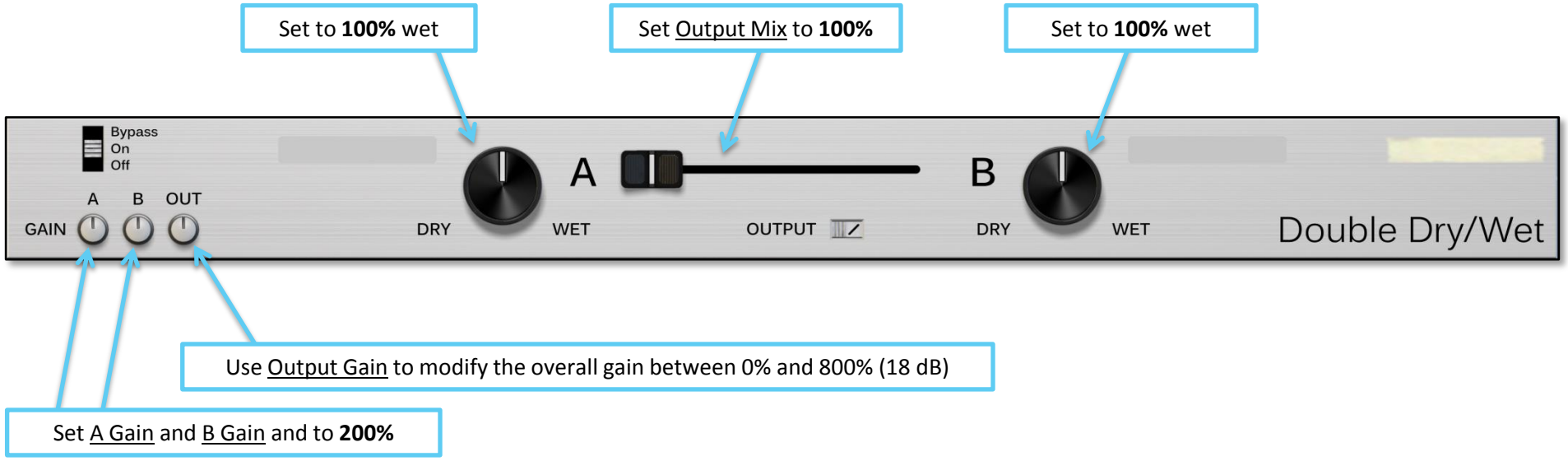


Recipe: **-∞ to 12 dB Gain Control**

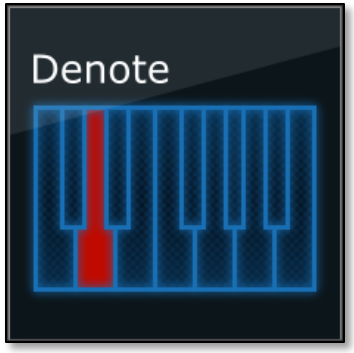


Recipe: **-∞ to 18 dB Gain Control**





About **Andrew Russell**

Andrew Russell is a former computer game developer from Australia, bringing his experience developing high-performance game engines and designing fun, intuitive and delightful user experiences to the world of music software.

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