Operating the Red Sea

How to use the Red Sea

- Signal Flow In & Out of the Red Sea
- Using the Blend Knob
- Using the Polarity Switches

Signal Flow In & Out of the Red Sea

The Red Sea can be wired in many different ways but before we dig into each wiring diagram let's go over how the signal can flow in and out of the Red Sea.

Use the Right Input for a mono signal going in to the Red Sea. Your input signal will be copied, split, and sent to all four send jacks (1 thru 4). The input signal can be anything, guitar, drive pedal, eq pedal, or any other mono signal source.

Mono Input



Use both Left and Right inputs to maintain a stereo image routing through the Red Sea. When ran in stereo, the Left Input will be copied, split, and sent to send jacks 3 and 4. The Right Input will be copied, split, and sent to send jacks 1 and 2. The input signals can be anything like dual guitars, 1 guitar and 1 bass, or any stereo effects pedal.

Stereo Input



The signal flowing through the return jacks on the right side (Return 1 & 2) will leave on the Right Output of the Red Sea. The same will apply for the signals flowing through the return jacks on the left side (Return 3 & 4), these signals will leave on the Left Output of the Red Sea.

Return Jack Signal FLow



*** There is one exception to the signal flow in the Return jacks when using the Red Sea in a Wet Dry or Wet Dry Wet setup. When you remove the patch cable from the Return 4 jack, the Red Sea will re-route the signal from the Return 2 jack to both Left and Right Outputs.

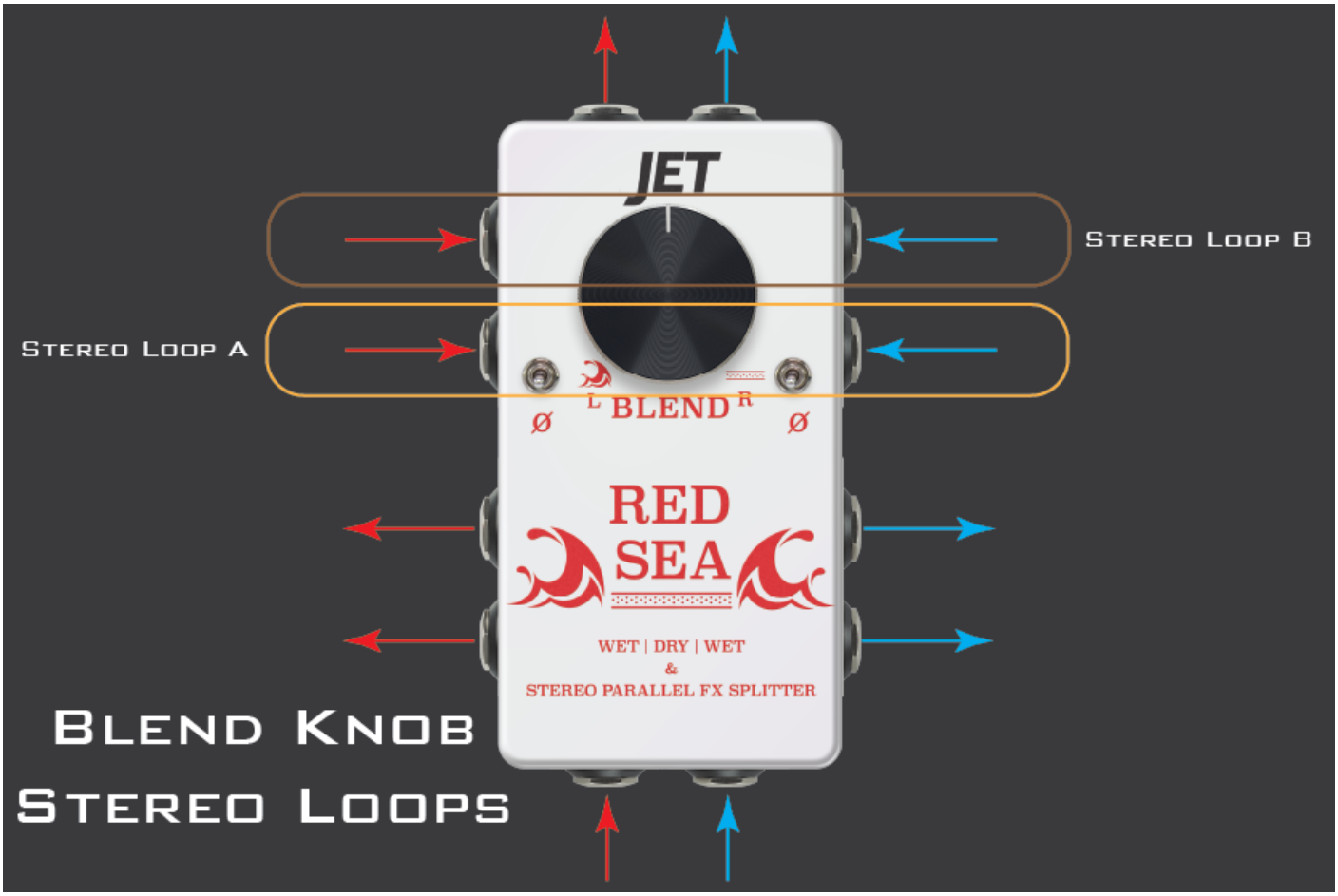
Wet Dry Wet Signal Flow



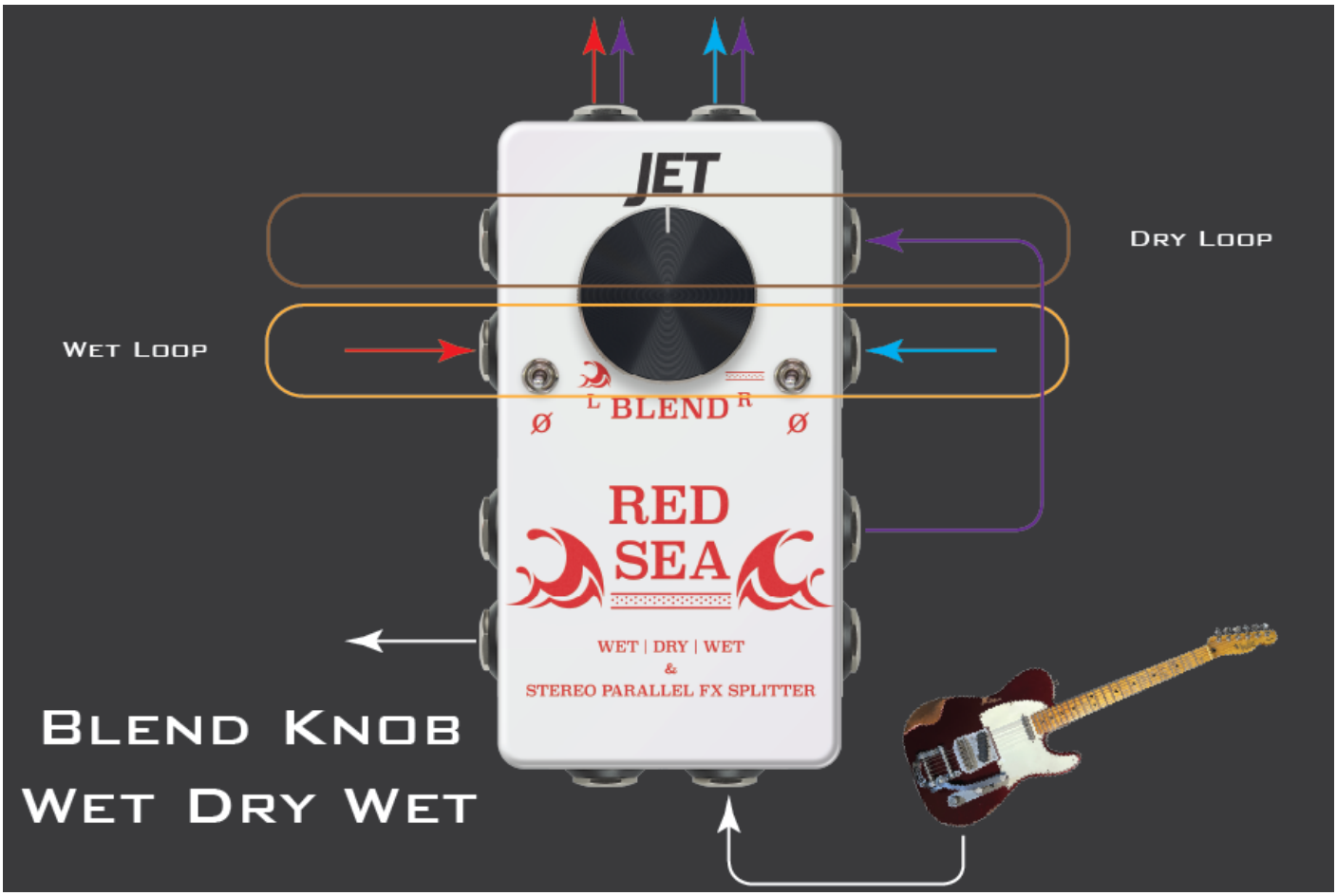
Hopefully by now you can see how your signal will flow in and out of the Red Sea. Later in the manual we will provide various wiring diagrams for different routing options, however using the knowledge above you should be able to create your own unique routing configurations.

Using the Blend Knob

The Blend knob can be used to blend the volume/mix between two parallel effects loops. For instance you want to run your reverb and delay in parallel which will allows for your wet effects to not interact with each other. Rotating the Blend knob counter clockwise will make Stereo Loop A (Return Jacks 1 & 3) louder while simultaneously making Stereo Loop B (Return Jacks 2 & 4) quieter. The opposite is true when rotating the Blend knob clockwise, B gets louder while A simultaneously gets quieter.



It can also be used to blend the overall mix between your dry and wet signals when using the Red Sea for Wet Dry Wet. When rotating the Blend knob counter clockwise, the Wet loop (Return Jacks 1 & 3) will get louder while simultaneously making the Dry loop (Return Jack 2) quieter. The opposite is true when rotating the Blend knob clockwise, Dry gets louder while Wet simultaneously gets quieter.

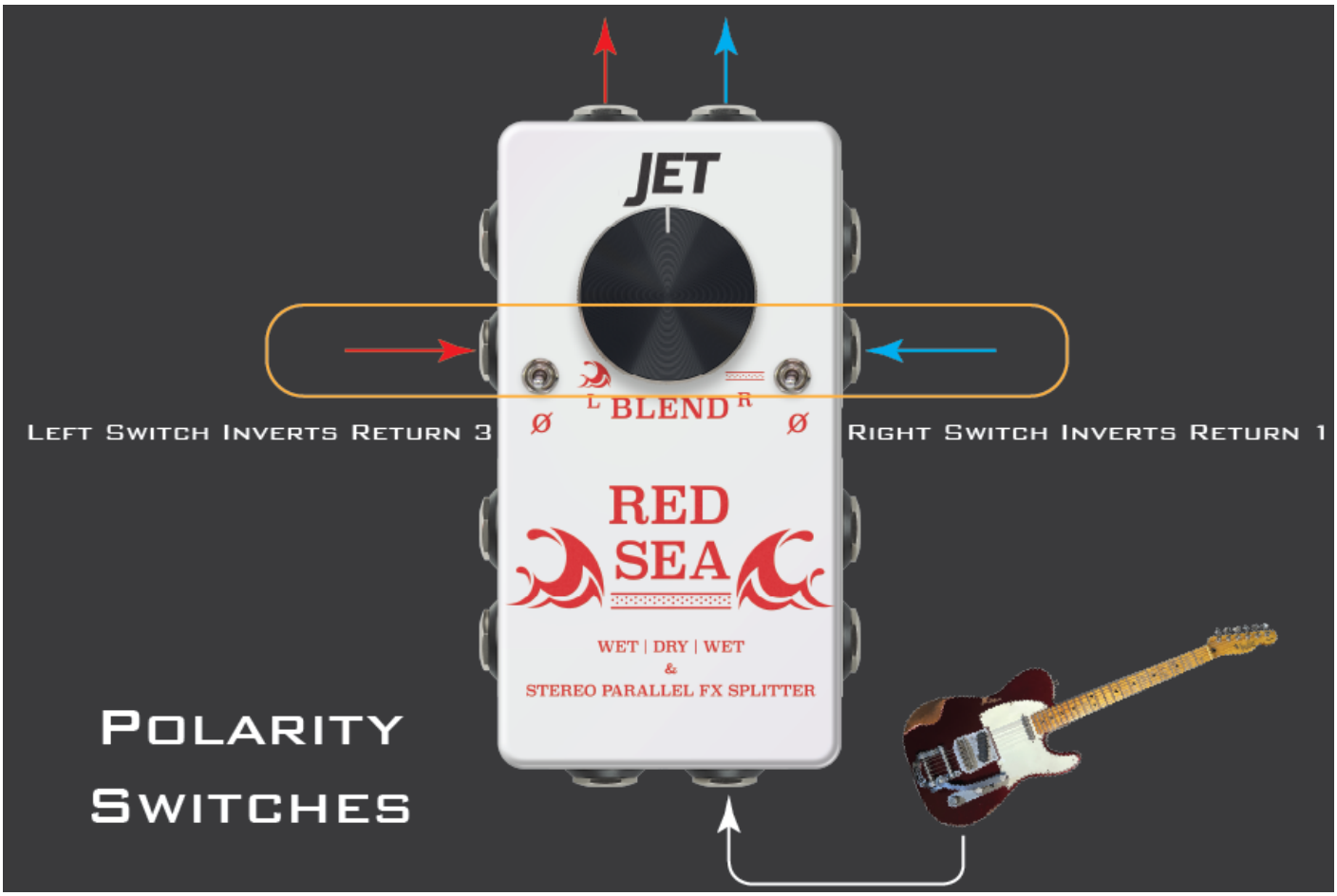

JET
Dry Loop
Wet Loop
L BLEND R
Ø
Ø
RED SEA
WET | DRY | WET
&
STEREO PARALLEL FX SPLITTER
Blend Knob
Wet Dry Wet

Using the Polarity Switches

The polarity switches can be a very useful and powerful tool, not only to phase correct your stereo loops, but also provide a stereo widening effect.

When running amp modelers or drive pedals in parallel, often times they will be out of polarity with each other. When this happens various frequencies will end up canceling each other out. When this happens you will experience two things that will affect your tone 1) it is quite common to loose bass frequencies leaving your tone thin and less full sounding 2) anytime frequencies are removed, this results in a volume drop and your signal will not be as loud.

With the Red Sea we fix these issues with our two polarity switches, each switch will invert the polarity for Return Jack 1 & 3 respectively. This will ensure both stereo loops will remain in phase with each other.



***If you are experiencing any of the two issues listed above, flip both polarity switches either up or down while listening to your tone change as you flip the switches.

The polarity switches can also be used to create a stereo widening effect, this trick works in both Wet Dry Wet and Stereo Parallel FX Loops wiring arraignments. Instead of flipping/keeping both polarity switches in the same direction, try flipping just one of the switches and see what happens. You'll notice your dry signal goes from a "center panned" kind of sound to a "left / right panned" sound which will create a huge stereo widening sound effecting removing your dry signal from the middle and placing it in the left and right outputs. There will be some draw backs to using this method, which were mentioned above (loss of bass and volume), however the Red Sea can limit the effectiveness of these draw backs. Since we have two stereo loops, or a Wet and Dry loop, your signal will remain in tact in one loop and inverted in the other loop. As long as the Blend knob isn't turned fully counter clockwise the drawbacks will be less noticeable. Also, as you turn the knob clockwise, the stereo widening effect becomes less noticeable as you are removing the inverted signal from your overall mix.