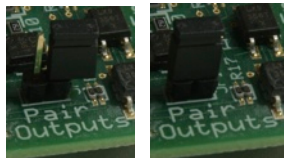
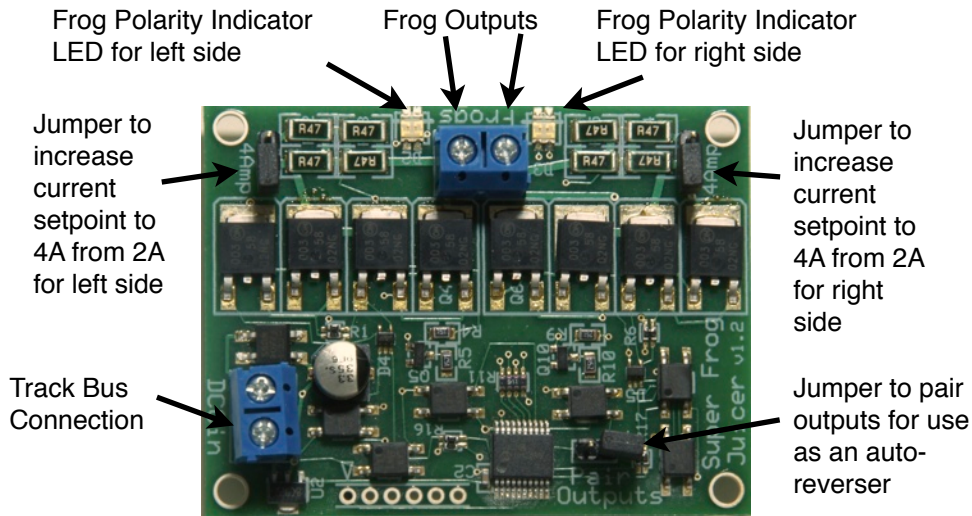


## Dual Frog Juicer v1.0 Automated Frog Control and Auto-Reverser For DCC Systems up to 30 Amps

TamValleyDepot.com

Installation of the Super Frog Juicer (SFJ) is simple. Connect the **DCCIn** terminal block to the DCC bus.



OFF ON  
Jumper settings

*To use as a reverser for two independent frogs* - Connect the two frogs to be powered to the **Frogs** terminal block.

*To use as an Auto-reverser* - Place the **Pair Outputs** jumper across both pins (ON) and connect the outputs to the reversing section rails. You may also want to set the **4Amp** jumpers ON if you are using a 5 Amp or greater booster.

*See diagrams on reverse side.*

The Frog Polarity Indicator LEDs will change color when a train crosses a frog that needs to be switched. There should be no interruption of sound or movement when this occurs (unless the track is dirty - sorry - the SFJ can't automatically fix this problem).

**4Amp** jumpers - Putting these jumpers ON increases the current switch point from 2 Amps to 4 Amps. This may be useful if you are running multiple unit locomotive consists that draw more than 2 Amps. Leave the jumpers OFF if your DXX system is rated less than 5 Amps.

Each Super Frog Juicer draws just 40 mA (0.04 Amps) of power from your DCC system.

### Troubleshooting

If the LEDs are not lit make sure the two outer wires are connected to DCC power and that the DCC power is on.

***The board will NOT work with DC. Connecting it to DC may damage the board and will void the warranty.***

If the LEDs both go off for a second and then come back on this indicates that the booster detected the short before the SFJ. If this happens repeatedly then something is wrong and it must be fixed or you risk destroying the SFJ.

- Make sure the frog is isolated from the track - a short between the frog and the rest of the track will prevent the board from working and must be resolved by fixing the short. Look to see if one of the gaps has closed or if a loose wire is touching the frog.
- Make sure there is no light bulb between the input of the SFJ and the booster. If there is run the wires directly back to the DCC booster bypassing the lightbulb.
- If the unit is not switching make sure the 4Amp jumpers are OFF. If you are using a DCC system less than 5 Amps the jumpers should be OFF.
- A small amount of resistance between the frog and the SFJ can increase the reliability, especially with small amperage (less than 3 Amp) DCC systems such as the NCE Powercab or Digitrax Zephyr. The easiest way to create this resistance is with a 24" length of 30 ga. wire. Place the wire between the middle output of the SFJ and the frog being powered.
- In some cases it may be advantageous to place all the frogs on their own power section with their own booster. Tam Valley Depot sells a booster that is ideal for this.
- Check for more information at [www.tamvalleydepot.com/](http://www.tamvalleydepot.com/)

Technical Support may be obtained by emailing [dmcree@tamvalleyrr.com](mailto:dmcree@tamvalleyrr.com).

