

FLUENCE FLUENCE SWEETWATER HIGHWAY 30 INSTALLATION GUIDE

# System Requirements

These instructions provide installation options for the Fishman Fluence series of multi-voice pickups, but these instructions are not comprehensive. A skilled electronics technician can simply interpret this overview to create a wide range of custom wiring options. Please consult with your installer for alternate switching and control components or options not specifically detailed in this guide or included with your pickup purchase. Please visit www. fishman.com for additional wiring diagrams.

## **Installation Warning!**

By self-installing and/or misusing this product, you understand and agree that and such uses are high risk activities and, to the extent permitted by law, YOU EXPRESSLY AND VOLUNTARILY ASSUME THE RISK OF DEATH OR OTHER PERSONAL INJURY SUSTAINED WHILE PARTICIPATING IN SUCH ACTIVITIES WHETHER OR NOT CAUSED BY THE NEGLIGENCE OR ANY OTHER FAULT of Fishman, including but not limited to equipment malfunction from whatever cause, or any other fault of Fishman. Additionally, you agree to indemnify, defend and hold Fishman harmless from any third party claims arising from such activities.

## **Getting Started**

- 1. Determine the rotary controls (Volume, Tone, etc.) and switches to be used in your installation, including those included with your purchase. Test fit the components to make sure that each will fit in the allocated locations or modify the instrument until the fit is correct and all controls can be located without issue. Fishman Fluence Pickups are low impedance and perform ideally with 25K audio taper potentiometers.
- 2. Fishman Fluence multi-voice pickups require a 9V power supply.
- If using a standard 9V battery, test fit cavity locations for simple installations or consider installing an externally accessible battery compartment (available separately.) Note that it is important the battery is not allowed to short contacts between controls in the instrument.
- If using a separately purchased Fishman rechargeable battery, refer to those instructions to complete this part of your installation.
- Note that it may be possible to combine other active pickups with Fishman Fluence pickups, but all pickups will need to use the same 9V power source. Only low impedance pickup combinations are supported.

- 3. One or more of your Fluence pickups will have a preamp built into the base of the pickup assembly. Preamplified pickups each have their own switching capabilities. In setups controlled by a single preamp, such as the Fluence Single-Width set, optional switching on the preamplified pickup will alter the output of all pickups connected to that preamplifier. The preamps on Fishman Fluence pickups are not suitable for use with other brands of guitar pickups.
- 4. All Pickup Voicing, High Frequency Tilt (HF Tilt) and Gain reduction features are selected by connecting their leads to Ground. These features and their wire locations are described in the user guide accompanying each pickup. During installation, any of these selections can be made switchable (using the included push-pull pot or other preferred switch) or permanent by either connecting to Ground or leaving "open" (unconnected). Some switching scenarios are provided below, featuring the components provided with your purchase, but any schematic allowing connection to Ground can be used.
- 5. Review your planned scheme for errors, complete the soldering, mount and secure all your components, and test your completed installation before assembly. Consider a popular wiring option as shown on the reverse side of this guide.



#### Fluence Highway 30 - Connection Points & Functions

**1. Voice-2 Select Wire -** Voice-1 is the default voice with no voice pins grounded/selected.

To select Voice-2, connect this pin to ground through a switch contact or permanently by soldering it to any ground point.

This pin is an electronically controlled switch and has no signal on it. It can share a switch contact with other voice select wires without interaction.

Note: Voice-3 select pin over rides Voice-2 select. Therefore, the Voice-3 pin must be disconnected (not grounded) to allow Voice-2 selection.

**2. Voice-3 Select Wire -** To select Voice-3, connect this pin to ground through a switch contact.

When selected, Voice-3 mode over rides the status of Voice-1 or 2.

Note: Voice-3 select pin over rides Voice-2 select. Therefore, the Voice-3 pin must be disconnected (not grounded) to allow Voice-2 selection.

**3. SCO (South Coil Out) -** This solder pad is used to conveniently access the south coil output on each pickup for HSH (Humbucker, Single, Humbucker) and HSS pickup combinations using the Fluence SSA Single width pickup.

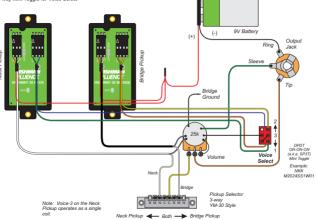
The south coil is on the neck side of each pickup. The SSA pickup is a north coil, allowing hum cancelling combinations in the 2&4 positions on a 5-way pickup switch.

- **4. +9-18V** This is the + dc power input pin. Fluence pickups are designed to have a wide dynamic range running from a 9V supply, however they are 18V compatible for instruments already set up that way.
- **5. Output -** The main output pin has a 2k ohm output impedance and is suitable for driving low impedance volume and tone pots, typically 25k.
- ilar to the effect of using passive pickups loaded by a long instrument cable. To activate, connect the HFT contact pad to ground either wired through a switch or permanently by creating a solder bridge to the GND pad next to it. The HFT pad has signal on it. To prevent unwanted interaction, it should not share a switch contact with any other HFT or voice select wire.

6. HFT (High Frequency Tilt) - This feature is for players who prefer a darker top end, sim-

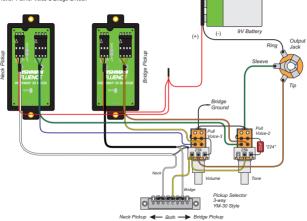
#### Highway 30 Set

Volume 3-way Mini Toggle for Voice Select



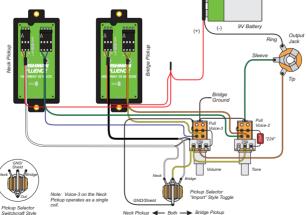
#### Highway 30 Set

Volume: Pull for Voice-3 (Single Coil) Bridge & Neck Tone: Pull for Voice-2 Bridge & Neck



Highway 30 Set





### Highway 30 Set Bridge Volume

Neck Volume: Pull for Voice-3 (Bridge & Neck)

