ToneStyler installation and wiring instructions

2017

All ToneStylers have 1/2" MID-length 3/8"-32 dia USA bushings and 24-fine-spline USA tips. These hybrid tips are solid, not split-shaft. As such, they cannot be "adjusted" with a screwdriver & pliers to fit undersized, oversized, new, used, shrunken, stripped or stretched-out acrylic push-on knobs. **Before installing your new control, test-fit your tone knob.** Never force any knob on any control - you may break it! If tight, push the knob on part-way, then remove... repeat several times, until it pushes all the way into final position without using great pressure. If loose, stick a very small strip of thin plastic or paper tape over the control tip, and test-fit the knob - add more tape strips until a snug fit is created.

If you are using set-screw knobs, add the supplied 1/4" brass sleeve for a perfect fit with 1/4" hole USA knobs. If you are using the smaller 6mm hole set-screw knobs, skip the brass sleeve - the splined-solid tip is already the correct size for metric knobs.

ToneStyler GUITAR and BASS ELEVEN:

Each ToneStyler G-11 & B-11 cable contains one **RED** signal wire. Connect the **RED** wire directly to the pickup's hot wire, where it's presently soldered in your bass or guitar.

Alternately, solder the **RED** wire to the hot output of a pickup selector switch or blend pot... ***but only when located before the pickup signals have passed through any volume pots.*** Never connect a **RED** ToneStyler wire to the output of any volume pot... and never connect it to the output jack of your instrument! This doesn't work.

Each ToneStyler G-11 & B-11 cable also contains one **CLEAR** "floating ground" wire. This important wire completes the ToneStyler's internal tone circuit; it doesn't provide any hum or noise prevention. The **CLEAR** floating ground wire allows for additional installation flexibility, such as required in instruments featuring series/parallel pickup switching. Each floating ground wire must be soldered to the same connection point where the pickup coil's neutral wire is soldered, or the ToneStyler will not function.

Each ToneStyler G-11 & B-11 cable contains one **stranded copper shield wire**, which is electrically-common to the metal casing and mounting bushing... and after installation, connects to the guitar's conductive mounting surface. For hum and noise prevention, solder the **stranded copper shield wire** to the pickup cable's ground wire, which is typically found soldered to a metal volume pot case.

For typical installations, separate connection points for the **CLEAR** and **stranded copper shield** wires are unnecessary; only one combined ground point is required. Simply twist & solder the ToneStyler's **CLEAR** and **stranded copper shield** ground wires together, and solder **both wires** to the pickup wire's ground point... exactly where it's presently soldered in your bass or guitar.

ToneStyler GUITAR and BASS DUO SIX:

The DUO SIX is engineered specifically to optimize performance in three-knob "volume-volume-tone" control plans, such as found in the Gibson Flying V and the Fender Jazz Bass, and in four-knob "master-volume-volume-tone" control plans, such as found in many Gretsch guitars. A DUO SIX contains two independent tone circuits, one for each pickup circuit. Since this creates two separate tone controls in the space of only one, each circuit is optimally-wired to a 100% "pre-volume" pickup output.

When multi-volume knob instruments are improperly-configured with only one "post-volume" tone control, the tone knob malfunctions unless one pickup's volume knob is set to maximum loudness at all times. Whenever both volumes are reduced, the tone knob stops controlling the pickups, and starts controlling the capacitance of the 1/4" instrument cable and the amplifier's input circuit, causing adverse tonal results: phase cancellation, comb-filtering, loss of clarity, and reduced signal level. The lower the volume knob settings, and the deeper the tone knob setting... the stronger the "mud tone" defect.

To solve this design flaw, the DUO SIX features TWO cables... one cable for the neck pickup (green GUITAR / blue BASS), and one cable for the bridge pickup (white). The wiring connections are the same as described above for the single-cable ToneStyler G-11 & B-11. For optimal performance and balanced output levels, the bridge pickup's EQ range is voiced about one octave higher than the neck pickup's EQ range.

ToneStyler TRIPLE SIX:

Each ToneStyler T-6 features one cable (yellow), but the wiring is NOT THE SAME as the ToneStyler G-11, B-11, G-D6 or B-D6 models described above. Unlike all other ToneStyler models, the TRIPLE SIX cable's **CLEAR WIRE** is NOT a "floating ground". It's an alternate-range HOT signal wire... a unique feature, which allows the user a choice of three different maximum EQ ranges during installation:

- .022µF GUITAR tone range: solder the **RED** signal wire to the pickup's HOT wire.
*No connection for the **CLEAR** signal wire.*
- .047µF BASS tone range: solder the **CLEAR** signal wire to the pickup's HOT wire.
*No connection for the **RED** signal wire.*
- .069µF SUB-BASS tone range: solder **BOTH** the **RED** AND **CLEAR** signal wires to the pickup's HOT wire.
- For all three T-6 connection options, solder the **stranded copper shield wire** to the pickup's ground wire, which is typically found soldered to a metal volume pot case.

Important note: because there is no "floating ground" circuit provided in the T-6, this unique control is not compatible in some series/parallel pickup circuits which also require floating ground pickup wiring. If you are uncertain about any specialized wiring in your instrument, please contact Stellartone before ordering, or simply choose a ToneStyler ELEVEN model.

General suggestions for proper guitar grounding

Most guitars feature a control mounting surface covered in a metallic foil, a metallic paint, or use a conductive plate that is grounded. These efforts are always helpful, but none are guaranteed to fully-ground your controls and circuits for optimal performance and hum reduction. For example, a metal control plate may appear to provide a perfect ground surface for mounting controls, but the metal may be clear-coated or anodized to prevent oxidation; this coating can prevent the controls from being properly grounded. **For best results, always solder cable shields or ground jumper wires between the metal pot cases, mounting bushings, and ground terminals of switches and jacks, to a single common ground point**, usually chosen as one volume control's casing.

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