

EMG PICKUPS

INSTALLATION INFORMATION FOR ACTIVE EQ MODELS EMG-BTC CONTROL, BTS CONTROL, EMG-BTC SYSTEM, BTS SYSTEM

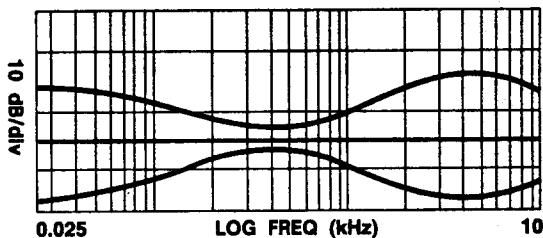
The EMG-BTC and BTS CONTROLS are active EQ circuits for bass guitar. Their effects are illustrated in the graphs to the right. They allow you separate control over bass and treble. Rotate the controls clockwise to boost, counterclockwise to cut. There is a center detent for flat response.

The EMG-BTC SYSTEM and BTS SYSTEM include a master volume and balance control. This enables you to pan between two pickups and affect overall volume with out changing the blend.

The BTC and BTS CONTROLS can be used with EMG pickups or high impedance pickups. The BTC and BTS SYSTEMS are for EMG pickups only, the balance and master volume controls are low impedance.

Specifications:

Output Noise (dBV).....	-90
Output Impedance (Kohms).....	2
Current @ 9V (micro amps)	400
Battery Life (Hours).....	625
Low Equalization (dB).....	±10
High Equalization (dB)	±12
Max Supply Voltage (DC Volts)	27



General Installation Notes:

1) These circuits are not designed as a direct retrofit for any particular instrument. You may need to modify your instrument to accommodate the number of pots. A qualified technician with special tools and skills are required. The following list describes the number of controls in the 4 configurations of the BT CONTROLS and BT SYSTEMS.

- BTC CONTROL 1 pot plus existing volume control(s)
- BTS CONTROL 2 pots plus existing volume control(s)
- BTC SYSTEM 3 pots total (includes balance and master volume controls)
- BTS SYSTEM 4 pots total (includes balance and master volume controls)

- 2) Only one battery is required but 2 batteries wired in series for 18 volts is recommended to increase headroom and enhance overall performance.
- 3) Use an alkaline battery for longest life.
- 4) The original control set must be altered if you already have EMG pickups in your instrument. If you are installing pickups along with an EQ circuit, please read both sets of instructions before you start. This should save you some steps.
- 5) If your installation is different from the diagrams in these instructions and you need additional diagrams, call or e-mail EMG. It is highly possible another EMG installation sheet will have the diagram you require.

Warranty:

All EMG Pickups and accessories are warranted for a period of two years. This warranty does not cover failure due to improper installation, abuse or damage. If at any time a pickup fails to work, return it postage prepaid with proof of purchase. If upon examination the pickup is determined to be defective, a replacement will be made at no charge. Warranty replacement products are covered by this same warranty. This warranty covers only those pickups and accessories sold by authorized EMG Dealers. This warranty is not transferable.

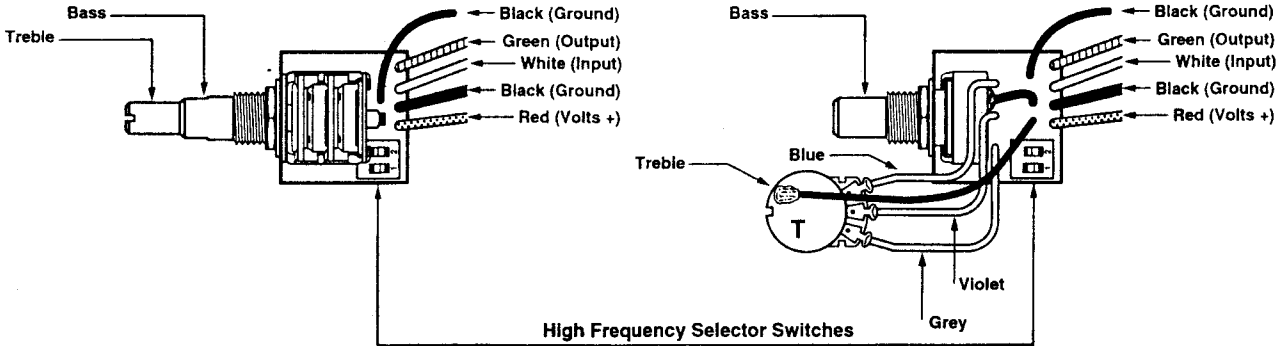
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FEATURES:

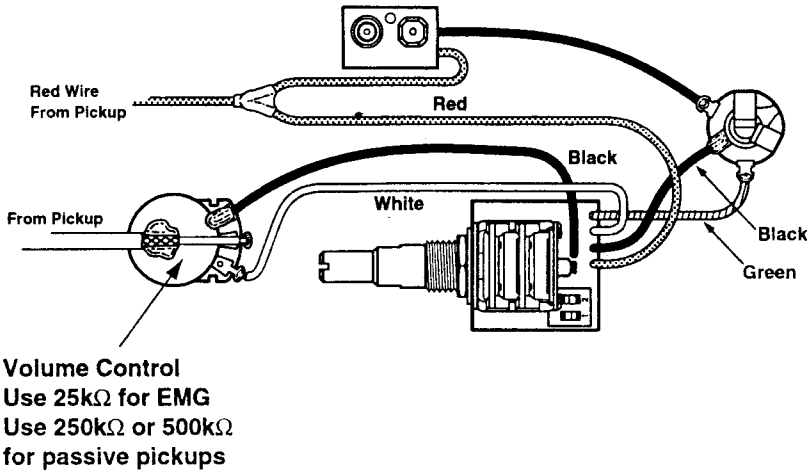
There are four different selectable frequencies for the treble control. These are selected by the dual switch mounted on the circuit board. The four settings of the switches - A, B, C, & D - are shown in the table.

We encourage you to experiment with the switches and find the setting that most enhances your sound.

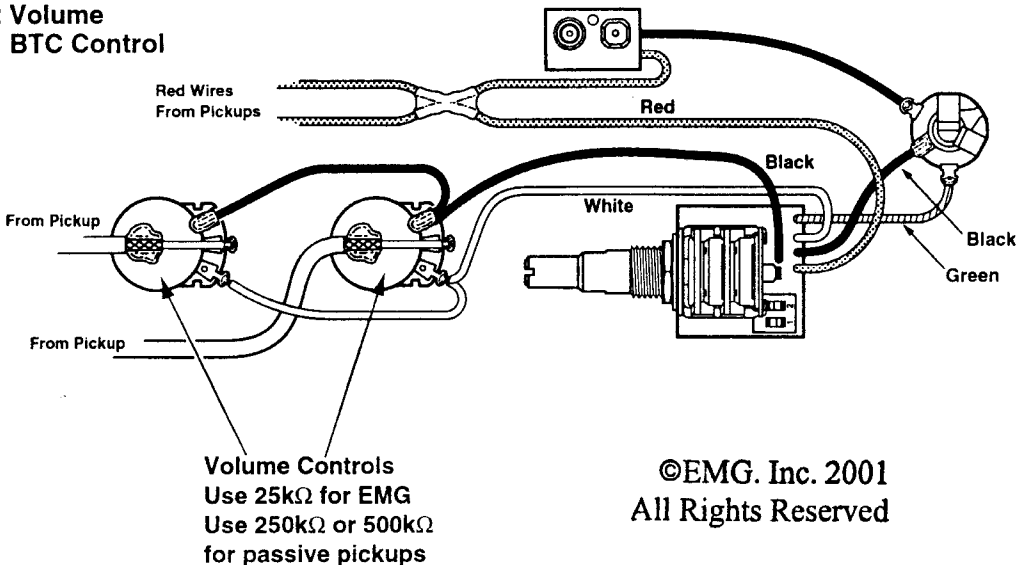
	Switches		Center frequency
a	on	on	2.1 kHz
b	on	off	3.5 kHz
c	off	on	4.5 kHz
d	off	off	7.0 kHz



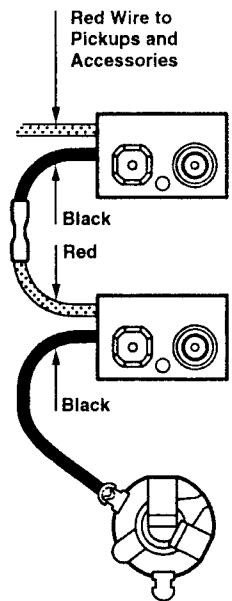
1 Volume 1 BTC Control



2 Volume 1 BTC Control



18 volt wiring option



Here is a diagram of how to wire your instrument for 18 volts. This won't increase output but it will give you more headroom and help prevent distortion.

Installation Instructions for BTC CONTROL and BTS CONTROL

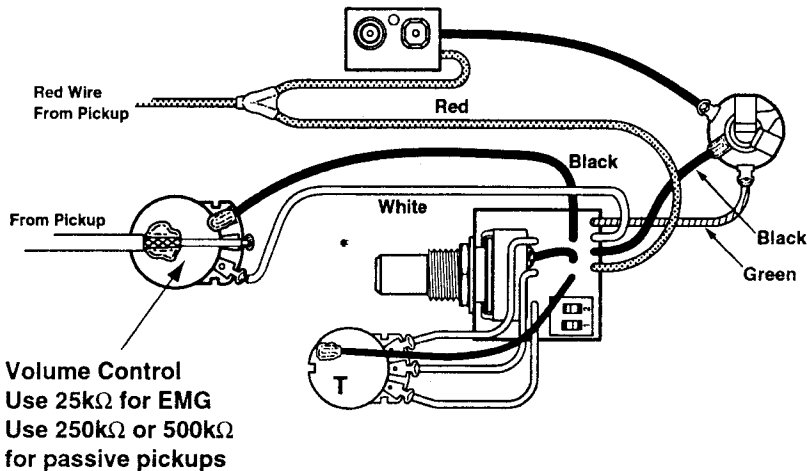
- 1) Unsolder and remove the tone control and its capacitor. Also remove the black wires going from the tone control to the jack and from the tone control to the volume control. They won't be reconnected.
- 2) Unsolder and remove the "Hot" wire that connects between the outer lug of the jack (tip) and the volume control.
- 3) Drill 3/8" hole (s) if necessary. (see important installation notes).
- 4) Mount the BTC or BTS CONTROL in the guitar.
- 5) Solder the white wire of the BTC or BTS CONTROL to the volume control as shown in the diagram.
- 6) Solder the green wire of the BTC or BTS CONTROL to the jack (tip) as shown in the diagram.
- 7) Solder one of the black wires to the output jack (sleeve) as shown in the diagram. Solder the other black wire to the volume control as shown in the dia-

gram. All black wires are ground so it does not matter which one you use to go to the volume and to the output jack.

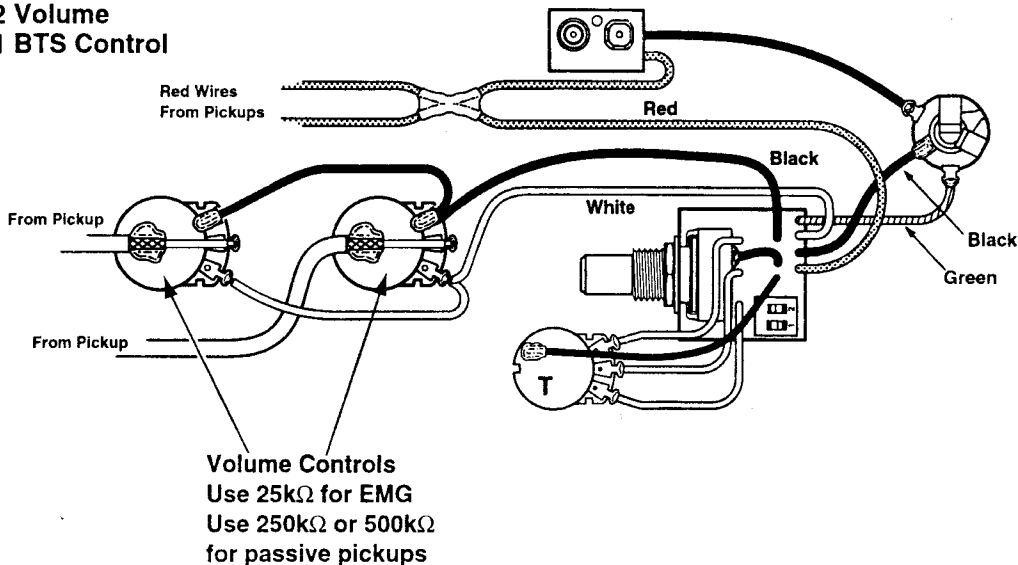
- 8) Connect the red wire of the BTC or BTS CONTROL together with the red wires from the pickups and battery clip. Cover this connection with heat shrink tubing.
- 9) Attach the battery(s) and test the instrument. It is recommended that you wrap the battery(s) in foam to keep it from shorting out against the circuitry in the control cavity.
- 10) Experiment with the switches on the circuit board to find the treble frequency best suited to your particular instrument. See table on page 2 for more information

This completes the installation. If you have any problems, contact the factory by phone or e-mail. Customer service is readily available.

1 Volume 1 BTS Control

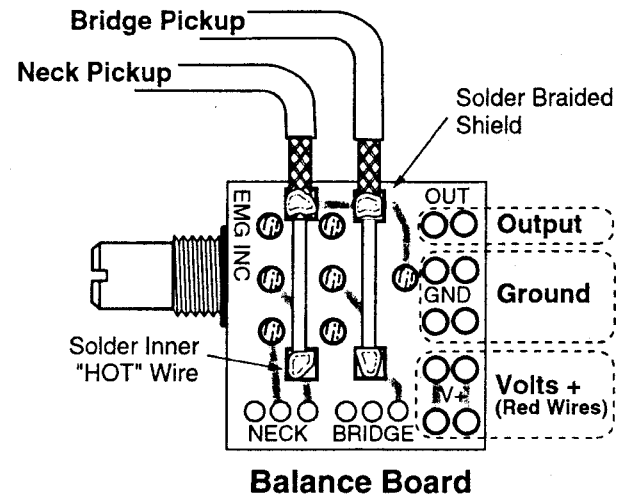


2 Volume 1 BTS Control



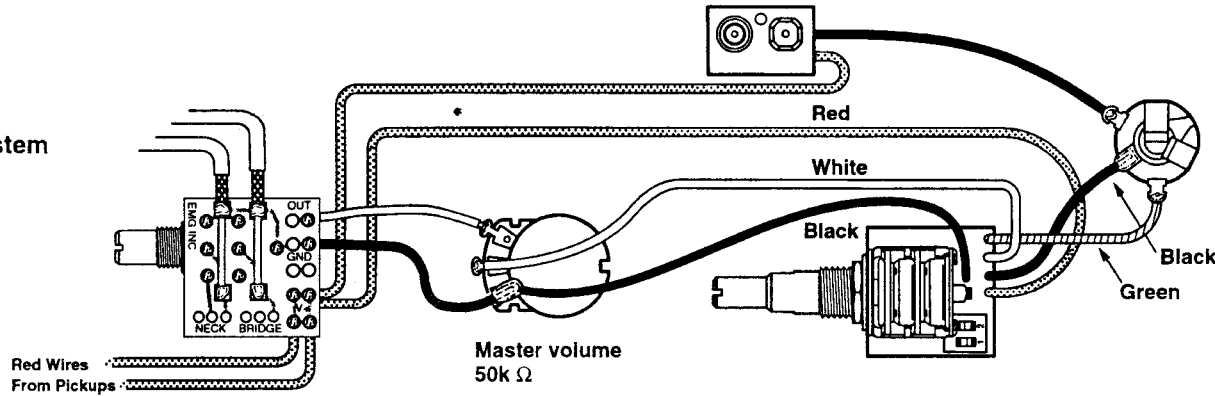
Installation Instructions for BTC SYSTEM and BTS SYSTEM

- 1) Unsolder the pickups from the volume pots.
- 2) Unsolder the output and ground wires from the jack. Also unsolder the capacitor from the jack. Do not unsolder the battery black wire.
- 3) Remove all the controls from the guitar.
- 4) Install the BTC SYSTEM or BTS SYSTEM in the guitar. Drill additional 3/8" holes if necessary.
- 5) Solder the pickup cables to the Balance board as shown in the diagrams.
- 6) Solder the red wires from the battery clip and the pickups to the Balance board as shown in the diagrams.
- 7) Attach the battery and test the instrument. It is recommended that you wrap the battery in foam to keep it from shorting out against the circuitry in the control cavity.
- 8) Experiment with the switches on the circuit board to find the treble frequency best suited to your particular instrument. See the table on page 2 for more information.



This completes the installation. If you have any problems, please contact the factory by phone or e-mail. Customer service is readily available.

BTC System



BTS System

