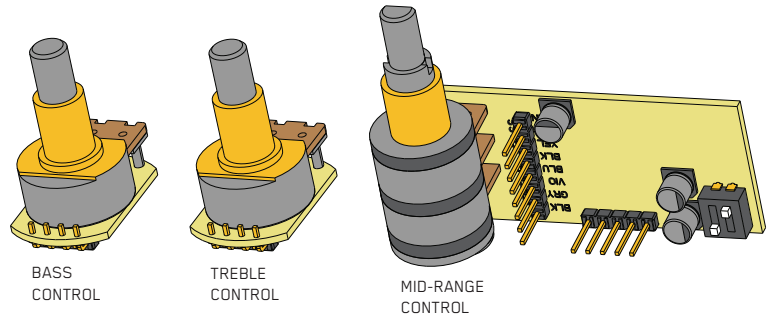




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## INSTALLATION INFORMATION

### EMG MODEL: BQS CONTROL (ACTIVE / PASSIVE PICKUP INPUT)

#### SPECIFICATIONS

Input Impedance (Ohms)	500K Ohm
Gain/Attenuation/ Frequency Bass Control	+/-12db/20Hz
Gain/Attenuation/ Frequency Treble Control	+/-12db/(Adjustable)
Input Referred Noise	-120dbV
Output Impedance (Ohms)	2K
Recommended Supply Voltage	18 Volts
Current @ 9V/18V (Microamps)	600/740
Battery Life (Hours)	750
Maximum Supply (Volts DC)	27 Volts

#### INCLUDED:

- 1 BQS Control
- 4 Knobs
- 1 Battery Clip with Buss Connector
- 1 Stereo Output Jack (Battery Switching)
- 4 Interconnect Cables (2 Red, 2 White)

#### GENERAL OPERATION

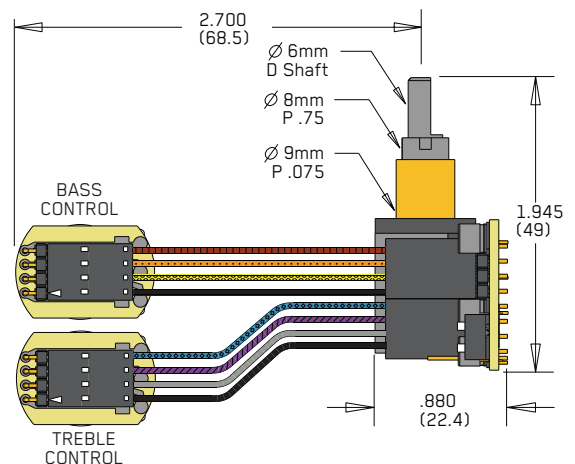
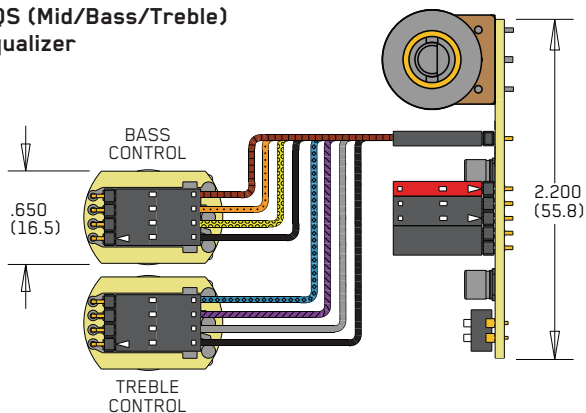
The BQS System is an active EQ circuit for bass guitars. Their effects are illustrated in the graphs on the next page. They allow you separate control over bass, midrange, and treble. Rotate the controlled clockwise to boost, counterclockwise to cut. There is a center detent for flat response. Active or Passive pickups can be used with the BQC and BQS Controls.

The mid-range control has a variable frequency knob that allows you to sweep through the mid-frequency range from 100Hz to 1KHz. This selects the frequency to boost or cut. The graphs on page 2 depict the frequency response of the controls.

#### BATTERY POWER:

If you play the instrument very hard, and are boosting the bass or treble with the BQS, you should consider operating the instrument on +18 Volts (See "Power Tips" under Accessories/product data sheets at <http://www.emgpickups.com>). If you play mildly and use a minimum of boost the instrument should operate easily on a single 9-Volt battery. Use an Alkaline or Lithium battery for the best battery life and always unplug your guitar when you're not using it.

#### Dimensions: BQS (Mid/Bass/Treble) Equalizer



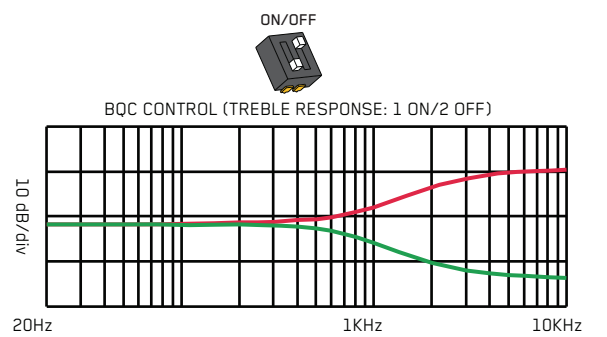
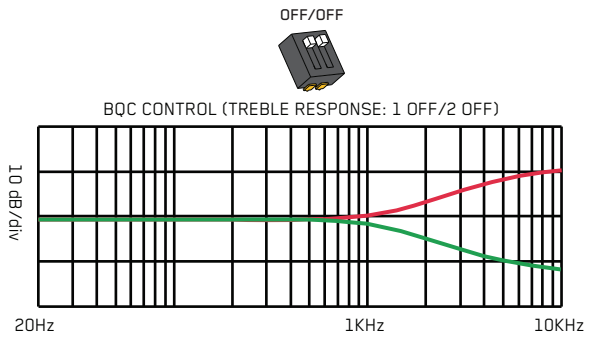
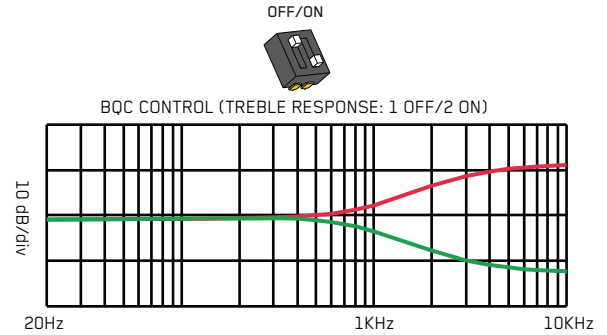
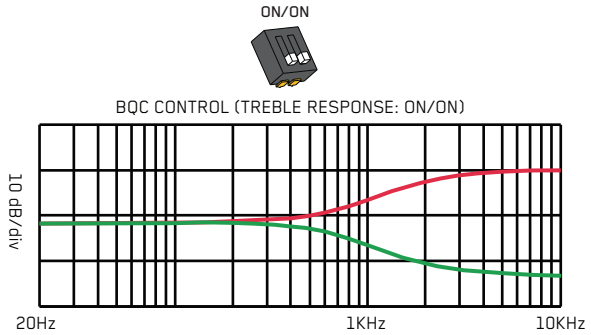
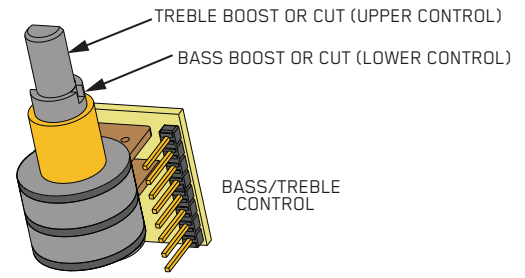
#### WARRANTY

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 upon examination the pickup is determined to be defective, a replacement will be made. 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.

**Installation Instructions:**  
**EMG Model: BQS Control**

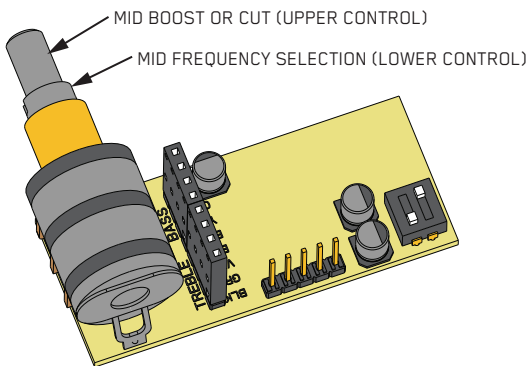
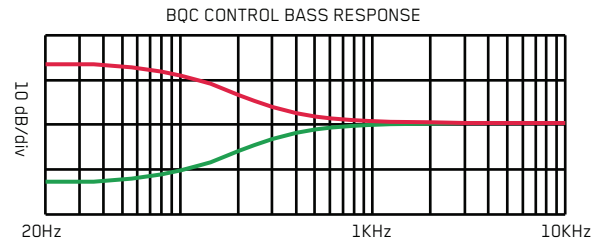
**High Frequency (Treble) Response Selection:**

The BQC has the added feature of allowing you to choose from 4 different high frequency response curves. This is a nice feature especially if you are using the BQC with passive pickups. The following diagrams show the dip-switch positions and the graphs show the resultant frequency diagrams. The BQC Control is an equalizer style control, offering both boost and cut at the same frequency locations. The control also features a center detent (click) that lets you know when no equalization is in effect.



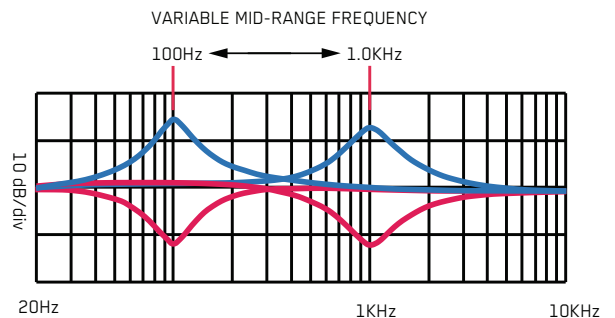
**Low Frequency (Bass) Response:**

The BQC has a fairly standard bass response boost and cut. It's slope is 6dB per octave and is centered at 50Hz. As you can see in the graph on the left the signal can be boosted by +12dB (Red Line) or cut by -12dB (Green Line). A center detent (click) is provided on the control to let you know when the frequency response is flat or unaffected by boosting or cutting.



**Mid-Range Frequency Response:**

One of the primary features of the BQC is it's mid-range control. It allows you to choose the frequency you want to boost or cut from 100 to 1000 Hz. The concentric mid-range pot has two sections. The lower control chooses the frequency, while the upper control lets you choose the amount of boost or cut you want. The maximum slope is 12dB per octave at full gain or cut. There is also a center detent (click) in the center of the upper control to let you know when the control is not having any effect.

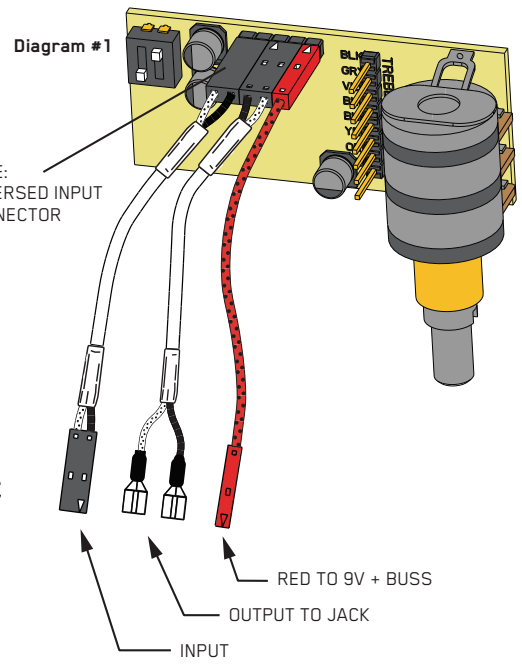
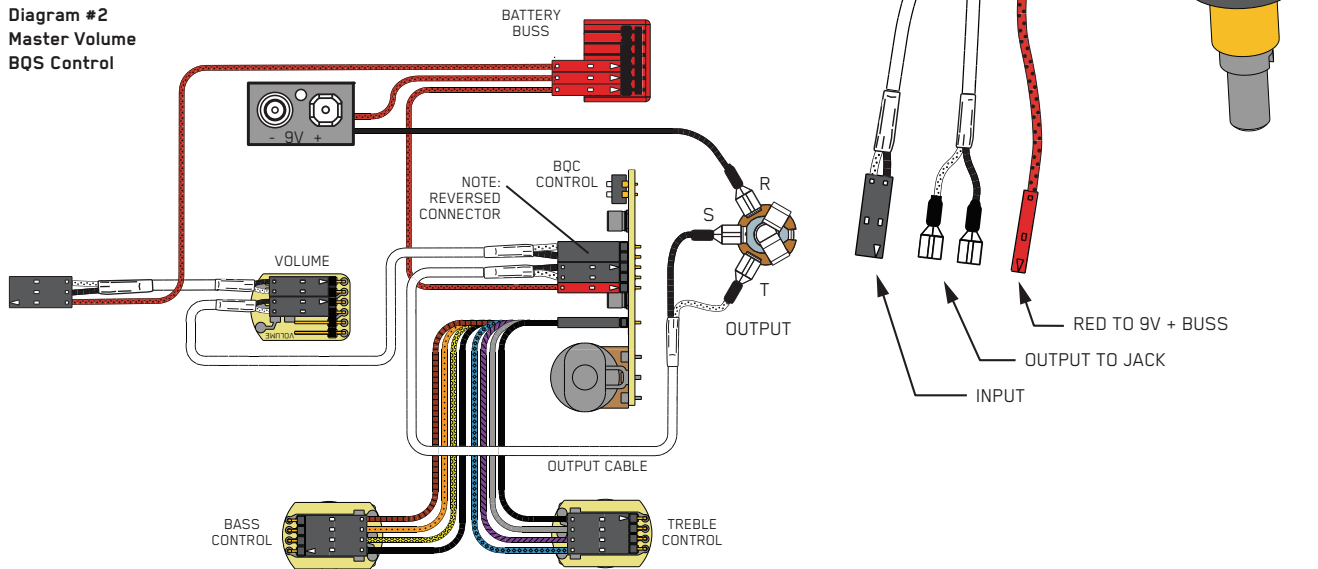


The BQS Control is easily installed by using the connector cables supplied. Diagram #1 shows the cables connected to the BQS Control. This 5-pin layout is the same for all EMG Accessories, so they can be interchanged.

There are a variety of ways instruments can be wired. The examples shown here are only a few. If your instrument has different wiring than shown here go to our website: <http://www.emgpickups.com> for alternate diagrams.

Diagram #2 below shows the installation of a single Volume control along with the BQS Control.

**Diagram #2**  
Master Volume  
BQS Control



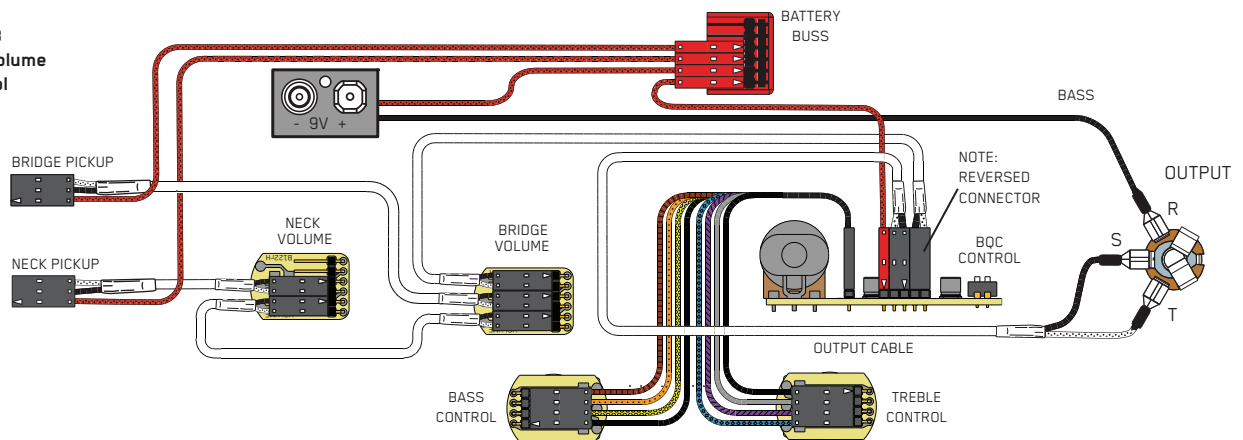
**Installation Instructions:**  
**EMG Model: BQS Control**

**2 Pickups, 2 Volume controls, BQS Control, no selection switch**  
**J-Bass Style wiring**  
**Refer to Diagram #3**

- 1) Install the Pickups and route the Pickup cables to the control cavity.  
If the cables are too long, keep any excess under the pickup.
- 2) Mount the Volume and Tone controls into the body / pickguard.  
Plug the Neck Pickup Cable onto the Neck Volume control.  
Plug the Bridge Pickup Cable onto the Bridge Volume control.
- 3) Plug a coax cable from the Neck Volume control to the Bridge Volume control.
- 4) Plug a coax cable from the Bridge Volume control to the BQS Control.

- 5) Plug the output cable from the BQS Control and connect the output wires to the output jack by pushing the connectors on as shown.  
WHITE wire onto the TIP (T) contact,  
BLACK wire onto the SLEEVE (S) contact  
BLACK Battery Negative wire onto the RING (R) contact.
- 6) Plug the RED Wires of the pickups onto the V+ Supply Buss (RED Shroud) along with the RED of the battery clip.  
Extra pins on the V+ Supply Buss are for EMG Accessories.
- 7) Put the battery in the insulating foam piece provided and place it securely in the control cavity.  
We suggest that you plug in the instrument and test it before closing the control cavity.

**Diagram #3**  
Volume / Volume  
BQS Control

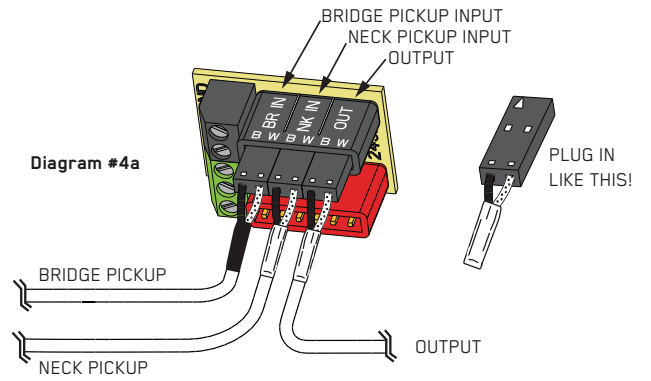


**Installation (Two Pickup Guitars with Selection switch):**

Guitars with two pickups and a selection switch will use the EMG B245 Pickup Buss shown at the right in Diagram #4a.

The Pickup Buss is a convenient way to wire your guitar without soldering. There is a separate sheet attached to these instructions that describes the Pickup Buss in detail.

In all installations it's best to find a place to mount the Pickup Buss in the control cavity before starting. Then, after the cables are routed use the velcro to mount it securely.

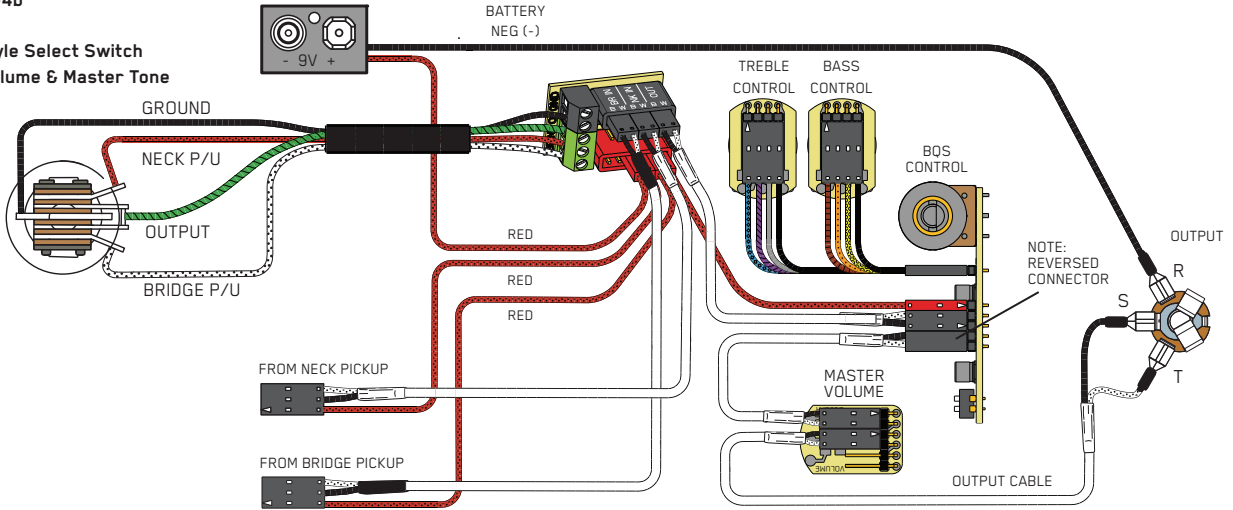


**2 Pickups / Toggle Select Switch / Master Volume and BQS Control**

- 1) Install the Pickups and route the Pickup cables to the control cavity.  
If the cables are too long, wind up the excess and keep it under the pickup.
- 2) Mount the Volume and Tone controls into the body.  
Plug both Pickup cables into the Pickup Buss (BLACK Shroud) as shown, Refer to Diagram #4a  
Bridge Pickup to Position 1  
Neck Pickup to Position 2.
- 3) Plug a coax cable from the Pickup Buss (Position 3) to the Master Tone (Active) as shown in Diagram #4b. Note the reversed connector on pins 1 and 2.
- 4) Plug a coax cable from the Master Tone (ACTIVE) to the Master Volume as shown.
- 5) Strip the insulation from the switch wires and Insert them into the GREEN Terminal Block and tighten the screws with a small screwdriver.  
The Bridge pickup goes to the BR Terminal  
The Neck pickup goes to the NK Terminal  
The Output of the switch goes to the O Terminal  
If there is a ground wire coming from the switch, insert it into one of the black terminals on the terminal block.

- 6) Plug the output cable onto the Master Volume control and connect the output wires to the output jack and push the connectors onto the jack as shown.  
WHITE wire onto the TIP (T) contact,  
BLACK wire onto the SLEEVE (S) contact  
BLACK Battery Negative wire onto the RING (R) contact.
- 7) Plug the RED Wires of the pickups onto the V+ Supply Buss (RED Shroud) along with the RED of the battery clip, and the RED wire of the Active Tone Control. Extra pins on the V+ Supply Buss are for EMG Accessories.
- 8) Put the battery in the insulating foam piece provided and place it securely in the control cavity.  
We suggest that you plug in the instrument and test it before closing the control cavity.

**Diagram #4b**  
2 Pickups  
Toggle Style Select Switch  
Master Volume & Master Tone



**Diagram #5**  
ABC / Master Volume  
BQS Control  
Output Jack

