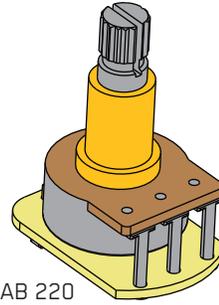




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AB 220

## INSTALLATION INFORMATION EMG MODEL: **AB 220** (ACTIVE/PASSIVE PICKUP INPUTS)

### SPECIFICATIONS

|                           |         |
|---------------------------|---------|
| Input Impedance (Ohms)    | 250K    |
| Input Referred Noise      | -130dbV |
| Output Impedance (Ohms)   | 2K      |
| Current @ 9V (Microamps)  | 980     |
| Battery Life (Hours)      | 250     |
| Maximum Supply (Volts DC) | 18      |

### INCLUDED:

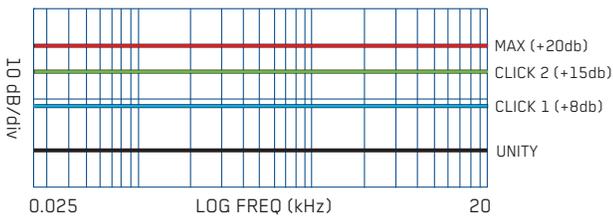
- 1 AB 220 Boost Control
- 1 Battery Clip with Buss Connector
- 1 Stereo Output Jack (Battery Switching)
- 2 Interconnect cables

### GENERAL OPERATION and INSTALLATION NOTES:

The AB 220 is a full bandwidth boost circuit with a maximum of +20db of gain. It features two detented positions, the first at +8db, the second at +15db. It can operate on a single 9 volt battery and can be easily installed in any guitar with active or passive pickups. It can also be used for bass. When the control is turned all the way down (counter-clockwise) it is in the bypass mode. The AB 220 is wired in series with the signal path and should be the last effect in the guitar, just before the output jack.

If you have EMG Active pickups, the installation is very simple, If you have passive pickups, either EMG or other, and your instrument does not have a battery, you will need to make space for a battery and change the output jack to a stereo type similar to the one included with the AB 220.

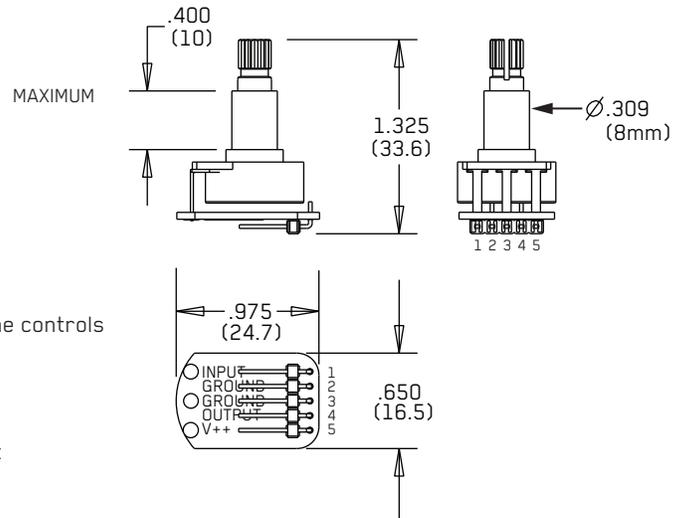
### Frequency Response and Gain: EMG-AB 220



Connector for EMG Active Tone controls and accessories.

- Pin 1 Input
- Pin 2 Ground for Input
- Pin 3 Ground for Output
- Pin 4 Output
- Pin 5 V+ Supply

### Dimensions:



### 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: AB 220**

Like all EMG Accessory products, the AB 220 uses a 5-pin connector. Diagram #1 to the right shows how the plug-in connectors are installed. Be sure to reverse the input connector as shown.

As mentioned in the General Operation note on page 1, the AB 220 should be the last effect in the signal chain. The diagrams all show the installation in this manner.

The output jack included with the AB220 is a stereo type and is used to turn the battery off when the guitar is unplugged. If you have a long panel jack, make sure you have a stereo jack, the Switchcraft type is 152B.

Diagram #2 shows the simplest installation. A pig-tail connector is supplied so you can solder it to the pickup cable, then plug into the AB220, or if you have EMG Cables you can simply use those.

Diagrams #3 and #4 illustrate Active EMG installations that have a single pickup and do not use a selection switch.

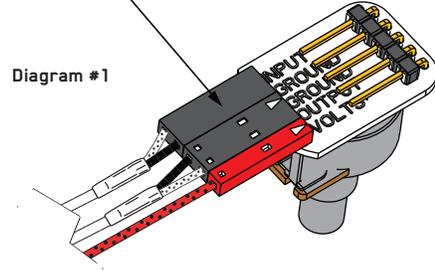
Page 3 has diagrams that have 2 pickups and a selection switch.

Page 4 has diagrams that have 3 pickups and use the B161v4 five position selection switch/buss. If you have the B161v4, refer to that data sheet where more options regarding the 3-pickup instruments are available.

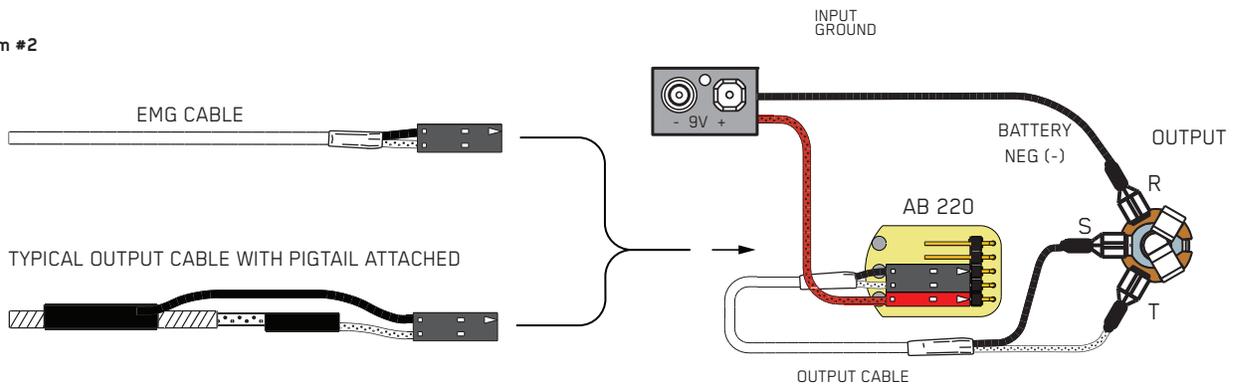
Keep in mind that all of the EMG Accessory controls can be substituted for one another since they all have buffered inputs and utilize the same 5-pin connector. So, if you decide you would rather use the SPC instead of the AB 220, simply unplug the Boost and replace it with the SPC.

All of the EMG Active controls use the same 5-pin connector shown below.

Note: Reversed connector! Pins 1 and 2 are reversed. Make sure the connectors are plugged on as shown.

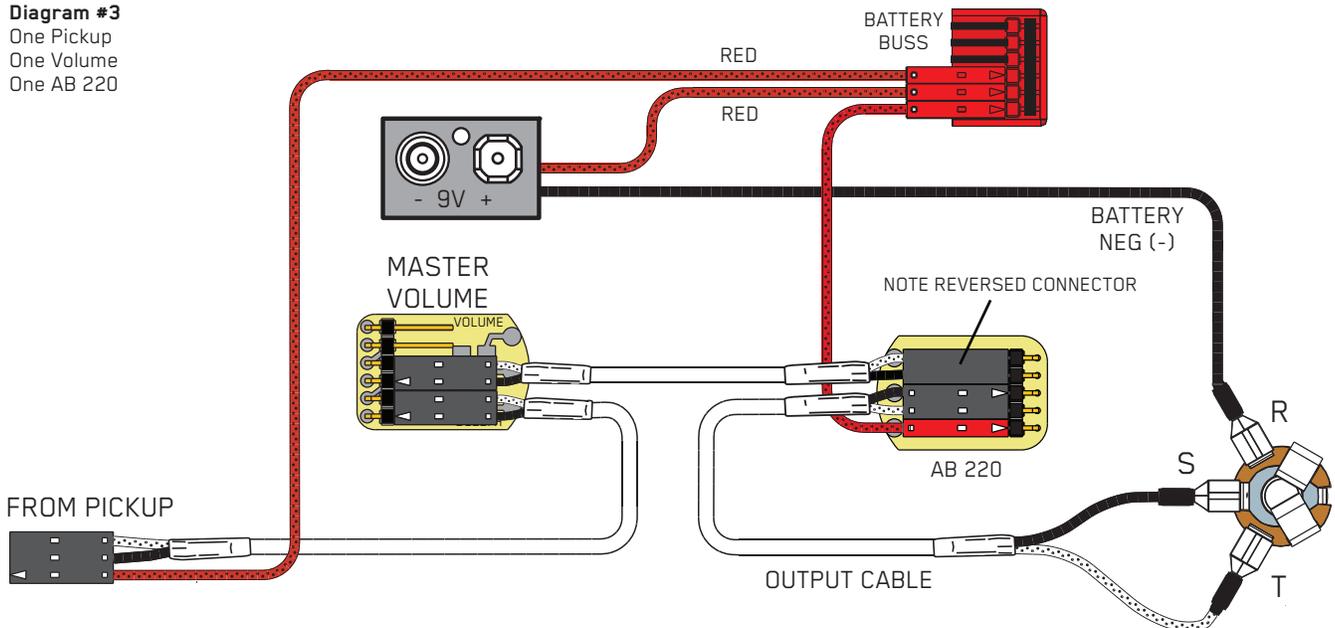


**Diagram #2**



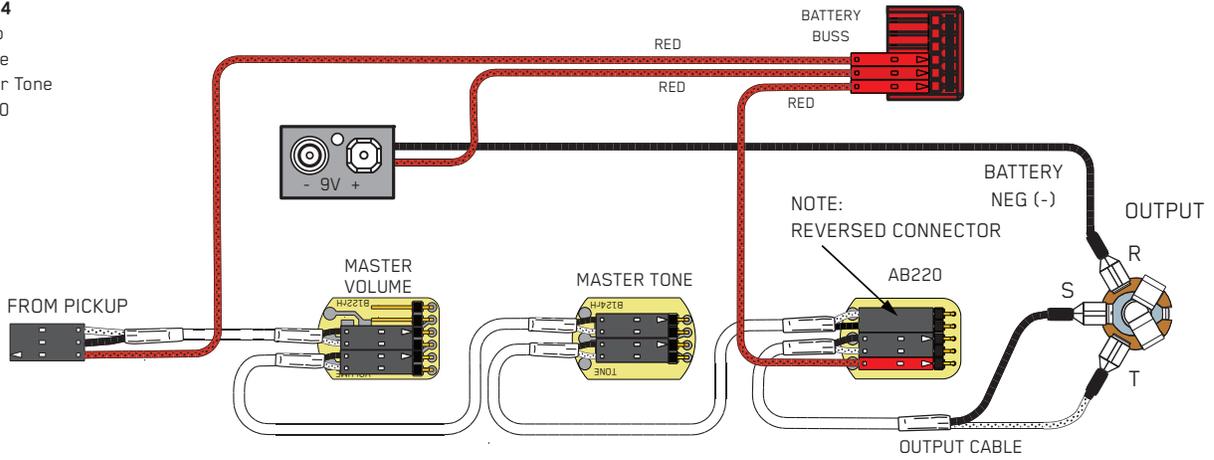
**Diagram #3**

One Pickup  
One Volume  
One AB 220



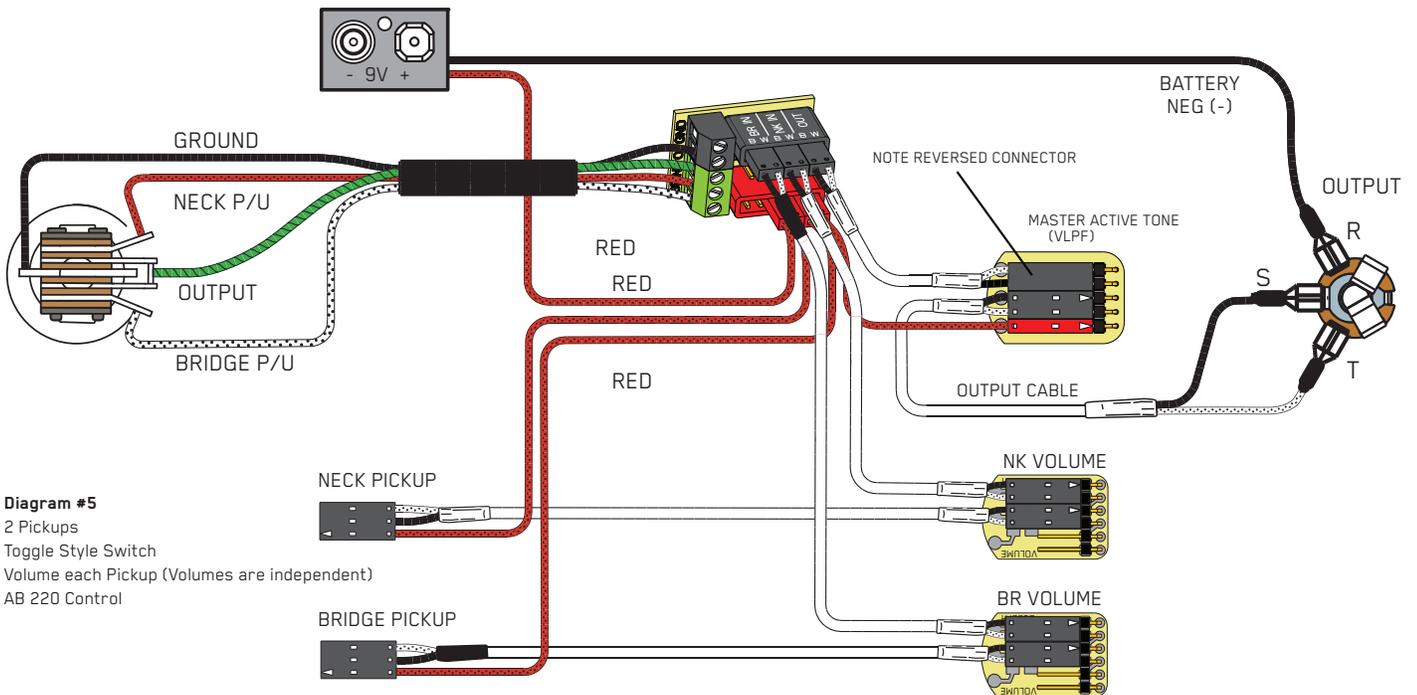
**Diagram #4**

- One Pickup
- One Volume
- One Master Tone
- One AB 220



**2 Pickup Guitars using a selection switch:**

Diagrams #5 and #6 show the pickups connected to the B245 Pickup Buss. To learn more about the B245 Pickup Buss, be sure to go to the EMG Website: <http://www.emgpickups.com>. More diagrams are available at the EMG website. The ABA 220 or any EMG Active Tone Control is shown following the pickup buss and then to the output jack.



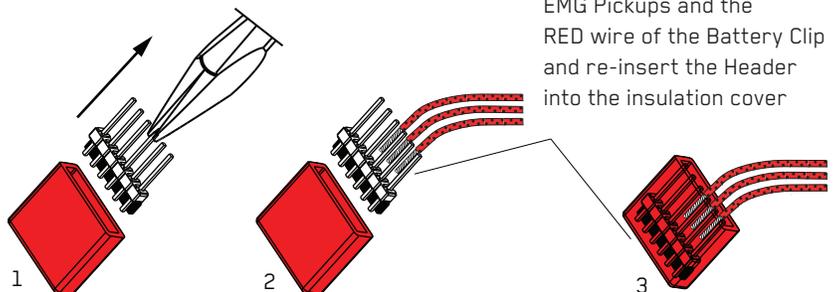
**Diagram #5**

- 2 Pickups
- Toggle Style Switch
- Volume each Pickup (Volumes are independent)
- AB 220 Control

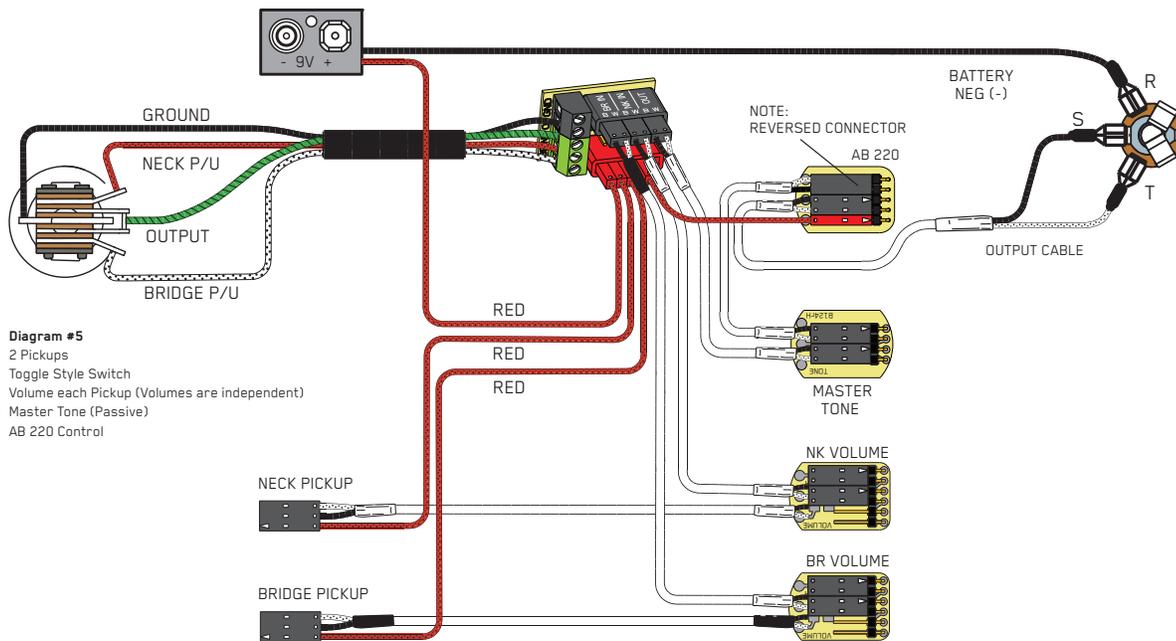
**Powering up the pickups:**

If your existing active pickup cables don't have the connector for the power buss, simply use some needle nose pliers and pull out the V+ header and solder the RED Wires of the EMG Pickups to any of the pins on the header.

If you are installing EMG-HZ Passive Pickups refer to their diagrams. The Red Wire of the HZ Pickup is NOT for battery power, it is a coil wire.



Solder RED wires from both EMG Pickups and the RED wire of the Battery Clip and re-insert the Header into the insulation cover



### 3 Pickup Guitars using a selection switch:

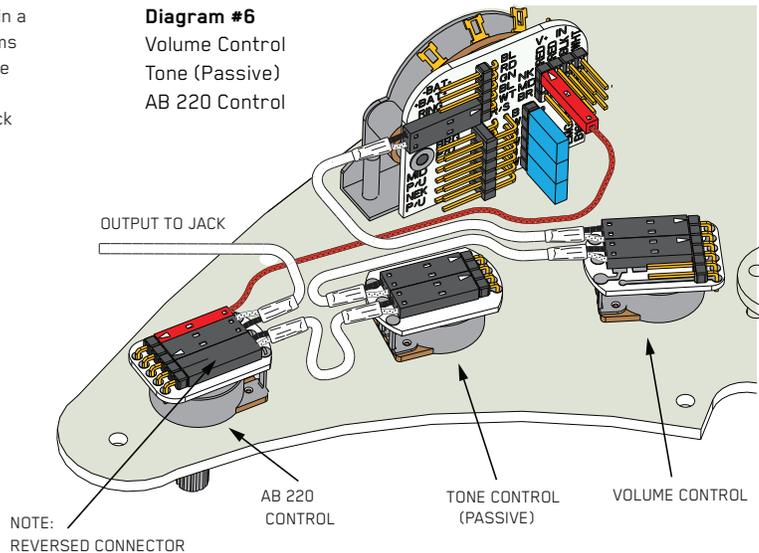
Diagrams #6, #7 show a typical installation with a Volume/Tone/AB 220 in a "daisy-chain" series wiring. The only difference between the diagrams is the order in which the controls are wired. The diagrams yield the same results. The diagrams have been edited to show the boost input, output, and power (9V+). The pickup inputs, battery, and "ring" contact to the jack have been omitted for clarity.

All diagrams show the B161 5-Position switch buss. To learn more about the B161 5-Position switch Buss, go to the EMG Website: <http://www.emgpickups.com>.

#### Refer to Diagram #6

- Start by installing the AB 220 as shown in Diagram #6.
- 1) Plug a coax cable from the output switch to the Volume control.
  - 2) Plug a coax cable from the Volume control to the Tone control.
  - 3) Plug a coax cable from the Tone control to the input of the SPC.
- Be sure to reverse the connector on the input of the 220 as shown.
- 4) Plug the output cable from the 220 to the output jack.
  - 5) Plug the Red wire from the 220 to one of the supply pins on the B161 Switch Buss.

Be sure the 3 shunts are installed on the bypass header of the B161 switch or you won't get any output from the guitar.



#### Refer to Diagram #7

Diagram #7 shows 2 active controls installed: AB 220 and VLPF. This is the same as the X Series Pickups that use an active tone (VLPF) and adding the AB 220 Control.

- Start by installing the AB 220 as shown in Diagram #8.
- 1) Plug a coax cable from the output switch to the Volume control.
  - 2) Plug a coax cable from the Volume control to the input of the VLPF.
- Be sure to reverse the connector on the input of the VLPF as shown.
- 3) Plug a coax cable from the output of the VLPF to the input of the 220.
- Be sure to reverse the connector on the input of the 220 as shown.
- 4) Plug the output cable from the 220 to the output jack.
  - 5) Plug the Red wires from both the VLPF and 220 to the extra 9V+ supply pins on the B161 Switch Buss.

Be sure the 3 shunts are installed on the bypass header of the B161 switch or you won't get any output from the guitar.

