

Designed By **THD**<sup>®</sup> CE

# Yellow Jackets<sup>®</sup>

Tube Converter

YJS



Handmade in the U.S.A.

## INSTRUCTION SHEET

- Converts most audio amplifiers with 6L6s, EL34s, 6550s or 6V6s to EL84s without modification or rebiasing
- **Converts from Class AB to Class A operation!**
- Drops output power by 50% to 70%.
- Safe for all common amplifiers and transformers.
- Two year warranty against manufactured defects.
- "The next best thing to getting yourself a new amp."
  - Guitar World Magazine
- "Increase amplifier flexibility"
  - Guitar Player Magazine

### **Thank You!**

Thank you for buying our Yellow Jackets<sup>®</sup> converter! It will provide you with years of service, assuming that you replace the tubes when they are worn, and will also give you a much greater variety of sounds from your amplifiers than you have ever experienced before.

### **How to Install Yellow Jackets<sup>®</sup>:**

1. With your amplifier cold and turned off, remove the 6V6, 6L6, EL34 or 6550 tube from its socket. (Use a towel to protect your hands if the tubes are hot.)
2. Place the Yellow Jackets<sup>®</sup> converter in the tube socket and install an EL84 tube into the Yellow Jackets<sup>®</sup> converter. Make sure that all pins are properly aligned and do not force anything. It should all go smoothly if the tube pins are properly aligned.
3. Turn the amp on, let it warm up, and play. Your amp is now running in Class A mode with an EL84 output tube.

You do not have to adjust the bias of your amplifier as the Yellow Jackets<sup>®</sup> converters themselves create their own cathode bias circuit, ignoring the bias setting in your amp. This also means that when you put your old tubes back into the amplifier, your bias will be set just as you left it.

If you have an amp with 4 output tubes, you have a number of options:

- a. Replace all 4 output tubes with Yellow Jackets<sup>®</sup>.
- b. Remove all 4 tube and put only 2 Yellow Jackets<sup>®</sup> in the amp, giving you about 10% power. In this case, install the Yellow Jackets<sup>®</sup> in the inner two sockets. (You do not need to adjust the impedance selector on your amplifier to compensate for using only two output tubes. You can keep it set to the impedance of your speaker cabinet with no danger of causing damage to the transformer.)

c. Leave two output tubes in the outside sockets and install two Yellow Jackets<sup>®</sup> in the inside two sockets. This will give you a combination of Class A Triode and Class AB Pentode operation, a very cool, responsive sound!

### **Other Thoughts Regarding Yellow Jackets<sup>®</sup>:**

This model of the Yellow Jackets<sup>®</sup> converter, the YJS, is a specialized, current-limiting/voltage-conditioning adaptor for use in most 20 watt to 100 watt amplifiers which use 6L6, EL34, 6550 or 6V6 output tubes. This includes Marshall<sup>™</sup> 50 and 100 watt tube amps, Fender<sup>®</sup> Super Reverb, Deluxe Reverb, Pro Reverb, Twin Reverb, Bassman, Showman, Tweed Pro (5E5-A), Hot Rod Deluxe, Hi-Watt 50 and 100 watt amps, Sound City 50 and 100 watt amps, all Rivera amps, Jim Kelley, Soldano SLO and Hot Rod Series amps, Mesa/Boogie 50 and 100 watt amps, Bogner, VHT, etc...

Yellow Jackets<sup>®</sup> converters are NOT to be used in amplifiers with extremely high plate voltages such as Marshall<sup>™</sup> Majors, Ampeg SVTs, Hi-Watt 200s and Orange 120s. These amplifiers have too high a plate voltage and will damage the EL84s and possibly the Yellow Jackets<sup>®</sup> converters themselves. While the Yellow Jackets<sup>®</sup> converters each reduce the plate and screen voltages by 100 volts, this would still make the plate voltage too high in certain amplifiers. If you are not sure if this Yellow Jackets<sup>®</sup> converter will work in your amp, please feel free to contact us either by phone or by e-mail. We will be happy to advise you on your individual situation.

Amplifiers which vary the bias voltage to create a tremolo effect will not have any tremolo effect when using Yellow Jackets<sup>®</sup>. This includes the Fender<sup>®</sup> Vibro-Champ, Brown Deluxe Amp (6G3), Princeton, Tremolux (5G9, 6G9), and Vibrolux (5F11, 6G11) to name a few.

Cathode-bias amplifiers such as Fender<sup>®</sup> Tweed Deluxe, Champ, Vibro-Champ, Tweed Princeton, Tweed Pro (5C5, 5D5, 5E5), Tweed Super (5C4, 5D4), Tweed Tremolux (5E9), Tweed Twin (5C8, 5D8) etc. require a custom version of the Yellow Jackets<sup>®</sup> converters (YJC) with a ground wire to attach to the chassis.

If your amp uses 6V6 output tubes and you do not want a reduction in power, you need YJ20 Yellow Jackets<sup>®</sup> converters. If your amp uses 7591 tubes, you should use YJ7591 Yellow Jackets<sup>®</sup> converters. The correct unit can be obtained from your local dealer or from us.

Thank you once again for buying our products. Without customers like you, we would have nothing to do all day.

- All the folks at CE Manufacturing, LLC



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