

# OPERATING INSTRUCTIONS AND USER MANUAL

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EVANS CUSTOM AMPLIFIERS, Inc. 2734 Woodbury Drive BURLINGTON, NC 27217 Phone/Fax (336) 270-5700 Starting in 1962, Evans has been building amplifiers exhibiting the ultimate in sound reproduction tonal quality.

The founder of our company, Jim Evans, was a professional steel guitar player as well as an industrial electronics engineer who recognized that no amplifier on the market filled the exacting need for quality of tone and complete control of the tonal profile. He started building amplifiers for his own use. A few weeks would go by until another musician would make him an offer for his amp. After letting the amp go that night, he furiously worked to build another so he could play that weekend. Thus began our company.

Through the years, the electronic design has been refined with new technology being embraced at every opportunity.

Whether you play jazz guitar, steel guitar, finger style, rhythm or lead guitar, fiddle or keyboard, Evans will give you a tonal quality that is beyond compare.

Scot and Julia Buffington

#### **OPERATING INSTRUCTIONS**

Evans amplifiers are designed to reproduce the true sound of your instrument. You will find the controls easy to adjust by using the following outline to get you started. You may use the entire span of the control if necessary. For instance, there is no rule that says you must have the Reverb control at 6 or Bass at 3. Make use of all the controls and inputs to achieve the sound you want. Here are a few tips we have learned from our customers over the years.

NORMAL AND +6db INPUTS: +6db provides the most volume with a heavier amplified sound. Use the NORMAL input with strong pickups to avoid overdriving the preamp.

MASTER: Used to set the output gain of the preamp. The convenient ON/OFF switch is activated when this control is rotated CW. Since the switch activates between 2 and 3, the only part of the rotation between 3 and 10 is used for level control.

<u>BUFF</u>: This control provides beautiful overtones for the solid-state preamp usually only found in tube preamps. Start with BUFF on 4-6, next adjust TREBLE and EXPAND (switch/control on tube preamp; switch only on solid-state unit).

REVERB: Adjusts the mix of reverb and bypass signal to give the degree of reverb desired. For very wet reverb, place REVERB at maximum.

BASS: The maximum BASS is dialed in by playing the lowest open string while turning the control CW from 0 until it gets boomy. Then back off by a number. Turn down BASS when using +6db INPUT with MASTER greater than 6 or NORMAL INPUT with MASTER greater than 7. Remember, the louder you play, the less BASS you need. If the BASS is turned up at loud volumes, the low end will be over compensated and muddy because bass frequencies are easier to reproduce at loud volumes.

<u>DEPTH</u>: This control enhances the low and low mid-range. CCW is off. Turn to 70% or so. BODY control should be greater than 1 for this control to be effective.

<u>BODY</u>: Used to set the mid range and darkness of the sound. This is a multifunction control that increases low midrange tones while rolling off high frequencies.

EXPAND: This control boosts the highs and some low tones.

TREBLE: Sets the amount of treble desired. Playing the highest open string and turning up the control from 0 until it gets thin and then backing off a number should find maximum TREBLE.

<u>VOLUME</u>: Sets the input level to the preamp. Lower settings mimic the instrument's voice; higher, settings (6-9) emphasize the amplifier's tone settings.

<u>REVERB SELECTION:</u> This 3-way switch is located on the rear panel of the preamplifier and AH200. It can select one of three Reverbs: Reverb alone; Reverb & Flange; and Reverb & Chorus.

<u>DWELL:</u> This knob is located next to the Reverb Selection Switch. This control sets the room size or reverb interval. When switched to Reverb alone the center detent on the Dwell control produces a "Hall" reverb that is sufficient for most musicians. The interval or Dwell variation is as follows:

REVERB - DWELL = 0.5 to 5.25 sec.

REVERB plus FLANGE – DWELL = 5.9 to 0.31 Hz / 1 to 3 sec.

REVERB plus CHORUS – DWELL = 5.9 to 0.31 Hz / 1 to 3 sec.

<u>EFFECTS SEND AND RETURN</u>: These jacks are located on the back panel of the preamplifier. In the signal path, they are situated after all tone controls and addition of internal REVERB. Most effects units should be connected here. However, some effects may operate better connected between the instrument and NORMAL input.

<u>PREAMP OUT</u>: This is an unbalanced line out signal for driving a mixer board or an additional power amplifier. This jack is located on the back panel of the preamp. Level is independent of MASTER control.

<u>DRIVE:</u> This line out voltage signal is used to supply the DPU Power Amp in combo units. This jack is located on the rear panel of the preamp. Signal level is dependant on MASTER control setting.

<u>PHONES</u>: Jack designed for stereo headphones, 40 Ohm impedance nominal. This  $\frac{1}{4}$ " jack is located on the DPU power amp in combo units and on the rear panel of the AH200. When phones are plugged in, all speakers are switched off.

EXTERNAL SPEAKER: The output is used for driving an external 8 ohm speaker. This ½" jack is located on the DPU power amp in combo units and on the rear panel of the AH200. For the AH200, the combined load of speakers should not be less than 4 ohms.

### CONTROL VOICINGS FOR SOLID STATE PREAMP

Use the settings below and add BUFF, REVERB, DEPTH and EXPAND to taste. For the AH200 use suggested settings according to the speaker size

#### **GENERAL SETUP**

	MASTER	REVERB	BASS	В	ODY	TREBLE	VOLUME	INPUT
RE200	4	2	3.5		5	0-2	5	+6db
10" SPEAKER	5-6	4	5		7	2	7	NORMAL
	4-5	3	2		8	2	7-9	NORMAL
	6-7	3	5		7	2	4	NORMAL
JE200	4	2	0-1		3.5	0-2	4	NORMAL
12" SPEAKER	5	3-4	5		7	0-2	5	+6db
	5	3	1-2		7-9	0-2	7-9	NORMAL
SE200	4	5	1-3		8	2	7	NORMAL
15" SPEAKER	5	4	5		6	2	5	+6db
10 OI LANCEIX	6	4-6	1-3		3	2	4	NORMAL

REVERB SELECTION: On most models, the rear panel contains a selector switch and a variable DWELL control that sets reverb parameters. The switch selects one of three reverbs: Reverb alone, Reverb plus Flange and Reverb plus Chorus. The dwell control sets room size or reverb interval. The dwell control has a convenient center detent value sufficient for most musicians. The interval or dwell variation is as follows:

REVERB - DWELL = 0.5 to 5.25 sec.

REVERB PLUS FLANGE - DWELL = 5.9 to 0.31 Hz / 1 to 3 sec.

REVERB PLUS CHORUS - DWELL = 5.9 to 0.31 Hz / 1 to 3 sec.

Buzz Evans' secret reverb setting: Switch to Reverb + Flange with Dwell CW just past center detent.

NOTE: Flange is achieved by splitting the audio signal into two paths and introducing a variable phase shift in one path before recombining the signal. The chorus effect is similar except the delay introduced is rapid and random.

# WARRANTY

Evans Custom Amplifiers warrants this product to be free from defects in material and workmanship for a period of one year from the date of purchase to the original consumer purchaser. Evans Custom Amplifiers will pay all labor and material expenses for all repairs covered by this warranty. Please be sure to save the original shipping carton(s) because a charge will be made if replacement carton(s) are requested. The customer is responsible for transporting the product for repair or arranging its transportation and for payment of any shipping charges. This warranty does not cover any expenses incurred in the removal and reinstallation of any components to this product.

The registration card contained in the information packet must be filled out and mailed back in order for the warranty to be valid. In addition, proof of date of purchase may be necessary in order to obtain warranty repair.

Sales outside the US are sold as-is, without warranty. However, Evans will supply a kit of semiconductor devices, or other parts deemed necessary by Evans for repair at a nominal cost not including shipping.

This warranty does not apply to any product damaged by accident, misuse, abuse, improper voltage, faulty installation, improper maintenance, lightning (or other acts of God). This warranty does not apply to any parts for service by anyone else other than Evans Custom Amplifiers or their authorized service technician. This warranty does not apply to any damage incurred during shipping.

EVANS CUSTOM AMPLIFIERS IS NOT RESPONSIBLE OR LIABLE FOR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS PRODUCT OR OTHER DAMAGES. EXCEPT AS PROVIDED HEREIN: EVANS CUSTOM AMPLIFIERS MAKES NO EXPRESS WARRANTIES, AND ANY IMPLIED WARRANTY OF MERCHANTIBILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS LIMITED IN ITS DURATION OF THE WRITTEN LIMITED WARRANTIES SET FOR THE HEREIN.

Some states do not allow limitations on how long an implied warranty lasts or an exclusion or limitation of accidental or consequential damages; therefore, the above limitations or exclusions may not apply to the purchaser.

# TROUBLE CHECKS

Sometimes, checking a few basic things can solve problems. To save time and money, please check the troubleshooting tips below before you call for help or ship your amp back to us for repair. If repair should be necessary and the amplifier is under warranty, we prefer it to be sent to us for evaluation and repair.

#### No Power

If pilot light on the preamp is out, first check the power cord and cord connections. For console amplifiers, check the 28 Vac connections from the power amplifier to the rear of the preamp.

#### No Signal

No sound from the speaker although the pilot light is on. First, unplug any external speaker then reset the power amplifier by turning off power, wait a few seconds for the pilot light to go out, then turn the power back on. If the sound returns, check the external speaker and cord for shorts.

#### Hum and Other Interference

Check guitar signal cord or effects cords for open shield connection. Check the output jack on guitar for broken ground or signal connection. Check room light dimmer circuits as source of radiated hum. Do not place cell phones on the amplifier. Keep single-coil pickups a reasonable distance from the amp.

#### Note:

There are no user serviceable parts inside the chassis. Only a qualified service technician can properly determine the course of action beyond the above checks.

# DPU200 and AH200 Digital Power Unit

The DPU200 and AH200 contain a digital power amplifier providing a maximum output of 200 Watts into 4 ohms. In addition, there is a transformer to supply the 28Vac for the preamplifier.

# **Power Module**

The output is bridged and not referenced to common or circuit ground. Therefore, **connect only a speaker load**. Any other load or appliance that causes output current to flow to ground will cause the amplifier to **permanently fail**. If the output leads are shorted together, the amplifier may recover from the fault by removing the load and turning the amplifier off for several seconds. If the condition that caused the fault has been removed, proper operation of the amplifier will be restored.

# **Transformer**

The preamp supply transformer is configured with dual windings so you may operate the entire unit from nominal voltages of 115 to 230 Vac by using the selector switch (units intended for Japan are not capable of this switching). **Never operate this unit on 230 Vac with the switch in the 115 Vac position.** To configure this unit for a different voltage, you must either procure a plug adaptor or attach the proper plug to the power cord