



BW 1969

OWNER'S MANUAL

Dear Customer,

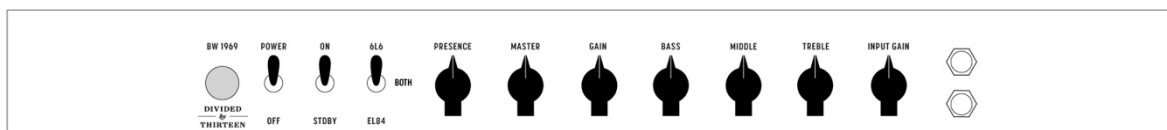
Thank you for choosing a **Divided By Thirteen** amplifier.

As a discerning guitarist, you understand that achieving exceptional tone starts with the finest components. Our classic design, paired with carefully selected parts and a hand-crafted approach, creates a truly versatile instrument that will enhance your sound. We encourage you to read through this manual, as it's designed to answer any questions you may have. Welcome to an exclusive group of musicians who have made **Divided By Thirteen** their amplifier of choice. We're excited to have you with us.

Important Safety Instructions

1. Read these instructions
2. Keep these instructions
3. Heed all warnings
4. Follow all instructions
5. Do not use this apparatus near water
6. Clean only with dry cloth
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions
8. Do not install near any heat sources such as radiators, heat registers, plugs, and the point where they exit from the apparatus
9. Protect the power cord from being walked on or pinched particularly at plugs and the point where they exit from the apparatus
10. Only use attachments/accessories specified by the manufacturer
11. Unplug this apparatus during lightning storms or when unused for long periods of time
12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped
13. CAUTION: To disconnect the unit completely from the MAINS, unplug the unit. Turning the power switch off does not disconnect the unit completely from the MAINS.

Front Panel Functions



INPUT JACKS – These are the high-impedance inputs for your guitar. The top jack provides full level to the first tube stage without attenuation. The bottom jack is attenuated to prevent higher-output pickups or pedals from overdriving the input stage prematurely.

INPUT GAIN – This 6-position switch allows the input of the amplifier to be driven at various levels to tailor the gain and compression characteristics of the preamp when used in conjunction with the Gain control.

TREBLE – This knob adjusts the high-frequency response. Lower settings produce a warmer, smoother tone; while turning it clockwise enhances high frequencies, making them more prominent and aggressive.

MIDDLE – This knob adjusts the response of the mid-range frequencies. Lower settings produce a scooped response, while turning it clockwise enhances mid frequencies to add body to the tone and cut through more effectively.

BASS – This knob adjusts the bass response. Lower settings reduce low frequencies to add clarity by emphasizing mid and treble frequencies. Turning it clockwise increases bass frequencies to fill out the response of single coils.

GAIN – This knob sets the amount of overdrive generated within the preamp when used in conjunction with the Input Gain control.

MASTER – This knob sets the overall output/volume of the amp.

PRESENCE – This knob adjusts the contour of the high-frequency response. Turning this control up gradually increases the intensity of the upper frequencies. This is a subtle control which can be used to emphasize sparkle when needed or smooth out your overall tone.

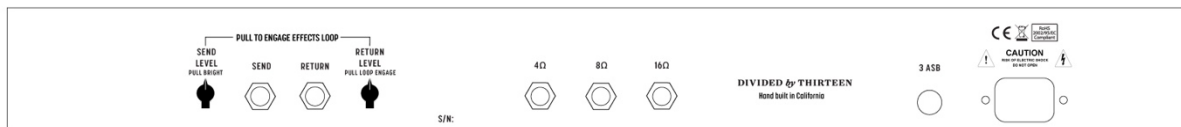
6L6/EL84/BOTH – This switch selects the output tubes that are active. In the upper position, the 6L6 tubes are active and run in fixed bias to provide more headroom and tighter response. In the lower position, the EL84 tubes are active and run in cathode bias to provide more breakup and harmonics. When the switch is in the middle position, both sets of tubes are active to provide a complimentary blend of both output sections.

ON/ STDBY (Standby) – This switch prevents full voltage from reaching the power tubes and mutes the output. Set it to the “down/STDBY” position before turning the power switch to the “up/POWER” position. After waiting 20 seconds or more, place this switch to the “up/ON” position to play the amplifier. For breaks, use the “down/STDBY” position to mute the output while keeping the power tubes idle, avoiding warm-up time when switched back to “up/ON.” To prolong tube life, power off the amplifier when not in use for long periods.

POWER/ OFF – This switch controls the amplifier’s power. When in the “down/OFF” position, the amplifier does not receive power, and the indicator lamp remains off. When in the “up/Power” position, the amplifier receives power, and the indicator lamp lights up. Note: this switch does not disconnect the unit from AC mains power.

INDICATOR LAMP – This lamp illuminates when the power switch is set to the “up/POWER” position, indicating the unit is receiving power. When the power switch is set to the “down/OFF” position, the amplifier is not receiving power, and the indicator lamp will not be illuminated. Note: this does not indicate the amplifier is disconnected from the AC mains power.

Rear Panel Functions



A/C Input - Connects the amplifier to A/C power via the power cable supplied. Unless otherwise specified, your amplifier is designed to operate on 120 volts A/C, 60 cycles, ONLY.

Mains Fuse – 3AG Type 250 Volt, SLO-BLO 3 Amp

Speaker Output Jacks – These jacks allow the amplifier to be connected to a wide range of cabinets and impedances (4, 8 and 16 ohms). The speaker output that matches the total load of the cabinet/cabinets to be connected should be used.

NEVER OPERATE YOUR AMPLIFIER WITHOUT A PROPER SPEAKER LOAD CONNECTED.

Return Level (Pull Loop Engage) - This control adjusts the signal level coming from the effects when the active tube buffer is engaged.

Return Jack - Use this jack to connect the output from the effects chain back to the amplifier.

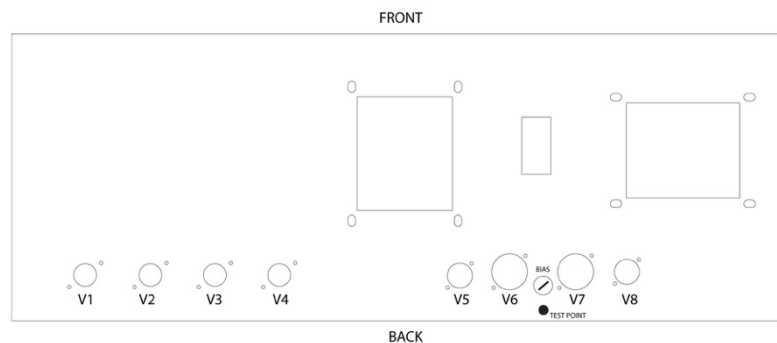
Send Jack - Use this jack to send the preamp signal to the effects chain.

Send Level/ (Pull Bright) - This control adjusts the signal level sent to the effects chain when the active tube buffer is engaged.

TUBE COMPLEMENT

Each production tube is tested and matched to our specifications. When the time comes that the power tubes need replacing, it's very important to use high quality, matched sets of power tubes. It's also critical that the bias of the amp be reset after installing new, or NOS power tubes.

- V1- Preamp 12AX7 - Input
- V2- Preamp 12AX7 - Gain
- V3- Preamp 12AX7 – FX Loop
- V4- Preamp 12AT7 – Phase Splitter
- V7- Output EL84
- V8- Output 6L6
- V9- Output 6L6
- V10- Output EL84



BIAS PROCEDURE

- Make sure the speaker is connected properly, then power up the amplifier.
- Set the **6L6/EL84/BOTH** switch to the up/6L6 position.
- DO NOT apply any signal to the input during the biasing procedure!
- Insert volt meter's positive probe into the bias test point socket
- Connect volt meter's negative probe to chassis ground
- Switch amp out of standby and allow a few seconds for the circuit to stabilize • Set voltmeter to millivolt scale (or lowest volt scale 60 millivolts =.060 volts.) • Observe the display on the meter to see the current bias setting
- If an adjustment is needed, use a small flat blade screwdriver inserted into the bias adjust pot and adjust by turning bias screw SLOWLY in very small increments until the desired setting is achieved on the meter. Then wait a few moments for the bias to stabilize and re-adjust if necessary. You may need to repeat this procedure a couple of times. It is ok to play test the amp with the meter connected. A setting of .060 -.064 volts is normal.

*****Do not set bias higher than recommended level as it can lead to tube failure and possible damage to other components in the amplifier!***

WARNING! No user serviceable parts inside! Refer to qualified service person only. LINE CORD- For your safety, connect to grounded A/C receptacle only.

We know your new **Divided By Thirteen** amplifier will provide many hours of enjoyment and inspiration in the years to come. This manual is a resource for some of your questions. Please contact us with any other questions or comments that you may have. We look forward to hearing from you!

Divided By 13 Amplifiers

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SERIAL NUMBER: _____