

FTR 37

OWNER'S MANUAL

Dear Customer,

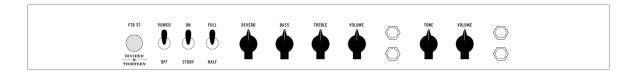
Thank you for choosing a **Divided By Thriteen** amplifier.

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 Thriteen** 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. <u>Turning the power switch off does not disconnect the unit completely from the MAINS.</u>

Front Panel Functions



INPUT JACKS (Channel 1) – These are the high-impedance inputs for channel 1. 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.

VOLUME (Channel 1) – This knob controls the level of channel 1. Turning it clockwise increases volume and adds overdrive at higher settings. When both channel 1 and 2 are in use simultaneously, this knob sets the level that is combined with channel 2.

TONE – This rotary switch offers six distinct capacitor variations that shape the lower frequencies of Channel 1. The full counterclockwise position provides less low frequencies. Turning the dial clockwise increases low frequencies.

INPUT JACKS (Channel 2) – These are the high-impedance inputs for channel 2. The top jack provides full level without attenuation. The bottom jack is attenuated to help prevent higher-output pickups or pedals from overdriving the input stage.

VOLUME/PULL BOOST (Channel 2) – This knob controls the level of channel 2. Turning it clockwise increases the volume and adds overdrive at higher settings. When both channel 1 and 2 are in use simultaneously, this knob sets the level that is combined with channel 1. Pulling the knob outward engages an additional mid/gain boost circuit.

PULL BOOST –This function is activated by pulling the VOLUME 2 knob outward, increasing the mid-range frequencies and volume, causing preamp overdrive to occur sooner as the VOLUME knob is turned clockwise.

TREBLE – This knob adjusts the high-frequency response of channel 2. Lower settings produce a warmer, smoother tone, while turning it clockwise enhances high frequencies, making them more prominent and aggressive.

BASS – This knob adjusts the bass response of channel 2. Lower settings reduce low frequencies, emphasizing mid and treble frequencies. Turning it clockwise increases bass frequencies.

REVERB – This knob controls the amount of reverb mixed with the dry signal of channel 2. At the full counterclockwise position, reverb is turned off. Turning it clockwise increases the reverb effect. When used in conjunction with the "REVERB SEND" control on the rear panel, a wide range of natural reverb effects can be

created. A footswitch connected to the "REVERB" jack on the rear panel can enable or defeat the reverb.

FULL/HALF – This switch controls the amplifier's output capability. In the "up/FULL" position, the power section outputs up to 37 watts. When switched to "down/HALF", the output is limited to 18 watts, allowing the amplifier to achieve output tube distortion at lower listening levels. *<u>see "Speaker Output Jacks" section for proper</u> load selection when using the "down/HALF" setting.

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. <u>Note: this does not indicate the amplifier is disconnected from the AC mains power.</u>

Rear Panel Functions



A/C Input - Connects the amplifier to A/C power via the power cable supplied.

<u>Unless otherwise specified</u>, your amplifier is designed to operate on 120 volts A/C, 60 cycles, <u>ONLY.</u>

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

High Voltage Fuse – Units produced prior to March 2025 feature an additional 3AG Type 250 Volt, SLO-BLO ½ amp fuse

Speaker Output Jacks - There are 5 speaker output jacks; (1) 16 ohm. (2) 8 ohm,

(2) 4 ohm. Only one set of jacks should be used at any point. The single jack labeled 16 ohms allows (1) 16 ohm cabinet to be connected. The jacks labeled 8 ohm allow (1) 8 ohm cab or (2) 16 ohm cabs to be connected. The jacks labeled 4 ohms allow (1) 4 ohm or (2) 8 ohms cabs to be connected. In the "up/FULL" power setting, be sure to match the impedance of your cabinets with the corresponding impedance (output) of the amplifier. In the "down/HALF" power setting, the amplifier output that is half that of the speaker load connected should be used. ***NEVER OPERATE YOUR AMPLIFIER WITHOUT A PROPER SPEAKER LOAD CONNECTED. ***

TUBE COMPLEMENT

Each production tube is tested and matched to our exacting 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 5879

V2- Preamp 12AX7

V3- Preamp 12AX7

V4- Preamp 12AT7

V5- Preamp 12AX7

V6- Preamp 12AX7

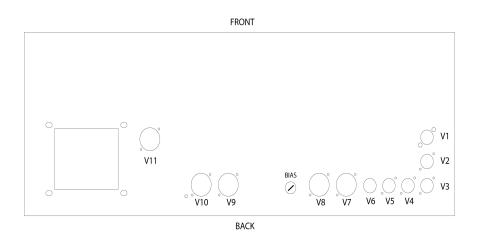
V7- Output 6V6

V8- Output 6V6

V9- Output 6V6

V10- Output 6V6

V11- 5AR4/GZ34



Bias Procedure using TAD BiasMaster or similar device. Refer to your devices owner's manual for detailed instructions:

- 1. With the amp turned off, remove output tubes from amp (Caution, they may be hot!!!)
- 2. Place the TAD BiasMaster octal probes into the free sockets, making sure the "guide pin" on the base lines up correctly in the socket. Remember: one probe in each socket.
- 3. Insert the power tubes into the probes.
- 4. Connect the cables of the octal probes with the TAD BiasMaster
- 5. Turn the amp on and leave on Standby for approximately 5 min. to allow tubes to warm up properly.

- 6. Set the Standby switch to the up/ON position.
- 7. The measurement is started by turning the control knob from the "off" position to the desired tube socket.
- 8. Adjust the bias to **25ma** using the adjustment point located on the bottom of the amp chassis.
- 9. After finishing the procedure, switch the amp off, let the tubes cool down and remove the probes from the tube sockets. Remove the power tubes from the probes and place them in the tube sockets, being careful to note the position of the tube guide pins are correctly aligned with the socket.

**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:	