

5F6

A stereo four-input valve bass amp with four 10-inch speakers, after the 1950s tweed circuit that became the template for the rock amp - two channels in one BLEND knob, a cathode-follower tone stack, presence, and TWEED and GREYBEARD models.



Overview

5F6 is a valve bass amp with four 10-inch speakers in an open-back cabinet, after the 1950s tweed bass-amp circuit that became the template for the rock amp: a cathode follower driving the tone stack, presence in the negative-feedback loop, and two channels you can jumper together. Played with a guitar it is a classic blues and rock amp. The sound is designed from scratch.

Both channels share the first valve; then come the two channel VOLUME pots (NORMAL, and BRIGHT with its small cap across the pot), a second stage and the cathode follower, whose grid draws current on the positive swing - the tweed's lopsided grind. The passive TREBLE / MIDDLE / BASS stack follows, worked out from its part values, its three pots interacting as on the real amp. Then the phase inverter, two power valves in push-pull (hit hard, they shift colder for a moment, giving the 'bloom' after a big note), PRESENCE in the feedback loop, a sagging supply and an output transformer that saturates on the low end. BLEND is the old jumper trick as one knob, and VOLUME is level-matched, so it changes the colour, not the loudness.

Two models, chosen in the header, set its character. TWEED is the original circuit: a low-gain first valve, the cathode follower clipping into the stack, little feedback and a valve rectifier that sags - dynamic and touch-sensitive; cranked, it blooms and the low end swells and sputters after each hard note. GREYBEARD re-voices the same amp the way the mid-60s amps were: a scooped tone stack, more feedback, a stiffer supply and a bigger transformer - glassy, tight and clean far up the dial. The panel follows the model: cream enamel for TWEED, dark charcoal grey for GREYBEARD. Each side, left and right, runs its own complete amp. Every clipping stage is anti-aliased (the house drive standard), so the amp runs at the host sample rate with no latency.

Reach for it for

- Blues, shuffles and rockabilly guitar
- Raw, cranked roots-rock crunch
- Harmonica through a howling, pushed amp
- Glassy surf and country clean tones on GREYBEARD
- Warm, vintage bass guitar and upright thump

Controls

The header

PRESETS, ◀ / ▶ and display

PRESETS (or a click on the display) opens the list of factory presets; the ◀ / ▶ keys step through them. The display shows the preset name. See Presets below.

TWEED / GREYBEARD

The model (TWEED by default). A change glides: every part of the circuit moves to its new value, so nothing clicks. The panel changes with it: cream for TWEED, dark charcoal grey for GREYBEARD.

S / M / L	Panel size: small, medium or large (large by default). The panel also scales to fit the plugin window.
?	Opens a pop-up with the design credit, the GFX website address, the address of this manual, and MAINS / EQUATOR PROXIMITY (see below). Click outside it to close it.

PREAMP

VOLUME	The preamp drive, 0 to 10 (5 by default). Every setting is level-matched (and the two models to each other), so it changes the colour, not the loudness. As it rises, the lows going into the first valve ease down a little (up to 1.5 dB below 150 Hz) and the cathode follower's clipping softens.
BLEND	The channels, as the old jumper trick in one knob: NORMAL only (left), both channels JUMPERED at the same volume (the middle, the default - the fat bottom of one and the top of the other, and up to 6 dB more drive), or BRIGHT only (right). BRIGHT is strongest at low VOLUME.

tone

TREBLE / MIDDLE / BASS	The passive tone stack, 0 to 10 each (TREBLE 6, MIDDLE 5, BASS 5 by default). The three controls interact as on the real amp: with all three low the amp gets much quieter. GREYBEARD's stack is scooped.
PRESENCE	0 to 10 (4). It takes the highs out of the feedback loop: more presence, a brighter, more open top end.

INPUT

TRIM	Input trim before the amp, -24 to +12 dB (0 dB by default). Raising it pushes the amp harder.
GUARD	Click the TRIM knob (without moving it) to switch the guard; its light sits at the knob's upper right. Off by default. When on, it gently eases very hot sources down towards about -18

	dBFS average and catches fast peaks above -6 dBFS, so loud sources never slam the amp. It never boosts quiet sources.
MONO IN	The source: feeds the sum of the left and right inputs to both amps (off by default). Use it for a mono source on a stereo track.

CABINET • 4 x 10 OPEN

CAB	The procedural 4x10 open-back cabinet (on by default). Off, the amp is a line out for your own impulse responses, and the cabinet section is slightly greyed.
MIC	The mic position, from ON AXIS (0: bright, with the cone breakup) to OFF AXIS (10: darker); 3 by default. The two sides' mics sit a hair apart.

OUTPUT

DRIFT	0 to 100% (50% by default). The valves' bias wanders (each side on its own), the supply breathes and the power valves drift out of balance; TWEED's valve rectifier wanders more than GREYBEARD. 50% is the standard amount; 0% keeps the amp perfectly steady.
SAT	Band saturation on the way out, 0 to 100% (0 by default): only the lows and highs are saturated (the mids stay clean).
OUTPUT	The output level, -24 to +12 dB (0 dB by default).
L / R	The output meters.
OUTPUT CLIP	A soft clipper on the output (always on) catches overs at the ceiling.

Knobs: drag up or down (Shift for fine moves), or use the mouse wheel; double-click (or Ctrl-click) to reset a knob to its default. The value shows while you touch a knob.

Mains and Equator Proximity

The ? pop-up holds the unit's power supply and its climate. Both start OFF and NEAR, where the unit sounds exactly as it always has.

MAINS: OFF / UK / US	The mains the unit is plugged into. UK and US add a mains hum, very faint (about -83 dBFS: at the edge of hearing), at 50 Hz or 60 Hz with its own overtones. Each instance's hum wanders slowly in phase, so many of them never pile up into one note. The supply also sags when you play hard - the rails drop as you dig in, softening the peaks, more here than on most units - with a faint ripple that grows with the load. UK is tight and recovers quickly; US sags deeper and recovers more slowly.
EQUATOR PROXIMITY	The room's climate, from FAR (a cold northern room) to NEAR (the tropics: always warm). Away from NEAR, the unit starts cold and warms up over a few minutes of use - about five at FAR. A cold amp is a little duller, quieter and grittier; it settles as the valves warm. Hover over the dial to see how long it takes; double-click (or Ctrl-click) for NEAR.
WARMTH	The lamp shows how warm the unit is. The heat is saved with the project: reopen it a minute later and the unit is still warm; leave it overnight and it has cooled. While REAPER bypasses the unit, it cools (about a minute to cold at FAR).

Presets

Presets set the model, VOLUME, BLEND, the tone controls, PRESENCE, the cabinet, the mic, DRIFT and OUTPUT (which evens out the loudness). TRIM, GUARD, MONO IN and the output stage are left as they are, except by Reset all to defaults.

Init	TWEED with the channels jumpered and the tone near the middle.
Chicago Shuffle	TWEED with VOLUME at 8 and the middle pushed: a thick, gritty blues tone.
Rockabilly Snap	TWEED leaning to the BRIGHT channel, the treble and presence up and the mic on axis.

Harp Howl	TWEED full up, leaning to NORMAL, the middle at 8, the treble and presence down and the mic off axis: for harmonica.
Roots Rock Crunch	TWEED with VOLUME at 7 and a little more middle and presence.
Desert Bloom	TWEED full up with heavy bass: it blooms and sputters on the low notes.
Upright Thump	TWEED with low volume, leaning to NORMAL, more bass and the mic off axis: a warm, thumpy bass tone.
Surf Glass	GREYBEARD leaning to BRIGHT, the treble at 7.5 and the middle scooped: glassy and clean.
Country Chicken Pick	GREYBEARD on the bright side, the treble at 8 and the presence up: snappy and clean.
Soul Clean	GREYBEARD with low volume, a little more bass and less presence: warm and clean.
Sixties Session Bass	GREYBEARD leaning to NORMAL, the bass up, the presence down and the mic well off axis: a round, dark bass guitar tone.
Garage Stomp	GREYBEARD with VOLUME at 9 and the presence up: a pushed, raw crunch.
Reset all to defaults	Every control back to its starting value, including TRIM, GUARD, MONO IN and the output stage.

Tips

- Turn BLEND towards NORMAL for a fatter, darker sound, towards BRIGHT for more snap; the jumpered middle gives the most drive.
- VOLUME changes the drive, not the level: set the tone you want, then use OUTPUT for the loudness.
- TWEED reacts to how hard you play: back off your guitar's volume knob to clean up a cranked setting.

- The tone controls interact: if the amp goes quiet with everything low, bring MIDDLE up first.
- For bass guitar, lean BLEND towards NORMAL and move the MIC off axis.
- Set DRIFT to 0 for a static, repeatable amp; leave it near 50% for a more alive, hardware-like feel.

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