

FRENZEL TUBE AMPS

Owners Manual

FM-5F6MB “Mini Bassman”



FRENZEL FM – 5F6MB "Mini Bassman"

The FRENZEL FM - 5F6 MB "Mini Bassman" was "INSPIRED" by one of the greatest Bass - Guitar amps ever built...the Fender 5F6A Bassman. 40 watts of audio dynamite in small lightweight Tolex cab. Loaded with features...including a JCM800 preamp for the M channel. Smooth warm Fender blues and jazz tones out of the F channel or super soaring dynamic rock leads on the M channel.

FEATURES:

Input Jacks isolated from chassis for low noise, eddy currents, and hum.

DC on preamp and driver filaments for low noise and hum.

Star ground system to reduce induced current chassis noise

F and M inputs with separate Gains drive a common Tone Stack and Master control. F Input voiced for the vintage smooth Fender 5F6A Bassman deep, rich, warm tones. M Input voiced for the great Marshall JCM800 high gain mid tones....or you can use an AB-Y switch and create your own distinct tones.

Classic vintage 3-BAND TONE STACK for extended flexibility in shaping your tone. DEEP switch on Bass control. BRIGHT Switches on Gain Controls MASTER level control so you can crank the GAIN's up and overdrive the preamp without overdriving the output tubes

Classic Type Bassman/JTM45 Style Presence control active on both channels.

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Unique NNFB "Edge" switch on the PRESENCE control that transforms the power amp section into a No-Negative-FeedBack style amp for more open, less compressed tones.

Post output transformer LINE OUT with LINE OUT LEVEL control for recording or driving a power amp. Has an auto switching internal load speaker simulator if speaker is not plugged into Speaker Out jack.

Class AB fixed biased matched pair of 6L6GC's in the output for fantastic headroom....and smooth blues saturation sounds.

Custom output transformer for extended lows down to 20 hz. ...plus 4 - 8 - 16 ohm speaker outputs.

Laser Etched Faceplate

Chassis Dimensions: 12"W X 2"H X 8"D

Weight: 16 lbs.

Power Output : 40 watts

Dual Speaker Jacks

Speaker Impedance Selector 4 - 8 - 16 ohms

5U4 rectifier for optimum pick attack and sag...or you can use 5AR4, GZ34 or Solid State Plug-In for different amounts of sag.

Primary Power Transformer Fuse

Extra long (10') three prong grounded power cord.

STANDBY switch to turn off the high voltage during warm-up. Rock solid point-to-point hand wiring using only the best of parts...low noise tubular polypropylenes caps, metal film resistors, ceramic sockets, switchcraft jacks...etc.

Sweet vintage clean to classic overdrive tones with three different types of distortion depending on whether you are overdriving the preamp, output... or both!

Tube compliment: 3 - 12AX7, 2 - 6L6GC, 1 - 5U4

FRONT PANEL:

- F INPUT
- M INPUT
- F GAIN WITH BRIGHT PULL SWITCH
- M GAIN WITH BRIGHT PULL SWITCH
- BASS WITH DEEP PULL SWITCH
- MIDDLE
- TREBLE
- MASTER
- PRESENCE with NNFB PULL SWITCH
- PILOT LIGHT
- POWER - STANDBY SWITCH

REAR PANEL:

- POWER CORD
- POWER PRIMARY FUSE
- LINE OUT LEVEL
- LINE OUT JACK
- SPEAKER OUT JACK
- SPEAKER IMPEDANCE SWITCH 4 - 8 - 16 OHM

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Price : \$895.00

UPGRADE OPTIONS:

1. 100 - 240 VOLT POWER TRANSFORMER - for operation outside the USA. Please specify line voltage. Add \$75.00
2. EDGE FOOTSWITCH - adds jack to rear panel for footswitch control on the NNFB EDGE switch. Includes classic heavy duty footswitch with LED. Add \$60.00
3. POWER ATTENUATOR - Built-in power attenuator provides three power levels. 10 - 20 - 40 watts. Add \$75.00
4. VINTAGE STEEL CAGE - steel perforated cage provides protection for tubes and maximum ventilation for long tube life. Includes "easy to carry" Fender style strap handle. Add \$100.00
5. CUSTOM TOLEX HEAD CABS, COMBO CABS AND SPEAKERS - Please see the CABINETS page on our website for more details

User's Operation Guide:

FRONT PANEL CONTROLS:

F INPUT – input for F preamp.

M INPUT – input for M preamp.

F GAIN – sets the volume and the point at which overdrive distortion is produced by the M preamp. Set at $\frac{1}{4}$ for initial setting.

PULL BRIGHT SWITCH ON F GAIN - This switch enhances brightness at lower level settings of the F Gain control. As the control is turned up, there will be less effect. At the max setting of the F control there is no effect.

M GAIN – sets the volume and the point at which overdrive distortion is produced by the BRIGHT preamp. Set at $\frac{1}{4}$ for initial setting.

PULL BRIGHT SWITCH ON M GAIN - This switch enhances brightness at lower level settings of the M Gain control. As the control is turned up, there will be less effect. At the max setting of the M control there is no effect.

MASTER – sets the maximum output of the preamp and the point at which the output tube saturates. The higher the setting on the MASTER, the sooner the output tube will saturate and produce output tube overdrive distortion. Set at $\frac{1}{2}$ for initial setting. Use the GAIN to adjust the preamp overdrive. As the GAIN is increased the preamp will begin to produce preamp overdrive distortion. Turn the MASTER up for output tube overdrive distortion. By adjusting the settings on the GAIN and MASTER you can set your desired amount CLEAN and OVERDRIVE tones.

TONE STACK – is a three band Bass, Middle, and Treble tone filter. The controls are interactive in shaping the tone. You will need to experiment to find the best setting for your playing requirements. Initial settings for all three controls is the $\frac{1}{2}$ position

BASS – attenuates the Bass frequencies from 10hz – 100hz as it is turned down.

PULL DEEP SWITCH ON BASS – This switch enhances the Bass and attenuates the Treble.

MIDDLE – is a 500 hz notch filter that dampens the middle frequencies. As you turn the control down it deepens the notch.

TREBLE – attenuates the high frequency tones from 1000hz - 15000hz. As it is turned down, the MIDDLE control will have less effect.

PRESENCE – boosts the high frequency range and gives the amp more bright punch. Set at $\frac{1}{2}$ for initial setting. (Please Note: a scratchy noise is normal when adjusting the PRESENCE control. This is caused by the DC current running through the control contacts. It only occurs while adjusting the control and will not affect the operation of the amp.)

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EDGE PULL SWITCH – when pulled out will turn off the negative feedback in the amp which produces a boost in the volume and a more dynamic less compressed tone.

POWER STANDBY ON SWITCH – In the **STANDBY** position the power is turned on to filaments of tubes. Pilot lamp will light up when switch is turned **STANDBY** position. Allow tubes to warm up 3- 5 minutes before turning to **ON** position. This protects tubes and lengthens tube life. Turn to **STANDBY** position when amp is temporarily not in use.

REAR PANEL CONTROLS:

EFFECTS LOOP – is a passive insertion point between the preamp and the power amplifier. The **SEND** jack is the output of the preamp. The **RETURN** jack is the input to the power amp. For normal operation these two jacks are connected together by a push/pull switch on the **SEND LEVEL**. To use the **EFFECTS LOOP**, pull the switch out on the **SEND LEVEL** control. This will open the loop and allows you to insert an effects unit into the jacks. The **SEND LEVEL** controls the output level of the **SEND** jack and can be used to adjust the level to meet the requirements of the input drive level your effect. Boost and distortion pedals can be used in the loop, but they usually work better in the front of the amp before the preamp. This is what they were designed for. The loop works best with studio digital effects that are designed to go after the preamp like Chorus, Delay, Reverb, Mixer, Volume, etc. (Only on amps with the Effects Loop upgrade.)

The **SEND** jack can also be used without the **EFFECTS LOOP** function to drive a recorder, mixer, or another amp. This function does not require the switch on the **SEND LEVEL** control to be pulled out. (Only on amps with the Effects Loop upgrade.)

LINE OUT - is a post output transformer **LINE OUT** jack with **LINE OUT LEVEL** control for driving another amp, mixer , recorder etc. It can be used without a speaker plugged into the amp. There is an internal load connected by a switch on the speaker jack if a speaker is not plugged in. This internal load simulates the speaker and will give you loaded clean and output distortion tones. Use a shielded cable to connect the **LINE OUT** to another device. The **LINE OUT** also works with headphones.

LINE OUT LEVEL – controls the output level of the **LINE OUT**.

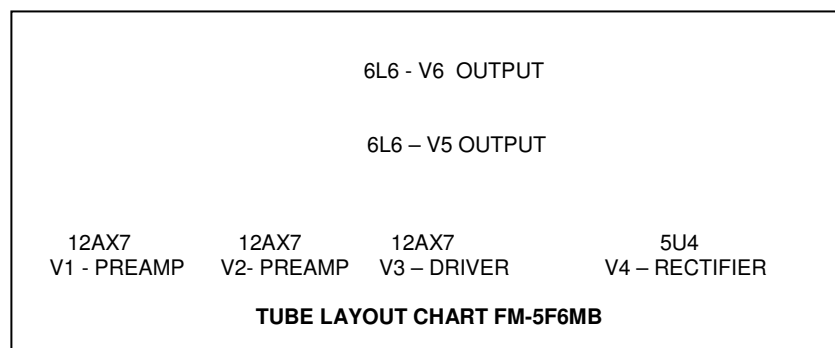
SPEAKER JACK– connects output of amp to speakers. The jacks are wired in parallel.

IMPEDANCE SELECTOR – selects the output impedance for the speaker to 4 – 8 -16 ohms. Set the switch to match the impedance of the speaker.

FUSE - protects the power supply. Use a 3 amp SLO-BLO type fuse.

POWER CORD – connects amp to electrical outlet. The power cord is a three prong grounded cord. Always plug into a grounded outlet to prevent electrical shock. The line voltage is shown over the power cord bushing. Be sure that the voltage matches your line voltage.

TUBES – The amp comes standard with the tubes shown below, but you can use other tubes for different tones and overdrive. For maximum clean and little or no preamp overdrive, you can use a 12AU7 in the V1 position. A 5AR4 will give less compression and a tighter sound in place of the V4 - 5U4 RECTIFIER. You can also substitute 5881's, KT66's, KT88's, 6550's in the output stage V5 and V6 for different saturation and overdrive tones



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