
BMF

BY

Randall

OWNER'S MANUAL

THE BMF STORY

Design Objective for the Special "BMF Project"

BMF was conceived by a team of engineers at Randall Electronics, specialty electronic consultants and several top Professional Guitar Players. The objective remained unchanged throughout the project: create a reliable, user-friendly, 2 channel (clean and dirty) all tube amplifier that offers the tone of ALL the famous Classic tube amps with additional tonal possibilities. The project assumed frequent Artist Relations efforts at each stage of development and subjected the amp to severe road service. We begged our supporting Artists to play it hard and treat it rough!

Result: the new BMF.

Use Your Own Superlative for Tone

If you were to imagine all the superlatives used to describe various tones, they would fall short of capturing all the so called "tone" types that are available from your BMF.

Clever engineering has been used to combine unique tube-powering and tonal-shaping capability. Channel 2 is equipped with 3 frequency-shaped Gain Controls. This makes for limitless combinations of tonal possibilities. These Controls influence the tone by their Gain Relationship to each other, and, by the frequency curve they each introduce to the signal. However, it doesn't stop there! Both channels also have an independent volume control and there is an additional, final Grand Master Volume control.

Correct Power For Any Performance, Create Even More Tones

For playing under different conditions you can take full advantage of the BMF's step-down settings. Very useful! Settings can be made on the back panel for limiting the output to 35 Watts for small clubs, to 50 Watts, or full bore at 100 Watts. As you know, overdriving any of these settings to attain a fat sound is a strong factor in itself for real tonal creation. And, such settings are indeed useful for controlling performing dynamics and output volume levels when necessary.

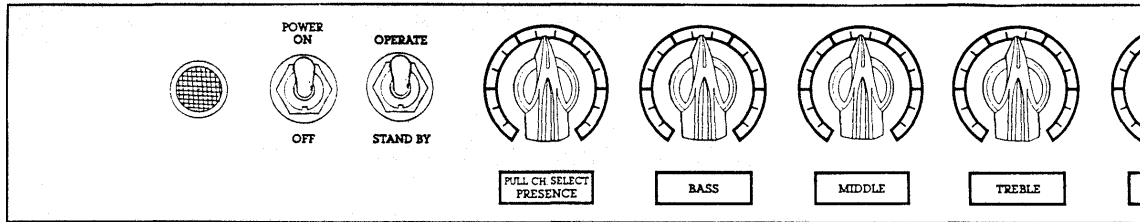
You Can Be Your Own Tube Tech, Create Even More Tones

How hot or how cool you run your tubes is easily controlled via the Bias ranges on the back panel. No more taking the amp to your technician for tweaks here and there or for the purpose of installing or alternating 6L6, 6550, 5881 or EL34 type tubes. Just flick the switch.

Other Goodies

Along with the Amp output settings and the Tube Bias Ranges, the back panel offers: Adjustable level effects loop. Frequency compensated line-out with its own level control; designed for multipurpose signal sending to gear such as slave amps or mixing consoles. Channel select footswitch jack. Grounded AC outlet.

FRONT PANEL



INPUT JACK

The input section of the BMF can accept most types of electric instruments but is primarily intended for the electric guitar.

CLEAN VOLUME

Used to control the input gain of the Clean channel. This control may be used along with the Grand Master Volume to create a fully clean sound or "crunch" type rhythm tones. NOTE* The Grand Master control must be turned up to hear sound from the amplifier in either Clean or Overdrive modes.

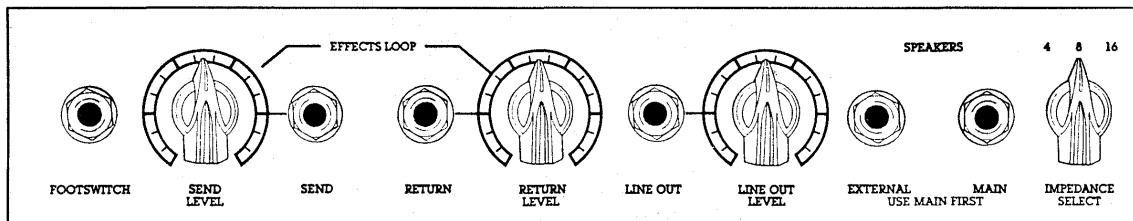
STAGE I, STAGE II, and GAIN MASTER CONTROLS

The BMF is equipped with three input stages of gain, each with their own controls. Stage I drives Stage II. Stage II drives stage three. Stage three is then fed to the Gain Master to control the overall level of the overdrive channel.

GRAND MASTER

Use this control to adjust the overall volume level of the amplifier.

BACK PANEL



AC LINE CORD

Connects the amplifier to any external power source capable of supplying the amount of current specified on the rear panel.

CIRCUIT BREAKER

The circuit breaker is actually a mechanical fuse and protects the amplifier from extreme overload conditions. Pushing in on the red circuit breaker button will set it, and it need not be reset unless caused to trip by an extreme overload. If the circuit breaker does trip and cannot be reset, it indicates trouble and should be investigated by a qualified technician.

AC OUTLET

Provides a method of plugging in other amplifiers or accessories near the amplifier. Do not exceed the 200 Watt rating on the outlet.

POWER SELECT SWITCH

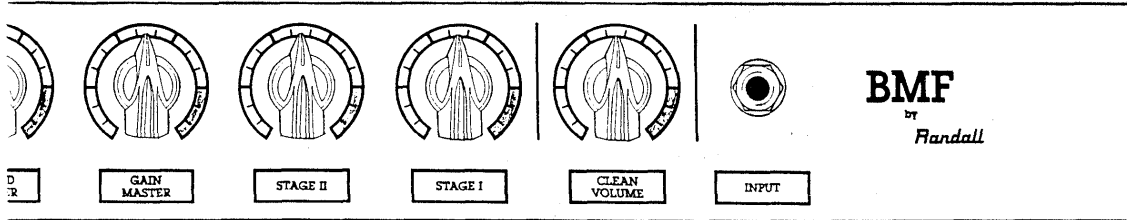
In the full power position the BMF will deliver 100 Watts RMS of output power. In the 1/2 power position the amplifier operates on only two of the four power tubes producing about half it's normal output power. In the 1/3 position the amplifier utilizes two power tubes with reduced power supply voltages, allowing only 1/3 power to be developed.

BIAS SELECT SWITCH

Allows the amplifier to accept either 6L6GC, 6550, 5881 or EL34 output tubes. Be sure the switch is in the correct position before turning on the amplifier or possible damage to the output tubes or the amplifier may occur. In addition to the bias select switch, the bias may be trimmed with an internal control. WARNING* DO NOT ATTEMPT TO ADJUST THE INTERNAL BIAS CONTROL YOURSELF! THIS REQUIRES THE SERVICES OF A QUALIFIED TECHNICIAN. DUE TO THE POSSIBILITY OF ELECTRIC SHOCK DO NOT REMOVE THE CHASSIS! THERE ARE NO USER SERVICEABLE PARTS INSIDE.

BIAS LEVEL SWITCH and LEDs

The Bias select switch controls the amount of electrical current flowing through the output tubes when the amplifier is in an "idle" condition. Lowering the amount of electrical current flowing through the tubes allows them to run cooler and extends their life. This also creates a particu-



TREBLE, MIDDLE and BASS CONTROLS

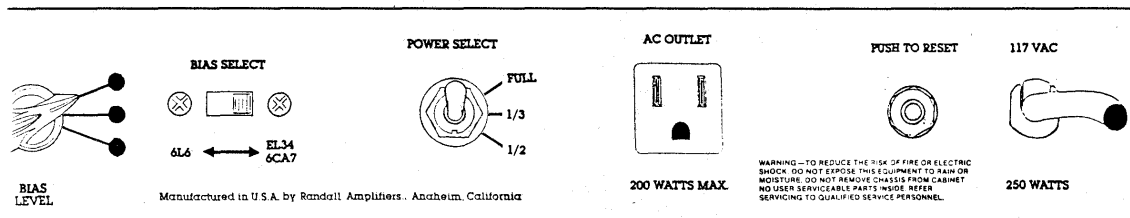
These controls provide a wide range of tonal variation. Set these controls half way up and then adjust until the desired sound is obtained.

PRESENCE

An ultra high frequency tone control located in the power section of the amplifier. The Presence control can be used to add extra brilliance to the overall tone. NOTE* The Presence control is equipped with a pull out switch which allows you to switch channels without the use of a remote footswitch. This switch should be in the "pushed in" position when using the remote footswitch.

ON-OFF and STAND-BY SWITCHES

Use the Stand-BY position when the amp is first turned on to allow the tubes to warm up (about thirty seconds). The Stand-By switch allows the amplifier to be turned off temporarily and then turned on instantly without the usual warm up time.



lar type of distortion known as "crossover distortion." The effect is similar to a "brown out" or low line voltage condition, which in the past has been achieved by plugging the amplifier into a variable voltage controller called a VARIAC. With this feature there is no need to use a VARIAC to create the infamous "Brown Sound." The output tubes run coolest when the green LED is lit.

IMPEDANCE SELECT SWITCH

Set this switch to the position that most closely matches the impedance of your speaker enclosure. If you are unsure of the impedance of your enclosure, using the switch in the wrong position will not harm the BMF. However, a slight loss of output power may occur. NOTE* To prevent possible damage to the output section, never use the BMF amplifier without speakers attached.

SPEAKER JACKS

Used to connect speakers to the amplifier. Use the jack labeled "MAIN" first. Use the jack labeled "EXTERNAL" to connect additional speakers. These jacks are internally wired in parallel.

LINE OUT JACK and LINE OUT LEVEL

The Line Out jack provides a low impedance, line level signal from the output section of the amplifier and can be used for driving additional amplifiers or mixing consoles. The Line Out Level controls the amount of signal at the Line Out jack.

EFFECTS LOOP

The jack labeled "Effects Send" should be connected to the input of the effects unit. Use the control labeled "Send Level" to control the amount of signal going to the effects unit. The jack labeled "Effects Return" should be connected to the output of the effects unit. Use the control labeled "Return Level" to control the amount of signal returning from the effects unit. Some experimentation with the Send and Return levels may be necessary as effects units often vary in signal strength and sensitivity. The loop works best with Microphone level devices, approximately -20dB.

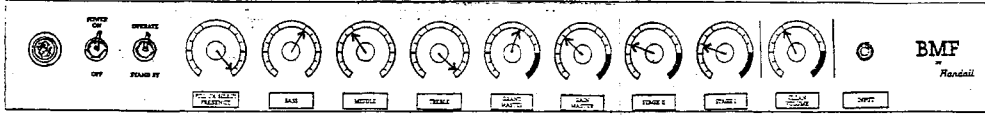
FOOTSWITCH JACK

Provides a means of switching channels from a remote location. Any standard mono, unshielded footswitch may be used. Approximately +12 volts DC appears at the positive terminal of the footswitch jack.

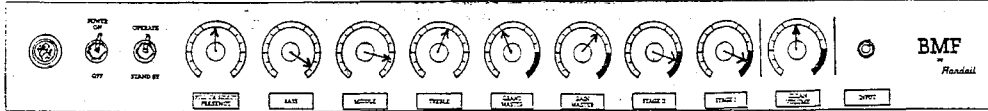
BMF

SAMPLE TONE SETTINGS

CLEAN: "THE ICEMAN" POWER= 50 Watts BIAS LEVEL= RED

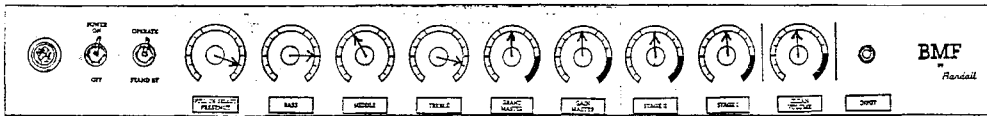


OVERDRIVE: " BROWN,THICK & CHUNKY" POWER= 35 Watts BIAS LEVEL= GREEN

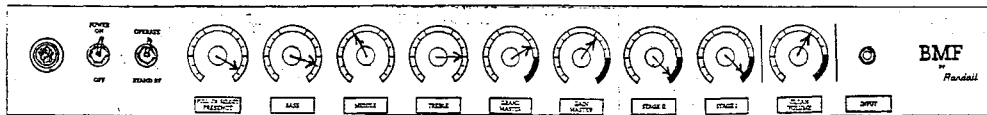


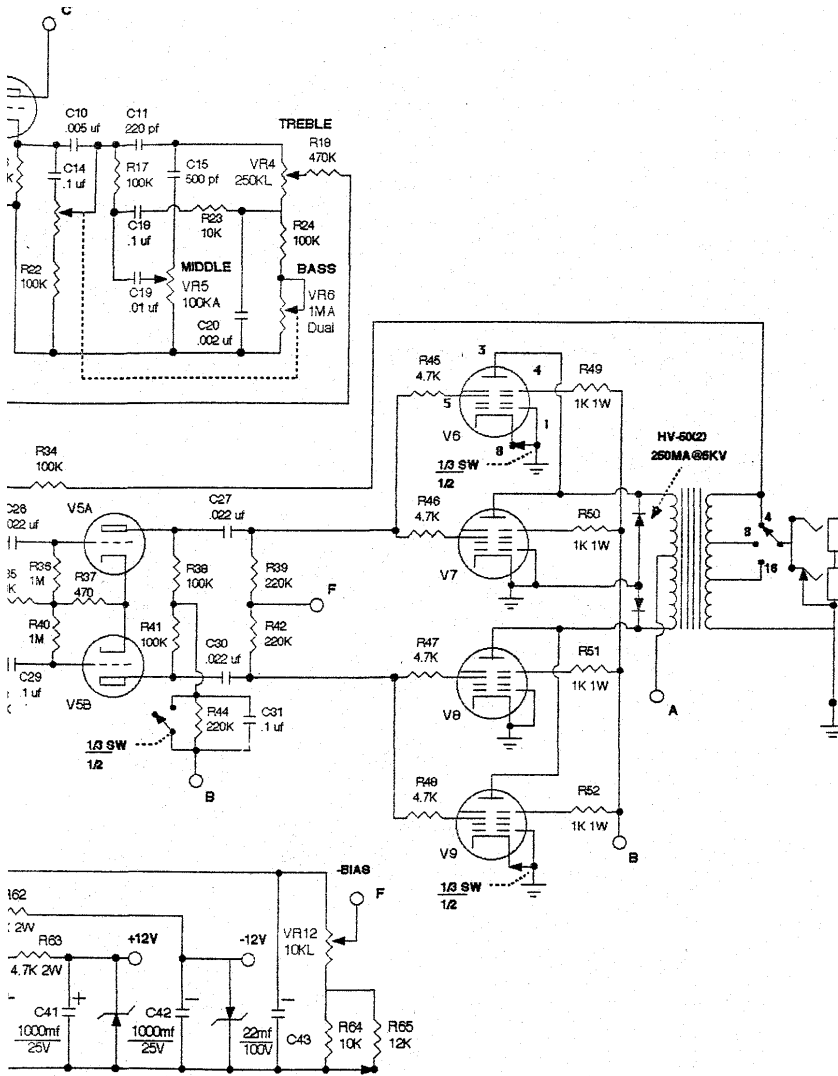
POWER= 50 Watts BIAS LEVEL= AMBER

OVERDRIVE & CLEAN: "MIDDLE of the ROAD"



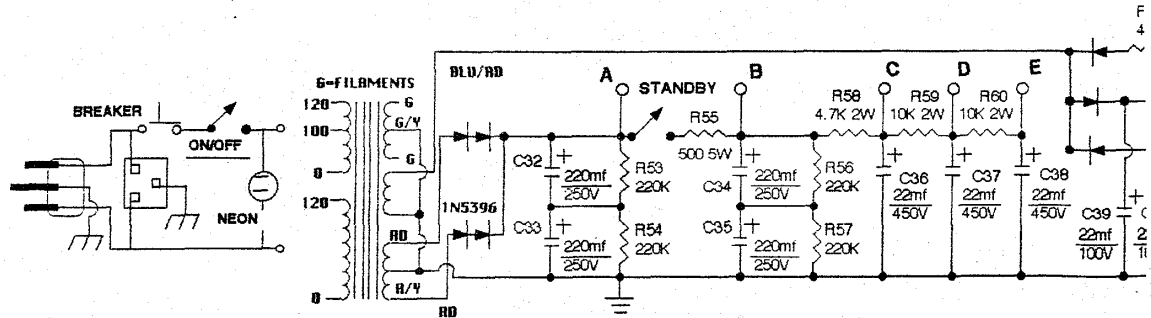
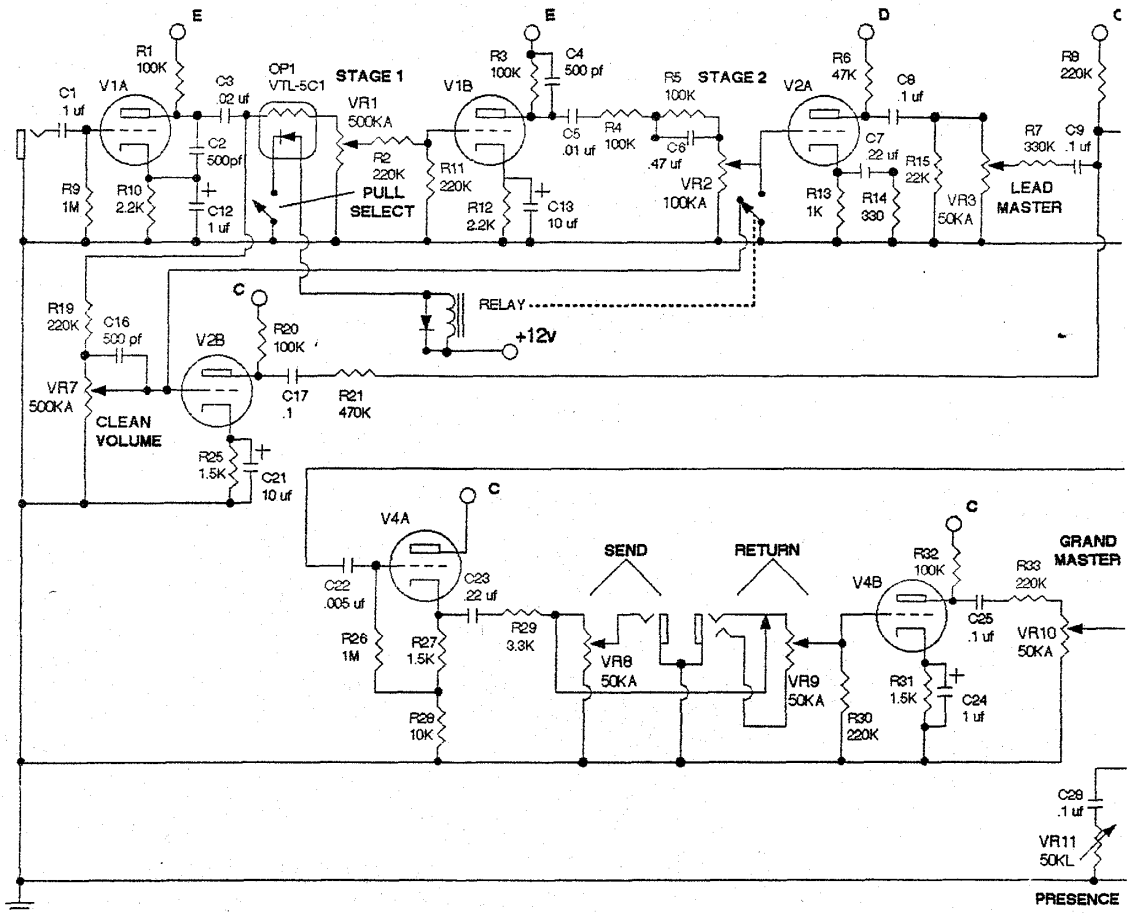
OVERDRIVE & CLEAN: "LOUD & PROUD" POWER= 100 Watts BIAS LEVEL= RED





Right Side

U.S. MUSIC / RANDALL AMPLIFIERS		
SCALE:	APPROVED BY:	DRAWN BY: <i>R. Wilson</i>
DATE: 10-93		REVISED:
BMF-100		
DSGN: <i>R. Wilson</i>	DRAWING NUMBER PCB-021-178&179	

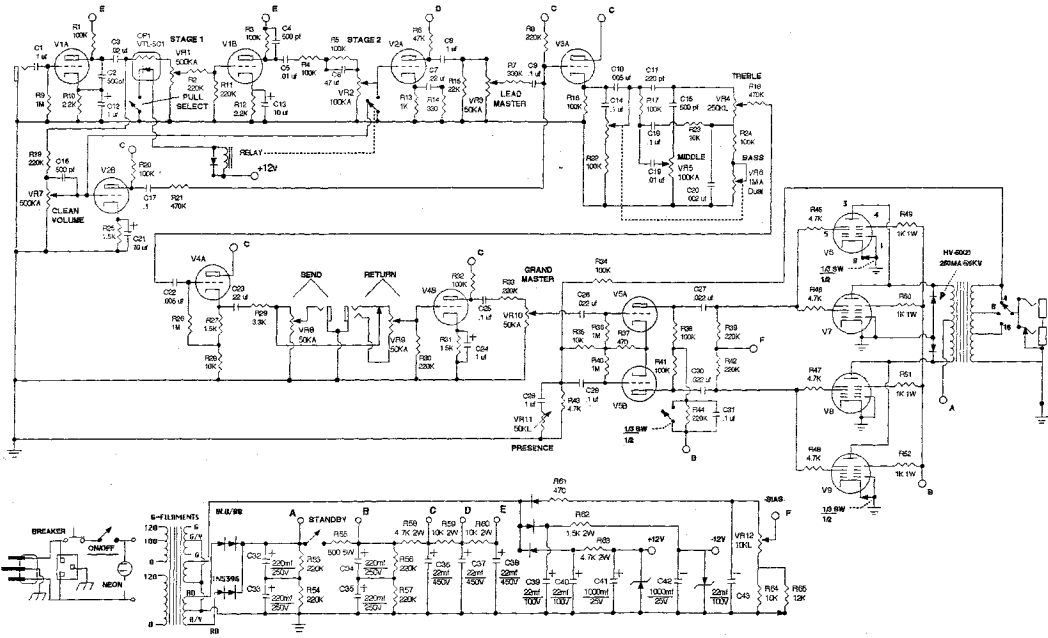


PRIMARY CONNECTIONS

OR 120V WHT GRAY BLK	OR WHT GRAY BRN BLK
OR 100V BRN WHT GRAY BLK	OR WHT GRAY BRN BLK

V1 THRU V5 = 12AX7
V7 THRU V9 = 6L6 / EL34-6CA7

Left Side



PRIMARY CONNECTIONS

0	BR	GR	6Y5
1	BRN	GRN	230V
2	BLU	BRN	230V
3	GRY	BLK	
4	GRY	BLK	
5	GRY	BLK	
6	GRY	BLK	
7	GRY	BLK	
8	GRY	BLK	
9	GRY	BLK	

V1 THRU V5 = 12AX7
 V7 THRU V9 = 6BE6 / 6CS6-2CA7

U.S. MUSIC/RANE

SCALE: _____ APPROVED BY: _____

DATE: 11-92

BMF-100

DSGN: *Kevin M. M...*

— U.S. MUSIC / RANDALL — AMPLIFIERS

U.S.A.

WARNING HAZARD

To prevent a possible fire or shock do not allow this appliance to become exposed to rain or moisture of any kind and do not attempt to operate with wet hands or feet.

This product is produced with the highest quality components and strict attention to workmanship. With proper care and maintenance it will provide long and outstanding service.