

LET'S GET ACQUAINTED WITH YOUR NEW BIG-M (Model M-15)

Your AMPEG two-channel BIG-M is a peerless, big-time amplifier for any performer who wants peak power with a sound to match. It is amazingly free of distortion throughout the tonal range even at its 25 watt maximum output. This is AMPEG fidelity at its best.

Whether you play guitar, accordion, piano or wish to use your BIG-M merely for vocal work, your performance will be greatly improved by becoming thoroughly familiar with its operation.

OPERATION

- 1) With all amplifier controls at "O" and switch off, plug line cord into any 105-125-volt, 60 cycle A.C. power source. Do not use any other line voltage.
- 2) Plug instrument into either Channel 1 or Channel 2. READ CAREFULLY THE FOLLOWING INFORMATION CONCERNING INPUTS: Because your BIG-M has 5 inputs, a word of explanation is in order. For all practical purposes any instrument, pickup or microphone may be used in any input EXCEPT the one marked "Stereo".

The top row of inputs relate to Channel 1; the lower row (except the Stereo input) are for Channel 2. The Stereo input relates to BOTH channels and is to be used with a special pickup and phone plug, sometimes referred to as a "ring tip sleeve" plug.

It is also known as a "single-prong, three-conductor phone plug". The sleeve part is the ground, common to both channels; the ring section is a signal conductor which relates to Channel 2, and is usually wired for the left hand signal of an accordion equipped with a Stereo pickup, such as the AMPEG AM-5. The tip itself conveys the right-hand signal of the accordion in to Channel 1. This arrangement permits separate volume and tone adjustments for both left and right hands. Our AM-5 Stereo pickup achieves this desirable condition by the use of four mikes beneath the grill, on the keyboard side of the accordion, and one in the bass chamber.

Stereo, as defined by AMPEG in this application, means stereo only insofar as the pickup and the pre-amp of the amplifier are concerned. Beyond this point, "Stereo" bears no relationship to the concept of stereo reproduction found in the home hi-fi set up.

A close-knit, integrated sound is desirable for a musical performance. Two divergent sounds coming from one instrument and emanating from different areas of the bandstand, would only serve to confuse both the player and his audience.

Some stereo-pickup-equipped accordions use a forked-end cable with two phone plugs, or "Y"-cord, as its called, at the amplifier end of their conductor as an alternative to the ring-tip-sleeve plug described earlier. In this case, any combination of the BIG-M's top and bottom row of inputs may be used EXCEPT the one marked "Stereo". Again, bear in mind that the top row is for Channel 1 and the lower for Channel 2. Normally, the two plugs of the forked cable are identified as to right or left hand. Some have a number "1" marked on the end of the plug indicating its use for Channel 1. Others may have the letter "R", meaning right hand. If they happen to be unmarked a little experimenting will soon tell you which hand is for which channel.

The two lower inputs (Channel 2), while adaptable to various pickups, are particularly suitable for instruments where a stronger bass response is required. This is frequently the case for accordion, especially on the left hand, where a mellowing, organ-like sound is desired.

In a MONAURAL setup usually only one mike or single pickup is used. The phone plug will be a two-conductor type without the ring at the end of the prong section. Many accordions use this single mike pickup. AMPEG supplies such a model (AM-1) which can be ordered through your dealer. With a monaural pickup any of the inputs (except the stereo input) may be used on either channel, thus freeing the unused channel for still another instrument or a voice mike.

A monaural pickup picks up <u>all</u> the sound from the instrument, feeding it into one channel. Incidentally, our AM-5 Stereo Pickup has a handy switch for optional monaural operation.

Most guitar and other instrument pickups are also considered monaural and a choice of inputs may be used.

If you have a monaural pickup, and you happen to plug into the Stereo jack no harm will be done. You merely use Channel 1 only and Channel 2 becomes inoperative

If you should use more than one pickup on each channel of your BIG-M (or any other 2-channel amplifier), be prepared for a volume drop and compensate with your volume and tone controls accordingly. Under some conditions, due to the nature of the pickup or microphone, you may experience a problem in obtaining proper balance of volume particularly when using a high-impedance voice — mike without a volume control of its own. It would be advisable to use your voice mike (or mikes) on one channel and your guitars on the other. A little experimenting will quickly determine the adjustments necessary for your particular needs.



- 3) Turn volume and tone controls of your <u>instrument</u> all the way up; always keep them at or very near maximum. It is important to make all major adjustments of volume and tone AT THE AMPLIFIER. Once these settings have been pre-determined, you may then feel free to back off on the controls of the instrument itself, should it be desirable to lower your volume during a given performance. This safeguard cannot be overemphasized. It will prevent you from inadvertantly raising your instrument controls beyond the overload point of the speaker and inviting speaker blowout.
- 4) Flip main toggle switch (located at extreme right side of control panel) to "on" position; pilot lamp will glow. Allow about one minute warm-up time.
- 5) Now raise volume control (one channel at a time) to the desired level. If you are using only one channel leave the controls of the other channel on "O". If you are using both channels, with or without the Stereo input, you will, of course, have two sets of volume controls to adjust.

IMPORTANT: The volume setting (gain) should never quite reach or exceed the overload point of the speaker. Excessive volume imposes a great strain on speakers and can quickly destroy the cone if overdriven. USE YOUR EAR! Do not rely on the numbers around the knob. They are only a guide for future recall of favored settings. If you hear a slapping sound in the speaker you are asking for trouble.

6) TONE CONTROL: There is a tone control for each channel. The lower the number, the lower the tone. While strictly a matter of taste, in general, accordion players tend to favor more bass in order to mellow the metallic quality of its reeds. Guitar players more often want to emphasize the crisp highs. Electronically, AMPEG builds more highs and lows into the circuitry to favor these particular instruments.

For the ultimate in sound and performance the proper balancing of all controls is a critical factor. It will pay you to spend some time adjusting slowly, listening carefully, and getting thoroughly acquainted with the subtle shadings made possible by the electronic design of this precision amplifier.

7) TREMOLO: Your M-12 has a built-in electronic pulsation effect known as tremolo, a most welcome feature, especially for accordion. Ideal for ballads, slow waltzes and special solo effects, the tremolo can be adjusted at the control panel by means of the two controls marked Speed and Intensity. A footswitch is also provided for instant remote on/off use.

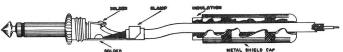
CARE AND MAINTENANCE

A dampened, soapy, sponge will quickly clean the tough, durable vinyl covering of these amplifiers. We find that Glass Wax is best for polishing chrome surfaces. The grill cloth may be tightened, if necessary, by a heat lamp or hot plate held several inches from the surface and kept in motion, applying just enough heat to shrink it. It should also be brushed occasionally with a soft-bristle brush, especially if the unit is used in a dusty location.

TROUBLESHOOTING

- 1) A complete wiring diagram (schematic) is pasted to the inside of the back cover. The most common trouble in instrument amplification is in the external connections. Nine times out of ten, loss of power (or gain), or unevenness of tone quality can be traced to this fault. It is usually in the cord connection, or broken shielding. Any good radio man should be able to make a complete continuity check between the pickup and the amplifier and isolate any serious trouble.
- 2) If the set is plugged in and you have no pilot light nor any sound whatsoever, you can easily check your fuse located on the right hand side of the control panel. Replace, if necessary, with a type AGC Z-amp. fuse only.
- 3) An annoying hum is sometimes caused by disturbances in the A.C. line voltage; it can be often corrected by removing the plug from the wall socket, reversing it and re-inserting it.

Another common cause of hum is inadequate shielding or poor ground connection on the microphone, pickup or cable. If the hum becomes louder when you plug in your instrument cable it is likely to be coming from the cable or pickup. The common phone plug with bakelite cover is not suitable. Your pickup leads must be shielded all the way; therefore a phone plug with a metal jacket must be used. The illustration shows how a properly soldered connection should appear. It is wise to have a spare cord.



Be sure to make all these checks before you blame the amplifier, and feel free to write or call us on any question you may have. We will not let you down.