



SUPER ECHO TWIN

(model ET-2)

Dimensions: 18¼" x 26 3/4" x 12½"

Weight: 46 lbs.

Tubes: 4/6SL7 4/6V6 2/5Y3

Our SUPER ECHO TWIN for guitar, accordion, piano or voice is literally two complete amplifiers in one, each with its own power supply. The combined output is a clean 30 watts with or without echo and/or vibrato.

Two 12" Jensen speakers with new Syntox 6 ceramic magnets are used.

A true vibrato is incorporated and can be employed in conjunction with reverb.

Completely isolated channels, each with separate volume and tone controls enable an accordionist, for instance, to have vibrato and/or echo on the right hand and not on the bass. The commanding concert hall effect of this combination, compared with straight amplification is overwhelming. The echo effect, actually a delayed repeat of the original signal enlarges upon the performance, defines and enriches the tone. The result is crystal clarity and increased brilliance.

An echo-dimension control regulates the desired expansiveness or depth of the echo; speed and intensity controls vary the pulsations and strength of the vibrato. Five inputs, including a Stereo jack, are provided. Guitar inputs stress the stunning highs of this instrument, so often desired by the player; special inputs favor the accordion, mellowing the reedy tones. Listeners are struck by the rich organ-like sweep of sound.

A double footswitch provides on/off remote control of vibrato and echo, and a toggle switch on the panel also activates these effects for Channel One only or for both.

The multiple uses and combinations of effects achieved by this twin system makes it one of the most versatile amplifiers on the market. One of the more obvious advantages is its emergency or "spare tire" aspect. Should tube trouble develop in either circuit the "show can still go on."

SUPER ECHO TWIN, available through music dealers, list at \$379.50 in the United States. A handsome vinyl slipcover gives added protection to the highly durable, washable, navy blue vinyl covering of the amplifier itself, for only \$9.50 additional. A detachable dolly is also a desirable extra at \$17.00.

Information on other fine AMPEG amps and pickups may be had by writing us at the above address.

DO NOT FILES -

LET'S GET ACQUAINTED WITH YOUR NEW AMPEG SUPER ECHO TWIN



The SUPER ECHO TWIN (model ET-2) is most unique among portable musical instrument amplifiers. It consists of two complete amplifiers, has echo and vibrato, and two 12-inch speakers in a single cabinet. Its electrical output is a clean 30 watts.

The commanding concert hall effect of the reverberation, contrasted with straight amplification, is overwhelming. Combined with vibrato the sound is unsurpassed.

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

This model is capable of a variety of compelling effects once the control possibilities are understood. It might also be mentioned that you will never be caught without an amp should tube breakdown or other mechanical difficulty occur on the job. Since there are two separate power supplys, either 15 watt amp will serve as a "spare" or emergency unit by simply removing the fuse in the affected circuit.

When using Channel 1, both 15 watt amplifiers are in action. When plugged into Channel 2 only, you are using an independent 15 watt amplifier.

OPERATION

- 1) With all amplifier controls at "0" and the 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 appropriate input jack of either Channel 1 or Channel 2. Note: If you play accordion and your pickup is "stereo" you will have either a "Y" cable (a two-pronged plug on the amplifier end) or a single 3-conductor Stereo phone plug. If your cable is a forked "Y" cord, use the two inputs on either side (and closest to) the input marked "Stereo" on the control panel, using Channel 1 for the right hand plug and Channel 2 for the left.

These two plugs are usually 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 you find you have the vibrato on the left hand, of course you will simply reverse the plugs. If you find you have vibrato on both hands it is likely that your pickup includes a switch for changing from Stereo to monaural or Regular. This is the case with our AM-5 Stereo Pickup. Make certain this switch is in Stereo position.)

With our AM-5, four mikes are used beneath the grill on the keyboard side and one in the bass chamber. This enables the accordionist to feature vibrato and/or reverb on the treble and not on the bass; it also permits adjustment for separate tone color on each hand. Both signals are fed into isolated channels of the amplifier to achieve this desirable condition.

In a monaural setup, a single mike picks up all the sound from the instrument, feeding it into one channel. Or, if desired, all the mikes of a Stereo pickup, such as our AM-5, can be switched (to monaural position) so that they all feed into one channel.

- 3) Turn volume and tone controls of your instrument all the way up; always keep them at or very near maximum.
- 4) Flip main toggle switch (located at left side of control panel) to "on" position; pilot lamp will glow. Allow about one-minute warm-up time.
- 5) Raise volume control on the amplifier to the desired level, using appropriate volume control for the channel you have selected.

If you are using the STEREO input with your stereo-pickup-equipped accordion, you will have two sets of volume and tone controls to adjust on the amplifier.

It is especially important to remember to keep the controls of your guitar or accordion all the way on, and adjust volume and tone controls of the amplifier only for the desired levels. 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 accidentally raising your instrument controls beyond the overload point of the speaker and inviting speaker blowout.

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.

You may use more than one instrument in each channel at the same time, but be prepared for a volume drop and raise the volume control to compensate.

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 needs. Guitar players more often want to emphasize the crisp highs. This, incidentally, is the reason for the distinction in the input jacks. Electronically, AMPEG builds more highs and lows into the circuitry to favor these particular instruments.
- 7) DIMENSION CONTROL: You may select the desired degree, or expansiveness, of the echo signal by adjusting this control knob from "0" to "10". It is located on the Channel 2 side of the panel but is operative for either channel. (See also par. #9).
- 8) VIBRATO: The SPEED and INTENSITY controls alter the pulsations and strength of the vibrato effect to suit the mood of the music. Practice and perference will determine their settings, especially when used in combination with reverb.

Your SUPER ECHO TWIN has true vibrato. This is an important distinction. Tremolo, another form of electronic pulsation is merely intermittent volume fluctuation. Vibrato is actual tone change (frequency modulation), creating the same effect one produces by rolling a finger back and forth on a violin string.

- 9) ECHO/VIBRATO TOGGLE SWITCH: A convenient toggle switch is mounted at the top, near center, of the control panel. It is self-explanatory. Echo and/or vibrato may be used on Channel 1 only, when switched to the left; to the right activates the echo and/or vibrato for both channels. We say "and/or" because the use of these effects is also governed by a footswitch with which the unit is equipped.
- 10) FOOTSWITCH: A double footswitch provides remote on or off switching of either echo and/or vibrato. When not in use it should be kept in its bracket located on the inside wall of the cabinet.

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 fuses located on either end of the control panel. Replace either, if necessary, with a type 3AG 2 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 below shows how a properly soldered connection should appear. It is wise to have a spare cord.

Be sure to make 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.



