

€PIPHONE€

ENSIGN

MODEL EA-14 RVT AMPLIFIER

INSTRUCTIONS

€PIPHONE€ Inc., KALAMAZOO, MICHIGAN

IMPORTANT — READ CAREFULLY BEFORE USE

CAUTION

The Reverb Unit has been carefully constructed. It is, however, a delicate electronic device. Treat it with the same care and respect given a TV set.

Avoid dropping, sudden jolts, or rough handling and it will give excellent service. This beautifully musical Reverberation effect is not to be confused with the repeating signal produced by the mechanical tape recorder style of echo units.

UNPACKING

Amplifiers are carefully packed to prevent damage in shipment. However, upon receipt of the amplifier, examine carefully to determine if there has been breakage of tubes or parts. If damage has occurred during shipment, call the Transportation Company immediately, and place a claim.

TUBES

Make certain all tubes are seated firmly into their respective sockets. Each tube is labeled for proper replacement should any tube be out of its socket. Be especially careful when inserting tubes to see that the pins on the tube are correctly aligned with the holes in the socket before pushing into place. Do not twist tube — push tube straight into socket. It is advisable to check tubes from time to time depending on amount of use and excellence of performance. *Be sure tubes are always returned to proper sockets and seated firmly.*

CAUTION

Damage to the amplifier will result if it is connected to an improper power source. This amplifier is designed to be operated on 105-125 volt, 50-60 cycle alternating current only. The voltage from the power lines should not exceed 125, and the frequency of the current should be either 50 or 60 cycles. When ready to use amplifier, insert the plug on the power cord into the electric outlet and move switch to "on." After approximately one minute for the tubes to heat, the amplifier is ready for use.

A.C. POWER-POLARITY SWITCH

A convenient switch has been provided for performing a total of three functions, turning the amplifier on and off, and selecting the proper polarity of the power source which reduces the A.C. hum and other extraneous noises to a minimum. Two "On" positions have been provided. The hum and hiss level on one of the "On" positions will be noticeably lower - this is the correct "Polarity" for using the amplifier.

FUSE

The fuse used in this Amplifier is a type 3 AG Slo-Blo of two amperes rating. **DO NOT USE FUSES OF HIGHER RATING.**

SERVICE

If the amplifier is in need of servicing, it should be taken to a reliable radio man. The electrical diagram in this folder should be shown the repairman to assist him in servicing the amplifier.

REVERBERATION — EFFECTIVE IN CHANNEL 2 ONLY

The Reverberation Unit must always be placed on a solid non-vibrating surface or footing when in operation.

Any sudden shock, jolt, or wiggle, when in use, will cause undesirable noise. The resultant clatter of an inadvertant shake or bump is annoying but not necessarily harmful. This delicate sensitivity to shock and vibration is a normal characteristic of the device.

No problem will be encountered while the unit is connected if supporting surface is solid and unit is not moved about. To avoid the unwanted noise, turn the reverberation unit off by pressing the foot switch.

BASS AND TREBLE TONE CONTROLS

A separate control has been provided for control of the bass or low frequencies and for the treble or high frequencies. The use of these two controls allows the player to obtain the maximum combinations of tone from a beautiful clear treble to a deep resonant bass. Setting the "BASS" control at maximum and the "TREBLE" at minimum, produces the deepest, fullest bass tone. Setting the "TREBLE" control at maximum and the "BASS" at minimum produces a chime-like tone rich in higher harmonics and will enable the artist to pick harmonics with greater ease. When both "BASS" and "TREBLE" controls are set at minimum the middle register predominates.

PRESENCE SWITCH

Presence switch in upper position will add a Chime or Bell like tone to the upper harmonics. In the lower position, the treble tones will have a mello characteristic.

TREMOLO — EFFECTIVE IN CHANNEL 2 ONLY

The Tremolo effect adds another dimension to the Reverberation effect. It can be used either with or without reverberation at the players discretion. The Tremolo is turned on or off by the use of the foot switch. The Tremolo Frequency Range has been carefully set to cover a wide range of Tremolo effects. The Depth of the Tremolo is also variable being controlled by the Depth control.

OPERATION OF MICROPHONE

The high gain and high fidelity characteristics of this Amplifier, permit the use of most of the popular high impedance microphones for public address work. The microphone should be plugged into the Number One jack and it is not recommended that other instruments be used in conjunction with the microphone.

When using a microphone it is important that the Number 280 or similar shielded plug be attached to the cord. The ordinary phone plug with bakelite or other non-shielded cover is not suitable because the leads from the microphone must be completely shielded. Otherwise, objectionable hum will result. Figure A illustrates the proper way to connect the plug to the microphone cable. To use the microphone, insert the plug in the Number One jack and advance the Loudness control until a feedback squeal or howl is produced on the loudspeaker. Reduce the Loudness control to just below the feedback point. This setting will vary considerably, depending upon the size of the room, its acoustical properties and the distance between the microphone and loudspeaker. Feedback is the limiting factor in all public address installations and is caused when the level of sound from the loudspeakers is sufficient to actuate the microphone. The general rule when setting up the equipment is to place the loudspeaker as far from the microphone as possible.



Figure A

