

## **COLLINS 26U-2 STEREO LIMITING AMPLIFIER**

Easy to operate and maintain and affording maximum flexibility, the Collins 26U-2 Stereo Limiting Amplifier is designed to permit maximum modulation with minimum distortion. It provides full tonal range broadcasting with thump-free performance.

The 26U-2 limits loud audio passages to prevent over-modulation, distortion and adjacent channel interference, while raising low level passages to be broadcast in their true value.

When used with stereo recording equipment, the Collins Stereo Limiting Amplifier prevents overloading and improves signal-to-noise ratio by allowing a higher average audio level.

Based on the time-proven circuitry of the Collins 26U-1, the stereo limiter has conservatively-rated components and long life. Typical mean time between failures: four years of continuous service.

The 26U-2 is designed to meet any requirement of the broadcaster. It may be used as a single channel limiter, two monaural channels or for stereo broadcasting. A switch in the subpanel selects either stereo or monaural operation.

The self-balanced circuit eliminates the need for tube selection or delicate balancing procedures usually associated with peak limiters. The Collins 26U-2 is capable of greater than 30 db compression.

Two illuminated VU meters, calibrated in VU and db of compression, which measure five functions, are incorporated. The meters' attenuator and function switch allow measurement of external and internal gain reduction (db of compression), and levels of input, output and external audio circuits. The external circuit measures audio levels of other program lines, eliminating the need for an additional VU meter panel.

Silicon diodes provide an efficient, low heat power supply with a minimum of maintenance. A voltage regulator provides stabilized reference voltages. Input and output level controls are continuously variable bridge-T attenuators.

Occupying only 10.5 inches of rack space, the Collins 26U-2 has a minimum number of controls, tubes and tube types. A hinged front panel with magnetic latches provides access to the subpanel controls.

# 26U-2 SPECIFICATIONS

**SIZE:** 19" W, 10½" H, 10¼" total D — 9¼" behind panel (48.26 cm W, 26.67 cm H, 26.04 cm total D — 23.5 cm behind panel).

**WEIGHT:** 35 lbs. (15.88 kg).

**POWER SOURCE:** 115 v or 230 v ac, 50-60 cps, single phase (150 watts at 115 v ac).

**FREQUENCY RANGE:** 50-15,000 cps ±1.5 db.

**INPUT:** 600 ohm bridged T (ungrounded), -20 dbm to +20 dbm.

**OUTPUT:** 600 ohm bridged T (ungrounded), -20 dbm to +20 dbm.

**DISTORTION:** 1% maximum.

**OUTPUT NOISE:** -50 dbm or less.

**CROSS-TALK:** 60 db minimum.

**COMPRESSION RATIO:** 12:1 first 10 db above threshold.

**GAIN:** 40 db.

**ATTACK TIME:** Adjustable, 0.5-3.0 milliseconds.

**RELEASE TIME:** Adjustable, 0.5-3.0 seconds.

**CONTROLS:**

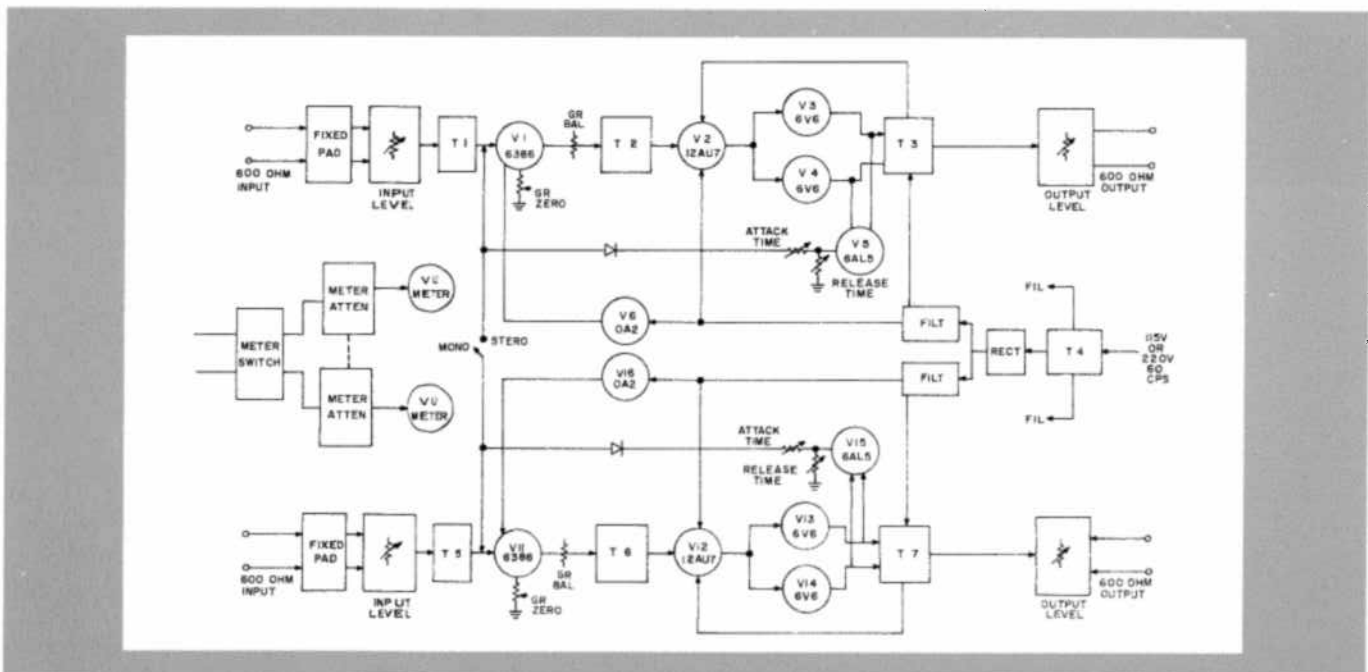
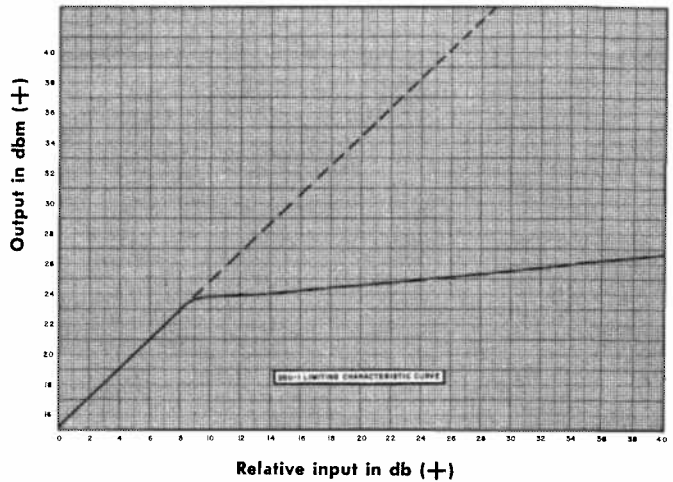
Panel Mounted	Meter Selector Switch Meter Multiplier Selector
Subpanel Controls	Input Level (2) Output Level (2) Gain Reduction Meter Zero (2) Gain Reduction Balance (2) Stereo-Mono Power ON-OFF
Rear Chassis Controls	Attack Time (2) Release Time (2)

**PROTECTION:** Overload fuse in primary circuit.

**METERING:** Two 3½" voltmeters which can be switched to measure Input Level, External Gain Reduction, Gain Reduction, Output Level and External Level.

**TUBE AND RECTIFIER COMPLEMENT:**

- 2 GL-6386 Variable gain input stages
- 2 12AU7 Interstage voltage amplifiers
- 4 6V6GTA Output amplifiers
- 2 6AL5 Limiter bias rectifiers
- 2 0A2 Voltage regulators
- 4 1N3256 Power rectifiers (silicon, commercial)



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