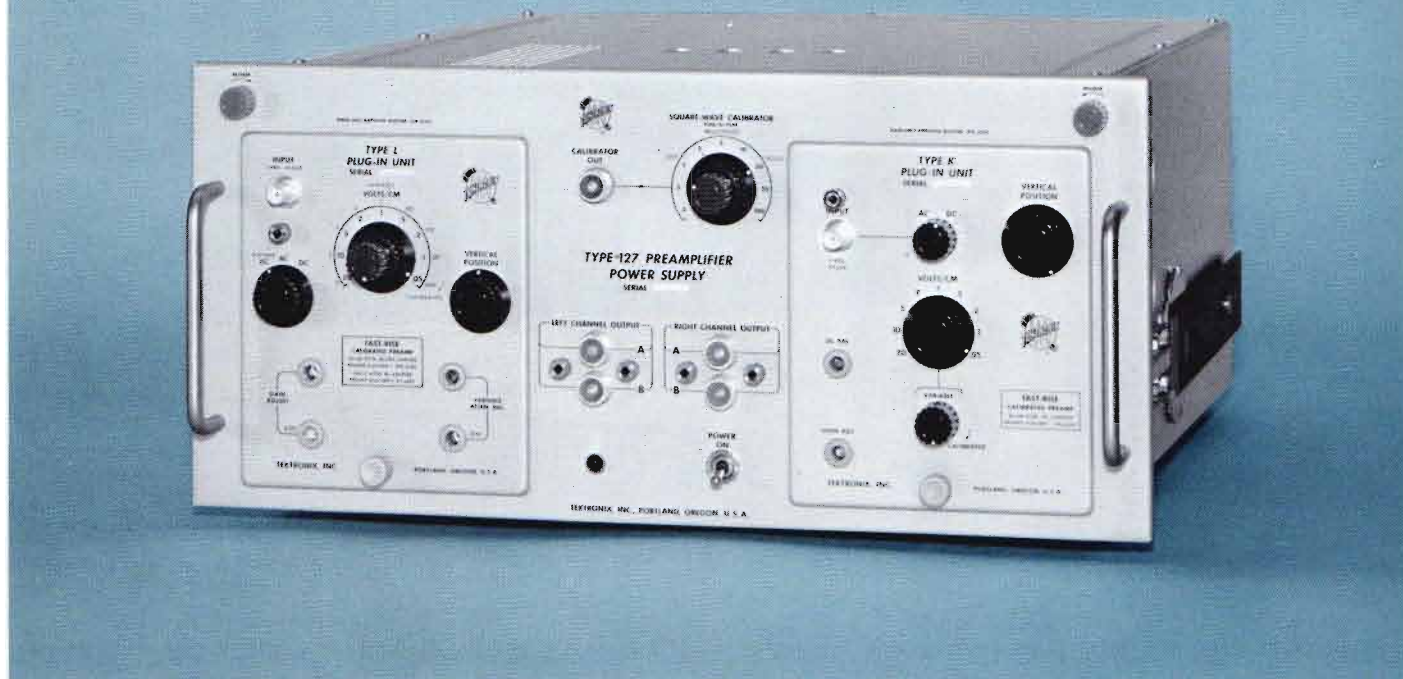


TYPE 127

PLUG-IN UNIT POWER SUPPLY



- **ACCEPTS MULTI-TRACE, DIFFERENTIAL, SPECTRUM ANALYZER, AND SAMPLING, PLUG-IN UNITS**
- **DC-to-19 MHz BANDWIDTH**

The Tektronix Type 127 Pre-amplifier Power Supply provides operating power to one or any combination of two Tektronix Letter Series or "I" Series Plug-In Units. This permits the operation of Tektronix Plug-Ins separate from the oscilloscope in which they are normally used. For example, a double-differential dual-trace display can be obtained with a Type 127 and two Type 1A5, 1A6, 1A7A or G Plug-In Units—when used in conjunction with a dual-trace oscilloscope.

Triggering Signal Inputs are provided at the rear of the instrument to permit the introduction of triggering pulses into a Type CA, 1A1, 1A2, M, or 1A4 Unit to utilize the alternate-sweep features of these multitrace units. The triggering pulses may be obtained from the + GATE OUT terminal of the associated oscilloscope.

Spectrum Analyzer Units require an external sweep voltage (positive going from 0 to at least +90 V). This can be supplied from a Type T Time Base Unit in one compartment, or from an associated oscilloscope with this signal output.

CHARACTERISTICS

BALANCED OUTPUT

The outputs of Plug-In Units powered by the Type 127 are fed through DC-coupled differential amplifier stages and cathode followers to provide a push-pull signal at the output terminals. Push-pull output swing is linear $\pm 3\%$ over a range of ± 0.3 volt into 170- Ω termination. Output DC operating levels are adjustable to ground potential.

GAIN

The Type 127 has a gain of one, push-pull. With single-ended output, gain is one-half.

OUTPUT TERMINALS

Each channel has four output terminals, two on the front panel and two at the rear. Terminated 170- Ω output cables are furnished.

AMPLITUDE CALIBRATOR

A squarewave calibration voltage is available through a front-panel coaxial connector. Eighteen fixed voltages—0.2 mV to 100 V, peak to peak (1, 2, 5 sequence). Accuracy is within 3%. Squarewave frequency is approximately 1 kHz.

TYPE 127 TYPICAL PERFORMANCE†

| PLUG-IN UNIT | MAXIMUM VOLTAGE GAIN | BANDWIDTH (—3 dB) | RISE-TIME |
|--------------|----------------------|---|-------------------------|
| B | 2 20 | DC to 15 MHz 2 Hz to 11 MHz | 24 ns 32 ns |
| CA | 2 | DC to 17 MHz | 21 ns |
| D | 100 | DC to 300 kHz at a gain of 100, increasing to 2 MHz at a gain of 2 | |
| E | 2000 | 0.06 Hz to 20 kHz at full gain, increasing to 60 kHz at a gain of 200 | |
| G | 2 | DC to 15 MHz | 24 ns |
| H | 20 | DC to 12 MHz | 30 ns |
| K | 2 | DC to 19 MHz | 19 ns |
| L | 2 20 | DC to 19 MHz 3 Hz to 17 MHz | 19 ns 21 ns |
| M | 5 | DC to 15 MHz | 24 ns |
| O | 2 | DC to 17 MHz | 21 ns |
| Q | * | DC to 6 kHz | 60 μ s |
| W | 2 100 | DC to 16 MHz DC to 7.5 MHz | 22 ns 47 ns |
| Z | 2 | DC to 11 MHz | 32 ns |
| 1A1 | 2 20 200 | DC to 19 MHz DC to 17 MHz 2 Hz to 11 MHz | 19 ns 21 ns 32 ns |
| 1A2 | 2 | DC to 19 MHz | 19 ns |
| 1A4 | 10 | DC to 19 MHz | 19 ns |
| 1A5 | 20 100 | DC to 19 MHz DC to 18 MHz | 19 ns 20 ns |
| 1A6 | 100 | DC to 2 MHz | 0.18 μ s |
| 1A7A | 10,000 | DC to 1 MHz | 0.35 μ s |
| 1L5 | 100 | 10 Hz to 1 MHz | 0.35 μ s |
| 1L10 | NA** | 1 MHz to 36 MHz | NA** |
| 1L20 | NA** | 10 MHz to 4.2 GHz | NA** |
| 1L30 | NA** | 925 MHz to 10.5 GHz | NA** |
| 1S1 | 50 | Equiv to DC to 1 GHz | 0.35 ns |
| 1S2 | 20 | Equiv to DC to 3.9 GHz | 90 ps |

*A 10 μ strain input produces a 100 mV output.

**Not applicable.

†Push-pull output terminated in 170 Ω , monitored with DC-to-33 MHz oscilloscope.

POWER REQUIREMENT

105 V to 125 V or 210 V to 250 V, 50 to 60 Hz, 450 watts maximum. Unit factory wired for 117 V. Can be factory wired for 234 V if so indicated on order.

DIMENSIONS AND WEIGHTS

| | | |
|--------------------------|---------------------|-------------------|
| Height | 8 $\frac{3}{4}$ in | 22.3 cm |
| Width | 19 in | 48.3 cm |
| Depth | 21 $\frac{5}{8}$ in | 55.0 cm |
| Net weight | 37 $\frac{1}{4}$ lb | 16.9 kg |
| Domestic shipping weight | \approx 71 lb | \approx 32.3 kg |
| Export-packed weight | \approx 92 lb | \approx 41.9 kg |

RACK MOUNTING

Type 127 can be withdrawn from rack on slide-out tracks, tilted and locked in 4 positions. Further mounting information on catalog instrument dimension page.

INCLUDED STANDARD ACCESSORIES

Four 170- Ω terminations (011-0048-00); four 170- Ω coaxial cables (012-0034-00); four BNC-to-UHF adapters (103-0032-00); four UHF-to-BNC adapters (103-0015-00); 3-conductor power cord (161-0010-03); 3 to 2-wire adapter (103-0013-00); pair mounting tracks (351-0085-00); two instruction manuals (070-0284-00).

SUPPORTING CRADLE

For rear slide support when the instrument is to be mounted in a backless rack, includes necessary mounting hardware, order 040-0344-00

Please refer to Terms and Shipment, General Information page.