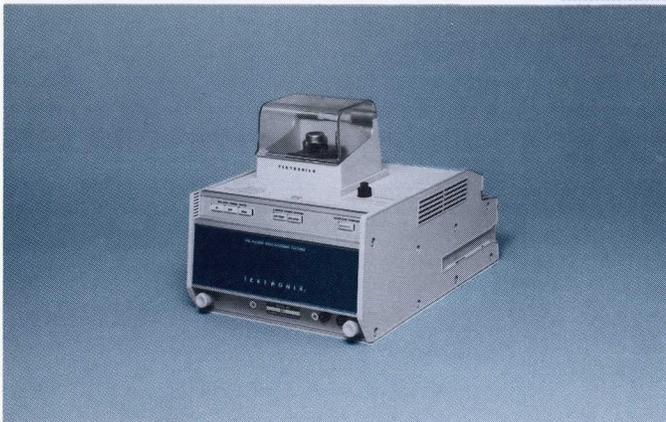


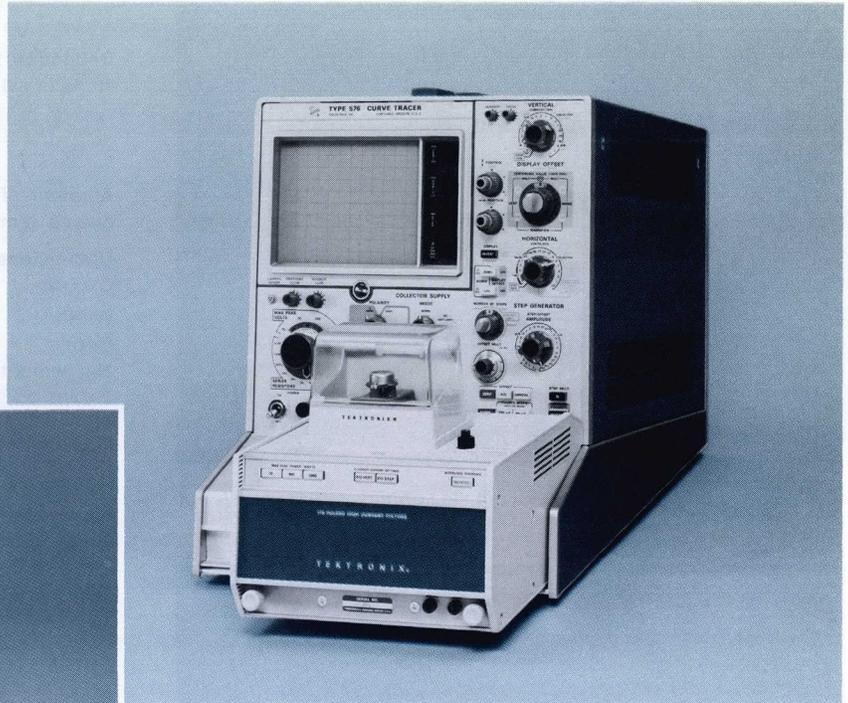
## SPECIAL-PURPOSE PRODUCTS

## Pulsed High-Current Fixture

- 200 AMP PEAK COLLECTOR DISPLAYS
- 20 AMP PEAK BASE SUPPLY



The 176 Pulsed High-Current Fixture extends the capabilities of the 576 Curve Tracer by providing pulsed collector operation to 200 amps peak and pulsed base steps to 20 amps peak. The step offset, when selected, is also pulsed. The pulsed operating mode allows many tests previously impossible. For example, small signal transistors can be tested under pulsed collector breakdown conditions without over-dissipation. The 176 "front porch" configuration fits in place of the 576 Standard Test Fixture, and is programmed from the 576 mainframe except for controls not provided on the mainframe. The collector pulse is slaved to the 576 in regard to width and repetition rate. The pulse width is selected by depressing the 300  $\mu$ s or 80  $\mu$ s push button on the 576 mainframe (usually, 300  $\mu$ s should be selected). The rep rate is automatically set when the 176 is inserted in the mainframe. Rep rate is also dependent on power-line frequency. The five highest VERTICAL CURRENT/DIV (0.1 A/div to 2 A/div) of the 576 can be multiplied X10 by actuation of the X10 VERT push button on the 176. This feature enables viewing of up to a 200 amp peak display. The five highest STEP GENERATOR AMPLITUDE base current steps of the 576 (10 mA to 200 mA) can be multiplied X10 by actuation of the X10 STEP push button on the 176. This feature enables the pulsed base step generator on the 176 to provide up to a 20 amp base step (tenth step). Both X10 VERT and X10 STEP push buttons provide inputs to the fiberoptic readout to display actual values. **If STEP GENERATOR AMPLITUDE or VERTICAL CURRENT/DIV controls are moved out of the five highest current settings, the multiplication of the affected function automatically drops back to X1.**



## CHARACTERISTICS

## COLLECTOR SUPPLY (PULSED)

**Width**—300  $\mu$ s or 80  $\mu$ s determined by 576.

**Repetition Rate**—Power-line frequency.

**Polarity**—+ or - determined by 576 polarity control.

**Amplitude**—Ranges are 15, 75, 350 volts nominal, controlled by MAX PEAK VOLTS switch on 576. Current (minimum available at low line into shorted load) is 15 V range, 200 A; 75 V range, 40 A; 350 V range, 8 A.

**Maximum Peak Watts**—Three illuminated push buttons select 10, 100, 1000 watts maximum peak power.

## STEP GENERATOR

**Current Ranges** (X10 STEP selected)—Step-Offset Amplitude Range is 100 mA to 2 A, 5 steps in a 1-2-5 sequence. Max Current (Steps and Aiding Offset) is X200 576 AMPLITUDE setting or 20 A, whichever is less. Max Voltage (Steps and Aiding Offset) is at least 5 V up to 10 A and 2 V up to 20 A.

**576 Offset Multiplier**—0 to X100 576 AMPLITUDE switch setting.

**Step Rate**—Power-line frequency.

**Pulsed Steps**—300  $\mu$ s or 80  $\mu$ s wide.

**Step/Offset Polarity**—The STEP GEN polarity is the same as the COLLECTOR SUPPLY polarity. Step polarity may be inverted by actuating the INVERT push button.

**Accuracy** (Current steps including offset)—Incremental is within 5% between any two steps; within 10% with 0.1X STEP MULT. Absolute is within 3% of total output  $\pm$  1% of one step or within 3% of one step, whichever is greater.

