

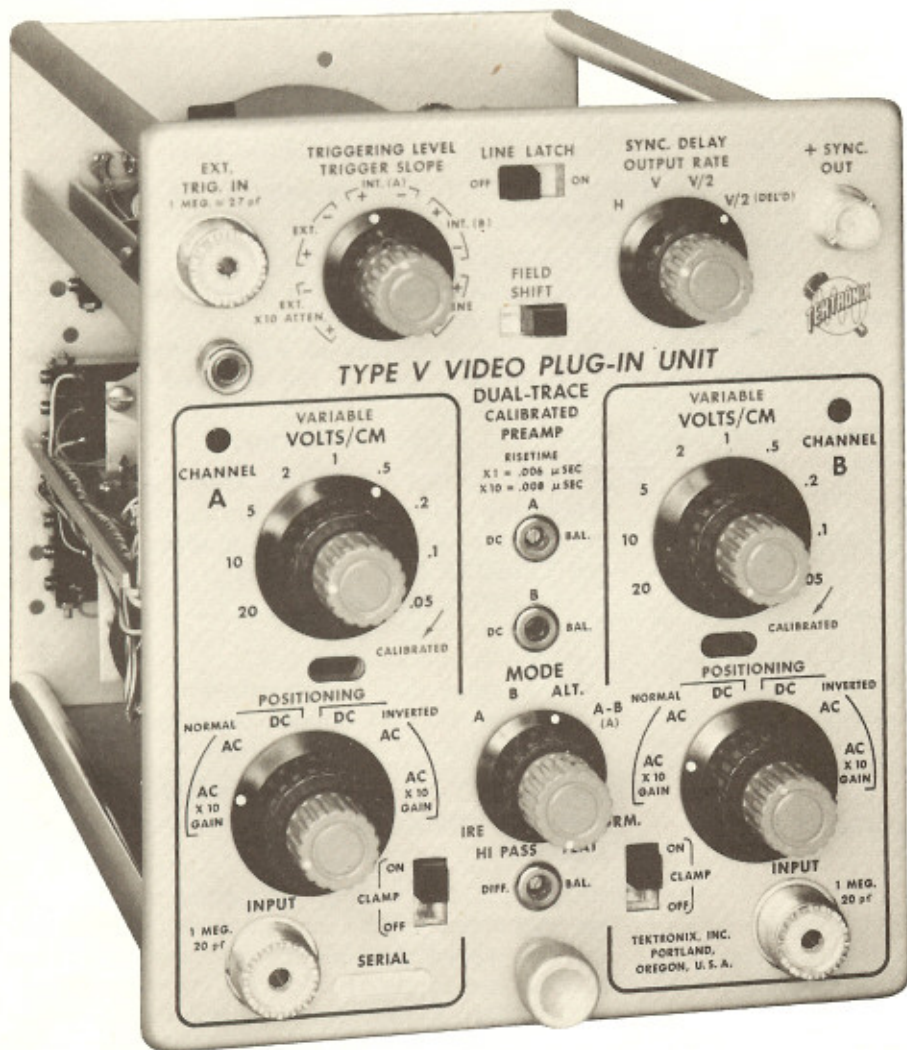
# t e n t a t i v e



## Type

# V

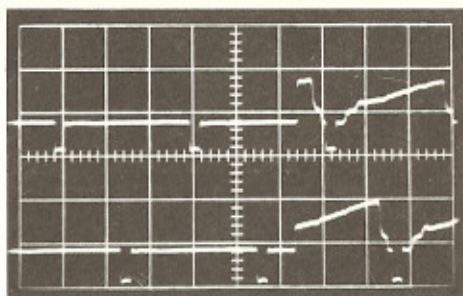
## VIDEO Plug-In Unit



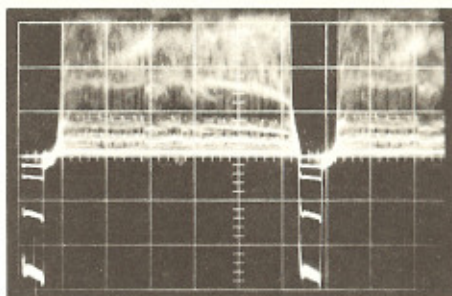
- DUAL-TRACE
- WIDE BAND
- KEYED CLAMP
- COMPLETE SYNC CHANNEL
- FIELD PRE-SELECTOR
- FREQUENCY-RESPONSE FILTERS

Adapting Tektronix Oscilloscopes using letter-series plug-in units to the particular needs of TV engineering, the Type V Unit enables you to observe any of the waveforms comprising the composite video signal and measure them quickly and accurately.

## TYPE V VIDEO PLUG-IN UNIT



Dual-trace display of field 1 and 2. Line Latch off. Illustrates use of Dual-Channel, Line Selector, and Field Selector features.



Keyed-Clamp display of 50-mv to 3-v video signals. Note that the baseline does not shift with large signal variations.

### TENTATIVE CHARACTERISTICS

#### CHANNELS 1 and 2

4 OPERATING MODES-- Channel 1 only, Channel 2 only, Alternate (A and B, dual-trace), Added Algebraically ( $\pm A \pm B$ ).

9 STEPS OF CALIBRATED SENSITIVITY-- 0.05 v/cm to 20 v/cm. 1-2-5 sequence. Continuously variable (uncalibrated) between steps and to 50 v/cm. AC X10 position increases the sensitivity to 5 mv/cm (ac coupled only).

RISETIME-- 6 nsec (Type V only) in AC or DC positions. 8 nsec (Type V only) in AC X10 position.

4 FILTERS-- A switch allows selection of one of four filters:

IRE-- bandpass conforms to latest IRE Standard.

HI-PASS-- passes 3.58 mc color subcarrier.

FLAT-- sine wave response flat to 10 mc  $\pm 1\%$ , in Type 531A, 533A, 535A Oscilloscopes.

NORMAL-- DC to 15 mc in Tektronix Type 531A, 533A, and 535A Oscilloscopes at 50 mv/cm sensitivity.

INPUT COUPLING-- AC or DC. The low-frequency response is 30% low at 2 cps when ac coupled.

POLARITY INVERSION-- Polarity of the display of either channel can be changed for comparisons of signals 180° out of phase.

INPUT IMPEDANCE-- 1 megohm paralleled by 20 picofarads.

KEYED CLAMP--

ON -- line-by-line backporch clamp simplifies both video and sync level adjustments.

OFF-- will allow observation of low-frequency noise on the signal.

#### SYNC CHANNEL

5 TRIGGER SOURCES-- A switch permits choice of the following: External X10 Atten., External,

Internal Channel 1, Internal Channel 2, or Power Line.

TRIGGER LEVEL-- Selects the level at which the incoming waveform will trigger the sweep. 50 mv of composite video signal is required for reliable operation. Triggers on either positive or negative going sync.

TRIGGER DELAY-- Determines the time of occurrence of the output trigger and allows observation of any part of the selected field.

FIELD SELECTOR-- Pre-selects the field to be observed.

LINE LATCH--

OFF-- permits display to start at any time in the selected field.

ON -- forces display to start at the beginning of any line in the selected field. This permits observation of jitter between H and V Sync Waveforms.

4 OUTPUT RATES-- A switch allows selection of triggering pulses at the following rates. These pulses are available at the plug-in connector and TRIGGER OUT connector.

H-- horizontal line rate.

V-- field rate.

V/2-- frame rate.

V/2 (delayed) -- frame rate with time of occurrence of trigger dependent upon the TRIGGER DELAY setting.

TRIGGER OUT-- A 12v negative pulse may be used for triggering the oscilloscope or other equipment.

LINE INDICATING VIDEO-- A picture monitor can be connected to the oscilloscope so that the picture appearing on the monitor is either blanked or intensified during the time of the oscilloscope sweep. This is useful for determining what portion of the picture is being displayed on the oscilloscope.

Price and Availability will be released later.

TEKTRONIX, INC. p.o. box 500 · Beaverton, Oregon