

PERFORMANCE

067-0546-00 VECTORSCOPE TEST UNIT

The VECTORSCOPE TEST UNIT provides a convenient source of those special test signals needed to check certain functions of both the new 520 NTSC Vectorscope and of the Type 526 Vectorscope.

The test unit has the same physical size as the Type 191 --- 7"H, 9" W, 16" D.

At the present time we plan to furnish the VECTORSCOPE TEST UNIT with a crystal of 3.579545 MHz, having good drift and stability characteristics for use at 25°C.

The VECTORSCOPE TEST UNIT is designed to check the 520 (or 526 --- where appropriate) for:

1. Phase angle accuracy of the 520 or 526 display by producing (on a 520 or 526 circular trace) either 180 successive 2° dots or 36 successive 10° dots;
2. Incremental phase accuracy --- by observation of the 2° dots in different quadrants;
3. Range accuracy and linearity of the 520 or 526 Precision Phase Shifter;
4. Correct test circle amplitude (a gain calibration check) for the 520. Produces an accurately-held 707 millivolt p-p 3.589 MHz signal --- which, when "beat" against the 3.579545 sub-carrier regenerator frequency, will produce a test circle repeating at 9.943 kHz and whose diameter is 2.096" when displayed on a correctly adjusted 520.
5. Sufficient pull-in and hold-in frequency range of either the 520 or 526 sub-carrier regenerator by providing an adjustable test output frequency of 3.579545 MHz \pm 1,000 Hz in three ranges:

3.579545 MHz \pm 100 Hz

\pm 250 Hz

\pm 1,000 Hz

TENTATIVE CHARACTERISTICS

Outputs:

Subcarrier 3.579545 MHz \pm 6 Hz at 25°C; 2.0 V \pm 2% into 75 Ω
Video 3.589488 MHz \pm 6 Hz
Variable 3.58 MHz . 3.579545 MHz \pm 1000 Hz in three ranges; 286 mV \pm 3%
Unblanking pulses (dots)
2⁰ markers 1,789,772.5 \pm three pulses per second
10⁰ markers 357,954.5 \pm one pulse per second

Amplitude:

Positive-going 15 V into 10 k Ω
Negative-going 7 V into 10 k Ω

Power:

115 V \pm 10%
230 V \pm 10%
50-60 Hz
 \cong 20 Watts

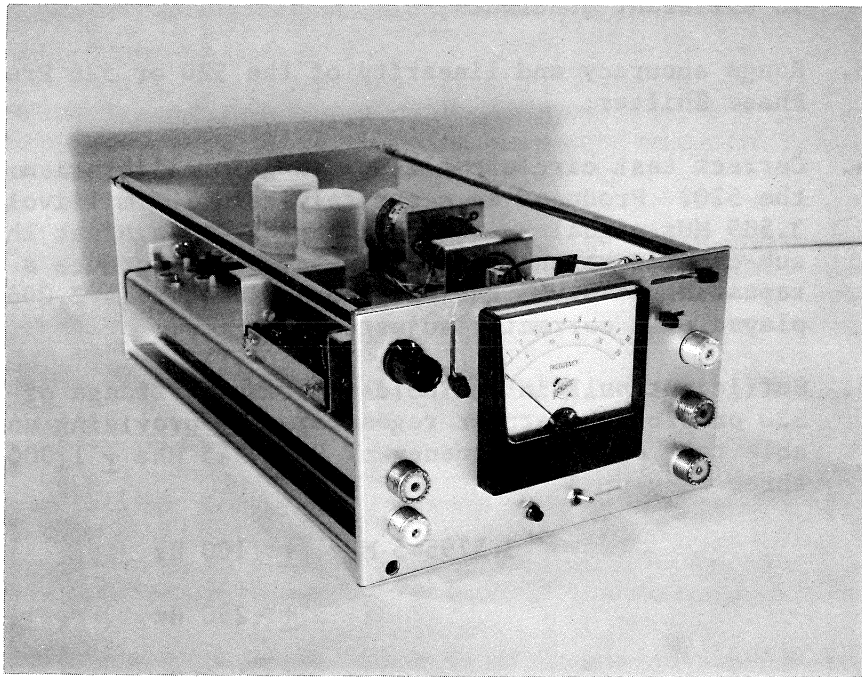


Photo of 067-0546-00 showing present layout. Changes will be made before production begins.

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Product Technical Information
8-25-67