

6. Connect the output of the stage to the Vertical Input of the oscilloscope. If the output is the second detector stage, the connection can be made by a straight probe (an isolation resistor of 10K ohm may be necessary). If the output connection is made at any other point, it will be necessary to use a Demodulation Probe with the oscilloscope.
7. Set the Sweep Generator RANGE switch to the required frequency band.
8. Set the Sweep Oscillator Dial to the Approximate Center Frequency of the stage under test.
9. Set the BLANKING - DOUBLE PATTERN switch to Double Pattern.
10. Set the SWEEP MC control to 9 MC Sweep.
11. Adjust the ATTEN RATIO & RF OUTPUT Controls and the Vertical Gain Controls on the oscilloscope to give a pattern of the desired height. (Use the smallest amount of signal from the TVG-2 as necessary to prevent overloading of the circuit.
12. If necessary, change the SWEEP MC control to the sweep width required to show the entire response band of the stage or stages being observed.
13. Vary the PHASE control until the double pattern coincides as nearly as possible into a single image pattern.

Then, if a single pattern with a base line is desired, throw the BLANKING - DOUBLE PATTERN switch to blanking position.
14. If desired, the pattern can be reversed from "Left to Right" or "Right to Left" to compare the traced pattern with a standard photograph or drawing.

NOTE: When aligning several stages, the RF OUTPUT and ATTEN RATIO controls should be adjusted with each stage to keep the pattern on the oscilloscope screen approximately the same size.

B. OBTAINING A VIDEO SWEEP

1. Inspect the A.C. plug to be sure the 1-1/2 Amp. line fuses are in place, then plug into a convenient 115 Volt, 60 cycle receptacle.
2. Two cables are provided with the TVG-2 and both are shielded leads, and identical, except one has clip, and the other has spade lugs. The lead with the clips is attached to the R. F. OUTPUT, and the lead with the spade lugs is attached to the HORIZONTAL CRO INPUT.
3. Throw the PWR Switch to the "On" position. The red pilot light will glow indicating that the instrument is in standby operation with all heaters on. Allow the instrument to warm up for at least 10 minutes before attempting any precision work.
4. Connect the lead from the HORIZONTAL CRO INPUT to the oscilloscope Horizontal Input Terminals. Be sure that the oscilloscope Horizontal Input Control is set to "External #1", so that the 60 cycle sweep from the TVG-2 is used as the horizontal sweep voltage.
5. Connect the R.F. OUTPUT cable to the Vertical Input of an oscilloscope.
6. Set the oscilloscope for maximum gain. (Use the Wide Band position if your scope is so equipped. An oscilloscope with a wide band pass, however, is not essential).