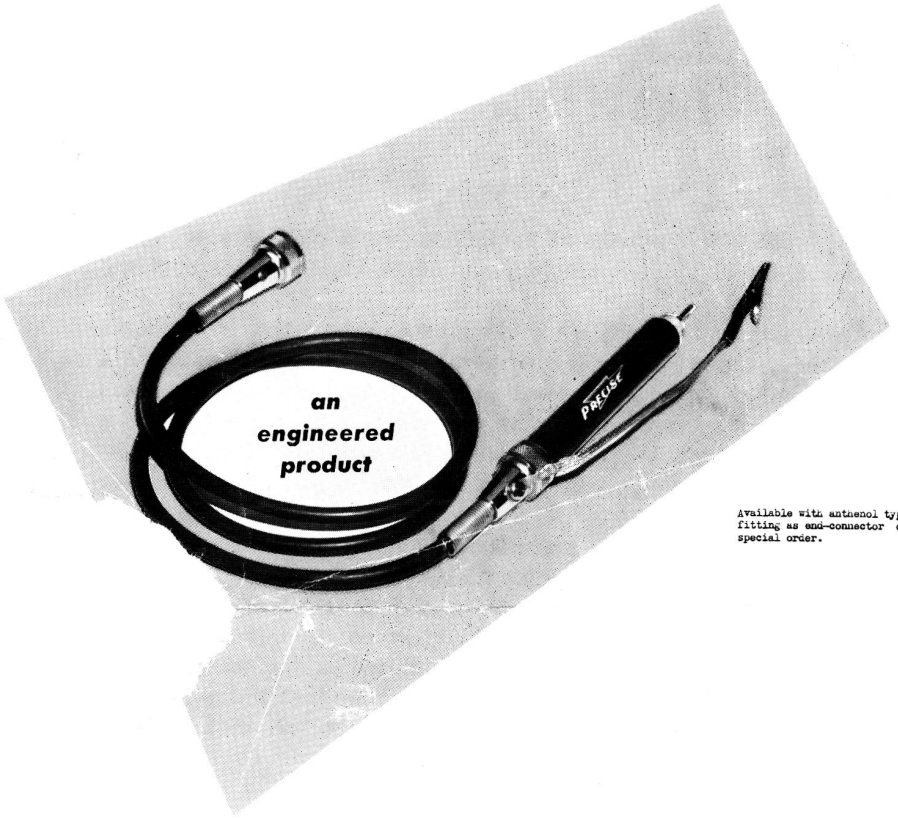
model 960

10:1 capacity attenuator probe

technical data



Available with amphenol type fitting as end-connector on special order.

PRECISE again has taken the lead in its introduction of the first low-priced, laboratory calibrated, capacity attenuator probe.

This instrument is invaluable for use in oscilloscope measurements where the input capacity of the scope normally loads the circuit being measured. The 960 is housed in a specially constructed non-porous case which is terminated in an Amphenol type connector while the other end of the coaxial cable has standard phone tip type fittings. Each instrument is hand-calibrated at high and low frequency square waves. Its normal frequency range is extended well beyond that of commercial oscilloscopes.

DEALER NET $5.95
(wired only)

"an engineered product"

ELECTRICAL SPECIFICATIONS:

Frequency Range	--- Zero (DC) through 100mc. Flat through normal commercial oscilloscope frequencies.
Readings	--- Attenuated by a factor of ten to one.
Maximum A.C.	--- 1000 volts.
Maximum D.C.	--- 1000 volts.
Input Capacity	--- Less than 7uufd.

MECHANICAL SPECIFICATIONS:

Length	--- 6½ inches, excluding lead and end attenuator.
Weight	--- ½ pound (approximate shipping weight).
Case	--- Plastic, black, non-hydroscopic, low-loss.
Cable	--- Phone tip type male connectors.

ADJUSTMENT PROCEDURE:

In order to use the MODEL 960 Capacity Attenuator Probe with a minimum of distortion, it is necessary to adjust each probe for each particular oscilloscope used. The adjustment procedure is quite simple and is outlined below:-

1.- It will be noted that the tip of the probe, protruding through the clear plastic nose piece, is composed of two metal parts:- a small pointed section which is screwed into a larger metal section. The adjustment is made by unscrewing the small metal pointed tip. Inside the larger metal part will be found the headless screw which when adjusted with a screw driver, properly compensates the probe.

2. connect the output terminals of the MODEL 960 to the input terminals of the oscilloscope.

3.- Attach the ground lead of a square wave generator to the ground lead on the MODEL 960. The other (hot side) is clipped onto the larger metal tip.

4.- Feed a square wave signal of approximately 1000 cycles into the probe and adjust the oscilloscope for two or three patterns appear on the screen.

5.- Place a thin screw driver into the larger metal piece and adjust the waveform seen on the oscilloscope until it most closely approximates a square wave. If the signal is considerably rounded on its leading edge the adjustment should be made in a clock-wise direction - if it is considerably pointed on the leading edge the adjustment should be made in a counter clock-wise direction. CAUTION: Make certain that the adjustment screw is not unscrewed beyond the edge of the large metal tip or tightened in too far since this could rupture the fine ceramic trimmer inside.

6.- Replace the pointed tip into the larger tip and the calibration is complete.

7.- When using the probe, keep your hand as far from the probing tip as possible in order to reduce the possibility of 60 cycle pick-up.

NOTE: Certain oscilloscopes - those without stepping attenuator and cathode follower inputs - will exhibit distortion characteristics when the vertical attenuator is adjusted on the oscilloscope. The Capacity Probe may be used with these instruments, but will probably work only for one setting of the oscilloscope attenuator. This is not the fault of the probe, but rather that of the oscilloscope. Even without the probe, the same oscilloscope will cause distortion.

OPERATION:

Simply connect the output connectors of the MODEL 960 to the input terminals of an oscilloscope. This will automatically reduce the input capacity to within 7uufd and attenuate the signal by a factor of 10 : 1. The probe may be used inter-changeably in either AC or DC circuits assuming the maximum ratings are observed.

WARRANTY:

All merchandise is warranted to be free from defects in material and workmanshin, and is fully protected by the standard RMA guarantee.

PRECISE DEVELOPMENT CORP. Oceanside, L. I., N. Y.