

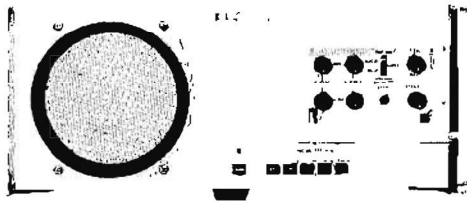
VISO-SCOPE

Simple, accurate physiological monitoring
Model 780-6A



**PATIENT MONITORING -
INTENSIVE CARE**

Patient signals can be accurately observed on the Model 780-6A general purpose 5-inch oscilloscope. ECG, pressure, pulse and other patient signals can be observed as sharply defined displays, due to the slow sweep speeds and long-persistence scope image. With the optional electronic switch, four patient signals can be monitored simultaneously. The electronic switch accepts eight rear panel inputs, any four of which may be selected for viewing on the oscilloscope screen. The modular design of the Model 780-6A allows it to be used with other 780-series modules either at the nurses station or at the patients bedside, or it may be easily converted for rack mounting in compatible recording systems.



Specifications

Time base

Range: 25, 50, 100 mm/sec and X10 multiplier (X.1 multiplier available on special order); accuracy $\pm 5\%$.

Triggering: free run, normal, or triggered.

Free run: circuit free runs independently of trigger circuit.

Normal: circuit free runs, can be reset any time after 5 cm of sweep by applying ext trigger of 5 V or greater (jack on rear panel); input RC, 100K ohms shunted by 40 pF; max input 15 V.

Triggered: initiated by ext trigger signal, or front panel pushbutton; sweep can be reset in same manner as Normal.

Vertical amplifier

Bandwidth: dc to 200 kHz. (Option 01, see below.)

Deflection factor (sensitivity): variable from 100 mV/cm to 1 V/cm.

Balanced input: connections for +, -, and ground provided.

Common-mode rejection: greater than 40 dB for common-mode signals of less than ± 3 volts at 1 kHz.

Input RC: 1 megohm shunted by approximately 200 pF from each side of balanced input to ground.

Connectors:

Y vertical input: 3-conductor phone jack on rear panel.

Y vertical output: 3-conductor phone jack on rear panel in parallel with Y vertical input.

Option 01 (four-channel electronic switch):

Chopping rate: 40 kHz (10 kHz per channel when all four channels are turned on).

Connectors: Amp Series M 14-pin connector on rear panel;

2-conductor phone jacks in parallel with inputs 1 through 4 on rear panel.

Each channel:

Bandwidth: 1 kHz.

Deflection factor (sensitivity): set simultaneously for all channels with one control; variable from about 200 mV/cm to about 2 V/cm.

Input RC: single-ended, 20K ohms shunted by 80 pF.

Controls: position control, and 9-position switch allowing each channel to be connected to any one of eight rear panel inputs or Off.

Horizontal amplifier

Bandwidth: dc to 70 kHz.

Deflection factor (sensitivity): 0.5 V/cm, variable $\pm 25\%$.

Balanced input: connections for +, -, and ground provided.

Common-mode rejection: greater than 40 dB for common-mode signals of less than ± 3 volts at 1 kHz.

Input RC: 1 megohm shunted by approximately 160 pF from each side of balanced input to ground.

Connector: 3-conductor phone jack on rear panel.

X-Y operation: selectable with front panel pushbutton.

General

Cathode ray tube: mono-accelerator, 2500-volt accelerating potential; supplied with P7 long persistence phosphor and amber filter; etched safety glass faceplate reduces glare.

Graticule: 10 x 10 cm parallax-free internal graticule marked in cm squares; major horizontal and vertical axes have 2 mm subdivisions.

Intensity modulation: +5 V pulse will blank trace of normal intensity; z-axis input, dc coupled; input is to 2-conductor phone jack on rear panel; input impedance, 25K ohms; maximum z-axis input, 10 V.

Location of controls:

Front panel: power, sweep speed, X-Y and multiplier.

Behind door: focus, intensity, X and Y sensitivity and position, sweep mode, and manual trigger.

Dimensions: 16 $\frac{3}{4}$ " wide, 7 $\frac{1}{2}$ " high, 18 $\frac{3}{8}$ " deep overall (426 x 191 x 466 mm); hardware furnished for quick conversion to 7" x 19" (178 x 483 mm) rack mount.

Color: blue cabinet with white enamel front panel standard; gray panel available, see options.

Weight: net 27 lbs (12.2 kg); shipping 33 lbs (14.9 kg).

Power: 115 or 230 volts $\pm 10\%$, 50 to 1000 Hz, approx. 95 W; Aux. power output (5 amp max.) is provided for connecting other equipment.

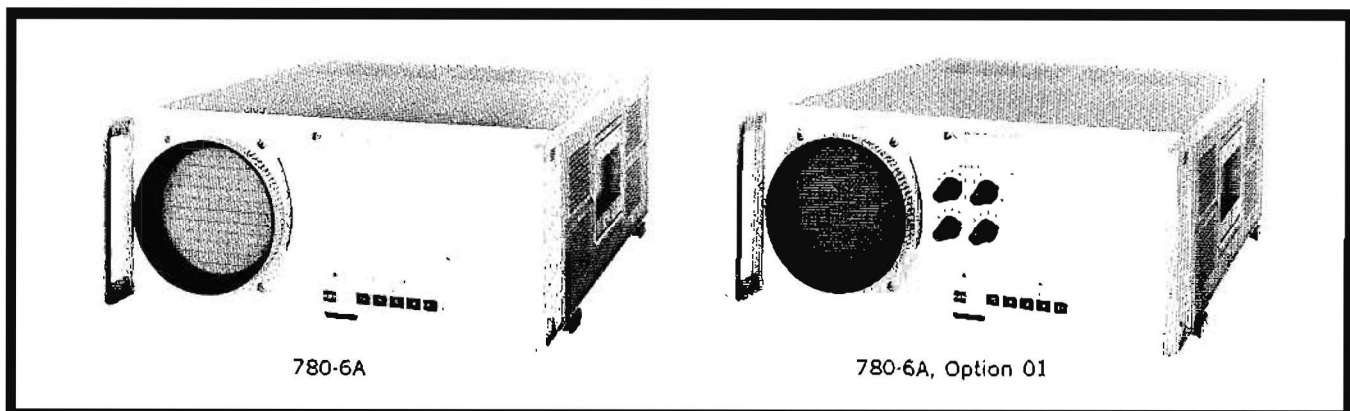
Price: HP Model 780-6A, \$700.

Options: (specify by option number)

01: 4-channel electronic switch for vertical amplifier, add \$175.

04: combining hardware for mounting two half-modules on top of a Model 780-6A, no additional charge.

05: gray front panel instead of standard white, add \$25.



780-6A

780-6A, Option 01