#### **7A16P**



Programmable—Dc to 225 MHz Amplifier

## 7A16P

Fully Programmable Plug-in for 7912AD or 7612D Digitizers only

10 mV/div to 5 V/div Calibrated Deflection Factors

200 MHz Bandwidth (7900 Family)

50 Ω or 1 MΩ Input Selectable

The 7A16P is designed for use only in Tektronix 7000 Series Programmable Digitizers. All of the normal operational features of a high-quality, wide-band 7000 Series plug-in amplifier are provided in the 7A16P. These are available at the front panel for manual selection, or they can be set under program control via a programmable mainframe and the IEEE-488 bus. Whether operated manually or under program control, the front-panel push buttons light to indicate plug-in status plug-in status can also be read over the IEEE-488 bus by an external controller for input to instrument set-up and control routines.

Two switch selected input connectors are also provided for selecting input signal source.

## CHARACTERISTICS

 $\textbf{Bandwidth} = 225 \, \text{MHz}, plug-in only, 200 \, \text{MHz}$  in the 7912AD. Bandwidth may be limited to 20 MHz  $\pm 3$  MHz by bandwidth limit switch.

Ac Coupled Lower Bandwidth — 10 Hz or less.

Step Response — 50  $\Omega$  input plug-in only, 1.8 ns rise time.

**Deflection Factor** — 10 mV/div to 5 V/div, 9 steps in a 1-2-5 sequence. Accuracy is  $\pm 2\%$  of indicated deflection factor with GAIN adjusted at 10 mV/div.

Uncalibrated VARIABLE is continuous between steps and extends selected deflection factor to at least 2.5 times the calibrated value.

Input R and C — Selectable: 1 M $\Omega$  within 2% and  $\approx$ 20 pF or 50  $\Omega$   $\pm$ 1  $\Omega$  with VSWR  $\leqslant$ 1.5:1 at 200 MHz or less.

Inputs - Selectable A or B signal input connectors

Max Input Voltage — 1 M $\Omega$ , dc coupled: 250 V (dc + peak ac), ac component 500 V p-p max, 1 kHz or less. M $\Omega$ , ac coupled: 500 V (dc + peak ac), ac component 500 V p-p max, 1 kHz or less. 50  $\Omega$ : 0.5 watts max.

**Programmable Functions** — All functions except VARIABLE, GAIN, and IDENTIFY are programmable.

Order 7A16P Programmable
Amplifier .......\$2200

## 7A18



Dc to 75 MHz Dual Trace Amplifier

## 7A18

Dc to 75 MHz Bandwidth

5 mV/div to 5 V/div Calibrated Deflection Factors

1 MΩ Input

The 7A18, the basic building block of 3- and 4-trace operation, is a dual-trace plug-in amplifier. The 7A18 features constant bandwidth for all deflection factors, 5 operating modes (Ch 1, Ch 2, ALT, CHOP, ADD), trigger source selectivity and color-keyed control grouping. The 7A18 has a trace identify function. Polarity of channel 2 is selectable.

Deflection Factor — 5 mV/div to 5 V/div in 10 calibrated steps (1-2-5 sequence). Accuracy is within 2% with gain adjusted to 10 mV/div. Uncalibrated VARIABLE is continuous between steps to at least 12.5 V/div.

Input R and C — 1 MΩ within 2%; ≈20 pF.

Max Input Voltage — Dc-coupled: 250 V (dc + peak ac); ac component 500 V p-p max, 1 kHz or less. Ac-coupled: 500 V (dc + peak ac); ac component 500 V p-p max, 1 kHz or less.

Dc Stability — Drift with ambient temperature (constant line voltage) is 0.01 div/°C. Drift with time (ambient temperature and line voltage constant) is 0.02 div in any one minute after 1 hour warm-up.

Common-Mode Rejection Ratio (ADD, Ch 2 Invert) — At least 10:1, dc to 50 MHz.

Order 7A18 Amplifier ...... \$1145

#### DC OFFSET OPTION

Dc Offset is for the user who needs to analyze small signals that are riding on larger signals, such as power supply ripple.

Option 06, Dc Offset — Two separate Channel 1 and Channel 2 variable offset controls are concentric with the position controls replacing the identify push-buttons of the standard 7A18. The ac-dc-ground switch of each channel is expanded to accommodate a fourth position for dc offset.

Offset Range Display —  $\pm 200$  div max, equivalent to  $\pm 1$  V at 5 mV/div.

**Accuracy** — When in DC OFFSET the deflection accuracy is derated by 1%.

Order Option 06 Dc Offset ...... Add \$200

## 7A26



Dc to 200 MHz Dual Trace Amplifier

# 7A26

Dc to 200 MHz Bandwidth (7900 Family)

5 mV/div to 5 V/div Calibrated Deflection Factors

1 MΩ Input

The 7A26, a dual-trace plug-in amplifier, is a basic building block for 3- or 4-trace operation. It features constant bandwidth for all deflection factors, 5 operating modes (Ch 1, Ch 2, ALT, CHOP, ADD), trigger source selection (Ch 1, Ch 2, MODE), and color-keyed control groupings. Polarity of channel 2 is selectable. Bandwidth may be set at FULL or limited to 20 MHz for low-frequency applications.

**Deflection Factor** — 5 mV/div to 5 V/div in 10 calibrated steps (1-2-5 sequence). Accuracy is within 2% with gain adjusted at 10 mV/div. Uncalibrated VARIABLE is continuous between steps to at least 12.5 V/div.

Input R and C — 1 M $\Omega$  within 2%;  $\approx$ 20 pF.

Max Input Voltage — Dc-coupled: 250 V (dc + peak ac); ac component 500 V p-p max, 1 kHz or less. Ac-coupled: 500 V (dc + peak ac); ac component 500 V p-p max, 1 kHz or less.

Common-Mode Rejection Ratio (ADD, Ch 1 Invert) — At least 10:1, dc to 50 MHz.

Dc Stability — Drift with ambient temperature (constant line voltage) is 0.02 div/°C. Drift with time (ambient temperature and line voltage constant) is 0.02 div in any one minute after 1 hour warm-up.

Order 7A26 Amplifier ...... \$1850