



Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

*InstraView*SM REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at www.instraview.com ↗

WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. www.artisanng.com/WeBuyEquipment ↗

LOOKING FOR MORE INFORMATION?

Visit us on the web at www.artisanng.com ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

Contact us: (888) 88-SOURCE | sales@artisanng.com | www.artisanng.com

VX4780

Signal Conditioner Module

Features

- 16 channels
- Independently programmable
- Cutoff Frequency
- Gain
- Attenuation
- Coupling
- Offset
- Isolation
- Extensive programmable self-test
- Companion product to the [VX4244](#) Digitizer
- [VXIplug&play](#) WIN, WIN95 and WINNT Frameworks
- [Obtain VXIplug&play Software Now](#)

The VX4780 Signal Conditioner has 16 fully programmable channels designed to be a companion product for the VX4244, 200 KS/s, 16-bit Digitizer.

Below is a feature by feature description of the signal conditioning capability, including extensive self-test:

Isolation

Each channel contains both an input and an output isolation relay.

Coupling

If DC is specified, the inputs of the specified channel(s) are connected through the input isolation relays directly to the input attenuator(s). If AC coupling is specified, the inputs of the specified channel(s) are switched through the input isolation relays, then through coupling capacitors to the input attenuator(s).

Attenuation

The input attenuator of each channel may be programmed to divide the input signal by 10 or 100. The input attenuator of each channel may be inserted into the signal path or bypassed.

Gain

The gain of each channel can be programmed to any of

the following values: 1, 2, 5, 10, 20, 50, or 100 V/V.

Gain Trim

Each channel contains a D/A converter used to calibrate the overall channel gain. This enables the VX4780 to compensate for gain errors caused by temperature changes and introduced by other devices connected to its inputs or outputs.

Offset

Each channel contains a D/A converter used to null DC offset errors at the channel output. This enables the signal conditioner to null DC offset errors caused by temperature changes and introduced by other devices connected to its inputs or outputs.

Filter

Each channel contains a Bessel lowpass filter. The cutoff frequency of each filter is command selectable from 468 Hz to 7.02 kHz in 468 Hz steps or from 7.13 kHz to 107 kHz in 7.13 kHz steps. Cutoff frequencies greater than 468 Hz and less than 107 kHz are rounded to the closest realizable value.

SELF-TEST

Self-test performs the tests listed below on the VX4780 signal conditioning circuitry. Self-test can test all channels or selected channels.

Offset calibration circuitry: The dc offset calibration circuitry is tested.

Novram Checksum: The checksums of gain and offset calibration constants stored in novram are calculated and checked against the stored checksums.

Test source: The self-test input voltage source is tested.

Input Attenuator: The attenuation of the input attenuator is verified at attenuation settings of /10 and /100 and with the attenuator bypassed. This test is performed with nominal attenuation calibration factors, then repeated with stored calibration factors.

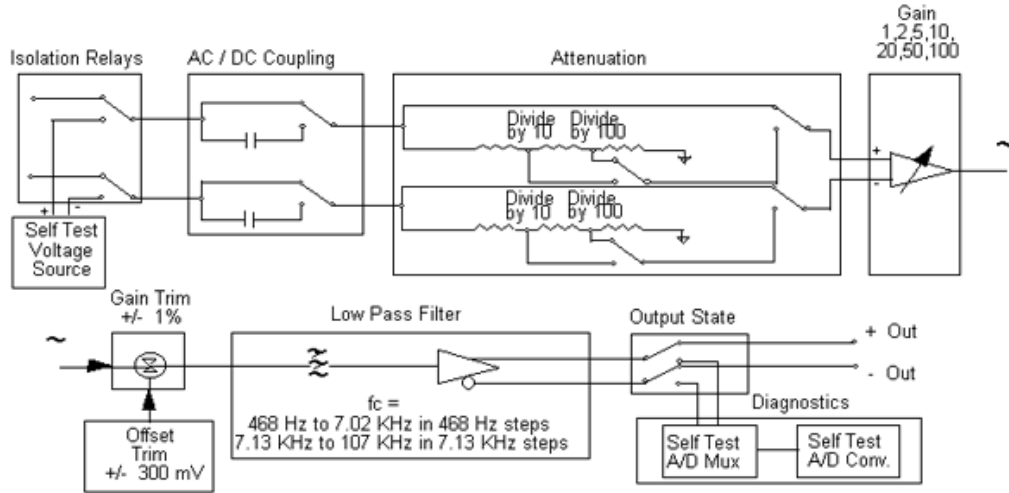
Gain Calibration circuitry: The gain calibration circuitry is tested.

Lowpass filter: The cutoff frequency of the lowpass filter is checked at cutoff frequencies of 468 Hz, 936 Hz, 1872 Hz, 3744 Hz, and 7133 Hz. This test verifies that the cutoff frequency tuning circuitry is functioning properly.

AC Coupling Capacitors: The positive input and negative input AC coupling capacitors are checked.

Variable Gain Amplifier: The variable gain amplifier is checked at gains of 1, 2, 5, 10, 20, 50, and 100 V/V. This test is performed with nominal gain calibration factors, then repeated with stored calibration factors.

The following schematic represents a summary of the functionality of each channel of the signal conditioner:



Tektronix Measurement products are manufactured in ISO registered facilities.

Specifications are subject to change without notice. Check with your local Tektronix representative for current specifications.

© Copyright Tektronix, Inc |



Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

*InstraView*SM REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at www.instraview.com ↗

WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. www.artisanng.com/WeBuyEquipment ↗

LOOKING FOR MORE INFORMATION?

Visit us on the web at www.artisanng.com ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

Contact us: (888) 88-SOURCE | sales@artisanng.com | www.artisanng.com