ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

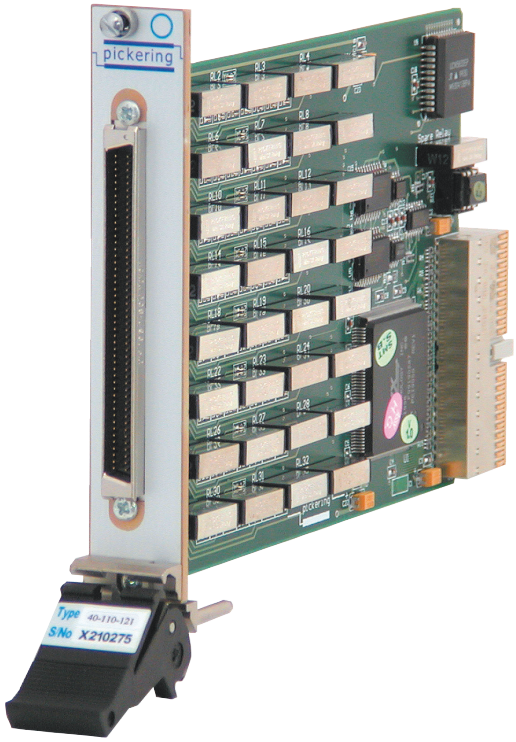
Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Pickering 40-110-121* at our website: ***Click HERE***

40-110/115/120/125
Reed Relay Module

- 16, 24 or 32 Reed Relays Per Module
- SPST, DPST, SPDT and Shielded Configurations
- Ruthenium Reed Relays Suitable For Low Level Signals
- Uses High Reliability Pickering Reed Relays For Maximum Performance
- Fast Operating Speed 250µs Typical
- Switch up to 150Volts, 1.25A with 20W Max Power
- VISA/IVI Drivers Supplied for Windows 2000/NT/XP
- Diagnostic Tool Available (PI-MXT)
- Supported by PXI or LXI Chassis
- 2 Year Warranty



The 40-110/115 range of switching modules are available in both Changeover (SPDT) and Normally Open (SPST & DPST) configurations. Connections are made via a front panel 96 pin male connector.

For applications requiring improved bandwidth and crosstalk performance please look at our 40-120/125 range of shielded reed relay modules.

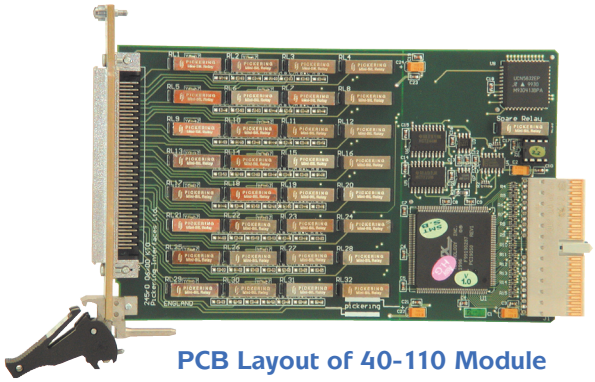
General purpose reed relays are suitable for the construction of small switching networks, for slaving up to larger switches or for operating external devices (e.g. lamps, solenoids etc.). To simplify inter-relay wiring, interconnection points are built onto the circuit board thus easing the construction of complicated wiring.

Relay Type

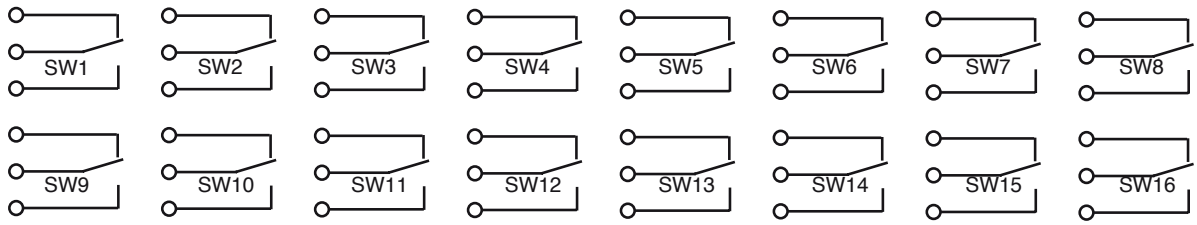
The 40-110/15/20/25 is fitted with Reed Relays (Ruthenium sputtered type), these offer very long life with good low level switching performance and excellent contact resistance stability. Spare Reed Relays are built onto the circuit board to facilitate easy maintenance with minimum downtime.
All reed relays are manufactured by our sister company Pickering Electronics, www.pickeringrelay.com.

Range Description:

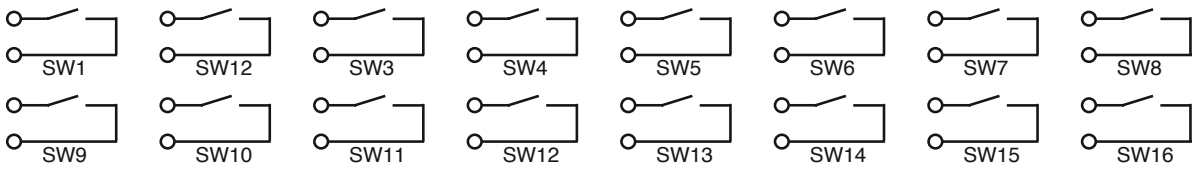
40-110	16 or 32 x SPDT Reed Relays.
40-115	16, 24 or 32 x SPST/DPST Reed Relays.
40-120	16 x Shielded SPDT Reed Relays.
40-125	16 or 24 Shielded SPST Reed Relays.



PCB Layout of 40-110 Module

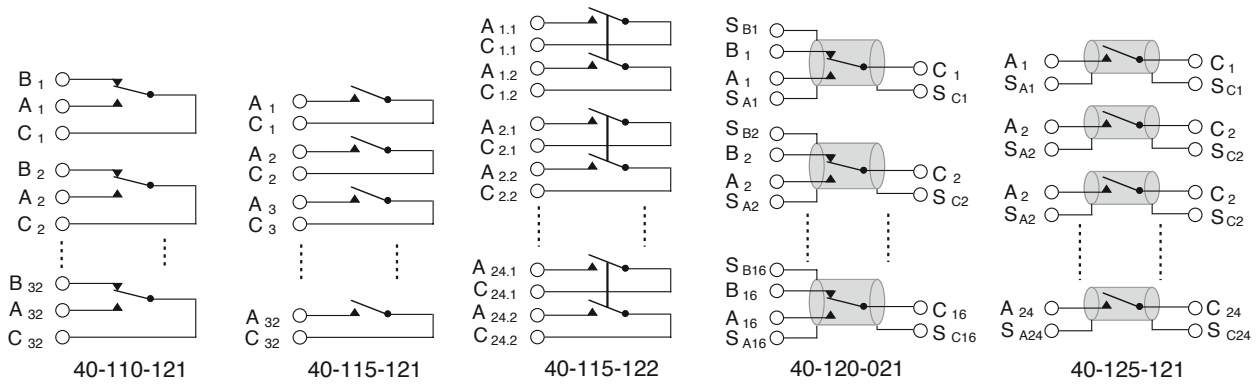


Schematic of 40-110 Relay Module – 16 x SPDT



Schematic of 40-115 Relay Module – 16 x SPST

ISSUE 5.1 JUL 2007



Switching Diagrams for the 40-110/115/120/125 Reed Relay Module

Switching Specification

Switch Type:	Ruthenium Reed
Max Switch Voltage:	150V DC/100V AC
Max Power: Max Switch Current: Max Carry Current:	20W (3W for SPDT) 1A (0.25A for SPDT) 1.2A (1A for SPDT)
On Path Resistance Off Path Resistance Differential Thermal Offset:	<500mΩ $>10^9$Ω <10µV
Crosstalk (100Ω balanced): Isolation (100Ω balanced):	80dB (1MHz), 72dB (10MHz) 62dB (25MHz) 75dB (1MHz), 60dB (10MHz) 55dB (25MHz)
Bandwidth (-3dB): (measured on 40-120)	70MHz (typical)
Operate Time: Release Time:	<0.5ms, 0.25ms typ. <0.5ms, 0.25ms typ.
Expected Life, low power: Expected Life, high power:	$1x10^9$ operations $>1x10^6$ operations

Programming

Pickering provide kernel, VISA and IVI drivers which are compatible with Windows 2000/NT/XP operating systems, the VISA driver is also compatible with the LabVIEW RT operating system.

These drivers may be used with a variety of programming environments and applications including :-

National Instruments products (LabVIEW/LabWindows/CVI/ Switch Executive/MAX/TestStand etc.)

Microsoft Visual Studio products (Visual Basic/Visual C+)

Agilent VEE

Mathworks Matlab

Other environments are also supported, please contact Pickering with specific enquiries.

Power Requirements

+3.3V	+5V	+12V	-12V
0	360mA (typ 280mA)	0	0

Width and Dimensions

Single slot 3U PXI (CompactPCI card).

PXI & CompactPCI Compliance

All Pickering Interfaces PXI modules comply with the PXI Specification. Local Bus, Interrupts, Trigger Bus and Star Trigger are not implemented.

Safety & CE Compliance

All modules are fully CE compliant and meet applicable EU directives: Low-voltage safety EN61010-1:2001, EMC Immunity EN61000-6-1:2001, Emissions EN55011:1998.

Connectors

PXI bus via 32-bit P1/J1 backplane connector.
Signals via front panel 96 Way male SCSI connector, for pin outs please refer to the operating manual.

Product Order Codes

16 x SPDT, Ruthenium Reed Relays	**40-110-021**
32 x SPDT, Ruthenium Reed Relays	**40-110-121**
16 x SPST, Ruthenium Reed Relays	**40-115-021**
32 x SPST, Ruthenium Reed Relays	**40-115-121**
16 x DPST, Ruthenium Reed Relays	**40-115-022**
24 x DPST, Ruthenium Reed Relays	**40-115-122**
16 x Shielded SPDT Reed Relays	**40-120-021**
16 x Shielded SPST Reed Relays	**40-125-021**
24 x Shielded SPST Reed Relays	**40-125-121**

Mating Connectors & Cabling

Examples of connectors and cabling for the 40-110 series are:

40-961-096	96 way SCSI style ribbon cable connector
40-970-096-1M	Cableform, 96 way SCSI Style, Female to Female, 1A, 1m Length
40-965-096	Connector Block, Shielded, 96 way SCSI Style, Module Mounted

Please refer to the Pickering Interfaces "**Interconnection Solutions**" catalog for the full list of connector/cabling options, including drawings, photos and specifications. This is available in either print or as a download. Alternatively our web site has dynamically linked connector/ cabling options, including pricing, for all Pickering PXI modules.

Latest Details

Please refer to our Web Site for Latest Product Details.
www.pickeringtest.com

Operating/Storage Conditions

Operating Conditions

Operating Temperature:	0°C to 55°C
Humidity:	Up to 95% non-condensing
Altitude:	5000m

Storage and Transport Conditions

Storage Temperature:	-20°C to +75°C
Humidity:	Up to 95% non-condensing
Altitude:	15000m

© Copyright (2007) Pickering Interfaces. All Rights Reserved
Pickering Interfaces maintains a commitment to continuous product development, consequently we reserve the right to vary from the description given in this data sheet.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP