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 *Universal Switching VXIRMR410002* at our website: ***Click HERE***

Universal Switching Corporation

Specification Sheet VXI-RMR410-001

Quad Section 1x10 SMA Type DC-18GHz
VXIbus Switching Module
Model VXI-RMR410

December 1998

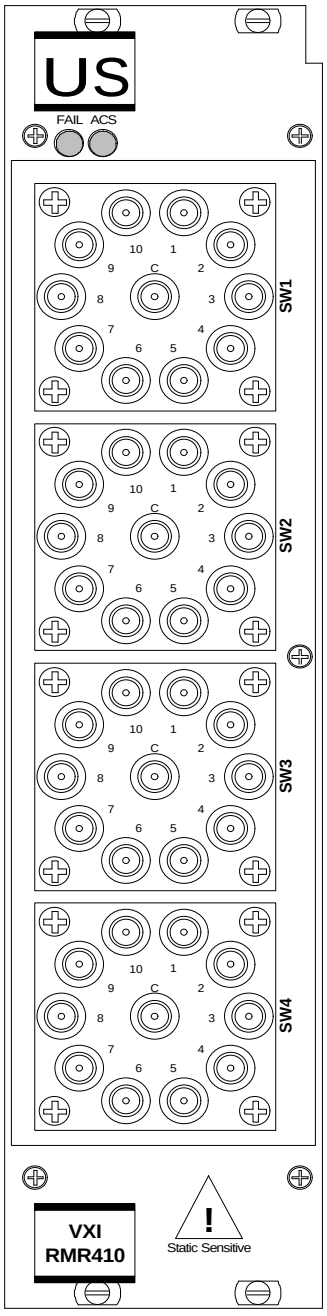
General

The relay-based VXI-RMR410 coaxial microwave switching module provides a flexible high density configuration for many applications. It contains multiple 18GHz relay sections for use in ATE stations, communication sites or other demanding applications requiring compact high performance microwave switching.

It provides up to four 1x10 individual relay sections within a single C2 sized VXI module. Each relay element is individually shielded from each other and the internal control/status circuitry. A unique control driver method reduces the amount of power the module requires from the host VXI mainframe, reducing cooling requirements and increasing reliability.

Ultra-high reliability relay elements (>1,000,000 operations) are coupled with control and status circuitry. Sections can be field replaced without special tools since each section is connectorized.

The number of sections included is determined by the model number. A reduced configuration can be further populated while in the field. Additional configurations are available on special order.



Applications

- Antenna routing
- ATE systems
- Communication installations
- Switching high speed ECL/PECL data
- Satellite control centers
- Ground station IF signal routing

Features

- Fast register-based control
- High reliability relay elements
- DC to 18GHz bandpass (min)
- High performance stainless steel SMA signal connectors
- Field replaceable plug-in relay elements
- Rugged aluminum shielded C2 sized enclosure
- Built-in control and status circuitry
- Individually shielded sections
- LabVIEW drivers included

Configurations

- VXI-RMR410-001 . . . .Single 1x10
- VXI-RMR410-002 . . . .Dual 1x10
- VXI-RMR410-003 . . . .Triple 1x10
- VXI-RMR410-004 . . . .Quad 1x10

Universal Switching Corporation
7145 Woodley Avenue, Van Nuys, CA USA
Phn (818) 785-0200 Fax (818) 785-0680 E-Mail sales@uswi.com

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Construction

The diagram below shows the overall physical configuration of the VXI-RMR410 module. The top and bottom of the module contains venting slots for flow through cooling for proper operation in extreme temperature environments. The rugged aluminum enclosure provides a shielded environment internally for low noise signals. The module also provides aluminum slides for additional grounding for host VXI mainframes that provide conductive module slides.

Easily accessible during installation, the module has both the Logical Address and IRQ/function DIP-switches located on the side of the module (detailed below). Also located on the side is a set of status LED to indicate various module functions during troubleshooting.

The module faceplate provides two additional status LED's. A red LED is labeled ERR to indicate error conditions, and a blue LED illuminates when the module is addressed by the VXI slot 0 controller.

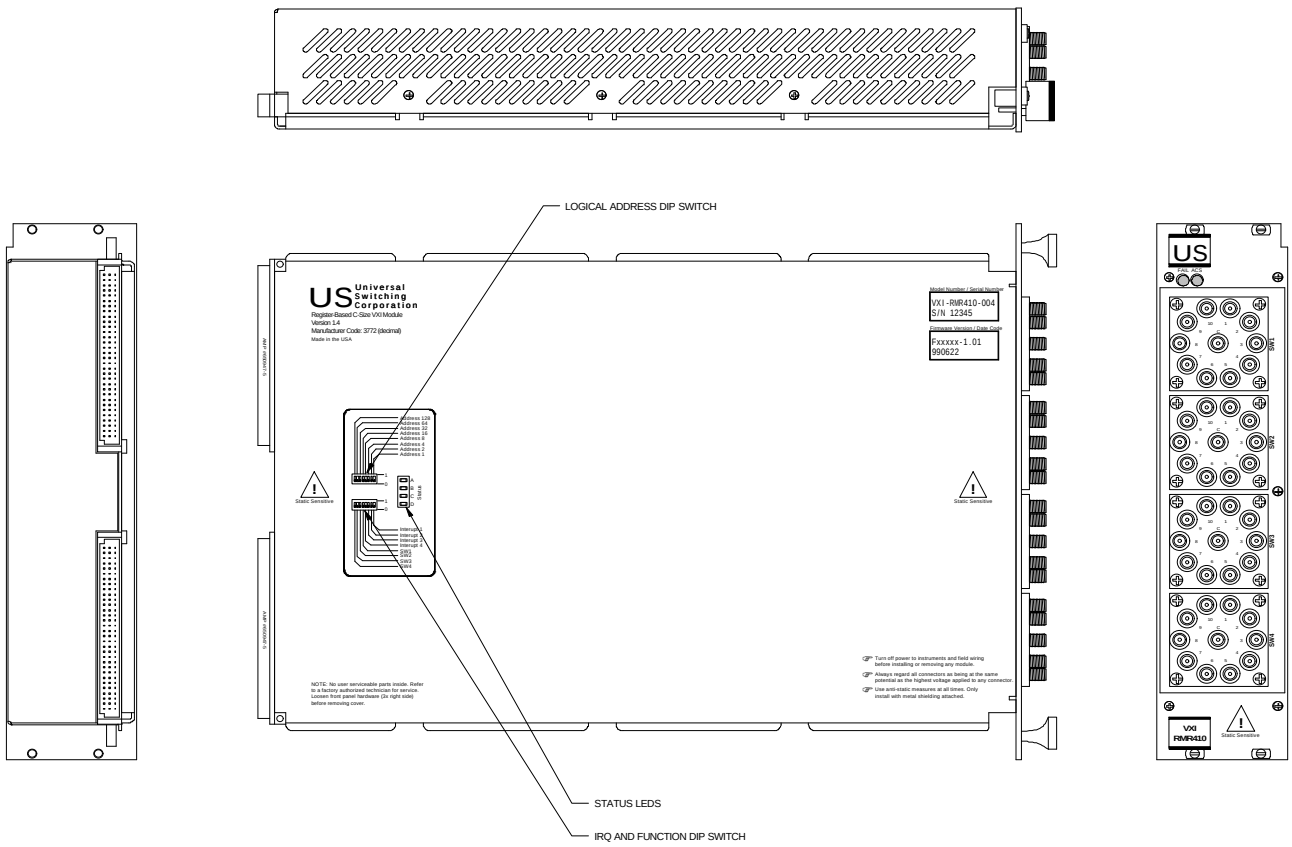
Module control is register based providing fast easy control of the module's functions. LabVIEW drivers can be provided to simplify the control of the module.

Example Module Usage

Many different applications can be served by the VXI-RMR72 VXI switch module. The module provides a versatile building block for both 1xN type switching and XY matrix switching, or both.

Universal Switching Corporation builds systems utilizing this and other modules to meet customer applications. The diagram on page 3 illustrates how the four individual sections can be cascaded to provide a larger configuration.

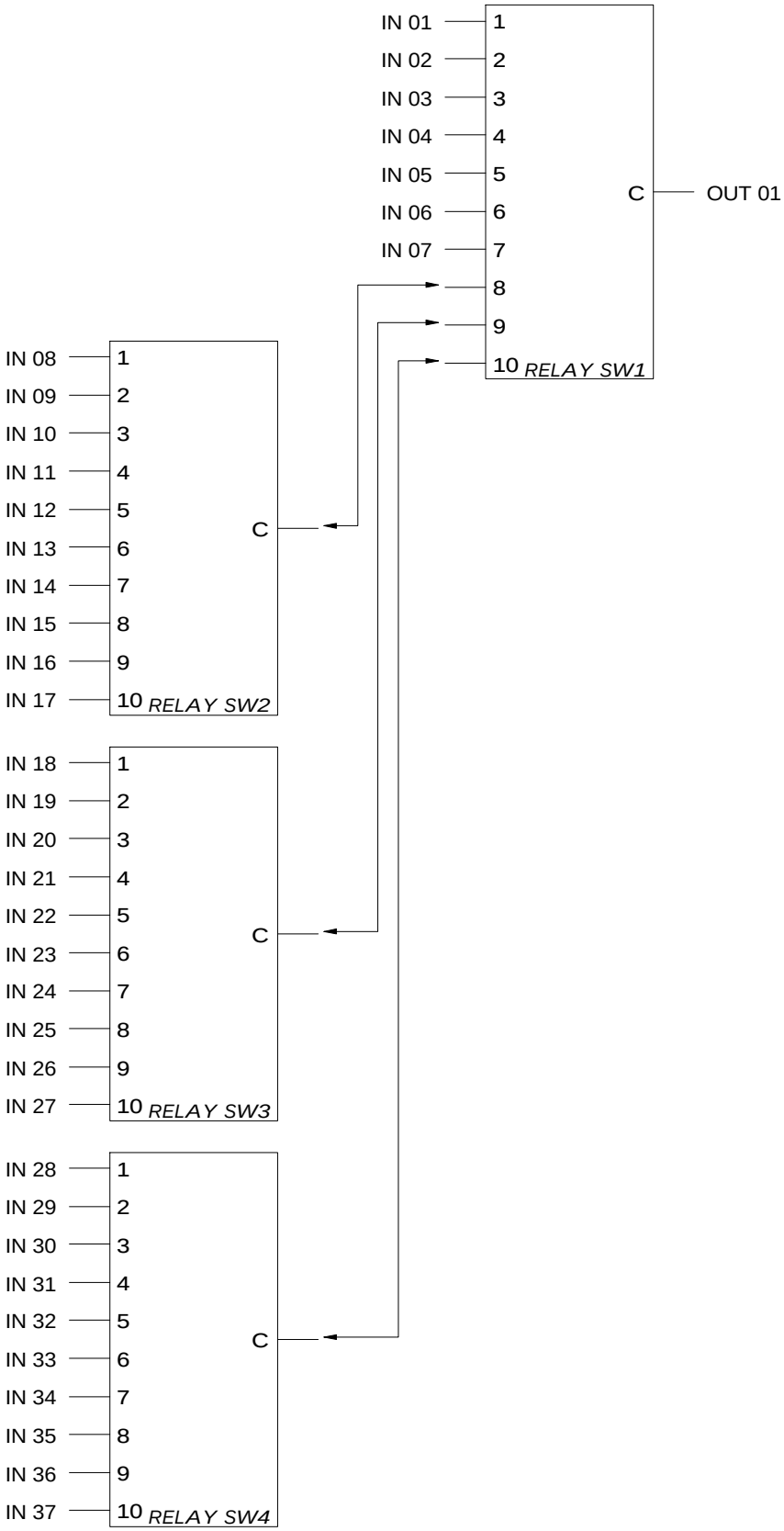
The example shows a 37x1 bidirectional array allowing the selection of one signal of 37 to be routed to the single output. Many other possibilities can be realized when coupled with other VXI switching modules too. Interconnection cabling can be provided by the factory using high performance 30GHz semi-flex cabling insuring the best possible performance.

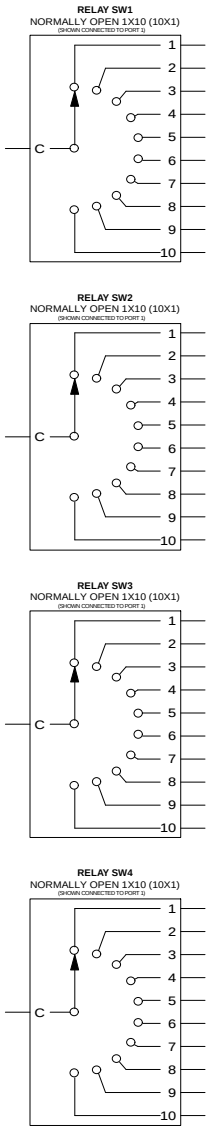


7145 Woodley Avenue, Van Nuys, CA USA
Phn (818) 785-0200 Fax (818) 785-0680 E-Mail sales@uswi.com
Universal Switching Corporation

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

37x1 Switching Array Diagram





Signal Specifications

Switching elements	Relay-based
Operating mode	Normally Open
Configuration	One 1x10, up to Four 1x10
Signal type	Analog, bi-directional
Signal connector	Stainless steel female SMA
Frequency range	DC - 18GHz (min)
Impedance	50 ohm
Insertion loss	<0.30dB @ 4GHz
	<0.35dB @ 8GHz
	<0.40dB @ 12GHz
	<0.50dB @ 18GHz
Repeatability	<0.10dB max
Crosstalk isolation (min)	>75dB @ 4GHz
	>70dB @ 8GHz
	>65dB @ 12GHz
	>60dB @ 18GHz
VSWR	<1.2 : 1 @ 4GHz
	<1.3 : 1 @ 8GHz
	<1.4 : 1 @ 12GHz
	<1.5 : 1 @ 18GHz
Maximum power	100 watts @ 2.5GHz
	40 watts @ 18GHz
Switching speed	<50mS (plus control time)

General Specifications

Module size	Quad (C2)
Control type	Register based (V1.4)
Sparing	Field replaceable elements
Construction	Shielded aluminum case
Mating SMA torque	8 inch pounds MAX
DC power	+5V @ 1A plus 125mA/closure
	+12V @ 310mA (50mS duration)
Weight	<3lbs
Operating temp	0 to +70C
Non-operating temp	-20 to +85C
Humidity	0 to 95% (NC @ +25C)
Contact life	>1,000,000 operations (per port)
MTBF	>75,000 hours
	(per MIL-HDBK-217F, N1
	ground benign @ +25C)

Universal Switching's policy is one of continuous development, and consequently the company reserves the right to vary from the descriptions and specifications shown in this publication.

7145 Woodley Avenue, Van Nuys, CA USA
Phn (818) 785-0200 Fax (818) 785-0680 E-Mail sales@uswi.com

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

US Universal Switching Corporation

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