

General

The relay-based VXI-RMR46 coaxial microwave switching module provides a flexible medium 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 individual normally open 1x6 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.

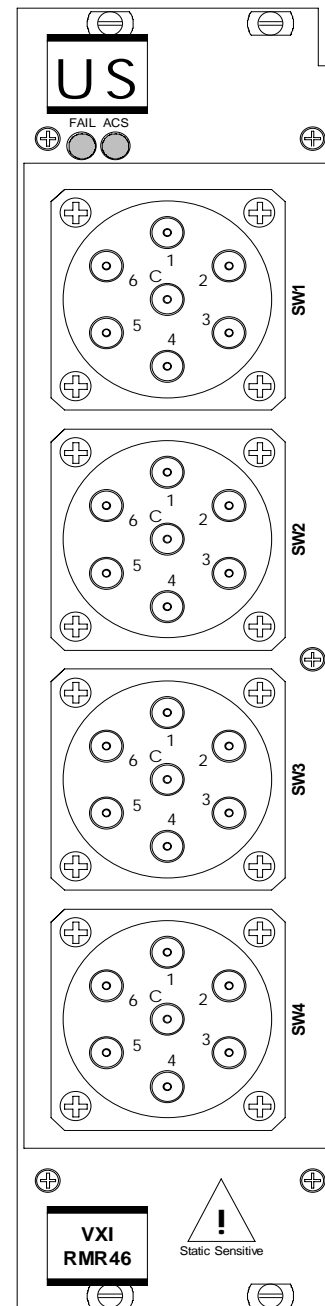
The number of sections included is determined by the model number. A reduced configuration can be further populated while in the field. Additional configurations are available on special order.

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-RMR46-001Single 1x6
- VXI-RMR46-002Dual 1x6
- VXI-RMR46-003Triple 1x6
- VXI-RMR46-004Quad 1x6

Construction

The diagram below shows the overall physical configuration of the VXI-RMR46 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.

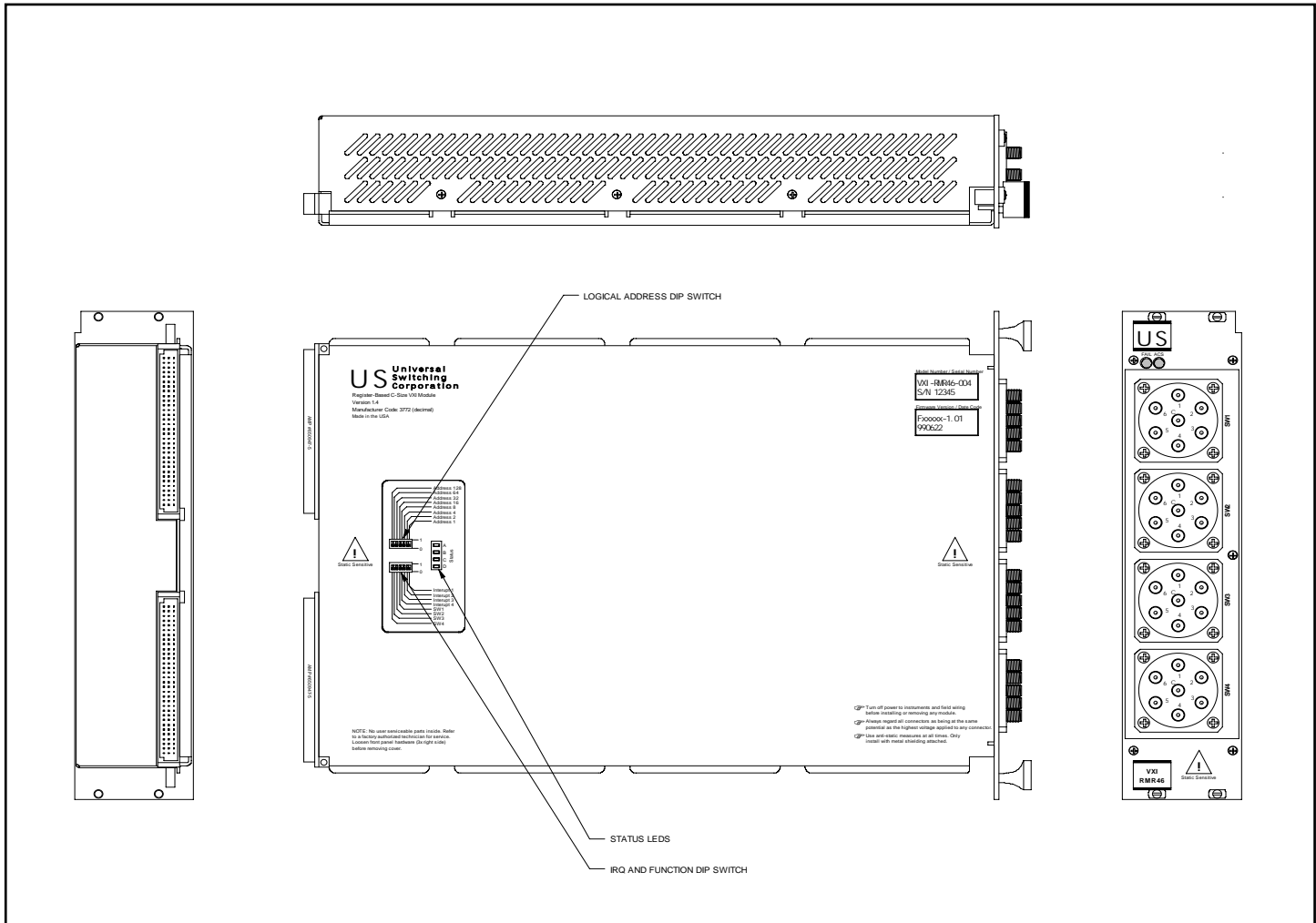
The module faceplate provides two additional status LED's. A red LED is labeled ERR to indicate error conditions, and a blue LED illuminates when the module is addressed by the VXI slot 0 controller.

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-RMR46 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. 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.



VXI-RMR46-001

VXI-RMR46-002

VXI-RMR46-003

VXI-RMR46-004

