# MultiPort RF Routing System
**Model R232**



**Model R232  2 Output X 32 Input Switch with Gain**

## FEATURES

- Dual non-blocking outputs – any source can be routed to any output

- Ultrawide operating range of 5MHz – 2GHz covers all carriers and DOCSIS 3.1 upper band specifications

- 20dB input to output gain

- Unique side attached Pocket Power Supply™ places more ports in a smaller rack "foot-print" without an external power block

- Unused inputs and outputs terminated into 75Ω

- Dual color LED front panel indicators to monitor/verify port selections

- Web-based user controls with credentialed username/password access

- Digital Alert Systems X-point Control Protocol (MXCP™) automation/test instrument interface over TCP/IP

## APPLICATIONS

- Test port monitoring across several ports with benefit of gain to improve accuracy and results

- Multiple port sharing – enabling one switch to support multiple test instruments for space savings and lower per-port cost

- Network control allows remote port selection for test monitoring over LAN/WAN interface

## DESCRIPTION

Digital Alert Systems continues to embrace the future and push cable technology with the Model R232 MultiPort RF Routing System. Unlike any regular RF switch, the R232 encompasses many features never before offered in a RF switch design, all in a compact and affordable package.

The R232 starts off with a multiple-input – multiple-output switching matrix featuring dual independent A & B outputs that can select any of the 32 inputs. Since the R232 uses two matrixes, the outputs are non-blocking, so each output is completely independent of the other and can share the same input or any other input. This makes the R232 truly unique for test monitoring as different instruments or monitors can be configured on each output and then look at the same or any other input. Never before has it been this easy to monitor one port and compare it with another port using the same or different test heads. Speed up testing and perform more thorough examination in much less time and with much less equipment.

Adding to the suite of R232 features is the 20db of gain from input to out-put, which is able to pull signals up to valid testing levels without introducing performance errors over the operating band, and to minimize noise it shunts unused inputs and outputs directly in to 75Ω

The future of Hybrid Fiber Coax plants requires using even greater band-width on the coax side. Services like DOCSIS 3.1 and many others requires ever increasing bandwidth and the R232 is up to the task, operating up to 2GHz – well beyond even the most current standards.

Port selection is accomplished via a 10/100 Ethernet control port using a simple browser interface or the exclusive Digital Alert Systems CrossPoint Control Protocol (MXCP™) making interfacing with automation and test equipment substantially easier over less sophisticated or manual controls.

The R232 features the unique side-attached Pocket Power Supply™ to create the densest, most compact 1RU chassis design without resorting to external power blocks and boasts top-notch performance from 5MHz to over 2GHz with 20db of gain making it perfect for large-scale test port management.
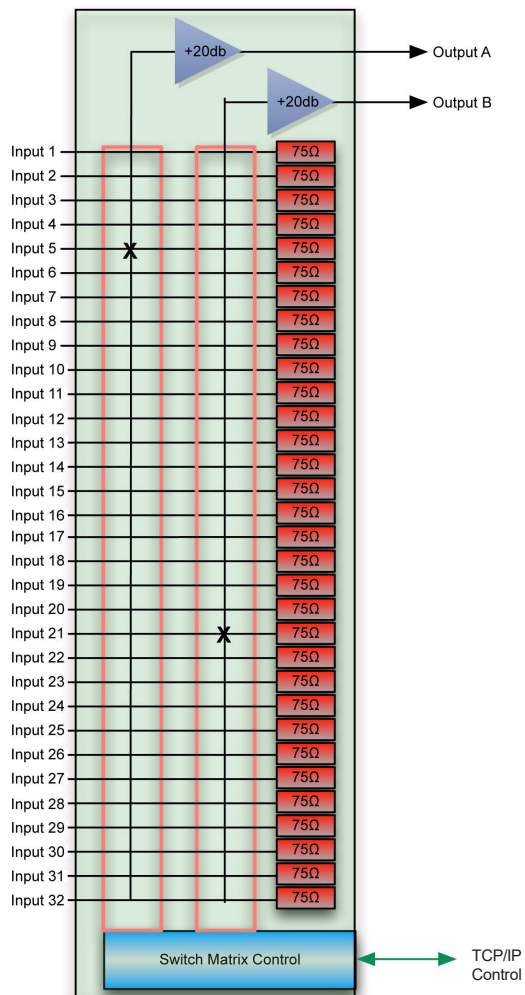
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## PANEL



R232 Front
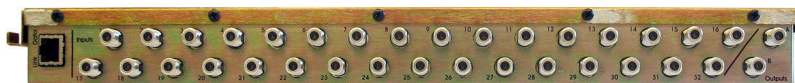


R232 Back

## BLOCK DIAGRAM

Diagram shows routing examples:
- Input 5 routed to Output A
- Input 21 routed to Output B



## SPECIFICATIONS

**Input Ports**
- 32 labeled 1 - 32

**Output Ports**
- 2 labeled A & B

**Connectors**
- "F" Type 75Ω

**Operating Bandwidth**
- 5MHz - 2.0GHz

**Flatness**
- ±2.5 dB Over operating bandwidth

**Input Signal Level**
- Maximum +15dBmV
- Minimum -11dBmV

**Gain**
- +20 dB Input to Output

**Isolation (port-port)**
- -55dB

**Return Loss**
- >15dB

**Routing**
- Dual 32 x 1 switching matrix forms a non-blocking 32 x 2 switching array in a single package
- Any input can be routed to either or both of the outputs

## CONTROLS

**LAN Interface** TCP/IP Ethernet
- One (1) 10/100BASE-T Ethernet IEEE 802.3
- RJ-45 connectors suited for wiring CAT-5 or above
- Port features green link and data indicators
- Assignable IP addressing either fixed or DHCP (unit ships set fixed at 192.168.0.232)

**Front Panel Display**
- Output A - Green
- Output B - Amber
- Power - Blue

**Physical Attributes**
- 19.0 in W x 12.75 in D x 1.75 in H (1RU EIA rackmount)

**Power Requirements**
- 90-240 VAC, ±2%, 50-60Hz @ 0.2 Amps (20 watts)
- Right-angle removable IEC power cord

**Weight**
- 10.0 lbs



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100 Housel Ave., P.O. Box 535
Lyndonville, NY 14098
(585)765-2254  (585)765-1155   fax (585)765-9330
www.digitalalertsystems.com