

1582-725 RF Protection Switch

The 1582-725 RF Switch has two independent switches (A and B) in a single 1 3/4" chassis. Each switch provides Auto, Manual, or Remote relay switching between CH1 and CH2. Alarm conditions on CH1 and CH2 are detected if a contact closure (to ground or an open, selectable) occurs. Switching logic can be selected as follows:

1) CH1 Prime Mode - Switches from CH1 to CH2 only if CH1 alarms and CH2 is good.

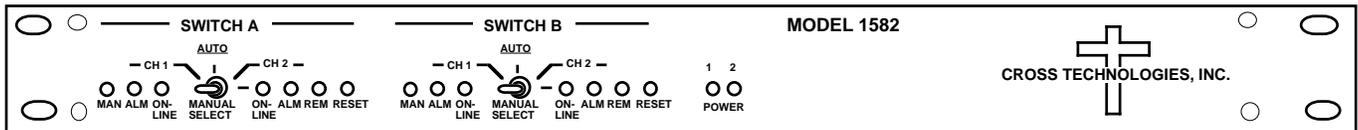
Switches back to CH1 when it is no longer in alarm or when both CH1 and CH2 are in alarm.

2) Latch to CH2 Mode - Switches from CH1 to CH2 if CH1 alarms and CH2 is good.

Latches to CH2. Push Reset or ground Remote Reset pin to return to CH1 if it has no alarm or both CH1 and CH2 are in alarm.

3) Minimum Auto switching, Initial Channel Select (ICS) Mode - Switch stays on channel last selected by Manual or Remote selection after return to Auto if both channel alarms are clear or both channels are in alarm. Auto switching occurs only if current channel alarms and the other channel is clear. Factory set mode is generally **(1) CH1 Prime Mode**.

When power is first applied and there are no alarms, CH1 is selected. On power loss CH2 is the selected channel. The Manual Select switch and contact closures to Remote Select pins (when in Auto), select CH1 or CH2 independent of alarms. LEDs indicate alarm and switch conditions for CH1 and CH2, REMOTE or MANUAL operation, and power on. RF connectors are BNC, female. Contact closure inputs and outputs are via barrier strip. Dual power supplies provide redundant power to the 1582-725. Chassis is a 1 3/4" rack mount.

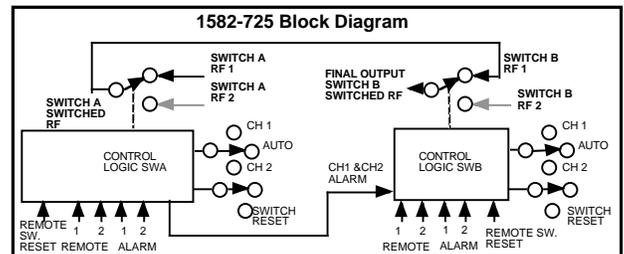


1582-725 RF

EQUIPMENT SPECIFICATIONS*

Switch Characteristics

Impedance	75Ω
Type/Configuration	Non-Latching Relay, DPDT
Insertion Loss	1.5 dB max., ≤1.0 dB, typ, DC to 1.5 GHz 2.5 dB max., ≤2.0 dB, typ, 1.5 to 2.5 GHz
Frequency Response	±0.5 dB, any 40 MHz BW, DC to 2.5 GHz
Return Loss	≥12 dB max., ≥14 dB, typ, DC to 1.5 GHz ≥10 dB max., ≥12 dB, typ, 1.5 to 2.5 GHz
Isolation	-55 dB max., ≤-60 dB, typ, DC to 1.5 GHz -45 dB max., ≤-50 dB, typ, 1.5 to 2.5 GHz
Switch time	≤10 milliseconds



Controls

MANUAL SELECT	Manually select CH1, CH2, or Auto operation. If operating in the ICS mode, the last channel manually selected (CH1/CH2) will be the initial channel if both channel alarms are clear or both channels are in alarm.
SWITCH RESET	Resets switch to CH1 if it is good and switch is in the latch mode, Also Resets REMOTE by returning operation to Auto

Indicators, LEDs

CH1 ON-LINE	Turns green when Channel 1 is selected
CH2 ON-LINE	Turns green when Channel 2 is selected
MANUAL	Turns red when the Manual Select switch manually selects channel 1 or 2.
ALARM CH1	Turns red when an external alarm input (closure or open, selectable)
ALARM CH2	Turns red when an external alarm input (closure or open, selectable)
POWER 1	Turns green when power is applied to AC1 input on the rear panel
POWER 2	Turns green when power is applied to AC2 input on the rear panel
REMOTE	Turns amber when REMOTE control is active

Other

Mechanical	19 inch standard chassis 1.75"high X 12" deep
Power	Redundant power supplies; 100 - 240 ±10% VAC, 47 - 63Hz, 30 watts

*10°C to 40°C; 2000m max elevation; 80% max humidity; Specifications subject to change without notice