

**USERS MANUAL
LNR SMART SWITCH™ SERIES
EIGHT CHANNEL
PROTECTION SWITCH**

PART NO. 015845, AND 015844

REV. A *For Set up use*
RS-422-1

LNR

180 MARCUS BLVD. • HAUPPAUGE, NY 11788

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CODE IDENT NO. 51029

960115

SECTION I GENERAL DESCRIPTION

1.1 PURPOSE AND FUNCTION

The LNR model SMART SWITCH, is designed to operate as a flexible multi configuration system level protection switch when used in conjunction with all LNR synthesized SLIMLINE frequency converters. The unit with advanced microprocessor controlled logic circuitry is capable of service involving backup, or switch out for failure protection for the following:

- One 1:8 converter system (Either all up converters, or all down converters.)
- Two 1:4 converter systems (Either 2 up converter, or 2 down converter systems, or one of each).
- One 1:2 Up converter system, plus one 1:6 down converter system.
- Four 1:2 systems (any mix of up or down converter systems).

This manual is divided into six functional sections as follows:

SECTION:

- I GENERAL DESCRIPTION**
- II INSTALLATION**
- III OPERATION**
- IV MAINTENANCE**
- V PARTS LIST**
- VI DIAGRAMS**

1.2 CAPABILITIES

The SMART SWITCH series of protection switches usable in the configurations listed in the above text, are intended for 70 MHz, and 140 MHz Intermediate Frequency (IF.) operation within the CONTROLLER/ IF SWITCH ASSEMBLY, LNR part no. 015845. In addition, dual polarity down converter input frequency selection capability may be incorporated into this assembly.

RF. switching functions are provided by the companion unit RF. SWITCH ASSEMBLY, LNR part no. 015844. This assembly as determined by specific type may be configured to satisfy the protected transmit link frequencies ranging from 5.850 GHz to 14.50 GHz

All channel switching capability installed within the units utilizes outboard coaxial inter channel connection. The unit is rapidly upgraded in the field with purchased channel upgrade kits. The upgrade kits are installed without service interruption, and without removing the respective assemblies from the equipment rack.

1.3 DESCRIPTION

The SMART SWITCH is completely self-contained, requiring only connection to the LNR synthesized SLIMLINE frequency converters to operate. The CONTROLLER/IF SWITCH unit is housed in a three and one half in. (2RU) rack mountable chassis. The RF SWITCH ASSEMBLY, is housed in a five and one quarter inch rack mountable chassis. All manual controls and indicators are located on the unit front panel. The remote control interface function accessibility is located on the rear panel.

Refer to Table 1 for GENERAL CHARACTERISTICS:

TABLE 1 GENERAL CHARACTERISTICS

Dimensions:

Height	3.5 inches (Controller / IF switch assembly P/N 015845) 5.25 inches (RF Switch assembly P/N 015844)
Width	19 inches
Length	22 inches
Weight	Controller IF Switch Assembly...10 lb. (nominal) RF Switch Assembly 10 lb. (nominal)

Power requirements:

Voltage +24 Vdc, and +6 Vdc, supplied by LNR Frequency Converters.

Environmental Specifications:

Operating temperature: 0-+ 50 Degrees C.
Operating Humidity 0 - 98% (NON CONDENSING)

Controls Front Panel Keypad, Menu Driven -Alpha Numeric Display
Remote Relay Closure
Remote RS-422A (Optional)

Indicators Front Panel - Alarm and Status, Alpha Numeric Display
Rear Panel - Units on Line, Form A Relay Closure. Alarms, Form
A Relay Closure. Units in service, Relay Closure to GND.

