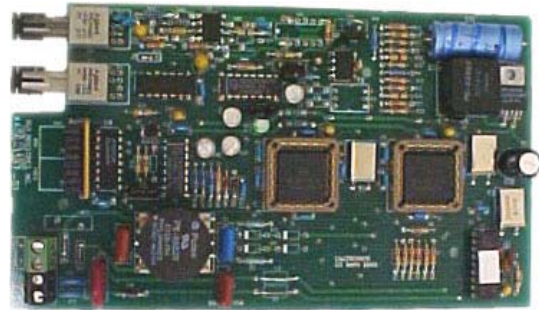


Fiber Type	2 Wire ISDN CO Card	2 Wire ISDN Sub Card
Multimode (62.5/125μ)	P/N 8806-1387-01	P/N 8806-1397-01
Single-mode (8-10/125μ)	P/N 8806-1388-01	P/N 8806-1398-01



**ISDN System Description**

These RLH Fiber Optic Link cards (Central Office and Subscriber) are an ISDN fiber optic repeater for Basic Rate Interface ISDN lines. ISDN signal is sensed and recreated at both ends conforming to 2B1Q formats.

**LED Indicators**

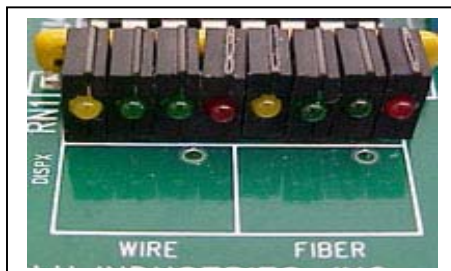
Wire end and fiber end connections are monitored and displayed using 8 LED display in the front of the card. 4 LEDs are for the wire end (left side) and 4 LEDs are for the fiber end (right side). LED functions are described as follows:

**YELLOW - ACTIVATE** The yellow LED indicates that there is activation in progress. When the activation process is completed, this remains on. This yellow LED may go out if a “deactivate” command has been sent from either the CO or subscriber side as a “power down” type command...

**GREEN - SYNC** The first green LED next to the yellow indicates Superframe Sync is successfully recognized. This validates the format with which ISDN 2B1Q data is being transferred. This means the proper format and timing has occurred and now the unit will search for a proper data format.

**GREEN - LINKUP** This LED indicates that proper data format and signal strength have been found and there is a valid link between both ends. The U-interface has now completed activation where full-duplex communication is valid. This LED can go out if the customer or CO send a Deactivate Request command. Once either source send an Activate Request command, the LED will return to its normal state. Normal linkup is accomplished with no command sent.

**RED - ERROR** This LED indicates there is an error. Causes of this error LED to activate are: 1.) Loss of frame signal 2.) More than 480 ms of loss of valid data signal or 3.) Failure to get response of activate (TL) tone from NT1 side.



## INSTALLATION

2 Wire ISDN CO and Sub Cards can be mounted in any RLH Card Housing. Copper telephone wires are connected via green screw done terminal marked **TEL** or **LINE**. The TEL / LINE terminal on the RLH 2 Wire ISDN CO and Sub Card is not polarity sensitive)

DC Power is connected via black screw done terminal marked **18-54 V DC** with positive and negative indications.

\*Note: The CO and Sub card must be powered from different sources to retain isolation protection.

Fiber is connected via transmit (TX) and receive (RX) optical connectors (ST Female) on the RLH 2 Wire Card. Be sure to route fiber loosely to avoid excessive optical loss. Be sure the TX optical is connected to the RX optical on the opposite end of fiber, i.e., if the #1 fiber is connected to the TX optical on the CO Card then the #1 fiber must be connected to the RX optical on the Sub Card.

### ISDN Specifications:

<b>Power requirement:</b>	750mW, 18-54 V DC, 31mA@24V/16mA@48V
<b>Operating external voltage:</b>	18 to 54 VDC
<b>Operating temperature:</b>	-40 to +85 degrees C.
<b>Line required:</b>	Basic Rate Interface (BRI) ISDN line
<b>Transmission Method:</b>	Amplitude modulated light via two optical fibers
<b>Connector Type:</b>	<u>Multimode:</u> ST <u>Single mode:</u> ST
<b>Maximum Fiber Length:</b>	<u>Multimode:</u> 5db minimum @ 820 nm; up to 2 miles (3.5 km) <u>Single mode:</u> 5dB minimum @ 1310 nm; up to 6 miles (10 Km) typical
<b>Humidity:</b>	95% non condensing
<b>Powering Method:</b>	<u>CO Card:</u> Isolated DC power source <u>Sub Card:</u> Isolated DC power source



**Sales and Customer Service: (800) 877-1672**  
**24 hour Tech. Support: (714) 366-2503 or (404) 925-0522**  
**[www.fiberopticlink.com](http://www.fiberopticlink.com)**