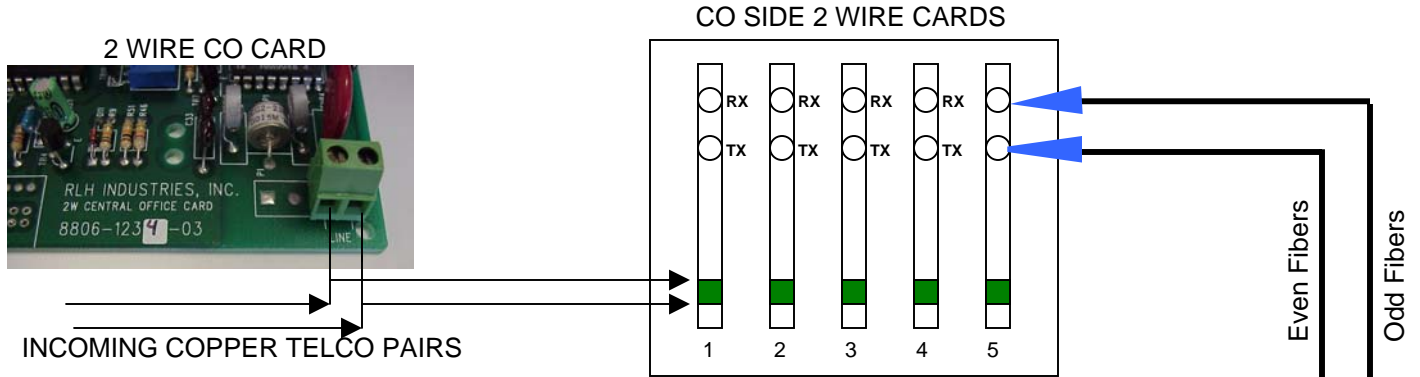


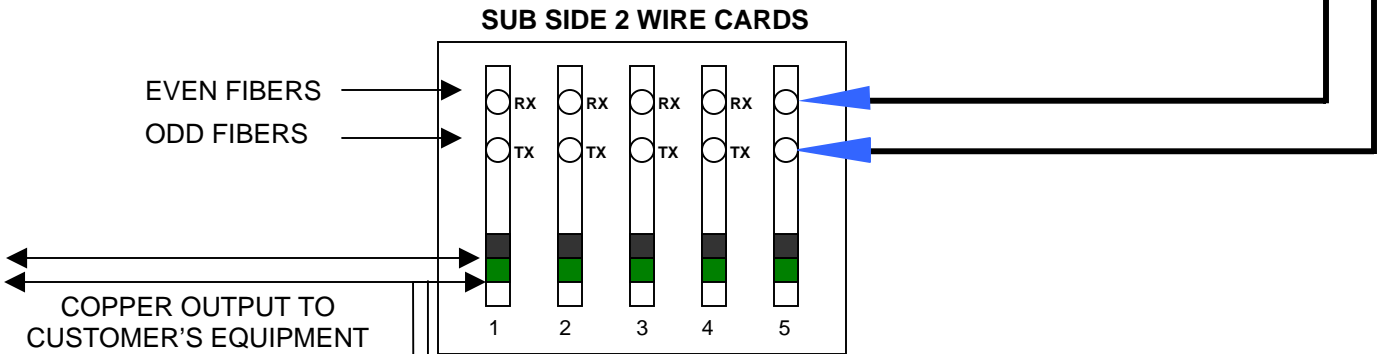
## 2 WIRE GENERAL SETUP DIAGRAM

CO SIDE 5 CARD SHELF WITH 2 WIRE CARDS INSTALLED



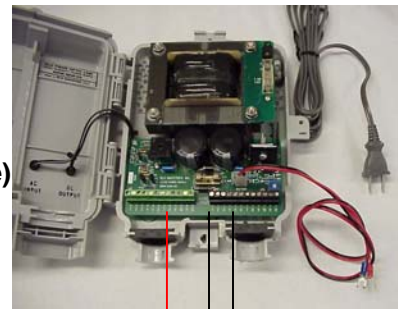
**COPPER**, EACH 2 WIRE CO SIDE CARD IS POWERED USING WORKING TELEPHONE PAIRS.

**FIBER** IS CONNECTED VIA TRANSMIT (TX) AND RECEIVE (RX) OPTICAL CONNECTORS 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.



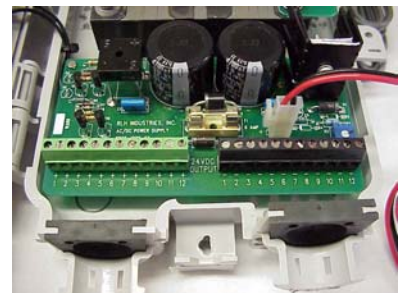
SUB SIDE POWER SUPPLY

24 VDC POWER SOURCE  
(48VDC 2-Wire Sub Card is available)



+

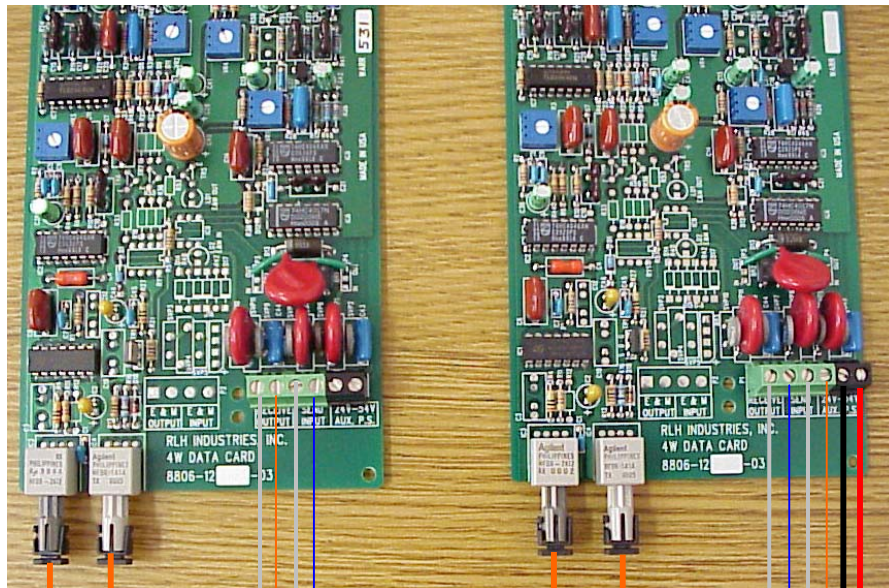
FROM THE 115/24 AC/DC POWER SUPPLY. PLACE + AND - INTO CORRECT TERMINALS.



**TYPICAL 4-WIRE SETUP**

**CO 4 WIRE CARD**

**SUB 4 WIRE CARD**



#1 FIBER →

← #2 FIBER

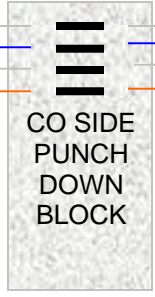
#2 FIBER →

← #1 FIBER

+  
CONNECT TO 24 TO 48 VDC POWER SOURCE  
-

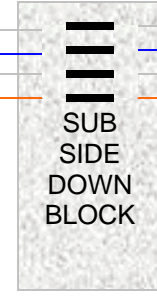
BLUE PAIR EXAMPLE ARE THE TRANSMIT OR SEND TELCO COPPER PAIRS  
ORANGE PAIR EXAMPLE ARE THE RECEIVE OR OUTPUT TELCO COPPER PAIRS

TRANSMIT (SEND) FROM TELCO →  
RECEIVE OR (OUTPUT) FROM TELCO →



CO SIDE PUNCH DOWN BLOCK

TRANSMIT (SEND) FROM TELCO →  
RECEIVE OR (OUTPUT) FROM TELCO →



SUB SIDE PUNCH DOWN BLOCK

COPPER TELCO OUTPUT TO CUSTOMERS EQUIPMENT

IN-COMING TELCO PAIRS

**COPPER TELCO PAIRS AND FIBER CONNECTION**

THE TELCO COPPER SEND (TRANSMIT) PAIR IS PLACED INTO CO FIBER CARDS (INPUT) ON FIBER CARD AND RECEIVE TELCO PAIR IS PLACED INTO RECEIVE (OUTPUT) ON FIBER CARD. PLUG YOUR SELECTED FIBER PAIRS INTO CO CARD (I.E #1 OR #2) USING SAME NUMBER FIBERS AT SUB CARD, FLIP OR TRANSPOSE, SEE DIAGRAM ABOVE.

AT SUB CARD, FLIP OR TRANSPOSE COPPER PAIRS AS SHOWN IN DIAGRAM ABOVE.

**AUXILARY POWER SOURCE TO THE SUB FIBER CARD**

AUXILARY DC POWER SOURCE VOLTAGE IS INSERTED INTO THE SUB CARDS AUXILARY POWER NPUT TERMINALS.

NOTE: 2 WIRE SUB CARD OPERATE AT 24-30 VDC, 4 WIRE CARDS OPERATE AT 24-54 VDC

CALL RLH INDUSTRIES, INC. AT 800-877-1672 IF ADDITIONAL INFORMATION IS REQUIRED.