

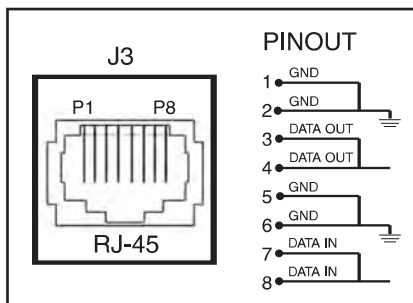
ADDENDUM

The Comnet FDX55 Series has recently undergone some **enhancements**.

The three **enhancements** are summarized here. **Please verify which version of the FDX55 you have by examining the front and rear panels for the following changes. These changes are reflected in this Installation and Operation manual and will allow you to correctly configure the device for proper operation.**

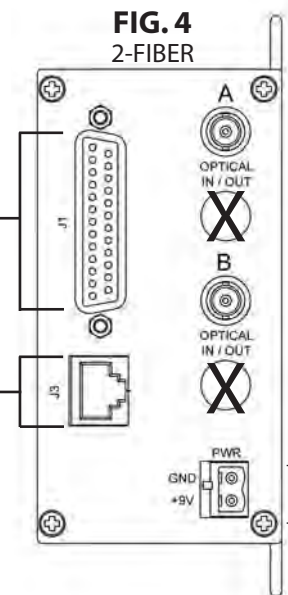
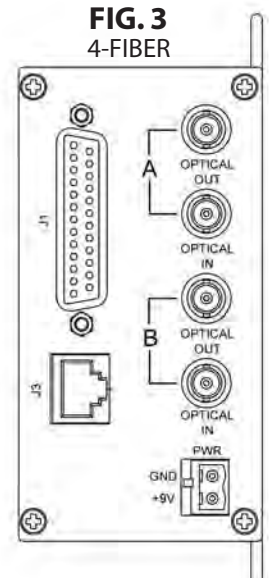
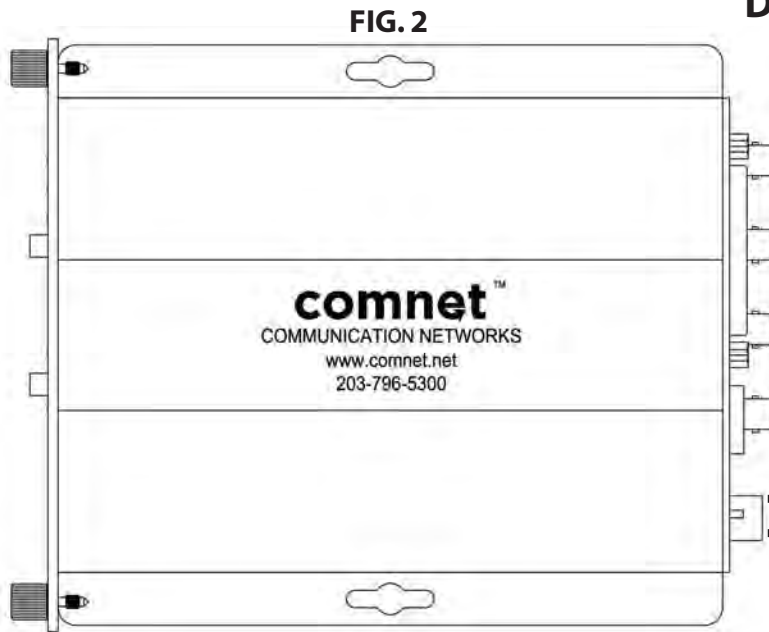
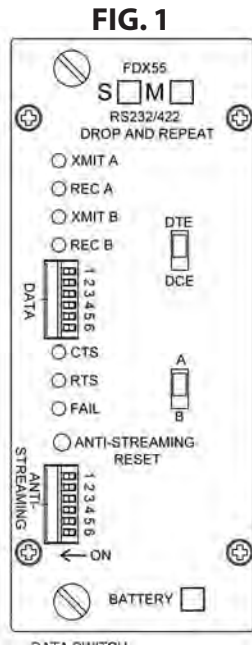
1) The silk screened printing on the front of each FDX55 Series device had previously shown a **"JABBER RESET"** button. The silk screened printing was changed and now reads **"ANTI-STREAMING RESET"** for this button.

2) Linking port J3 originally used an **RJ-45** receptacle. This now has been changed to an **RJ-11** receptacle.



3) The FDX55 was originally designed as a DCE device with a switch labeled **"NA/DCE"** to allow for possible future use as a true **"DCE/DTE"** switch. **The device has now changed to allow for the selection of DCE or DTE via the front panel switch labeled DTE/DCE. The setting of this switch is detailed later in this manual.**

RS-232/422 DROP AND REPEAT DATA TRANSCEIVER



LEDS: RED = "No Activity"
GRN = "Activity"
NOTE: RED DOES NOT MEAN "Error"

BLACK WITH WHITE STRIPE

BLACK

DATA CONNECTOR

LINKING PORT

ANTI-STREAMING SWITCH:

Anti-Streaming Timer (See Pg. 11, Fig. 18)

J1 CONNECTOR:

Input/Output Connector (See Pg. 8, Fig. 10)

J3 CONNECTOR/ A/B SWITCH:

Connects two FDX55 together electrically. one must be set for "A" and one for "B".
Factory Default: "A" (See Pg. 8, Fig. 11)

DATA SWITCH:

Selects connections between optical and electrical ports. (See Pg. 10, Fig. 16 and Fig. 17)

NOTE: Remove Electrical Connector for Rack Mount Units

1) ANTI-STREAMING SELECT SWITCH

The anti-streaming function is provided to protect the communications channel in the event that a controller should go into a streaming or data-storming condition.

If the anti-streaming is to be used, it must be set to a setting that will exceed the longest possible data transmission time that will exist on that channel. It should be noted that in most installations, the anti-streaming will not be utilized and the switch should be left in the factory default "Off" position. **See Pg. 11, Fig.18.**

2) DTE/DCE SELECT SWITCH

The purpose of this switch is to transpose the RS-232 data transmit and data receive signals. Normally, this switch will be left in the factory default "DCE" position.

See Pg. 9, Fig.12 through Fig. 15.

3) LINKING PORT, J3

J3 is an RJ-11 connector utilized for electrically connecting two co-located FDX55 units. For example, at some point on an east-to-west communications channel, it may be desired to extend the channel in the north-to-south direction. A second FDX55 may be added in the same cabinet as another existing FDX55, and the second unit would be utilized for extending the channel in the north-to-south direction. A conventional straight-through interconnect cable terminated at each end with RJ-11 connectors is required when connecting the two FDX55 units. It is desirable to keep the length of this cable as short as possible, so as to minimize any possibility of stray electrical pick-up corrupting the quality of the data, which could result in data errors. **See Pg. 8, Fig. 11 and Pg. 10, Fig. 17.**

4) A/B SELECT SWITCH

The purpose of this switch is to transpose the data transmit and data receive signals when connecting two co-located FDX55 units utilizing the J3 expansion port and a straight-through data interconnect cable. One FDX55 will be set to "A" and the second FDX55 will be set to "B". If a cross over cable is used, then both FDX55s would be set to "A". This interconnect cable should be kept as short as possible to eliminate EMI/RFI noise injection. Refer to Figure 1 for typical configuration. Factory default for this switch is "A". **See Pg. 1, Fig.1.**

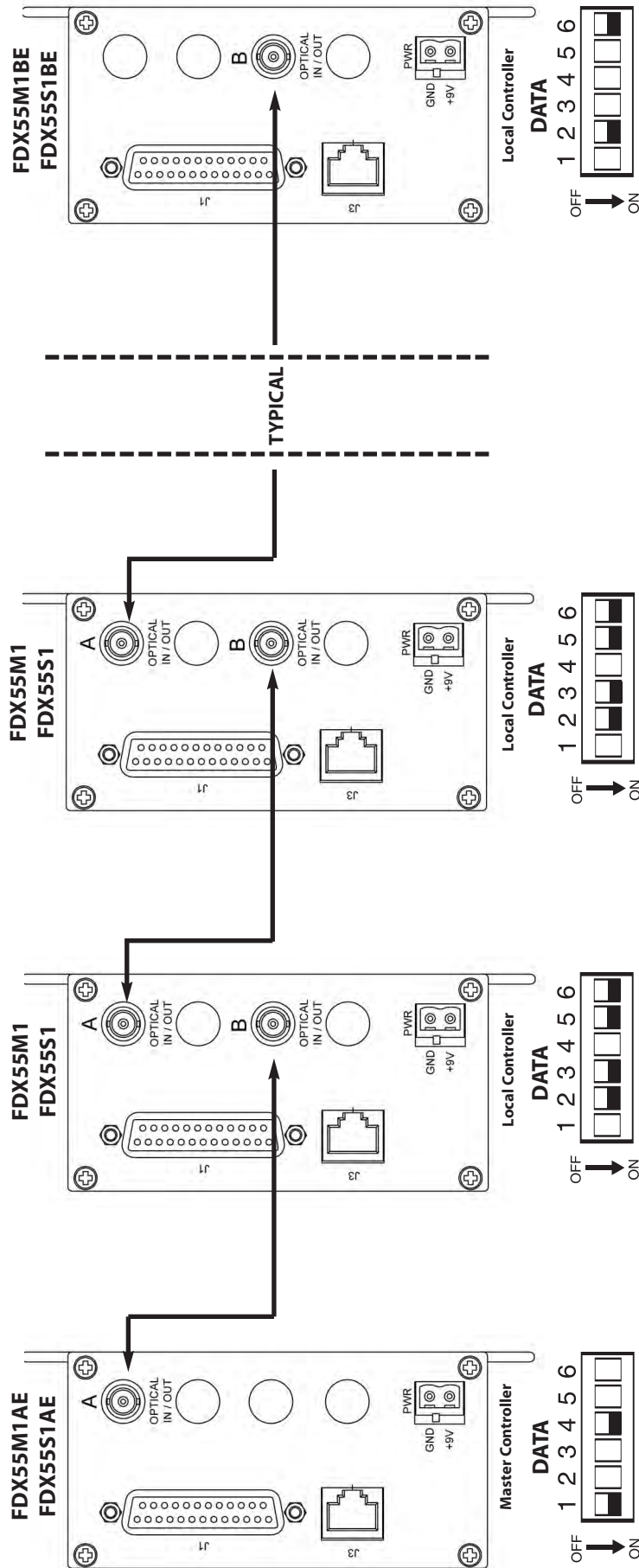
Power Sources - The product should only be operated from the recommended power source. Use only a UL Class 2 indoor/dry or Class 3 outdoor/wet power supply.

WARNING: Unit is to be used with a Listed Class 2 or LPS power supply rated 9-12 VDC @ 1A.

WARNING: This unit should be installed in a restricted access location; available through the use of a lock and key or other means of security. Access should be limited to service personnel who have been instructed about the reasons for the restrictions to the location. Any and all precautions should be taken and controlled by the authority responsible for the location.

FIG. 5

FDX55 TYPICAL REPEATER CONFIGURATION



FDX55 TYPICAL POINT-TO-POINT CONFIGURATION

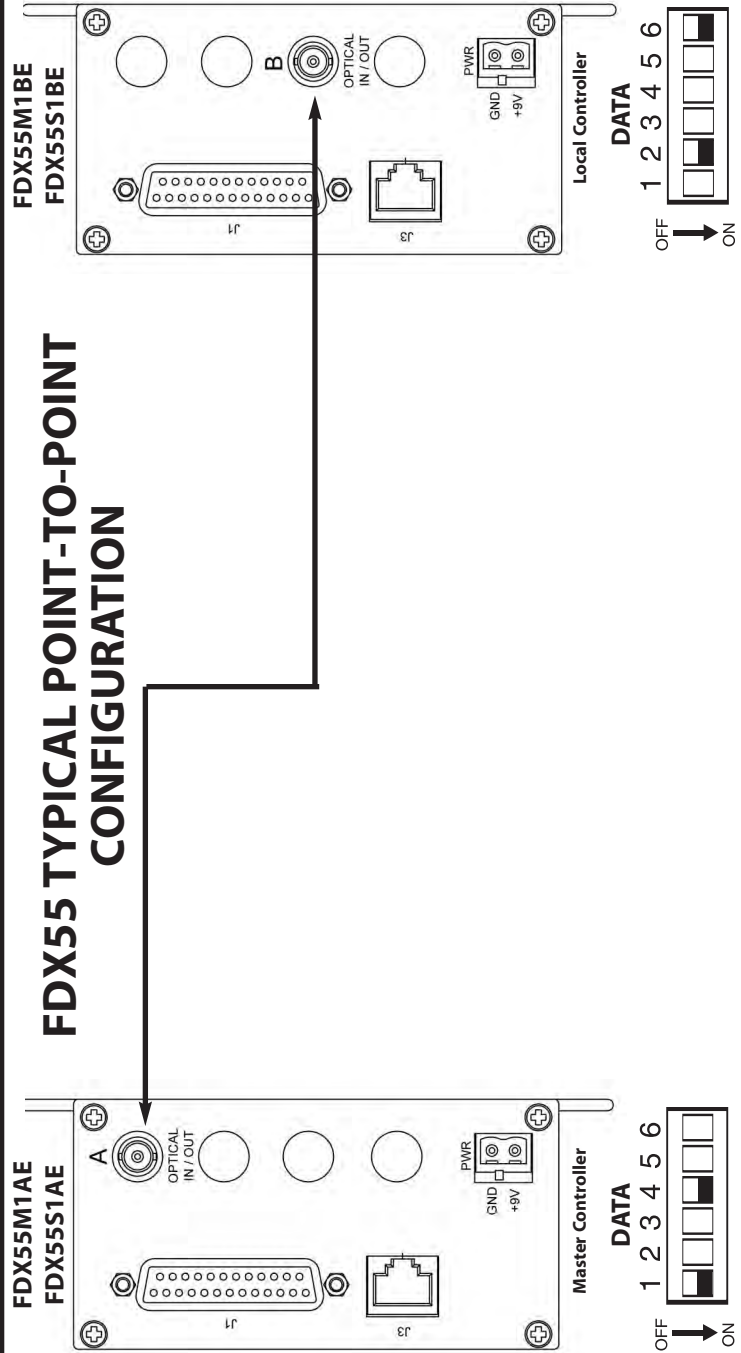
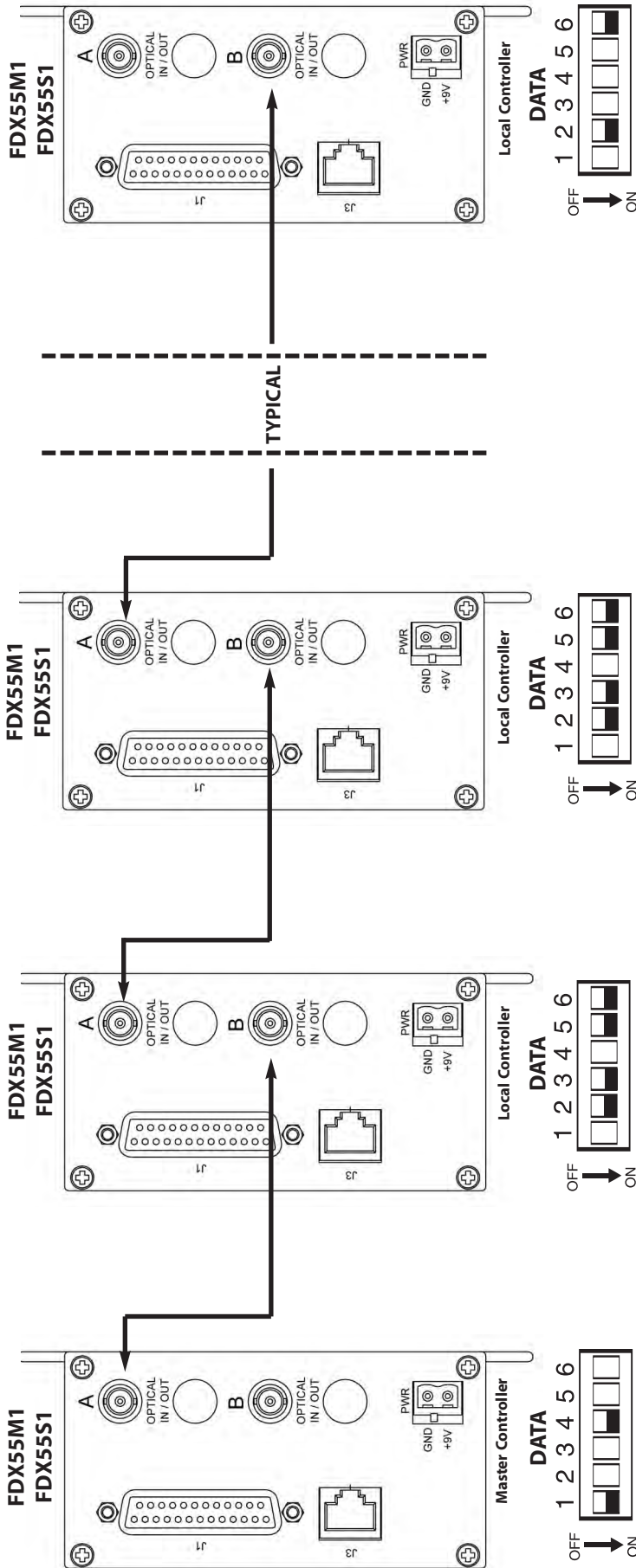
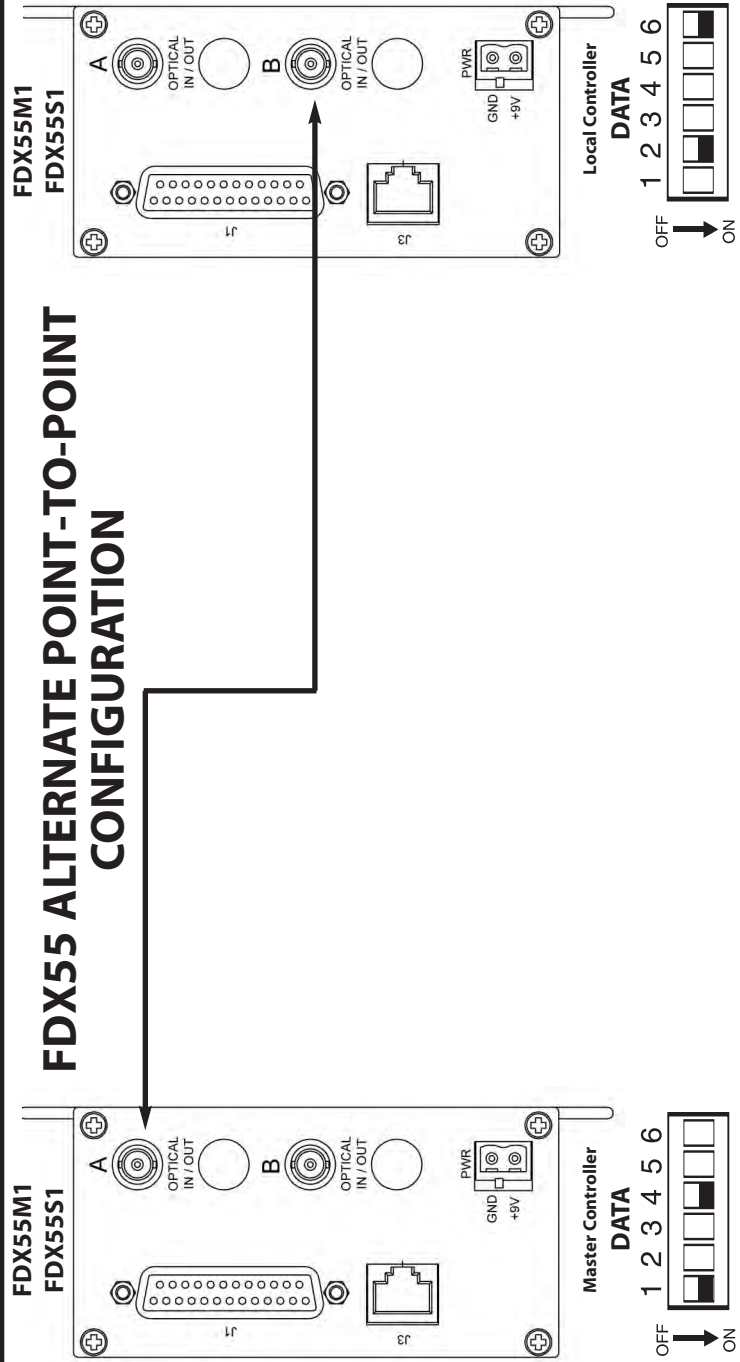


FIG. 6

FDX55 ALTERNATE DROP AND REPEAT CONFIGURATION

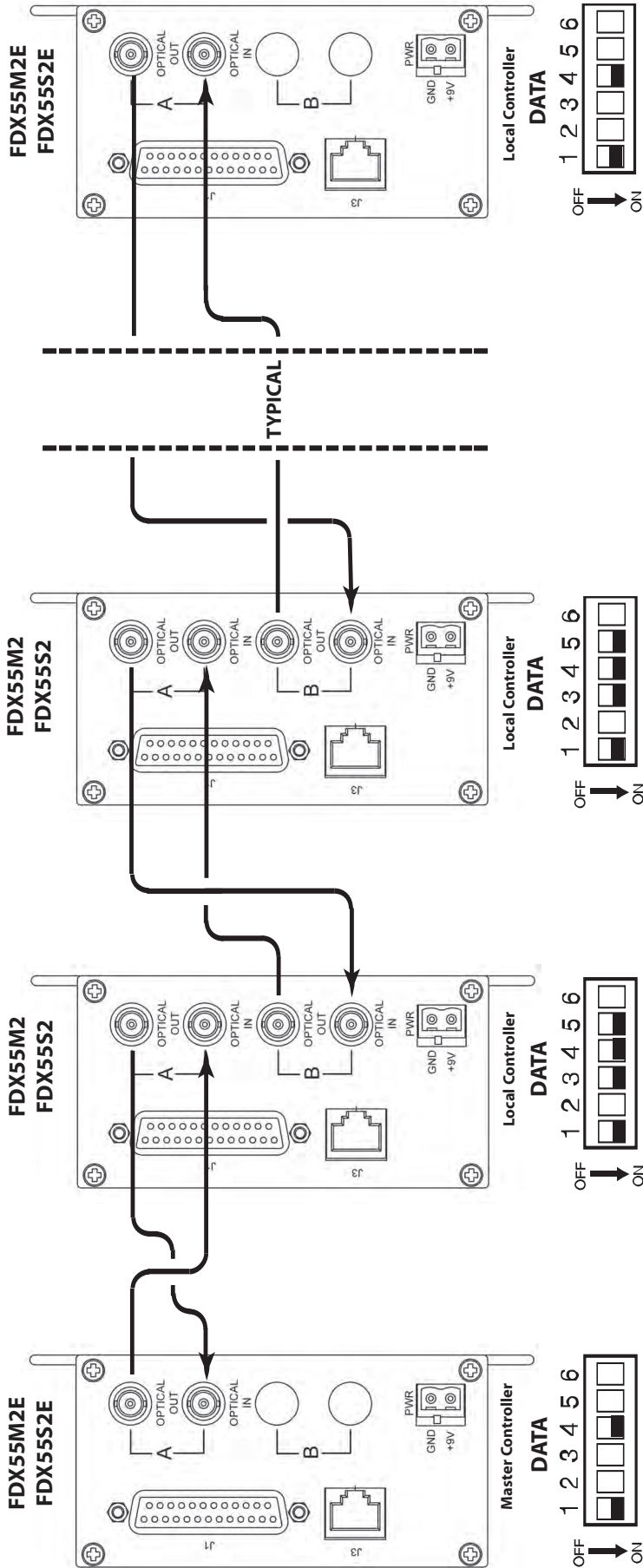


FDX55 ALTERNATE POINT-TO-POINT CONFIGURATION



FDX55M2 TYPICAL DROP AND REPEAT CONFIGURATION

FIG. 7



FDX55M2 TYPICAL POINT-TO-POINT CONFIGURATION

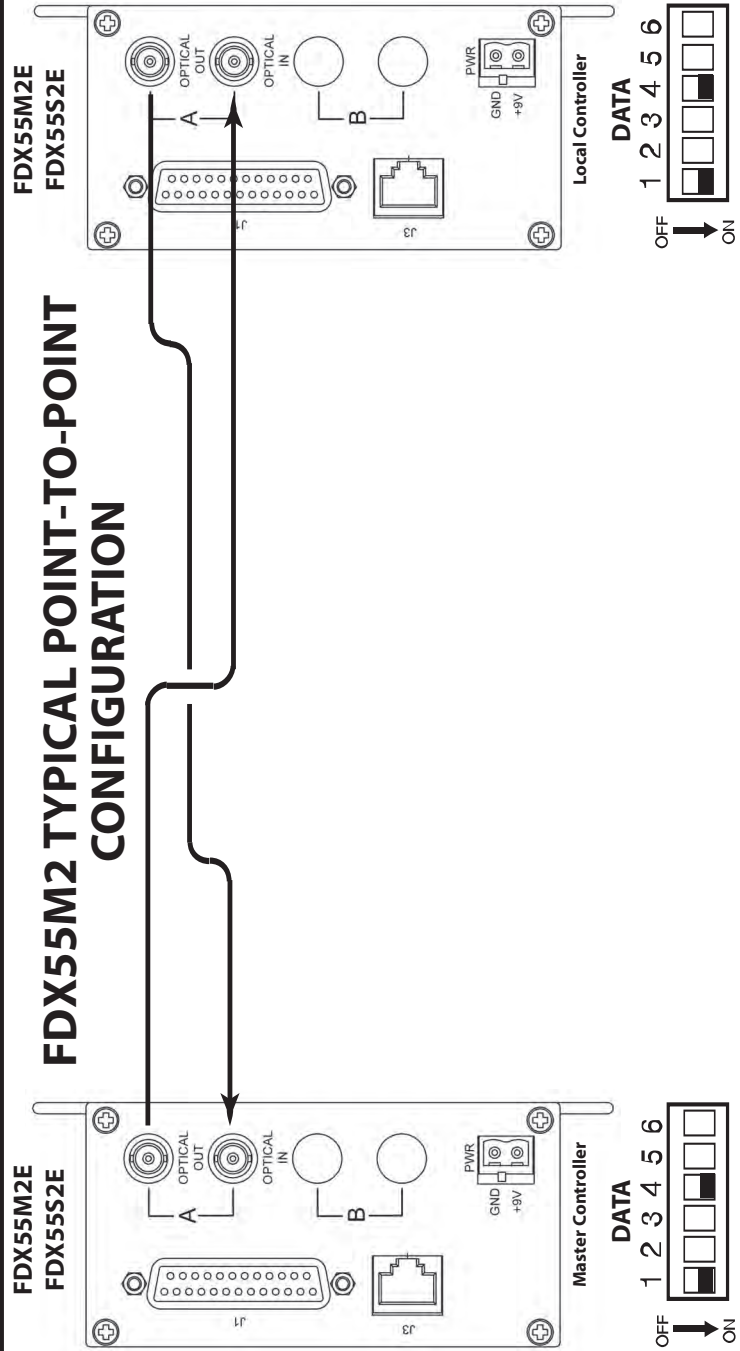
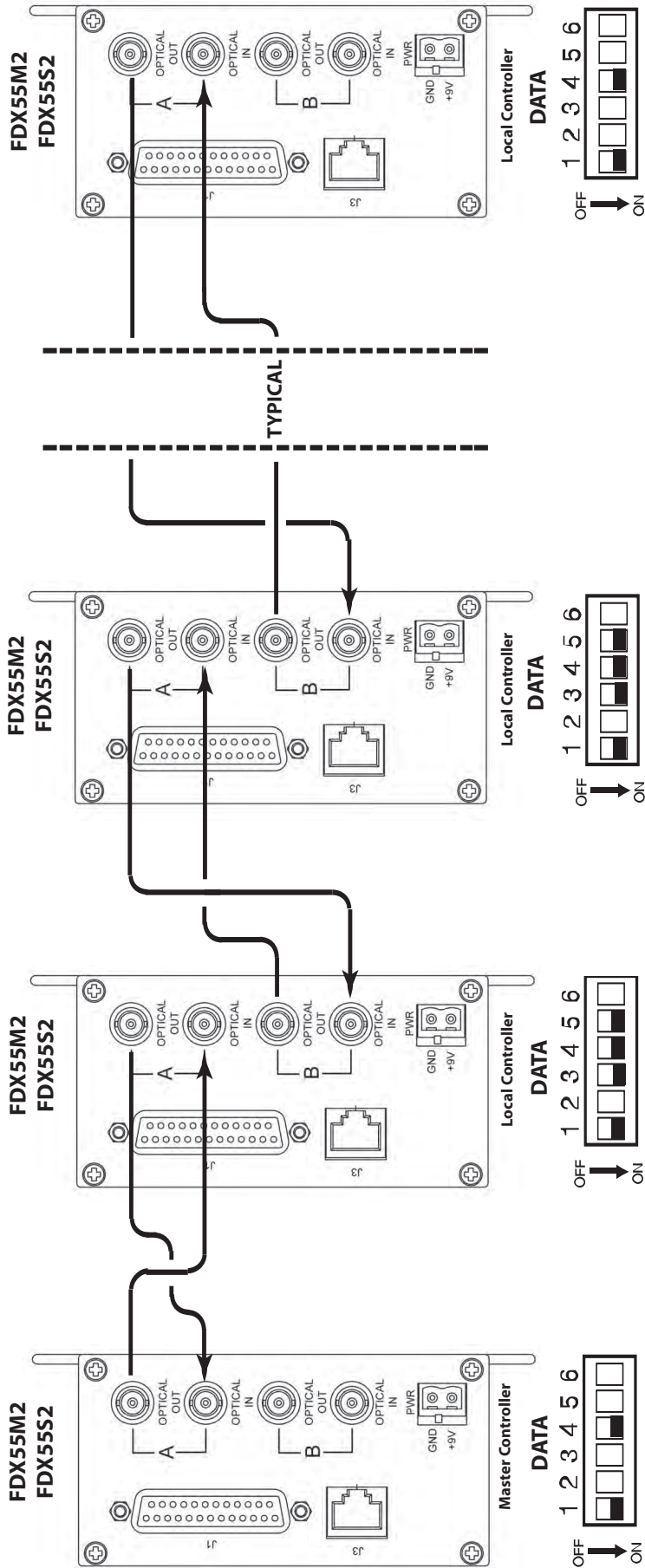


FIG. 8

FDX55M2 ALTERNATE DROP AND REPEAT CONFIGURATION



FDX55M2 ALTERNATE POINT-TO-POINT CONFIGURATION

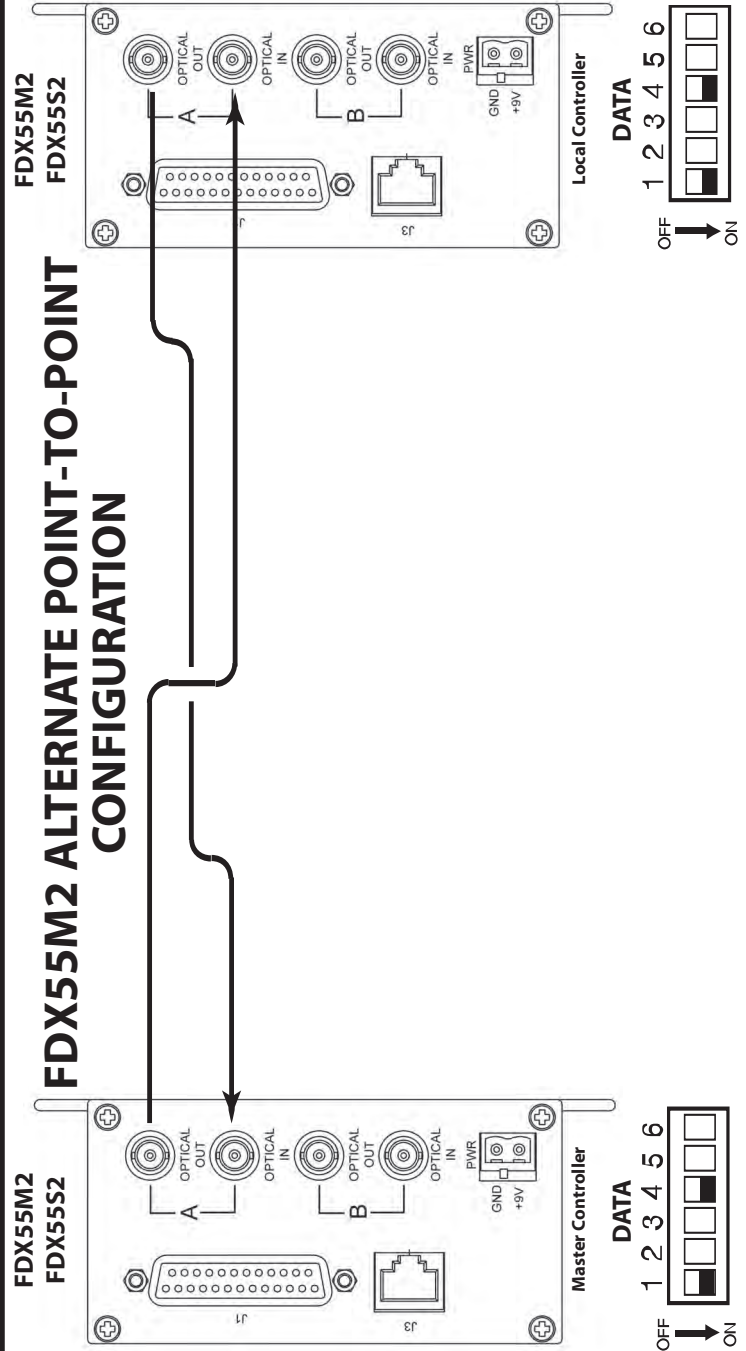
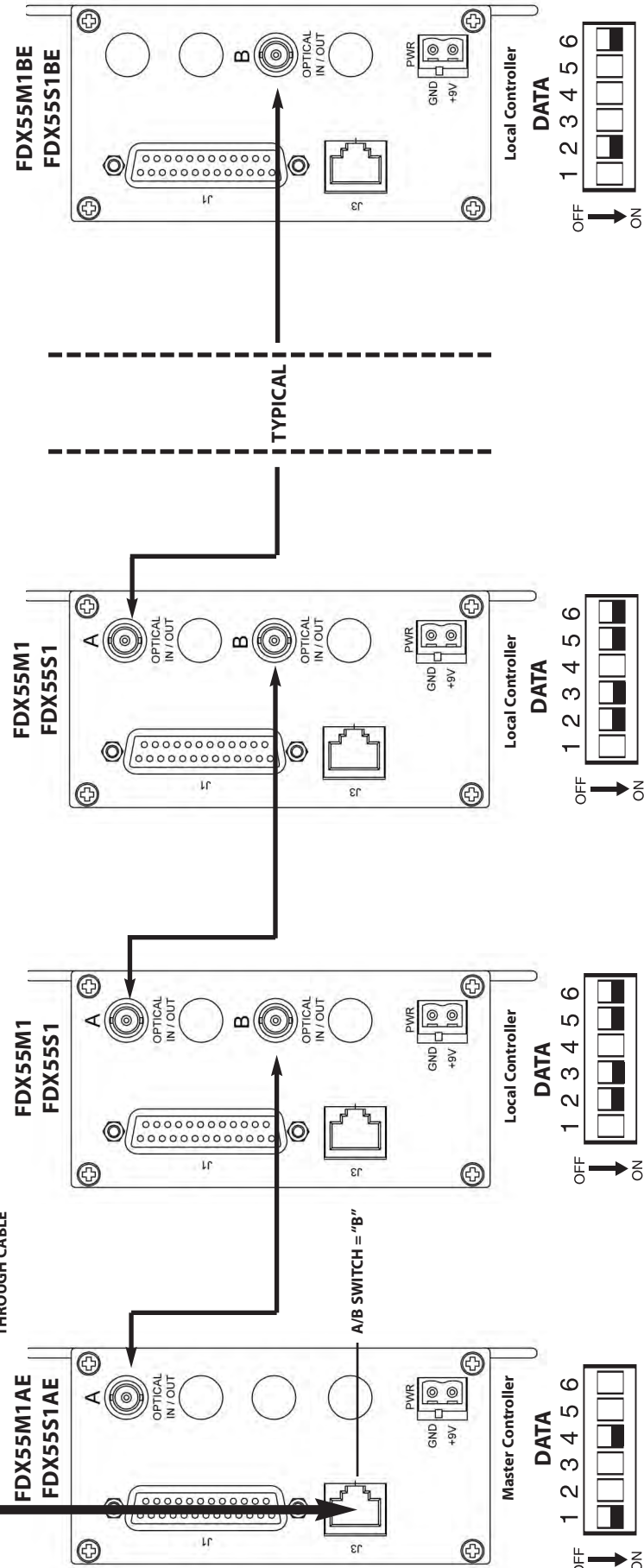
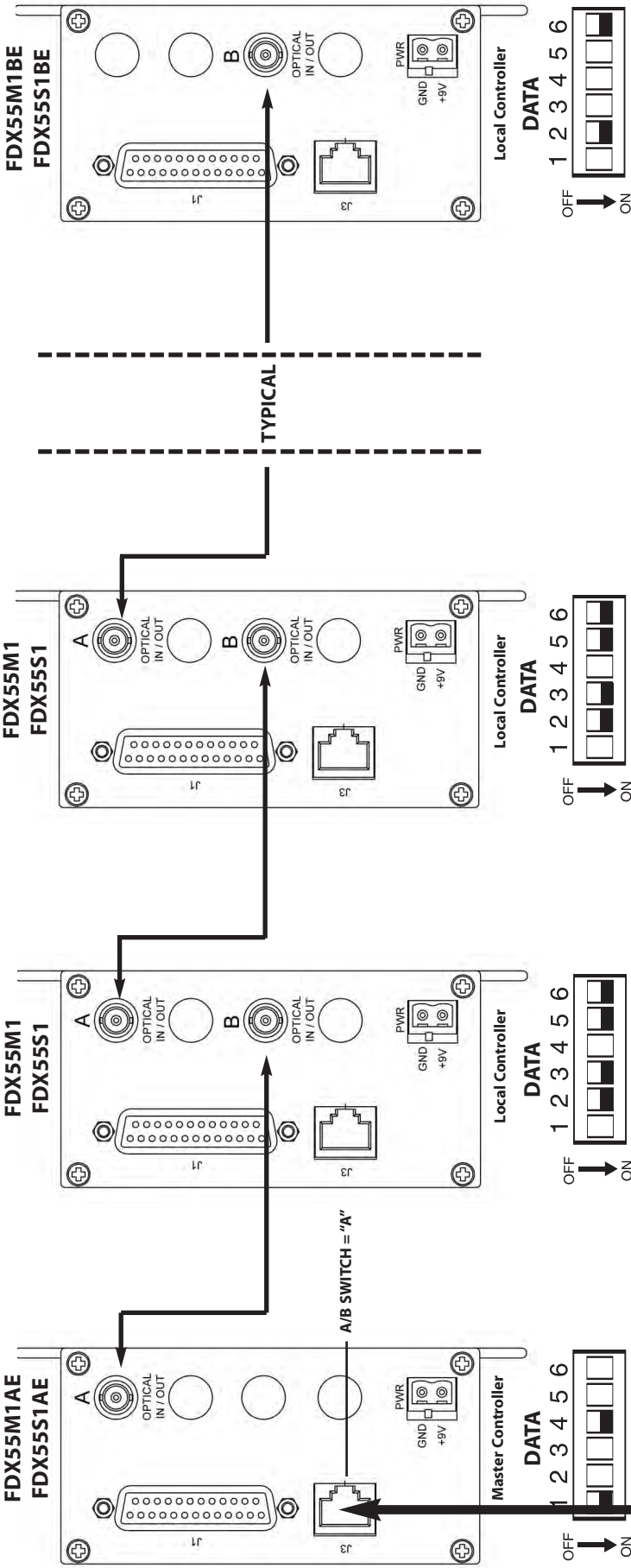


FIG. 9

FDX55 TYPICAL EXPANSION PORT J3 CONNECTION



INSTALLATION INSTRUCTIONS

RS-232/422 DROP AND REPEAT DATA TRANSCEIVER

FIG. 10

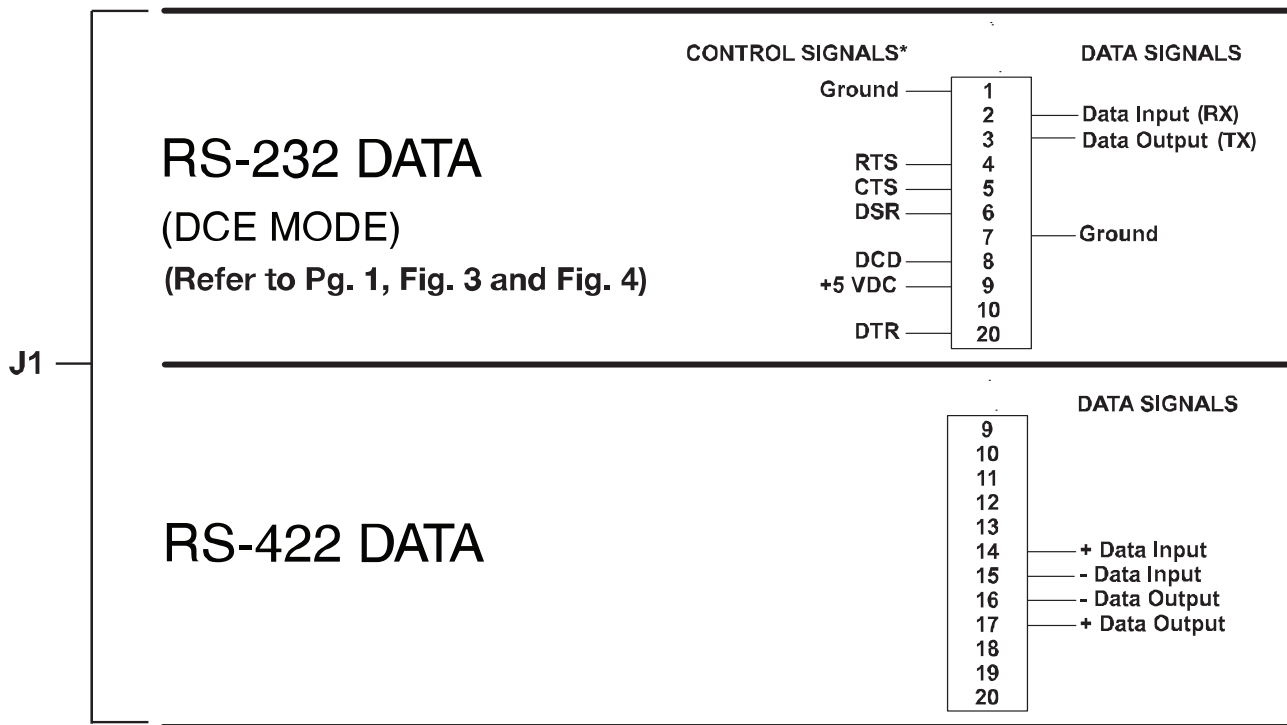
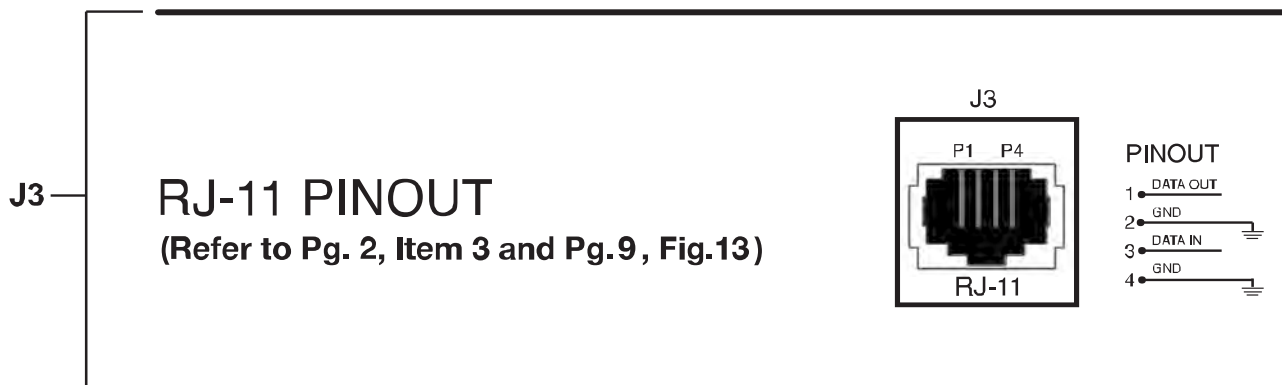


FIG. 11



INSTALLATION INSTRUCTIONS

RS-232/422 DROP AND REPEAT DATA TRANSCIVER

FIG. 12

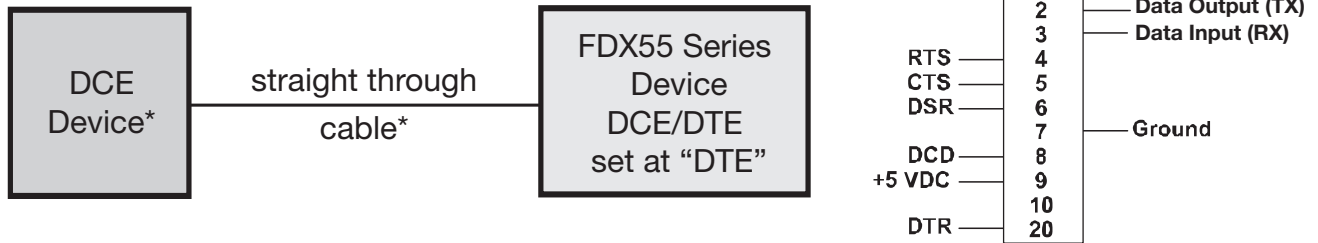


FIG. 13

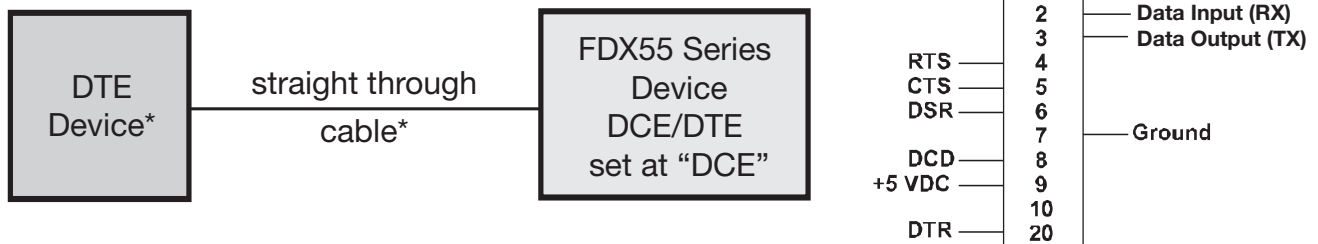


FIG. 14

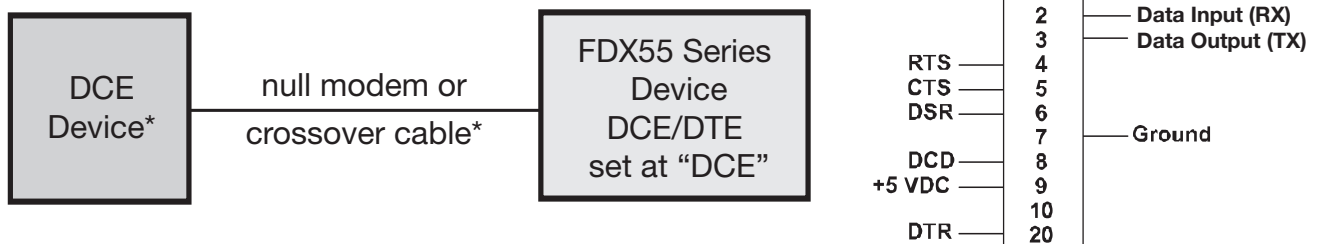
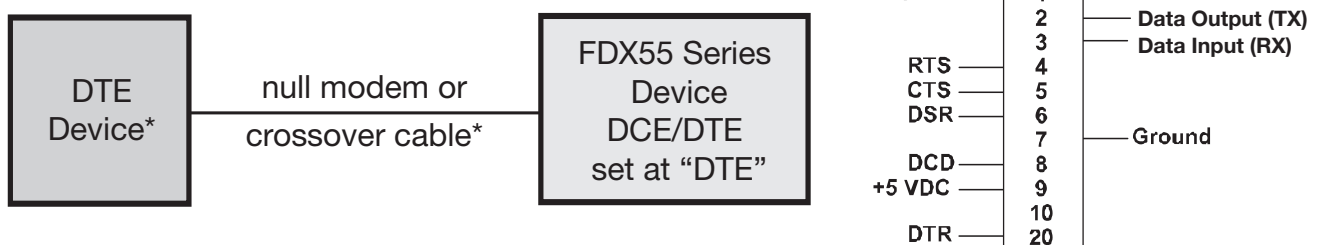


FIG. 15



*equipment supplied by others

INSTALLATION INSTRUCTIONS

RS-232/422 DROP AND REPEAT DATA TRANSCEIVER

FIG. 16

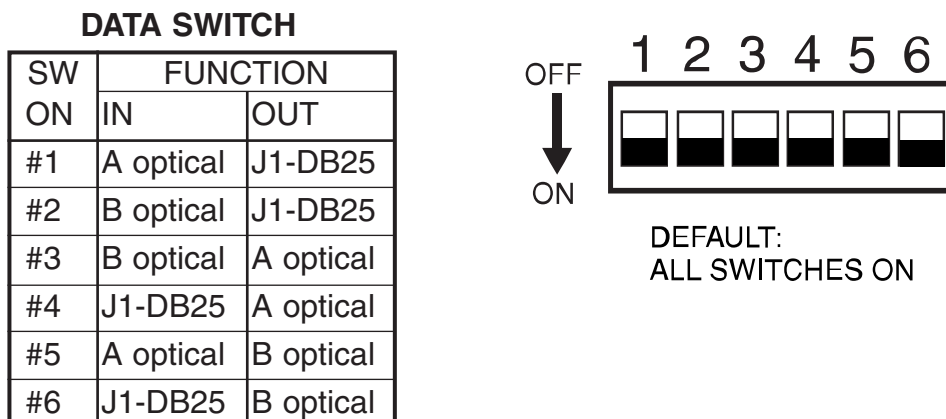
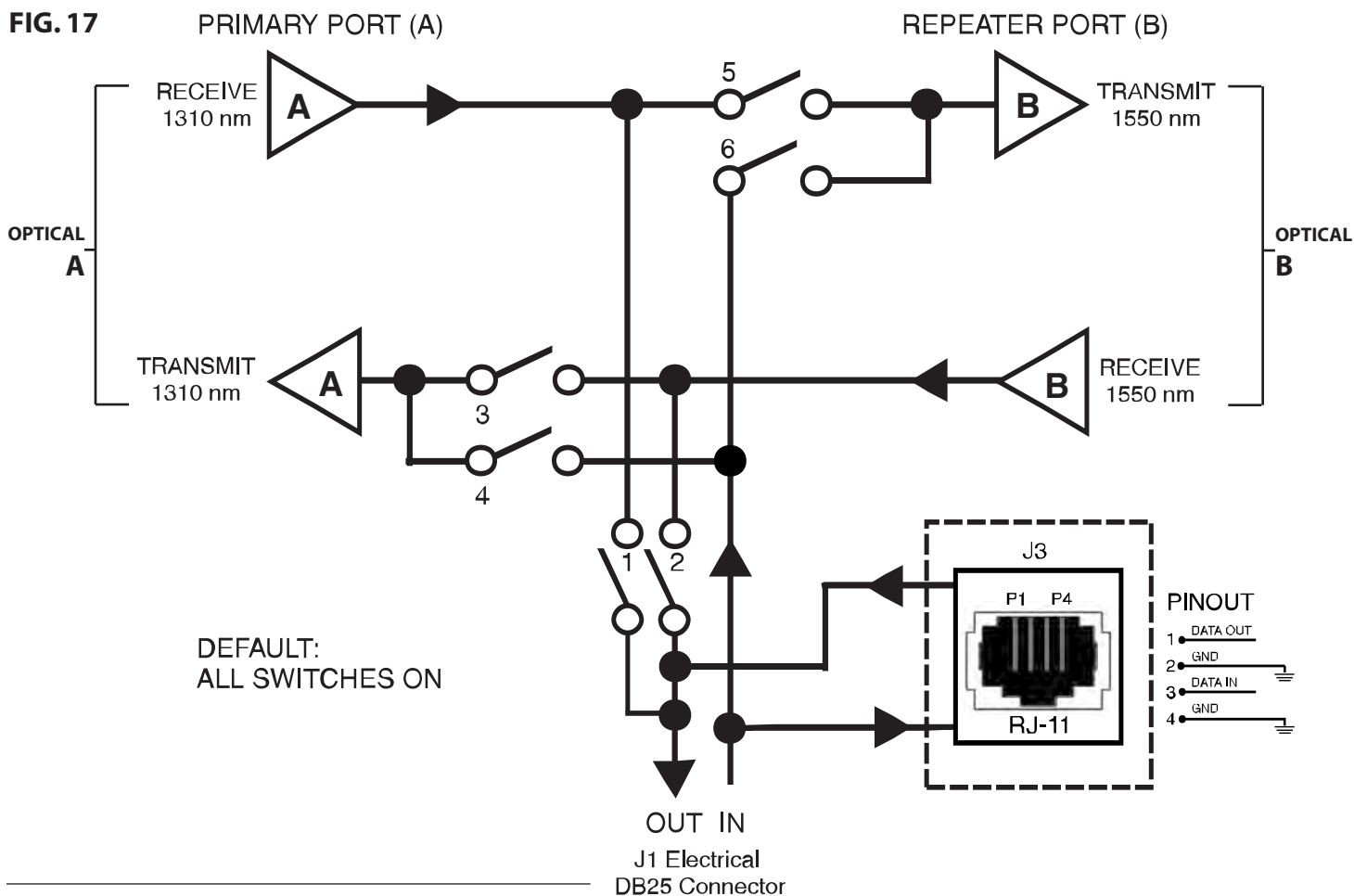


FIG. 17



Communication Networks

3 Corporate Drive • Danbury, CT 06810 • USA
 Tel: 203-796-5300 • Toll Free: 1-888-678-9427
 www.comnet.net

INSTALLATION INSTRUCTIONS

RS-232/422 DROP AND REPEAT DATA TRANSCEIVER

FIG. 18

ANTI-STREAMING TIMER: Times RTS (Request to Send). If RTS is asserted for a time greater than the Anti-Streaming settings, the electrical input is turned OFF permanently.

To RESET: Press the RESET button on the front panel.

RTS/CTS INDICATORS

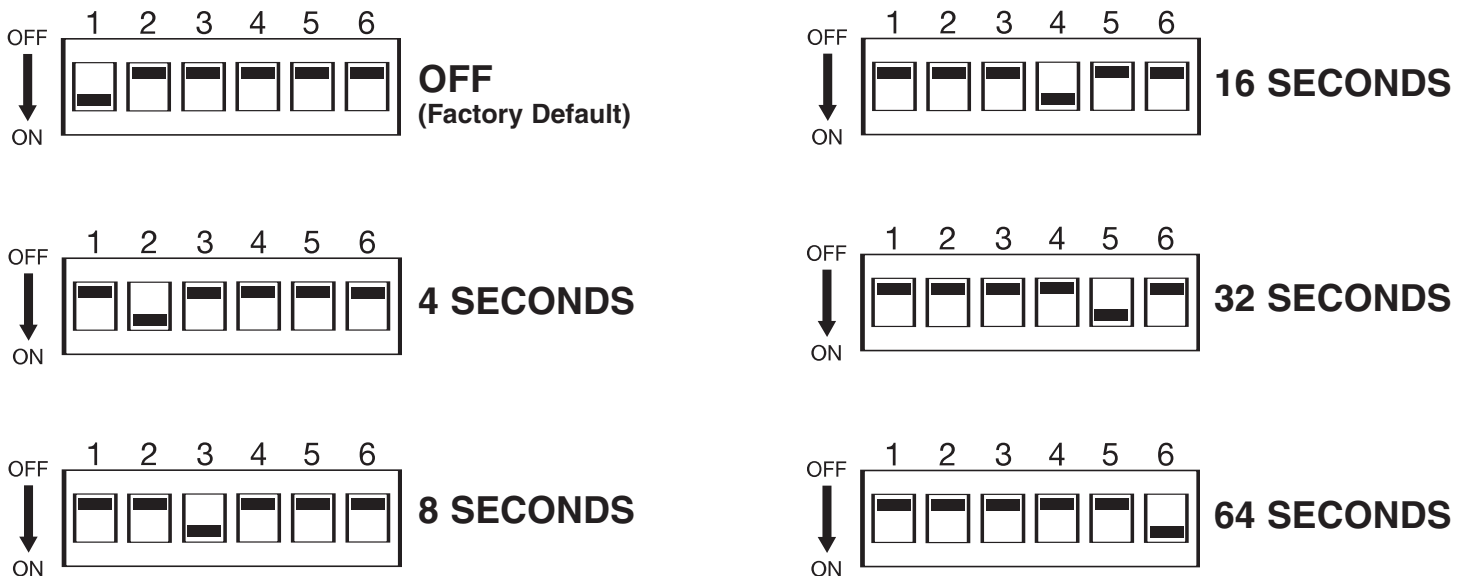
RTS: RED RTS is OFF
 GRN RTS is ON

CTS: RED CTS is OFF
 GRN CTS is ON

Note: If the RTS signal is turned ON for a time greater than the Anti-Streaming Time Setting, then the RTS will be ON, but the CTS will be RED (Off) and the FAIL LIGHT will be GRN (Failure Asserted).

When the RESET button is pressed, the FAIL LIGHT switches to RED and the RTS/CTS works again.

ANTI-STREAMING



ANTI-STREAMING TIMER

Communication Networks

3 Corporate Drive • Danbury, CT 06810 • USA
 Tel: 203-796-5300 • Toll Free: 1-888-678-9427
 www.comnet.net