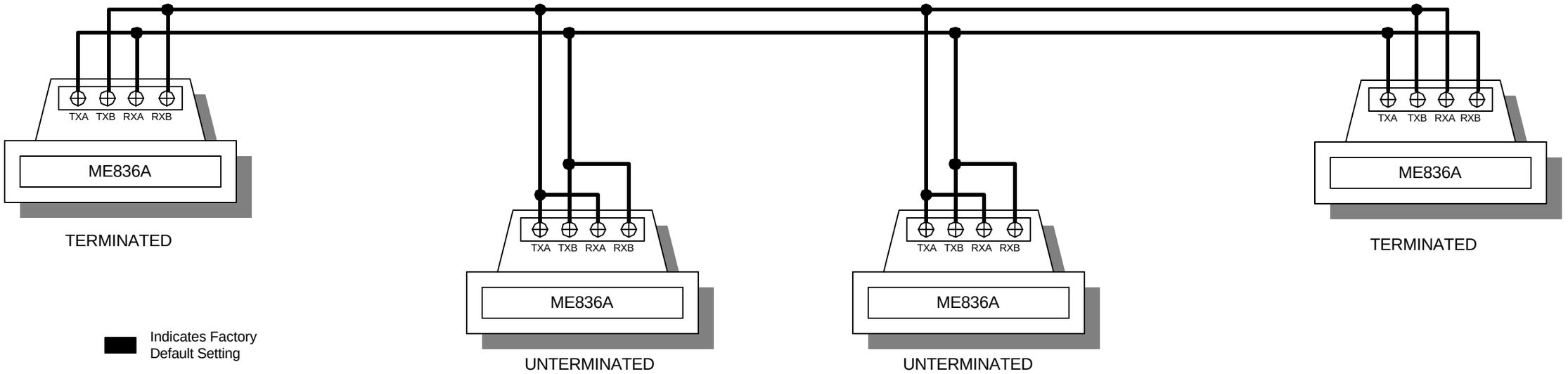
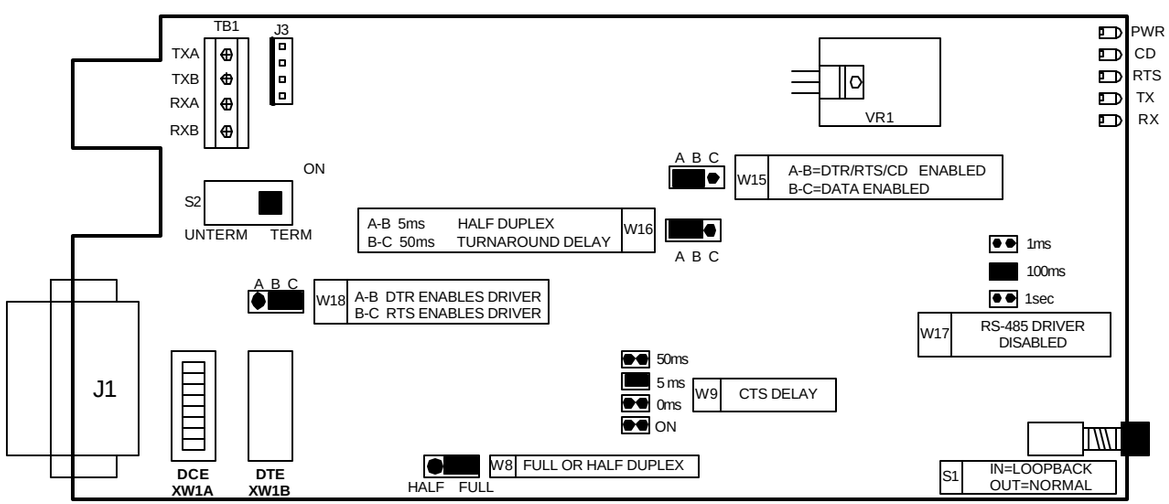
ME836A IN A 2-WIRE POINT-TO MULTIPOINT APPLICATION





- Set DTE/DCE (XW1A/XW1B) jumper opposite of the connecting equipment.
- The two end line drivers, should be terminated (S2), and all line drivers in between, should be unterminated.
- Jumper W8, selects Half Duplex or Full Duplex operation.
- Jumper W9, sets the CTS delay. When the transmitter of a device is first turned on, an unstable carrier signal is transmitted for several milliseconds. If data was sent during this period, it would be received as distorted information. Setting the CTS delay on the unit, allows the communication link to settle down before data is sent.
- Jumper W15 sets the driver to be enabled one of three ways. 1.) by RS-232 control signals 2.) by data or 3.) constantly on. If your equipment raises CD, RTS, or DTR, you can set the RS-485 driver to be enabled by one of these leads. If your equipment doesn't have the capability to raise CD, DTR, or RTS, you will need to set the driver to be enabled by data or constantly enabled. IN ORDER FOR AN RS-232 CONTROL LEAD TO ENABLE THE RS-485 DRIVER, W15 **MUST** BE IN POSITION A-B AND W9 MUST BE SET FOR 0,5, OR 50 ms.
- When the RS-232 port is selected as **DTE,** the RS-485 driver will be enabled when CD goes true (High).
- When the RS-232 port is selected as **DCE,** and jumper W18 is in the A-B position, DTR enables the RS-485 driver. When jumper W18 is in the B-C position, RTS enables the driver.
- The RS-485 driver can also be enabled without requiring an RS-232 control lead to be asserted. When jumper W15 is placed in the B-C position, the driver is enabled when data is received on the RS-232 port of the unit. As soon as the first bit of the first character is received at the RS-232 port, the RS-485 driver is enabled and an internal timer is started. Each time a "one to zero" transition occurs in the data, the timer is reset. When the timer times out, the driver is disabled. Jumper W17 allows this timeout delay to be set for 1msec., 100mses. or 1sec.
- The RS-485 driver can be constantly enabled by setting jumper W9 to the ON position.
- When operating in half-duplex mode, the unit adds a small delay each time it stops transmitting data and prepares to receive data. This delay allows the RS-485 interface and transmission line time to stabilize, thus reducing the possibility of garbled data being received at the end of a message.
- When jumper W16 is in the A-B position, 5msec delay is added. This amount of delay is sufficient for most applications. If you have a long transmission line or many ME836A devices connected in a network, you may