



- ❖ Maximum fiber distance is 5000 ft. from the First Line Driver "IF" within fiber budget. The ME540A's are not repeaters.
- ❖ Will only operate on Multi-mode fiber.
- ❖ Link Budget: 50-125u cable = 2.5dB, 62.5-125u cable = 6dB, 100-140u cable = 11.5dB
- ❖ Fiber Launch Power = -14dB
- ❖ Receiver Sensitivity = -25dB
- ❖ Wave Length = 820 nm

ME540A IN NETWORK MODE

- ❖ In Network Mode, all of the devices look the same. There are no Masters or Slaves.
- ❖ Data flow is half-duplex ONLY.
- ❖ All devices see all the data on the network.
- ❖ Data sent to the transmitter (TX) of any of the interfaces, is passed out to both optical transmitters (TX).
- ❖ Data received from either optical receiver (RX) is passed through to the opposite optical port's transmitter (TX), to the receiver (RX) of the RS-232, RS-485 or 20 ma port.

NOTE:

There is no collision detection

- ❖ Set S1, position 1, to OFF (0) for Network Mode.
- ❖ There are no Masters or Slaves.
- ❖ Set the shunt jumper for what interface you will be connecting to. A = RS-232, B = RS=485, C = 20 ma
- ❖ **For RS-232:**
Set DCE/DTE shunt jumper opposite of the device that you are connected to.
In DCE mode, and jumper W3 in the A-B position, enables DTR (DTR controls CTS)
In DCE mode, and jumper W3 in the B-C position, enables RTS (RTS controls CTS)
In DTE mode, jumper W3 has "NO" effect
- Jumper W2 sets the delay of CTS assertion with the raising of DTR or RTS. 0 means there will be no delay. 10 gives you a 10 ms delay, and 30 is a 30 ms delay.
- ❖ **For RS-485:**
Set W4 and W5 for either 2-Wire or 4-Wire operation. (A-B) = 4-Wire (B-C) = 2-Wire.
Set S5 in the "B" position
operating in 2-wire mode; set W6 for the time that the driver remains enabled after the TX of the last data bit.
- Set S1, position 3,4,5 and 6 for the appropriate biasing. OFF=No Bias and ON=Biased. In most RS-485 applications, you would bias your RX (S1, positions 5 and 6) ON or closed.
- ❖ **For 20 ma:**
Set S2 and S3 for either Active or Passive TX/RX. S2 Position A = Active RX, position B = Passive RX. S3 position A = Active TX, B = Passive TX.
Set S5 in the "A" position

