

## OVERVIEW

Included with the MSO-3M cable shipment are the following:

- Qty 1 - 18 channel 3M connector cable
- Qty 1 – MSO-3M Instruction sheet (this document)

## OPERATING ENVIRONMENT

Before using the MSO-3M cable, ensure that its operating environment will be maintained within these parameters:

|              |                           |
|--------------|---------------------------|
| Temperature: | 5 to 40 °C                |
| Humidity:    | ≤ 80% RH (non-condensing) |

## SAFETY REQUIREMENTS



### CAUTION

To avoid personal injury or damage to the MSO-3M or any equipment connected to it, review and comply with the following safety precautions.

- **Use only as intended.** The MSO-3M cable is intended to be used only with LeCroy MS-250, MS-500 or MS-500-36 Mixed Signal Oscilloscope options. Use of the MSO-3M and/or the equipment it is connected to in a manner other than specified may impair the protection mechanisms.
- **Connect and disconnect properly.** Avoid damage to cables thru excessive bending. When disconnecting the MSO-3M cable from the MS-250, MS-500, MS-500-36 or Device Under Test NEVER pull on the blue wires, pull only the black plastic housing.
- **Do not use in wet/damp or explosive atmospheres.**
- **For indoor use only.** The MSO-3M cable and associated test equipment is intended for indoor use and should be operated in a clean, dry, environment.
- **Do not operate with suspected failures.** Do not use the product if any part is damaged. All maintenance should be referred to qualified service personnel.

## BASIC OPERATION

### Connecting the MSO-3M to the MS-250 or MS-500

- Connect the end of the cable labeled D0 – D17 to the corresponding input of the MS-250 or MS-500 labeled D0 – D17 and fasten thumb screws

Note: MS-500 can be operated in 36 channel mode by using two MS-3M cables however both MSO-3M cables will be labeled D0-D17.

### Connecting the MSO-3M to the Device Under Test

- The MSO-3M cable mates with the following 3M Through-Hole 2500 series connectors

2520-6002 (straight)  
2520-5002 (right-angle)

*Looking into the 3M Connector:*

|                 |     |     |     |     |     |    |    |    |    |     |
|-----------------|-----|-----|-----|-----|-----|----|----|----|----|-----|
| Connector Pin # | 1   | 3   | 5   | 7   | 9   | 11 | 13 | 15 | 17 | 19  |
|                 | NC  | D16 | D14 | D12 | D10 | D8 | D6 | D4 | D2 | D0  |
|                 | D17 | D15 | D13 | D11 | D9  | D7 | D5 | D3 | D1 | Gnd |
| Connector Pin # | 2   | 4   | 6   | 8   | 10  | 12 | 14 | 16 | 18 | 20  |

### **SPECIFICATIONS**

|                       |                  |
|-----------------------|------------------|
| Input Impedance       | 100 k $\Omega$   |
| Attenuation           | 10:1             |
| Maximum Input Voltage | $\leq 30 V_{pk}$ |

*All specifications are for the MSO-3M cable used with the MS-250, MS-500 or MS-500-36*

