

# 3-MHz X-Y Display Module



LBO-51MA

- Designed for OEM and Custom Applications
- Standard Half-Rack Configuration
- 3-MHz X and Y Bandwidth
- 4-MHz Z-Axis Bandwidth
- P31 or Optional Phosphors
- Removable Imprintable External Graticule
- Custom Internal Graticules Available
- Stereo Phase Monitoring

## KEY SPECIFICATIONS

### CRT

Display Area

8 x 10 cm

Spot Size

0.26 mm at 0.5  $\mu$ A beam current

Brightness

25 fL measured with 200 line raster and 60 Hz refresh rate

Phosphor

P31 (other phosphors optional)

Accelerating Voltages

7 kV/2 kV

### X-Y DEFLECTION

Bandwidth

dc to 3 MHz (-3 dB at 5 div deflection)

Coupling

dc or ac (internal switch)

Phase Shift

< 3° at 1 MHz

Sensitivity

100 mV/div, adjustable  $\pm$  50%

Polarity

+ or - (internally switchable)

Linearity

Within 5%

Input Impedance

1 M $\Omega$ , < 50 pF (provision is made for internal terminating resistor)

Maximum Input Voltage

100 V (dc plus ac peak)

Rise Time

< 120 ns

### Z-AXIS

Bandwidth

dc to 4 MHz

Blanking Threshold/Polarity

-1 V (when INTEN knob is positioned at mid-range)/Negative

Input Impedance

1 M $\Omega$ , < 50 pF

Maximum Input Voltage

100 V (dc plus ac peak)

Rise Time

< 90 ns

### POWER REQUIREMENTS

100, 120, 220, 240 V ac  $\pm$  10%

50/60 Hz, 25 W

### PHYSICAL

Size (W x H x D)

8 1/2 x 5 1/4 x 16 3/4 in.

215 x 132 x 425 mm

Weight

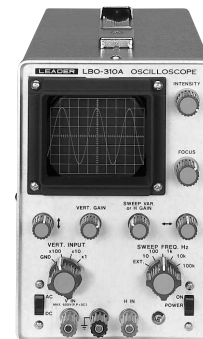
13 1/4 lbs., 6 kg

### OPTIONAL ACCESSORY

Rackmount Adapter (LR-2400VI)

# 4-MHz Recurrent Sweep Oscilloscope

- Easy to Use
- Small Footprint (5" Wide)
- 4-MHz Bandwidth
- 20 mV/div Maximum Sensitivity
- X-Y Operation
- Good Display for Sweep Alignment
- Versatile Instrumentation for Production Work



LBO-310A

## KEY SPECIFICATIONS

### VERTICAL DEFLECTION

Bandwidth (-3 dB, 4 div)

dc: dc to 4 MHz

ac: 2 Hz to 4 MHz

Input Sensitivity Control

x100, x10, x1 and variable (20 mV max)

Input Impedance

1 M $\Omega$ , 40 pF

Direct CRT Drive

10 V p-p sensitivity up to 100 MHz

### EXTERNAL HORIZONTAL DEFLECTION

Bandwidth (-3 dB, 10 div)

dc to 250 kHz

Input Sensitivity

300 mV/div

### INPUT HORIZONTAL DEFLECTION

Type Sweep

Recurrent

### X-Y DEFLECTION

Sweep Rates

10 Hz to 100 kHz, four ranges

### Z-AXIS (INTENSITY) MODULATION

Sensitivity

20 V p-p

CRT Display

Accelerating Potential/Phosphor

1200 V/P1

### POWER REQUIREMENTS

100, 120, 220, 240 V ac  $\pm$  10%

50/60 Hz, approx. 12 VA

### PHYSICAL

Size (W x H x D)

5 x 7 1/2 x 12 in.

125 x 180 x 300 mm

Weight

8.8 lbs., 4 kg

### SUPPLIED ACCESSORY

1 Banana Plug to Alligator Clip