**LOGIC CONTROLS, INC.
MODEL LD9000 DISPLAY**

**LD9000X POLE DISPLAY
BY LOGIC CONTROLS**

## The Market Leader

Logic Controls pole displays are widely known as the market leaders for PC-based POS systems. They have long set the standard for reliability, value and functionality – reasons why most value-added resellers ask for Logic Controls displays by name.

## Proven, Time-Tested Reliability

One of the reasons why Logic Controls' pole displays are the market leaders is because of their well deserved reputation for unsurpassed reliability. The LD9000 uses special display technology and unique circuit design to achieve this reliability. In addition, the units are made with special, high durability plastic that is UV-resistant and prevents color fading.

## Advanced Functionality and Value

The LD9000 is a 2x20 line, 9.5mm character height display that comes with much functionality that simply is not found in other vendors' offerings. "Smart scrolling," user-definable characters, and a built-in real-time clock are all standard features of the unit's firmware. In addition, the LD9000 comes with a wide variety of interfaces, can emulate many popular command sets, and has better visibility due to an optically matched lens and wider character pitch. Best of all, this premium pole display is also one of the most affordable on the market.

- 2 line by 20 character pole display with 9.5mm character height
- Proven reliability
- Bright green vacuum fluorescent display
- Better visibility due to optically matched lens and wider character pitch
- Automatic message scrolling and "smart scrolling"
- Easily programmable for custom messages
- Wide choice of interfaces: USB, serial, parallel and pass-through
- User-definable characters
- Available with emulation of many popular command sets, including OPOS/JPOS
- Adjustable viewing angles
- Available in beige and dark grey, 120V and 220V

**LOGIC® CONTROLS**
*An Innovative Manufacturer Since 1982*

# LD9000 / X  SERIES  CUSTOMER  DISPLAYS  SPECIFICATIONS

## OPTICAL (FLUORESCENT DISPLAY)

| | |
|---|---|
| Digits per Row | 20 |
| Number of Rows | 2 |
| Digit Configuration | 5 x 7 Dot Matrix |
| Digit Height | 0.37 in. (9.5mm) |
| Difit Width | 0.24 in. (6.2mm) |
| Digit Pitch | 0.30 in. (7.7mm) |
| Character Configuration | ASCII |
| Brightness | 900 cd/m2 Typical |
| Display Color | Blue-green |
| MTBF | 300,000 hours |

## ELECTRICAL

| | |
|---|---|
| Input Power (to adapter) | 120VAC, 60Hz. |
| | 220VAC, 60Hz. (optional) |
| Output Power (from adapter) | 7.5VAC, 1A |
| Connector | 2 conductor female jack |
| Pole Connector | 6-pin DIN (male) |
| Interface Cable | |
| Pole side connector | 6-pin DIN (female) |
| Computer side connector | DB9 (female); Optional DB25 (female) |
| Power connector | 2 conductor male jack |

## ENVIRONMENTAL

| | |
|---|---|
| Operating Temperature | 0 to +50C |
| Storage Temperature | -20 to +70C |
| Relative Humidity | |
| Operating | 85% max. non-condensing |
| Non-operating | 90% max. non-condensing |
| Vibration (10 to 55 Hz.) | 4 G's |
| Shock | 40 G's |

## INTERFACE

| | |
|---|---|
| Serial | RS232C |
| Protocol: | |
| Baud Rate | 600, 1200, 2400, 9600*, |
| | 19,200 |
| Data Bit | 8 |
| Parity | None |
| Stop Bits | 1, 2* |

RTS/CTS Control lines are tied together in the connector.
DSR/DCD/DTR Control lines are tied together in the connector.

| | |
|---|---|
| Parallel | Optional Interface |
| Pass-Thru | Optional Serial or Parallel |

* Default Preset at Factory

## GENERAL INFORMATION

Power adapter and 6 foot cable (with DIN 5M and DB9F connectors) are supplied with product.

## POLE DISPLAY EMULATION

The LD9000 series pole displays are very versatile. They can emulate many other pole display command sets.
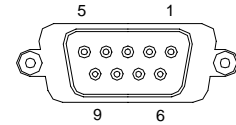
## MECHANICAL

| | |
|---|---|
| Weight | 2.7 lbs. |
| Dimensions (in inches) | (width x height x depth) |
| Fluorescent Display | 8.50 x 3.37 x 1.75 / 2.25 |
| Rectangular Base | 2.0 x 2.25 x 2.12 |
| Base Plate | 4.00 x 0.90 x 8.00 |
| Overall Height | 8 to 25 inches |

## CONNECTOR  PINOUT

### SERIAL

**DB9 Female connector**

| Pin # | Function |
|---|---|
| 1 | DCD |
| 3 | Data |
| 4 | DTR |
| 5 | Ground |
| 6 | DSR |
| 7 | RTS |
| 8 | CTS |

**DB25 Female connector**

| Pin # | Function |
|---|---|
| 2 | Data |
| 7 | Ground |
| 4 | RTS |
| 5 | CTS |
| 6 | DSR |
| 8 | DCD |
| 20 | DTR |
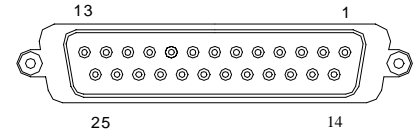
### PARALLEL

**DB25 Male connector**

| Pin # | Function | Pin # | Function |
|---|---|---|---|
| 1 | -Strobe | 10 | -ACK |
| 2 | Data 0 | 11 | Busy |
| 3 | Data 1 | 12 | Paper End |
| 4 | Data 2 | 13 | Select |
| 5 | Data 3 | 14 | -Auto Feed |
| 6 | Data 4 | 15 | -Error |
| 7 | Data 5 | 16 | -Initialize Printer |
| 8 | Data 6 | 17 | -Select Input |
| 9 | Data 7 | 18-25 | Ground |
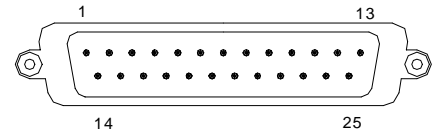
## ORDERING  INFORMATION

LD9 _ _ _ X - **DOUBLE SIDE**

**POWER ADAPTER**
0 = 120VAC
1 = 220VAC

**COMMAND SET**
0 = LOGIC CONTROLS
1 = LOGIC CONTROLS with Pass-thru
2 = SPECIAL COMMAND SET 1
3 = SPECIAL COMMAND SET 2
4 = SPECIAL COMMAND SET 3
5 = SPECIAL COMMAND SET 4

**SERIAL / PARALLEL INTERFACE**
0 = SERIAL 9600 BAUD
1 = " 600 "
2 = " 1200 "
3 = " 2400 "
4 = " 4800 "
5 = " 19200 "
9 = PARALLEL INTERFACE

*LOGIC CONTROLS, INC., NY, USA*