MOXA®

MD-124
Quick Installation Guide

First Edition, June 2012

1. Overview

The MD-124 Series marine displays are designed to fit the great demands of the marine industry. The 24-inch panel meets the most necessary maritime display standards and features a 16:9 aspect ratio, high definition 1920 x 1080 pixel resolution, full range dimming, optical bonding (Y model only), and 178° wide angle viewing, making it perfect for a wide variety of marine applications, and meet the required marine standards.
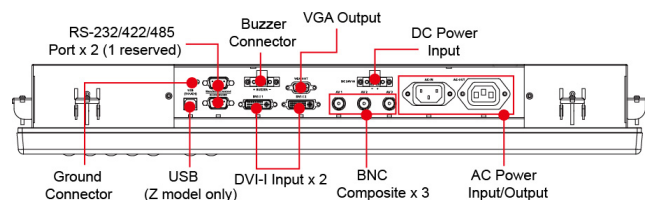
2. Package Checklist

Before installing the MD-124, verify that the package contains the following items:

- MD-124 display
- Rubber waterproofing cushion
- DVI to VGA adapter
- VGA Cable
- DVI-D Cable
- Console Mounting Kits
- USB cable for touch screen interface (MD-124-Z only)
- DC terminal block (for powering device)
- DC terminal block (for powering the buzzer)
- Documentation and driver CD
- Quick installation guide (printed)
- Warranty card

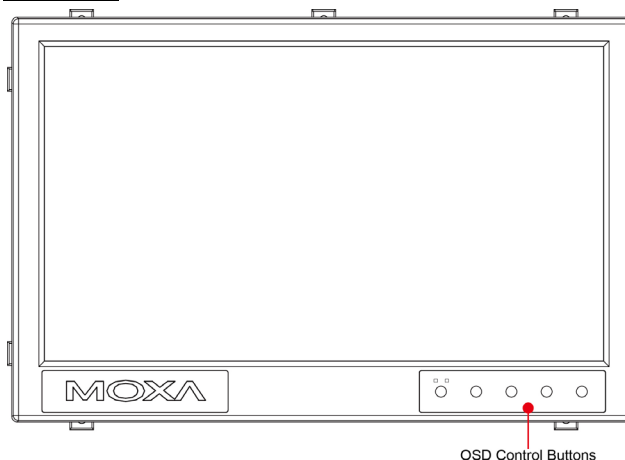*Note: Please notify your sales representative if any of the above items are missing or damaged.*

3. MD-124 Panel Layout

Bottom View

RS-232/422/485 Port x 2 (1 reserved)
Buzzer Connector
VGA Output
DC Power Input
Ground Connector
USB (Z model only)
DVI-I Input x 2
BNC Composite x 3
AC Power Input/Output

P/N: 1802001240010

Front View

OSD Control Buttons

LED Indicators

The following table are a key for reading the LED indicators located on the front of the MD-124:

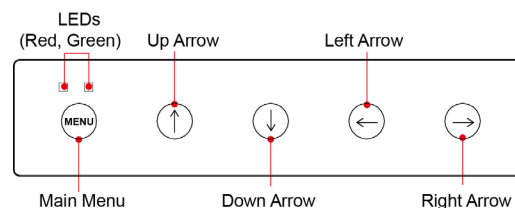| LED Name	LED Color	LED Function
Power	Green	Power is on and functioning normally
	Red	Display is suspended

4. Installing the MD-124

Wall or Cabinet Mounting

The MD-124 comes with nine mounting plates that should be attached to the four sides of the display. Install these plates, and fasten the screws to install the display on a cabinet or a wall. Before installing the plates, you need to place the rubber water-proofing cushion on the back of the display. For details, please refer to the MD-124 Hardware Manual.

5. Panel Adjustment

There are five buttons located in the right bottom corner of the panel. The **Menu** button brings up the OSD, which allows adjustment of the various display properties. Use the buttons according to the instructions detailed in the OSD help notes. To close the OSD, simply depress the **Menu** key again.

LEDs (Red, Green)   Up Arrow   Left Arrow
MENU
Main Menu   Down Arrow   Right Arrow

6. Connector Description

Power Connector

On its bottom panel the MD-124 has a terminal block that provides 24 VDC power input. Also on the bottom panel is a 110 to 230 VAC power input. An AC power output is also offered, to allow daisy-chaining the power supply to another panel.

Grounding the MD-124

Grounding and proper wiring practices help limit the effects of noise due to electromagnetic interference (EMI). The ground connector is located on the bottom of the MD-124. Run the ground connection from the ground screw to the grounding surface prior to connecting the power.

> ⚠️ **ATTENTION**
>
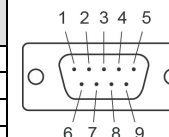> This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel.

VGA and DVI-I Inputs

To connect the MD-124 to a standard VGA interface, the MD-124 is equipped with a female 15-pin D-Sub connector on its bottom panel. In addition, two DVI-I connectors are provided to connect the monitor over a DVI-I interface; if needed, a DVI-to-VGA adapter may also be used.

Serial Ports

The MD-124 comes with 2 RS-232/422/485 serial ports. One port is reserved solely for manufacturer configuration. Serial port 2 terminates in a male 9-pin D-Sub (DE9) connector. It can be configured by software as an RS-232, RS-422, or RS-485 interface. Pin assignments for the ports are shown in the following table:

Pin	RS-232	RS-422	RS-485 4-wire	RS-485 2-wire
1	DCD	TxDA(-)	TxDA(-)	–
2	RxD	TxDB(+)	TxDB(+)	–
3	TxD	RxDB(+)	RxDB(+)	DataB(+)
4	DTR	RxDA(-)	RxDA(-)	DataA(-)
5	GND	GND	GND	GND
6	DSR	–	–	–
7	RTS	–	–	–
8	CTS	–	–	–

1 2 3 4 5
6 7 8 9

USB Host

The USB port on the bottom of the MD-124 (Z model only) is used to connect the touch-screen interface to a peripheral device server. Connect the MD-124 USB port to a touch-screen device server via a standard USB cable. Drivers for the touch screen interface are provided on the MD-124 software CD.

BNC Composite Connectors

The MD-124 offers three BNC composite connectors for audio/video interfaces.

Buzzer Terminal

The bottom panel of the MD-124 is equipped with a terminal block for powering the buzzer. Install the leads of a 5 to 12 V power source into the terminal block marked **BUZZER** to enable the buzzer feature.

7. Powering on the MD-124

To power on the MD-124, connect the "terminal block to power jack converter" to the MD-124's DC terminal block (located on the side panel), and then connect the power adaptor. For the AC input, simply connect the power cord to the power source. It takes about 5 seconds for the system to boot up. Once the system is ready, the **Power** LED on the front panel will light up.