



MPC-122-K

Quick Installation Guide

First Edition, December 2010

1. Overview

The MPC-122-K marine panel computers feature a 2.26 GHz Intel Core 2 Duo processor with up to 4 GB of system memory, providing high performance for system operation. The MPC-122-K computers have 2 RS-232/422/485 serial ports for reliable serial communications, and 2 Gigabit LAN ports for high speed Ethernet transmission and network redundancy. Features easily accessed from the computer's panel include full range dimming, optical bonding, wide viewing angle, and color calibration.

2. Package Checklist

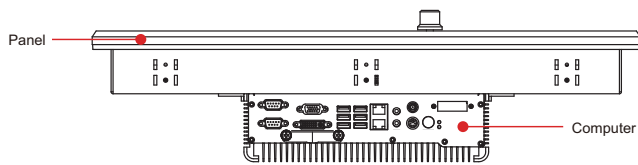
Before installing the MPC-122-K, verify that the package contains the following items:

- 1 MPC-122-K panel computer
- PS/2 to KB/MS Y-type cable
- 2 sets of hard disk drive cables and 1 set of SATA disk power cables
- Rubber water proofing cushion
- Hard disk drive ground sticker
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

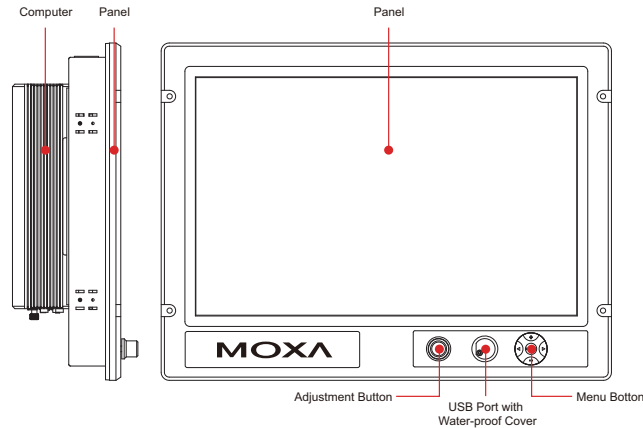
Note: Please notify your sales representative if any of the above items are missing or damaged.

3. MPC-122-K Panel Layout

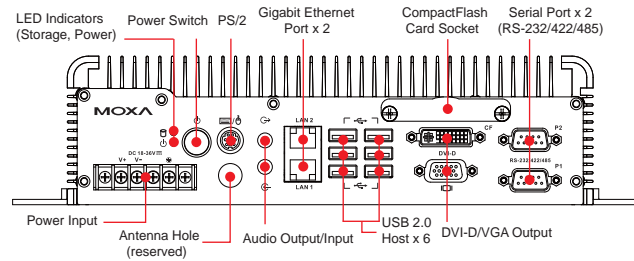
Bottom View



Side and Front Views



Computer



LED Indicators

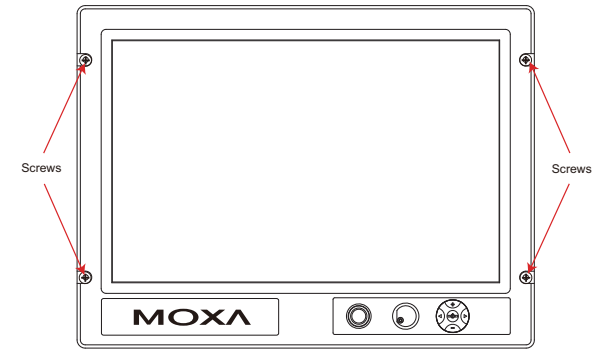
The following table describes the LED indicators located on the front panel of the MPC-122-K.

| LED Name | LED Color | LED Function |
|----------|-------------------|--|
| Power | Green | Power is on and functioning normally |
| | Off | Power is off or power error exists |
| Storage | Yellow (on) | CF card is inserted and detected |
| | Yellow (blinking) | Data is being read from or written to the CF card or HDD |
| | Off | No activity |
| LAN | Green | 100 Mbps Ethernet mode |
| | Yellow | 1000 Mbps (Gigabit) Ethernet mode |
| | Off | No activity or 10 Mbps Ethernet mode |

4. Installing the MPC-122-K

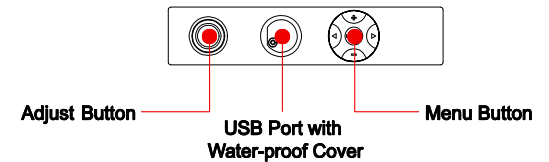
Wall or Cabinet Mounting

There are four screw holes on each side of the panel. Place the rubber water proofing cushion on the back of the panel, and then use two screws per side to attach the MPC-122-K to a wall or cabinet.



5. Panel Adjustment

There are two buttons located in the right bottom corner of the panel. Click the Menu Button to access panel adjustment items, and then use the arrows or the Adjustment Button for each configuration. Select Exit or push the button to close the configuration menu.



6. Connector Description

Power Connector

The MPC-122-K has an 18 to 36 VDC power input located on the terminal block. The Power LED will light up when power is being properly supplied. When The Ready LED lights to a solid green, the OS is ready. When the Ready LED lights to a solid green, the OS is ready.

Grounding the MPC-122-K

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting the power.

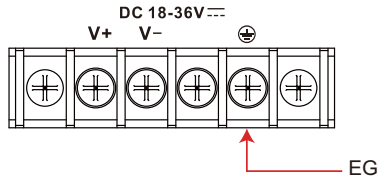


ATTENTION

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

P/N: 1802001220010

Earth Ground: Refer to the following figure for the location of the Earth Ground on the terminal block power connector. Connect the EG wire to an appropriate grounded metal surface.



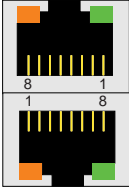
VGA and DVI-D Outputs

The MPC-122-K comes with a D-Sub 15-pin female connector on the front panel to connect a VGA CRT monitor. It also comes with a DVI-D connector on the front panel to connect to a panel with HDMI (High-Definition Multimedia Interface).

Ethernet Ports

The 10/100/1000 Mbps Ethernet ports use RJ45 connectors.

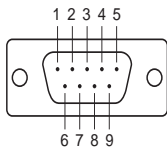
| Pin | 10/100 Mbps | 1000 Mbps |
|-----|-------------|-----------|
| 1 | ETx+ | TRD(0)+ |
| 2 | ETx- | TRD(0)- |
| 3 | ERx+ | TRD(1)+ |
| 4 | - | TRD(2)+ |
| 5 | - | TRD(2)- |
| 6 | ERx- | TRD(1)- |
| 7 | - | TRD(3)+ |
| 8 | - | TRD(3)- |



Serial Ports

The serial ports use DB9 connectors. Each port can be configured by software for RS-232, RS-422, or RS-485. The 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 | - | - | - |



CF Card Slot

The MPC-122-K computer comes with a CompactFlash socket located on the front panel. Remove the protective cap on the front panel to install the CompactFlash card.

USB Hosts

The MPC-122-K has six USB 2.0 full speed hosts that use a type A connector on the front panel of the computer. An additional USB port is located on the display. The port supports a keyboard and

mouse, and can also be used to connect a Flash disk for storing large amounts of data.

Audio Interface

The MPC-122-K comes with an audio input and an audio output, allowing users to connect a speaker or an earphone.

Reset Button

Press the "Reset Button" on the front panel of the MPC-122-K to reboot the system. The Ready LED will blink on and off for the first 5 seconds, and then maintain a steady glow once the system has rebooted.

Real-time Clock

The MPC-122-K's real-time clock is powered by a lithium battery. You should not replace the lithium battery without help from a qualified Moxa support engineer. If you need to change the battery, contact the Moxa RMA service team.

ATTENTION
There is a risk of explosion if the battery is replaced with an incorrect type of battery.

7. Powering on the MPC-122-K

To power on the MPC-122-K, connect the "terminal block to power jack converter" to the MPC-122-K's DC terminal block (located on the side panel), and then connect the power adaptor. Press the Power Switch button to turn on the computer. Note that the Earth Ground wire should be connected to the top pin of the terminal block. It takes about 30 seconds for the system to boot up. Once the system is ready, the Power LED will light up.

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The Americas: +1-714-528-6777 (toll-free: 1-888-669-2872)
 Europe: +49-89-3 70 03 99-0
 Asia-Pacific: +886-2-8919-1230
 China: +86-21-5258-9955 (toll-free: 800-820-5036)

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