Skip to content

Manuals+

User Manuals Simplified.

logic controls LC-8100 Mini KDS/Industrial Computer User Manual

Contents hide

logic controls LC-8100 Mini KDS/Industrial Computer

Notice

The manufacturer of the LC-8100 makes no representations or warranties, either expressed or implied, by or with

respect to anything in this manual, and shall not be liable for any implied warranties of fitness for a particular purpose or for any indirect, special or consequential damages. Information in this document is subject to change without notice and does not represent a commitment on the part of the manufacturer.

FCC Notice

Thi device complies with Part 15 of FCC Rules. Operations are subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

European Community Mark Of Conformity (CE)

This product is in conformity with the protection requirements of EU Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. Logic Controls cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product. This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to CISPR 22 / European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Important Safety Instructions

Read these instructions carefully. Save these instructions for future reference.

- Install this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer
- Installation measures must be taken to prevent physical damage to the power supply cord, including proper routing of the power supply cord and provision of a receptacle (socket outlet) near the fixed ITE, or positioning the fixed ITE near a receptacle (socket outlet).
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes & standards, including fire-rated construction.
- Do not attach power supply cable to the building surface or through walls, ceilings, floors, and similar openings.
- Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Install the system away from sun rays, vapor, gases, smoke, humidity, and suspended particles.
- Allow at least 6 inches of space from the top of the unit and 3 inches from the sides to allow proper ventilation. (This will be explained in the mounting instructions)
- If any problem occurs, do not try to repair the equipment by yourself, nor allow any unauthorized person to fix. Contact the manufacture for assistance.
- As a safety measure, it is advised the use of a voltage stabilizer or UPS between the equipment and the line socket.
- This product should be operated from the type of power indicated on the power adaptor. If you are not sure of the type of power available, consult your dealer or local power company. 4
- The feeding line should be exclusive for the equipment unless it is used for other compatible equipment and it should not overpass the maximum consumption of the line. Photocopy machines, electrical motors and any other high consumption equipment should be installed isolated from this equipment.
- If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating.
- Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
- Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    1. If the power cord or plug is damaged or frayed
    2. If liquid has been spilled into the product
    3. If the product has been exposed to rain or water
    4. If the product does not operate properly when the operating instructions are followed
    5. If the product has been dropped or the cabinet has been damaged
    6. If the product exhibits a distinct change in performance, indicating a need for service
- There is risk of electrical shock, even with the wire disconnected from the electrical network. Contact the

Manufacture Service centers whenever necessary.
- Do not try to replace the lithium battery cell under any circumstances. There is risk of explosion if an incorrect type of lithium battery cell used. Dispose of used batteries according to the instructions.

CAUTION!

Caution: Risk of Explosion if battery is replaced by an incorrect type. Ask manufacturer for a technical service if the lithium battery cell need to be replaced

Product Overview

The Logic Controls LC-8100 fan less and ventless kitchen display computer's Dual-Core power allows for maximum efficiency and high reliability. The single board design eliminates internal cables and fits in an ultra-compact die-cast housing. The kitchen display computer is built to withstand harsh work environments. Due to SSD or network boot configurations, the unit operates with no internal moving parts.

Care and Handling

The following tips will help keep your LC-8100 functioning at the optimal level:

- Remember to unplug the display unit from the power outlet before cleaning.
- Do not use alcohol (methyl, ethyl or isopropyl) or any strong dissolvent.
- Do not use thinner or benzene, abrasive cleaners, or compressed air.
- To clean the LC-8100 unit cabinet, use a cloth lightly dampened with a mild detergent. Do not immerse unit in water.
- Put the cleaner on the rag and wipe the LC-8100. Never apply the cleaner directly on the LC-8100.
- Avoid getting liquids inside the LC-8100. If liquid does get inside, have a qualified service technician check it before you power it on again.
- Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- We recommend all servicing done on this product be done by qualified service personnel.
- Aside from upgrades or swapping out the SSD or hard drive please refer all other servicing to the Logic Controls RMA Dept.

Features

- Fanless and ventless operation
- Intel Baytrail-I E3825 1.33GHz dual core processor, 1MB L2 Cache
- Mass storage: 64, 120, or 256GB SSD
- 4GB DDR3L SODIMM RAM
- mSATA SSD drives are used; so there are no internal connecting cables with all components mounted on single PC board for high reliability
- Large number of available I/O ports: 5x USB 2.0, 2x serial, 1x VGA, 1x Ethernet, 1x PS/2 keyboard and mouse, front & back speaker out and microphone in
- Multimedia: Video with 1920 x 1080 max resolution with 24-bit color, ALC886/ALC892 Audio
- CODEC and built-in 2W audio amplifier
- System boot from hard-drive, network, or USB
- Universal input (100 to 240VAC, 47 to 63Hz) switching power supply
- Ultra-compact die cast housing – only 2"H x 8"W x 6"D
- Integrated wall-mount brackets

Installation

Component Placement

The following is recommended when you plan the LC-8100 setup:

- Place the LC-8100 so that:1. The RESET button is accessible.
  2. The beeps from the speakers can be heard.
  3. The LED indicator on the front panel can be seen.

- Place the LC-8100 above grill/counter level, out of the way of possible spills.
- Leave enough spaces around the unit for ventilation

Parts

Parts included with the product package:

1. LC-8100 unit
2. AC – DC power adaptor
3. Power cord

Device Location

The location of installation should meet the following conditions:

- Have enough space for its operation and preventive and corrective maintenance.
- Advisably, the floor should not be wooden, in order to avoid electrostatic shocks on the equipment.
- Install the equipment in a stable place, with no vibrations. Do not install the equipment on a mobile table (with wheels).
- The video monitor should be place strategically so that the lights of the room do not reflect the operator, disturbing the correct visibility of the screen.

Electrical Requirements

It is the customer's responsibility to observe all governing codes and ordinances, and assure that the electrical installation is adequate and in conformance with National Electrical Code:

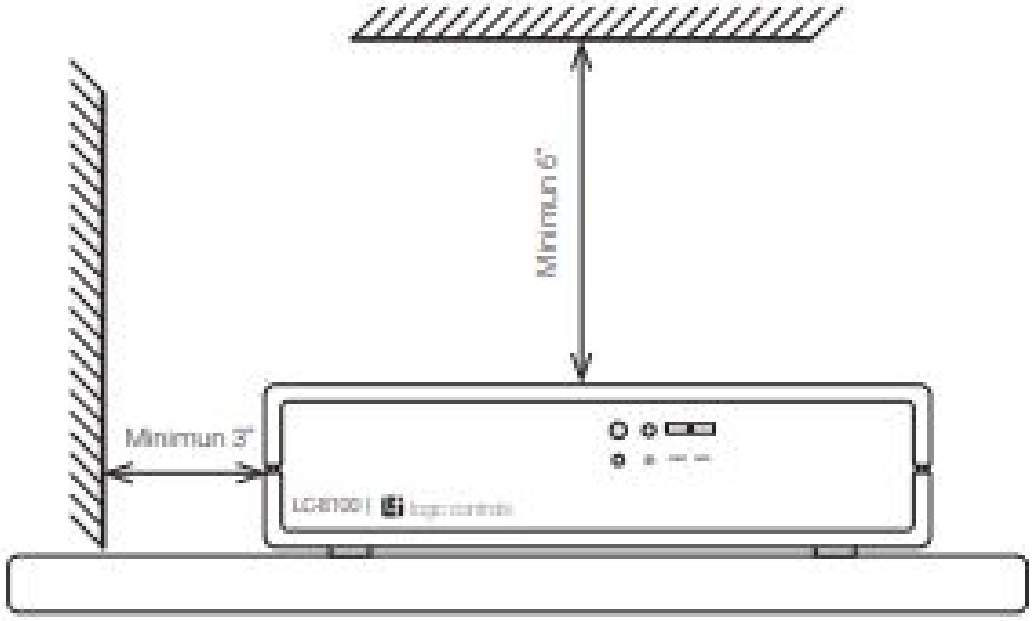
- ANSI/NFPA 70 — latest edition*, or CSA Standards.
- C22.1-94, Canadian Electrical Code, Part 1 and
- C22.2 No.0-M91 – latest edition** and all local codes and ordinances.
- Have an electrical network with a ground connection, with a threepin plug (2 poles and the ground) to be compatible with the cable of the equipment.
- Check that the voltage selector is in the position corresponding to the electrical provision.
- Electrical network power supply: 100–240 VAC~1.5A, 50/60 Hz.

Physical Requirements

- Mounting brackets are provided to facilitate mounting the LC-8100 to a wall. A vertical mounting stand is used for mounting the LC-8100 vertically on the countertop.
- The installer should ensure that the wall anchors used with the mounting brackets have the capacity to support 5.5 kg (12 lb.). This weight is determined by adding a safety margin weight to the weight of the unit. Wall anchors with specified weight capacity are available commercially.
- The power outlet socket is located near to the desired mounting location for the LC-8100.

Mounting the Device

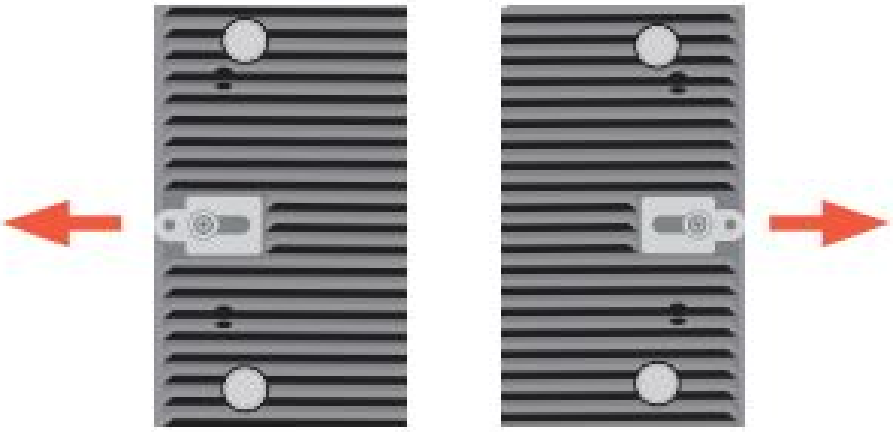
Mounting the LC-8100 horizontally with the mounting brackets



Allow at least 6 inches of space from the top of the unit and 3 inches from the sides to allow proper ventilation. See the picture that follows.

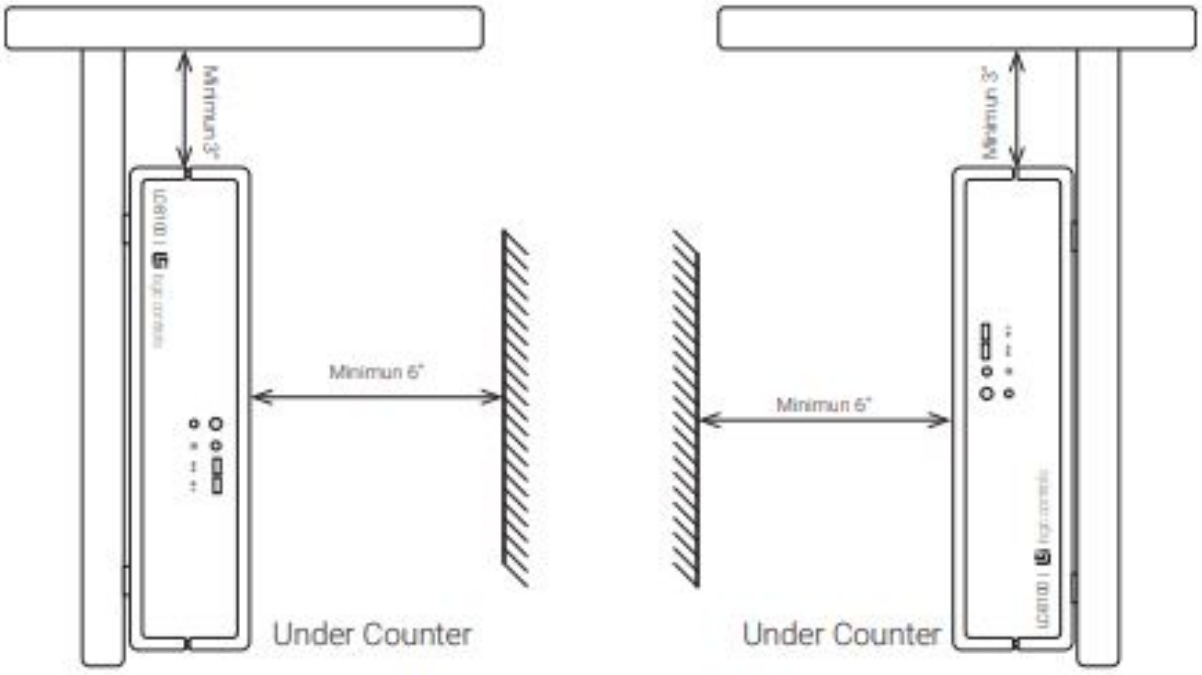
Installation

1. Push two mounting brackets out, and tighten the screws



2. Mount the LC-8100 on the countertop with screws

Mounting the LC-8100 to the wall with the mounting brackets
Allow at least 3 inches of space from the top of the unit and 6 inches from the sides to allow proper ventilation. See the picture below:



1. Push two mounting brackets out in the same as described in horizontal mounting above.
2. Mount the LC-8100 with wood screws (2 pieces – 1/8” x 1” 1/2).
    1. The screws must be driven on the wall studs or use drywall anchors if it is a dry wall.
    2. Use concrete wall anchors (2 pieces – 1/16” x 3/8”) if it is a concrete wall.
    The LC-8100 is a fan less and ventless unit. Heat is dissipated through the metal case. So, allow at least 6 inches of space from the top of the unit and 3 inches from the sides for proper ventilation. It is recommended to mount the unit vertically to maximize ventilation effect. Vertical mounting stands are available from Logic Controls.

Connections and Turning Power On

Make sure that all systems are powered off before making or removing any connections to the LC-8100 unit. Follow the steps below in connecting the devices:

- Connect the VGA cable of the display monitor to the LC-8100.
- Connect the RS232 cables of serial devices to the LC-8100.
- Connect the parallel cable of parallel device to parallel port of LC-8100.
- Connect the PS/2 keyboard (or bump bar) and mouse to the LC-8100. Note that the bump bar cable connector has connector locking feature to prevent connector from being pulled out by pulling the cable. When plugging in the connector, grab the connector at the end of the plug and push in tightly until it is fully snapped into the socket.
- Connect the Ethernet cable from Ethernet hub or switch to the LC-8100.
- Connect other peripherals such as speakers and USB devices to the LC-8100.
- Connect power to all peripheral devices and turn on power.
- Connect power adapter to the LC-8100. Make sure that the flat side of power plug is oriented upwards. Reversing the orientation and forcefully plugging into the power socket will result in damage to the connector. (When unplugging power adapter from LC-8100, do not pull the cable. The connector has a locking function that is released by holding the plug and pulling backwards. If the connector is forced out by pulling the cable, it may result in damage to the connector.)
- Connect power cord to the power adapter and plug the power cord into AC power outlet. (The power adapter must be connected to the LC-8100 first before it is connected to AC power outlet. Do not connect AC power before connecting to LC-8100).
- By default, the unit is set to turn on power automatically when power is connected. If it does not power up, press the on/off switch on the front panel to turn on power and check for correct CMOS configuration settings.
- If the LC-8100 had been shut down from the operating system, it may be restarted by pressing the power on/off switch on the front panel of the LC-8100. To turn off power to the unit, press and hold the power on/off switch for 5 seconds.

Bios Setting
Each time the LC-8100 is powered on, it will run a self-diagnostic and continue booting from storage media. BIOS settings are stored in a CMOS memory. To enter BIOS setup, as soon as you hear the system beep, just before the LCI logo splash screen appears, quickly press the [Delete] key on the keyboard.

Use left and right arrows to select the setup menu. Use arrow keys to navigate to different menu items and press [Enter] to select menu. Use -/+ keys to change the field value or press [Enter] to go to sub screen. When configuration is finished, press [F10] key to save the settings and exit setup.
In most of the applications, parameters are detected automatically the default configuration will be suitable. There are only a few parameters that might need to be customized for some applications. Examples of such cases are shown below:

Boot Device Priority Sequence
To specify the boot sequence from available devices, enter the [Boot] menu. Then setup [Boot Option Priorities] to choose the priority desired for the booting process from the list of available boot devices.

I/O Configuration: Serial Ports
To configure the serial ports, go to [Advanced] menu. Select [Super IO Configuration] and then you will be able to choose / change the address and IRQ for all the ports. For each serial port, option is available to select power function on pin 9 of the port:

- Disabled
- +5V
- +12V

Network Boot
If you desire to enable your system to boot from a network, go to [Advanced] menu. Then setup [Network] option to select “UEFI only” or “Legacy only”. Save the settings and reboot into BIOS, the network boot options will then be available [Boot] menu.

Restore to Optimized Defaults
If the BIOS settings are accidently changed and it is necessary to restore setting to the optimized default values, select menu [Save & Exit] and then [Restore Defaults]. Select [Yes] in the confirmation dialog box. Then select [Save Changes and Exit] (or press [F10]) to save the changes.

Mainboard

CPU	Intel Baytrail-I E3825 1.33 GHz Dual-Core processor with MB L2 Cache

Memory	4GB, DDR3L SODIMM x1
Mass storage	64/120/256 GB SSD

I/O Ports

Video	VGA, 1920 x 1080 pixels max
Network interface	10/100/1000 Mbits Ethernet, Network boot capable
Keyboard/mouse:	PS/2 mini-DIN6 connectors
USB ports	USB 2.0 ports x 5
Serial port	DB9 x2 (COM1 & COM2) Optional +5V/ +12V power at pin 9
Audio	Mic in and speaker out with 2W power amplifier
Expansion slot	Mini PCIe socket (supports WiFi card)

Power supply

Single power input	12VDC
Power adapter output	12VDC 5A
Power adapter input	100 to 240VAC, 1.5A max 50/60Hz

Enviromental

Operating temperature	32˚F to 104˚F (0˚C to 40˚C)
Relative humidity	5% to 90%, non-condensing
Storage temperature	32˚F to 140˚F (0˚C to 60˚C)
Relative humidity	5% to 80%, non-condensing

Mechanical

Dimensions (W x H x D)	8.1in x 6.3in x 2.0in (20.5cm x 16.0cm x 5.0cm)
Weight	3.3 lbs. (1.4Kg)
Housing	Diecast

Troubleshooting

There are no user serviceable components inside the LC-8100. Service should be performed only by Logic Controls or

qualified personnel certified by Logic Controls. The following guidelines will help in identifying the source of a problem:

Video monitor display is blank

1. If the power LED on the monitor is off, check that the monitor is properly connected to its power supply and the power supply is properly plugged into a functioning AC outlet.
2. Adjust the contrast controls on the monitor display.
3. Check that the video cable is plugged in properly on both the monitor and the LC-8100.
4. If the power LED on LC-8100 is off, check that the LC-8100 is properly connected to its power supply adapter and the power adapter are properly plugged into a functioning AC outlet.
5. If the LC-8100 is connected to a power supply but the power LED is off, press the power button to turn on the unit. If it does not turn on, try replacing the power supply.
6. Replace the LC-8100 if necessary.

Video monitor display is blue or frozen

1. Reset the LC-8100 and check the system information on the screen during boot up.
2. If unit reboots correctly, try running application again. If same problem occurs, try reinstalling the application software.
3. If unit cannot reboot correctly, try replacing the hard disk drive (or SSD).

Station is not communicating with server application

1. Check that the LC-8100 s' IP addresses are correct and unique (no conflict) and the port number matches application software setup.
2. Check the Ethernet cable connections at the problem LC-8100 s and at the Ethernet hub or switch.
3. Check that host server IP address matches the LC-8100 IP address group. Try pinging one of the LC-8100 IP address from the host.
4. Check host server application software setup. Restart software if necessary and test again.
5. Reboot the host server and test again.
6. Replace Ethernet hub or switch and test again.

LC-8100 does not respond to keyboard command

1. Check the keyboard cable connections at both the keyboard and the LC-8100. Unplug the cable and re-insert fully. Check whether it snaps in correctly. Note that it's necessary to hold the back end of the PS2 connector near the cable exit and push in hard to get the locking connector into place.
2. Test with known good keyboard and cable. If it works, replace the cable and/or keyboard.

Attached RS232 device is not working

1. Check that the device and LC-8100 have power.
2. Check RS232 connections at the device and LC-8100.
3. Check whether baud rate and data format settings of application is matching with the device.
4. Attach the wrap plug to the device end of the RS232 cable and run an RS232 port test program. If the test passes, replace the serial device. If the test fails, go to step 5.
5. Attach a wrap plug to the RS232 port of the LC-8100and rerun the RS232 loop test. If the test passes replace the RS232 cable. If the test fails, replace the LC-8100.

LC-8100 does not boot from internal mSATA SSD

1. Check in BIOS setting whether the boot device priority is set to boot from mSATA (note that the mSATA SSD is installed as SATA hard disk drive).
2. Check if the operating system on the mSATA SSD is corrupted. If so, try reinstalling the operating system or replace the mSATA SSD.

Warranty

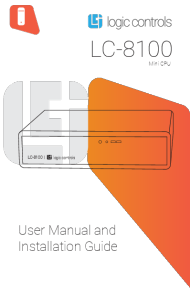
For Warranty information on your product, please visit: **https://logiccontrols.com/warranties-policies/**

Return and Repair Process
To return Logic Controls products for repair during the warranty period or after expiration of the warranty period, a valid Return Merchandise Authorization (RMA) number from Logic Controls Customer Service Department is required. To

obtain an RMA please go to the **support page on our website**.The RMA number, customer name and location must be clearly indicated on the outside of the returned package and on the enclosed packing list. Logic Controls cannot be held responsible for any products with packaging returned without an authorized RMA number. The Customer is responsible for packing the returned unit properly and for the cost of shipping the unit to Logic Controls. Additional damage caused in shipping due to poor packaging becomes the responsibility of the customer. Return shipping charges will be paid by Logic Controls on products under warranty via normal ground service for customers in the continental United States. Customers in all other geographies are responsible for return shipping charges from Logic Controls, FL. The customer is responsible for shipping charges to and from Logic Controls for products out of warranty or deemed not eligible for warranty coverage.

RMA Procedure
Download an RMA shipping label form (***Please note that this is not a pre-paid shipping label. ***)
Please mail RMA label to: Logic Controls
404 Sunport Ln.
Suite 550
Orlando, FL 32809
For further assistance:
Phone: 516-248-0400 Option 2 for Support
Website: **www.logiccontrols.com**
Email: **support@logiccontrols.com**
Hours of Operation: 9:00 a.m. to 5:30 p.m. ET, Monday – Friday
RMA Process outside USA
If you are located outside the United States, please contact your local dealer, or check our website for more information.

Documents / Resources



logic controls LC-8100 Mini KDS/Industrial Computer [pdf] User Manual
LC-8100, Mini KDS Industrial Computer, LC-8100 Mini KDS Industrial Computer

References

- **Logic Controls – Automation solutions built for your business**
- **Logic Controls – Automation solutions built for your business**
- **Warranties & Policies | Logic Controls**

Manuals+,

- **home**
- **privacy**