The Extron MLC 62 RS EU and the MLC 62 RS MK are keypad controllers for use in classrooms and meeting facilities. The EU model attaches to a single size European electrical junction box with a 60 mm mounting center. The MK model mounts to a single size MK junction box. The controllers have backlit soft touch buttons and can control common AV functions, including power, input switching, and volume. Both models have RS-232 serial and IR ports for universal display control. A digital input and two relays enable monitoring and controlling of other devices in the room. Both models have six-button and eight-button options.

**NOTES:**
- Installation and service must be performed by authorized personnel only.
- For full installation, configuration, and operation details, see the product user guide, available at www.extron.com.

**Installation Steps**

1. **Prepare the installation site.**
   - The MLC 62 EU and MK controllers can be installed in standard EU and MK one-gang electrical wall boxes:
     a. Install the electrical box, following the instructions provided with it.
     
     **ATTENTION:**
     - Ensure that the junction box is properly grounded.
     - Assurez vous que le boîtier d’encastrement est correctement mis à la terre.
     
     b. Prepare and pull the cables through the electrical box.

2. **(Optional) Change the faceplate and buttons as needed.**
   a. Remove the faceplate from the MLC module as follows:
      1. On the right and left edges of the faceplate are two pairs of slots, into which two small tabs on either side of the MLC fit. Insert the flat end of a small screwdriver into each side slot (as shown at right) and press inward until the tab is released from its slot.
      2. Lift the faceplate off the MLC circuit board.

   b. If desired, replace the buttons in the faceplate as follows:
      1. From the front of the faceplate, press the button membrane to be replaced backward through its faceplate openings until it comes free. If replacing the faceplate, repeat this step until all the buttons are removed.
      2. On the back of the faceplate, place the new button membrane at the desired location, with the two pegs in the upper-left and lower-right corners of the membrane in the faceplate holes at opposite corners of the row (see the illustrations at right). Press the pegs and buttons of the membrane into the faceplate.
      3. Repeat step 2b as needed.
c. Reattach or replace the faceplate as follows (see the illustration at right):
   1. Making sure that both the MLC and the faceplate are upright, hold the MLC with its circuit board against the back of the faceplate, aligning the two tabs on each side of the MLC with the two slots on each side of the faceplate.
   2. Each tab has a ridge that must snap into a slot on the side of the MLC. Press the MLC into the faceplate until the ridges on all four tabs snap into place.

3. Attach the mounting bracket to the junction box.
   a. Place the mounting bracket onto the electrical box, aligning the keyhole slots in the bracket with the screw holes on the right and left sides of the box.

   **NOTES:**
   - **Recommended:** To keep the MLC securely in place and prevent it from being easily pulled from its mounting, ensure that the side of the bracket with the word “Front” engraved on it faces out (away from the electrical box).
   - To be able to remove the MLC easily from its mounting, attach the bracket with Front facing inward (toward the electrical box).

   b. Secure the bracket to the mounting surface, using two of the included screws in the keyhole slots at the top and bottom (see the illustration above right).

4. Connect the cables to the MLC rear panel ports. Attach the cables and IR emitters to the rear panel of the MLC and to the display device or switcher as required.

   • **Port A Com:** Connect a display device or switcher to this serial port to control the device via RS-232 (see the illustration at right).

   • **Port B IR/S:** Connect a display device, switcher, or up to two IR emitters to this port (see the illustration at right). You can configure this port for either serial or IR communication using the MLC 55, 62 and 64 Series Configuration Program.

   • **Relay ports:** The relay ports provide connections for two relays. Connect one or two devices (such as a low-voltage controller and a motorized screen, shown in the example at right) to this port. The relay ports are normally open and rated for 24 VDC, 1 A.

   **NOTE:** If you use both relay ports, connect the ground wires of both devices to common pin 3.
5. **Connect and apply power.**

Connect the included power supply to the MLC Pwr connector as shown at right, then connect power to all devices in the system.

6. **Connect the MLC to the computer.**

Use either of the following methods:

- Connect a USB A-to-USB mini B cable between the **USB configuration port** on the MLC side panel and a USB port on your computer as shown at right, or
- Wire an RS-232 cable to the provided 3-pole connector and connect it between the MLC **Remote port** and the computer serial port, as shown below.

7. **Configure the MLC buttons and ports** (see the MLC 55, 62 and 64 Series Configuration Program Help File).

   a. Load and install the configuration software to your computer from the Extron website.
   b. Obtain device drivers. Drivers for the devices to be connected to the MLC rear panel IR and serial ports can be downloaded from [www.extron.com](http://www.extron.com). You can also obtain them using the configuration software if an Internet connection is available.
   c. Upload the configuration to the MLC.

8. **Test the system** to ensure that the MLC is functioning properly.
9. **Mount the MLC.**

   Before mounting the MLC to a wall or furniture, make sure that all device cables are connected to the MLC rear panel. Disconnect power at the source from all devices in the system.

   a. Align the MLC wall frame to the mounting bracket, which you attached to the mounting surface in step 3 (see page 2).

   b. Holding the wall frame in place on the bracket, press the MLC into the frame until the two tabs on either side of the unit snap into the opening of the mounting bracket, holding the MLC in place.

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**Mounting the MLC 62 EU in a Raceway Using a Spacer (Optional)**

If you are experiencing difficulty with the MLC staying in place when installed in a cable raceway, this may be due to a gap between the mounting bracket and the wall frame.

When this gap exists, the tabs on the sides of the MLC do not reach the mounting bracket and the MLC does not snap completely into the bracket.

You can remedy this situation by installing a spacer (provided with the MLC) between the mounting bracket and the rim of the junction box. The spacer is black plastic and has a slightly larger center opening than the mounting bracket.

To install the MLC in a raceway with a spacer:

1. Mount the electrical box in the raceway.
2. Attach the spacer to the electrical box by inserting two of the included screws in the holes at the sides of the spacer. Leave the screw heads protruding approximately 1/8 inch from the surface of the spacer.
3. With the “Front” label facing toward you, place the mounting bracket onto the spacer so that the screw heads pass through the two keyhole slots in opposite sides of the bracket.
4. Rotate the mounting bracket as necessary to ensure that the MLC will be positioned straight on the mounting surface and not skewed to either side.
5. Tighten the screws to secure the bracket to the spacer.
6. Pull the cables through the electrical box and the wall frame.
7. Disconnect power from all devices at the source and connect all cables to the MLC.
8. Align the wall frame with the mounting bracket on the mounting surface.
9. Press the MLC into the wall frame until the unit snaps into place.