

# **NEAR INFRARED (NIR) ELEVATED VIDEO PLUS MAZE**

## **INSTALLATION MANUAL**

**DOC-087**

**Rev. 2.4**

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notes

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## CHAPTER 1 | ASSEMBLY INSTRUCTIONS

The NIR Elevated Video Plus Maze is separated into basic components for shipping purposes. Begin assembly by unpacking and collecting all components. Then select a location for the maze. The Rat maze requires at least 5' x 9' (1.6m x 3m) of floor space and the mouse maze requires 4' x 7' (1.3m x 2.3m).

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**NOTE:** Do not apply power to the NIR-110 before completing these steps in order. Failure to do so will result in severe damage to the maze.

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1. Locate the three pieces required to assemble the maze base and assemble them using four of the supplied retaining pins, as shown in Figure 1.

*Figure 1 – Assembled NIR Plus Maze Base*

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2. Install one of the two identical open runways on the maze base by snapping it into place, as shown in Figure 2. Be sure to install this open runway on an arm of the maze base that does not have a protruding mount for the vertical supports at the end of it. This will be referred to as Open Runway 1. Tuck the cable out of the way, as it will not be used.

*Figure 2 – Open Runway 1 Installed*

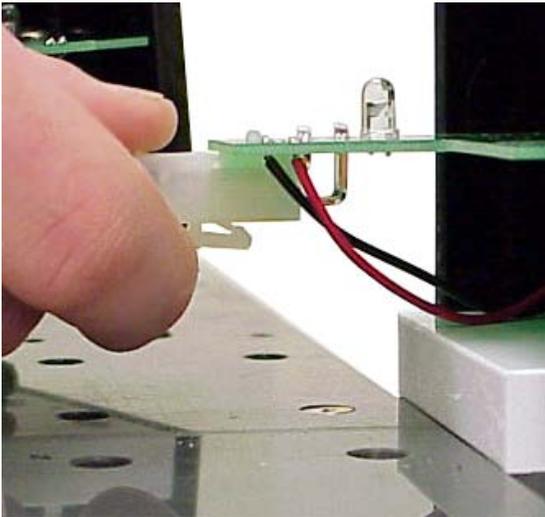
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3. Connect the cable on one of the two identical closed runways to the connector on Open Runway 1, as shown in Figure 3. This closed runway will be referred to as Closed Runway 1.

*Figure 3 – Connecting the Runway Control Cable*

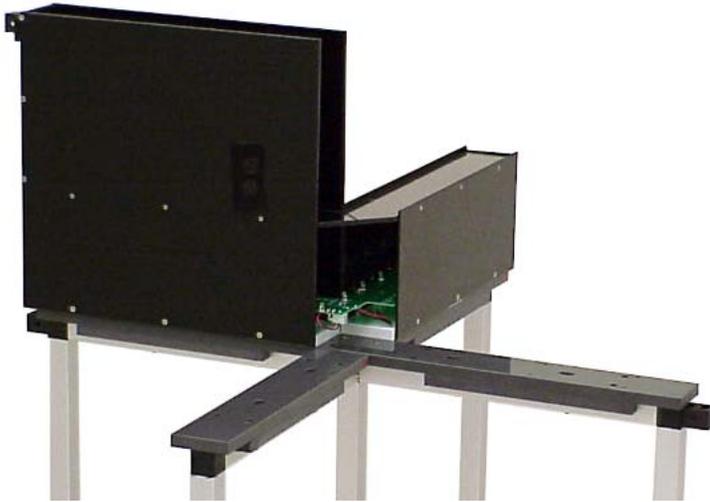
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4. Working in a counterclockwise direction, snap Closed Runway 1 into place on the next runway base, as shown in Figure 4.

*Figure 4 – Closed Runway 1 Installed*

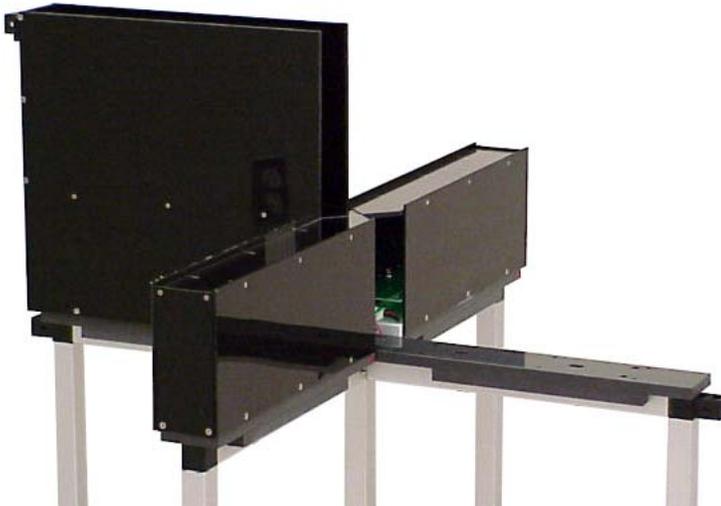
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5. Connect the cable on the remaining open runway to the connector on Closed Runway 1.
6. Snap the remaining open runway in place opposite the Open Runway 1, as shown in Figure 5. This will be referred to as Open Runway 2.

*Figure 5 – Open Runway 2 Installed*

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7. The remaining closed runway will be referred to as Closed Runway 2. Connect the cable on Closed Runway 2 to the port on Open Runway 2.
8. Snap Closed Runway 2 into place as shown in Figure 6.

Figure 6 – Base with Closed Runway 2 Installed

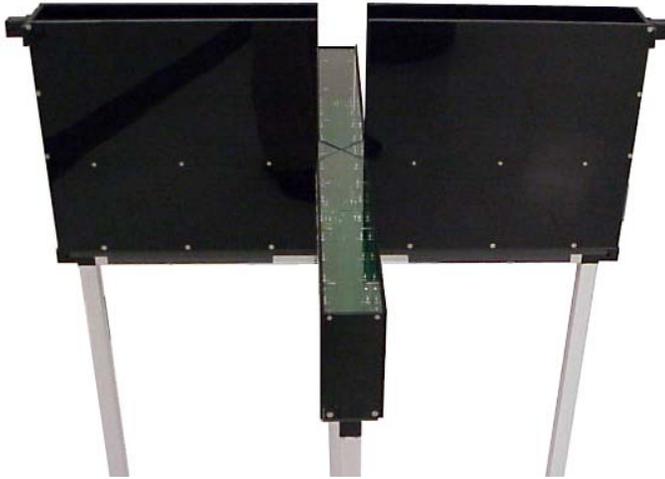
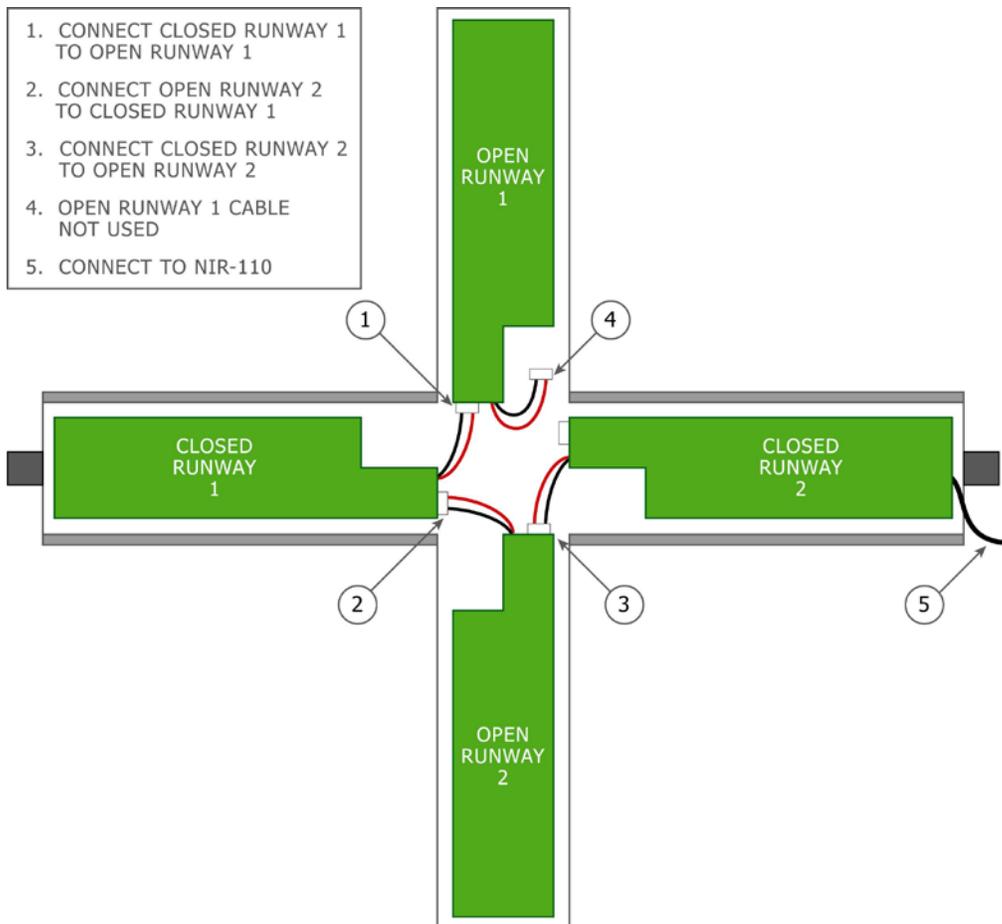


Figure 7 – Wiring Diagram



9. Place the white plastic diffuser panels over each of the runways, as shown in Figure 8.

10. Locate the two uprights and attach them to the protruding mounts on the maze base and closed runways using four of the included retaining pins, also shown in Figure 8.

*Figure 8 – Maze with Uprights and Diffuser Panels Installed*

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11. Slide the camera bracket to the center of the crossbar and fix in place using the included thumbscrew.
12. Secure the crossbar between the uprights using two of the included retaining pins, as shown in Figure 9.

*Figure 9 – Crossbar Installed*

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13. Insert the camera into the bracket and secure using the included thumbscrew, as shown in Figure 10.

*Figure 10 – Camera Mounted in Bracket*

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14. Connect the camera to the firewire hub using the provided firewire cable.
15. Using a second firewire cable, connect the firewire hub to the firewire card located on the back of the computer.

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**NOTE:** Do not apply power to the NIR-110 unless all four runways are connected as indicated in Figure 7. Failure to do so will result in severe damage to the maze.

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16. Connect one of the Light Control connectors on the NIR Plus Maze (shown in Figure 11, located at the end of each closed runway) to the **To Light Panel** connector on the NIR-110 Light Controller (shown in Figure 12) using the included SG-5601R-15 cable.

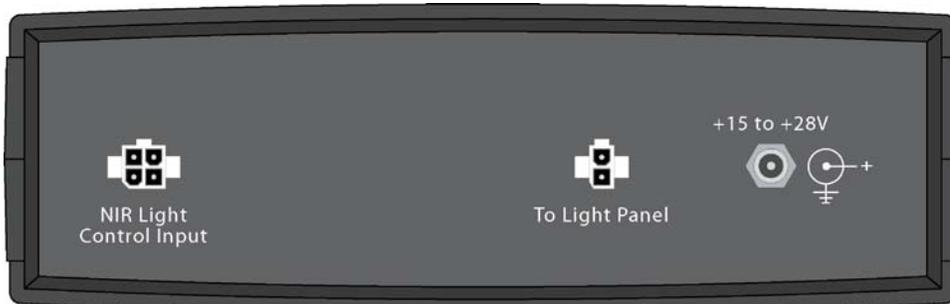
*Figure 11 – Light Control Port on NIR Plus Maze*

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*Figure 12 – Back of the NIR-110 Light Controller*

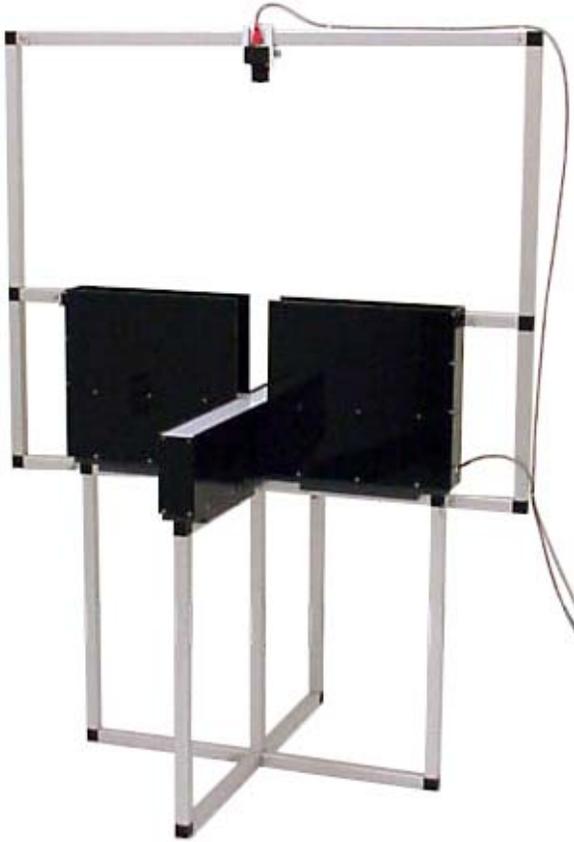
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17. Secure both the firewire and SG-560IR-15 cables to the anchors located on the crossbar and upright using the included cable ties, as shown in Figure 13.

*Figure 13 – Completed Maze with Secured Cables*

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## CHAPTER 2 | NIR-110 CONTROL OPTIONS

### Controlling the NIR-110 Remotely

To control the NIR-110 remotely via an output from a MED Connection Panel, use the included cable to connect the **NIR Light Control Input** to any available output on a MED Associates Connection Panel and set the **Remote/ON** switch to **Remote**. Power is supplied to the NIR-110 via the NIR Light Control Input.

The NIR light will turn on when the corresponding output is activated.

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**NOTE:** If controlling the NIR-110 remotely, **DO NOT** connect the **+15 to +28 V** DC connector to a standard wall outlet. Doing so may cause hardware damage.

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### Controlling the NIR-110 Manually

To control the NIR-110 Light Controller manually, use the included power adapter to connect the **+15 to +28V** DC power input on the back of the device to a standard wall outlet and set the **Remote/ON** switch to **ON**. The NIR light will remain on until the **Remote/ON** switch is set to **Remote**.

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**NOTE:** If controlling the NIR-110 manually, **DO NOT** connect the **NIR Light Control Input** connector to a MED Associates Connection Panel. Doing so may cause hardware damage.

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### CHAPTER 3 | OPERATING INSTRUCTIONS

1. The NIR light level can be adjusted to the desired intensity using the **Calibrate** adjustment screw, shown in Figure 14.
2. The **Power** LED on the front panel of the NIR-110 indicates that power is supplied to the device and it is switched on.
3. The **Light ON** LED on the front panel of the NIR-110 indicates that the NIR Light is currently on.

Figure 14 – Front of the NIR-110 Light Controller



## **APPENDIX A | CONTACT INFORMATION**

Please contact MED Associates, Inc. for information regarding any of our products.

Visit our website at [www.med-associates.com](http://www.med-associates.com) for contact information.

For technical questions, email [support@med-associates.com](mailto:support@med-associates.com).