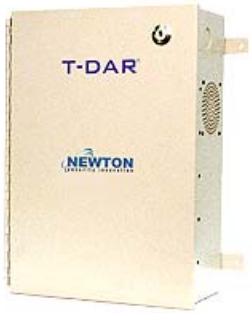
# T-DAR Mantrap Installation Checklist

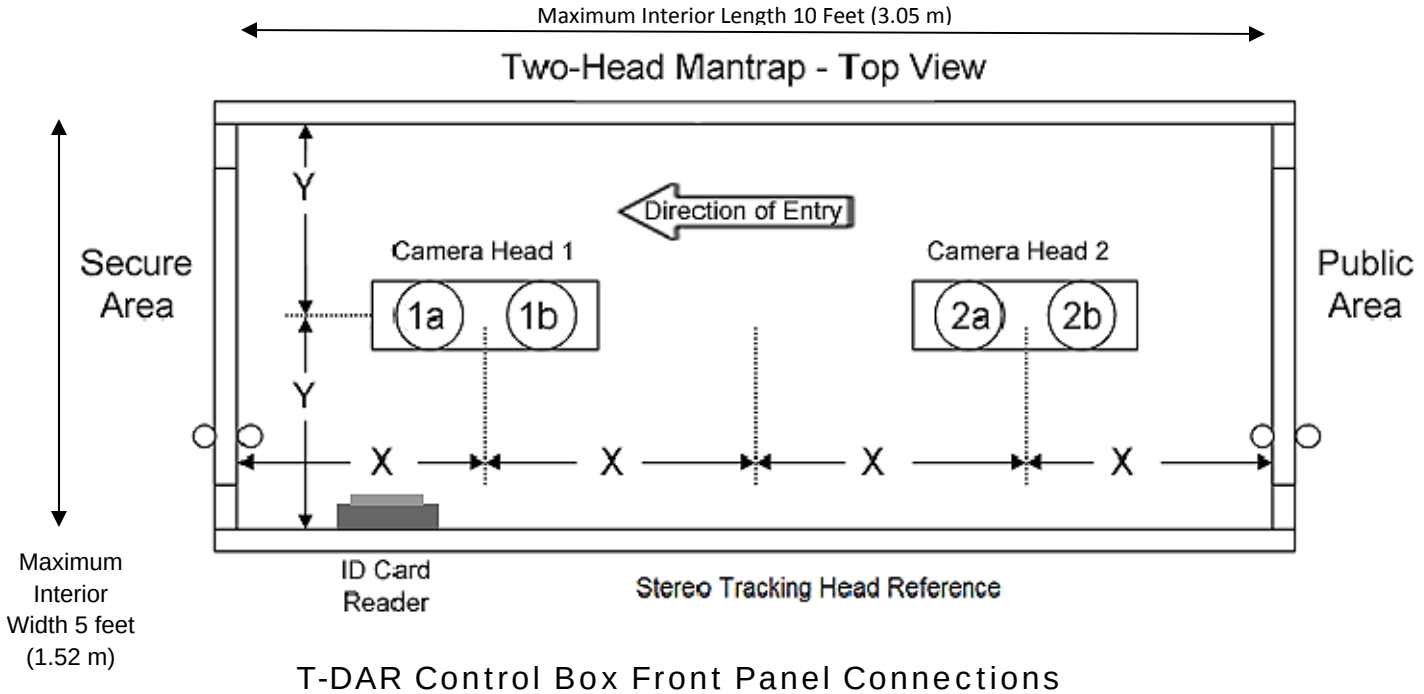
***To be completed before commissioning***

**Model T2010MT Two Head**

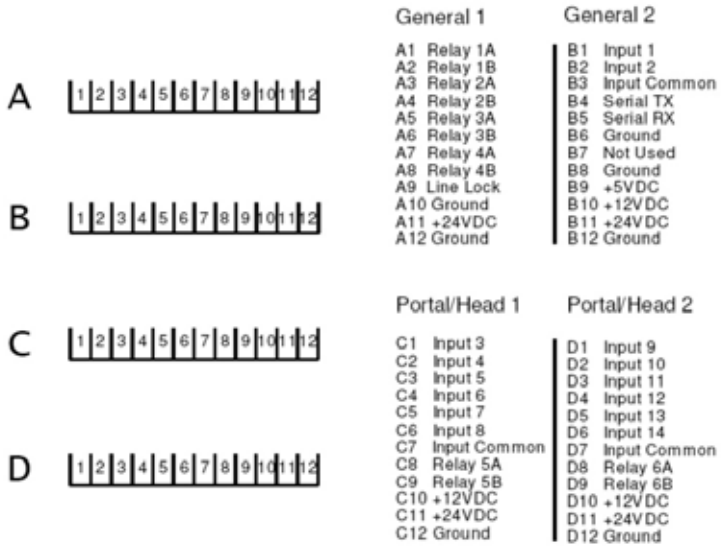




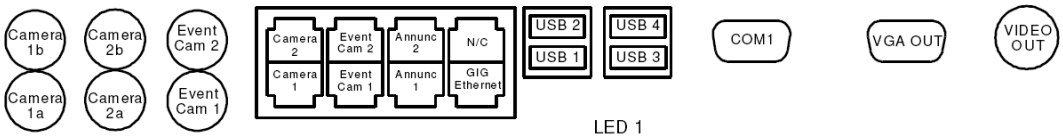
NEWTON
security innovation




## T-DAR Control Box Front Panel Connections




## Upper Front Panel Connections



# T-DAR Two-Head Mantrap Installation Checklist

An incorrectly wired T-DAR system, faulty connection, or bugs in access control programming will often not show up until the completion date of the project. Failure to finish the following installation procedures before the setup period may extend the completion date of the project.

This check list is used to confirm completion of T-DAR installation for a two-head mantrap system.

Successfully completing these procedures serves to confirm proper installation so that system setup may proceed. This list must be completed, signed and dated before commissioning by either a Newton engineer or a trained and approved engineer.

☐ **1. No modifications on the T-DAR control box have occurred before or during the installation.**

☐ 2. **IMPORTANT:** There should be no direct sunlight into the mantrap at any time.

☐ 3. Mantrap dimensions:
   a. Width should not exceed 5 ft. (1.52 m)
   b. For ceiling height that is between 8 ft. (2.44 m) and 9 ft. (2.74 m) the length should not exceed 9 ft. (2.74 m)
   c. For ceiling height that is between 9 ft. (2.74 m) and 11 ft. (3.35 m) the length should not exceed 10 ft.(3.05 m)

☐ 4. Confirm that the camera heads are at the same height and are parallel to the floor.

5. If the camera-head height is between 8 ft. (2.44 m) and 10 ft. (3.05 m) a 1.9 lens is required. ☐
   OR
   If the camera-head height is between 10 ft. (3.05 m) and 11 ft. 3.35 m) a 2.5 lens is required. ☐

☐ 6. If the door on the public side opens into the mantrap, then a door encoder will be. For an inward swinging public door, confirm that it is equipped with a door closer that automatically closes in a slow consistent manner and that the door is not allowed to open more than 100 degrees.

☐ 7. Verify that the camera heads are positioned as shown in the diagram on page 2 and that “Camera 1” on both camera heads is positioned toward the **secure side** of the mantrap.

☐ 8. **Project photographs -** When construction of the mantrap is complete and the answers to questions #1 through #7 are confirmed as correct, then shoot a minimum of eight, specific photos from inside and adjacent to the mantrap and send them to T-DAR set-up personnel:
   a. With your back to the public door, take photos of the ceiling, the floor, and the secure door.
   b. With your back to the secure door, take photos of the ceiling, the floor, and the public door.
   c. **Additionally**, send at least two pictures of the location and opened front of the T-DAR control unit showing all input/output wires terminated at the green Phoenix connectors..

☐ 9. Ensure that the light level is at least 300LUX (downward light measurement) at all points in the mantrap. Take measurements at 40 inches (1 m) above the floor.

☐ 10. The camera heads are connected to the T-DAR control unit. Cameras “a” and “b” on each head are to be connected to ports “a” and “b” of the control box. In addition, connect camera sync cables (Cat5) to the Camera 1 port for Head 1 and the Camera 2 port for Head 2.

**For steps #11 through #20, link a PC to the T-DAR control unit using an Ethernet connection. Once established, connect to the control box using the T-DAR User Interface (UI) application. The status "connected" should be displayed at the bottom of the user interface. Connect a video monitor to the video-out port of the T-DAR control unit.**

☐ 11. Click the "Monitor" tab of the user interface to set the video output. There is a drop-down menu in the "Display Demo" section, indicating Public Door and Secure Door. Select Secure Door from the dropdown menu and observe two separate images on the lower half of the video monitor. Verify that these images are still, clear, and that they are not shifted up or down. Select Public Door from the dropdown menu and verify the images are still, clear, and that they are not shifted up or down.

**Select "Show I/O" on the "Monitor" tab of the user interface.**

☐ 12. **For the public door-contact.** Test and verify that as the public door closes, Input #4 changes from red to green on the input/output display of the monitor.

☐ 13. **For the Secure Door Public Valid**. Test and verify that as the Secure Door Public Valid Access is granted (access grant signal from inside mantrap) Input #5 changes from red to green on the input/output display of the monitor.

☐ 14. **For the secure door-contact**. Test and verify that as the secure door closes Input #6 changes from red to green on the input/output display of the monitor.

☐ 15. **For Secure Door Secure Valid**. Test and verify that as the Secure Door Secure Valid request is granted (signal from outside of the mantrap, on the secure side), Input #3 changes from red to green on the input/output display of the monitor.

☐ 16. **For Supervisor Override**. Test and verify that as the Supervisor Override signal is provided (override button is pressed) Input #1 changes from red to green on the input/output display of the monitor.

☐ 17. Verify that both the public and secure door locks engage immediately when the T-DAR unit sends locking signals to either of these doors. If there is a delay in lock engagement on the public door lock, after a T-DAR lock command, the door will be able to be pushed open during the interlock process. This is also true for the secure door if there is a delay in its locking process.

☐ 18. Verify that an alarm output line extends to the building security center and that this line is connected across Relay #5 (pins C8 and C9).

☐ 19. For a public door with its own access readers, ensure that the T-DAR as well as the access control system can both lock the public door, in parallel (independently). The public door will lock when the T-DAR and/or the access control system decides to lock it. Also, ensure that any additional readers guarding the public door (inside or out) are not connected to T-DAR.

☐ 20. If the lighting above the doorway is provided by low frequency florescent fixtures operating at 60Hz or less, verify that a low-voltage, AC transformer has been installed and connected to the Line Lock and Ground terminals (A9 and A10) in the T-DAR control box. The Line Lock transformer voltage should be 6-30VAC.

**I confirm that I have verified all items on this checklist and that this T-DAR system is ready for commissioning.**

Name: _____ Date: _____ Location: _____