

## T-DAR Mantrap and Vestibule Maintenance Recommendations

To ensure the maximum life span and effectiveness of the T-DAR system, a maintenance procedure should be established. The solid state T-DAR system so does not require the more extensive maintenance that a mechanical system requires. Performing the following checks at the prescribed times will enable the system to continue providing secure access control. A system that is properly calibrated and maintained will give few false alarms.

Frequency	T-DAR Maintenance Elements
<p><b>At installation</b></p>	<p><b><u>Control Unit Cabinet</u></b></p> <p>The T-DAR control box is an industrial computer with very sensitive micro-chips and electrical components.</p> <p><b>WARNING:</b> Modifying, drilling or cutting holes into the T-DAR controller cabinet will void the one year manufacturer’s warranty.</p> <p>Cutting or drilling of the metal enclosure inevitably results in metal chips and particles falling into the control box and lodging in the sensitive electrical components of the internal circuit boards. Additionally, the level of vibration caused by drilling/cutting of the enclosure is not included into our factory test procedure. Normal transportation and standard installation is well within our design specification.</p>
<p><b>At installation and following any subsequent additions or alterations to the area</b></p>	<p><b><u>Ventilation</u></b></p> <p>Other than a ventilation fan, a T-DAR system has no moving parts. Fan units last for a number of years under continual use, provided that the environment is clean and that there are no obstructions to the airflow.</p> <p><b>NOTE:</b> Ensure that a six inch (15.2 cm) gap is maintained on both sides of the T-DAR control unit, away from any wall surface, equipment housing or conduit piping.</p>
<p><b>Every six (6) months</b></p>	<p><b><u>Calibration</u></b></p> <p>To ensure optimal tailgate detection, compare the calibration appearing on the <i>Installer Camera Setting</i> user interface screen against the settings listed in the manual - <a href="#">Section 7: Configuration and Set Up...</a></p> <p><b>NOTE:</b> T-DAR calibration should be checked immediately after any change is introduced into the mantrap environment. Calibrate the T-DAR system after a change in:</p> <ul style="list-style-type: none"> <li>▪ Lighting</li> <li>▪ Wall surface</li> <li>▪ Floor covering</li> <li>▪ New or different signage or postings</li> </ul> <p>Test cycle the mantrap several times to ensure that there are no false alarms:</p> <ul style="list-style-type: none"> <li>▪ Ideal test subjects would be individuals of different height and/or body mass.</li> <li>▪ Ensure that a user is able to pass completely through the mantrap on the first try.</li> <li>▪ Attempt to tailgate through the mantrap.</li> <li>▪ Each tailgate attempt should trigger a local alarm from the annunciator unit and send a remote signal to building security.</li> </ul>

Frequency	T-DAR Maintenance Elements
Every six (6) months	<p data-bbox="440 319 716 352"><b><u>Fans and Temperature</u></b></p> <p data-bbox="440 359 1425 422">On the front panel of the T-DAR controller are three LED lights used to indicate the internal temperature:</p> <ul data-bbox="488 428 1390 527" style="list-style-type: none"><li data-bbox="488 428 1390 459">▪ A green light signifies that the unit is running in the correct temperature range.</li><li data-bbox="488 464 1390 527">▪ A red LED or yellow LED is an alert that the system is running hot or is about to overheat.</li></ul> <p data-bbox="440 569 1414 663">Ensure the fans are spinning at a constant speed. Both exterior fans should be running smoothly with no unusual vibration or noise. If there is a padded filter over the intake fan, replace the filter every six months.</p> <p data-bbox="440 705 1260 737"><b>NOTE:</b> It is normal not to have a filter over the exhaust fan on the right side.</p> <p data-bbox="440 768 1417 863">When using padded filters in a dirty environment, replace the filters as often as necessary. The filters should be replaced if they show any amount of discoloration or darkening and well before the unit shows signs of overheating with the yellow or red LEDs.</p>
Every twelve (12) months	<p data-bbox="440 949 634 982"><b><u>Stereo Cameras</u></b></p> <p data-bbox="440 989 1406 1041">There are two cameras in each stereo head. In order for T-DAR stereo algorithms to work correctly, the raw video from the cameras must be clean and stable:</p> <ul data-bbox="488 1052 1425 1419" style="list-style-type: none"><li data-bbox="488 1052 1390 1115">▪ Check the integrity of the camera connections at commissioning, ensuring that they are secure.</li><li data-bbox="488 1119 1390 1182">▪ Check the raw video output from both cameras in each stereo head on a video monitor (or VGA monitor).</li><li data-bbox="488 1186 1390 1249">▪ In a system with more than one head, check the video signals from all camera units.</li><li data-bbox="488 1253 1425 1285">▪ Ensure that the video sync from each camera is stable with no signs of movement.</li><li data-bbox="488 1289 1406 1352">▪ On the monitor output, look for signs of interference on both cameras to ensure that the video is clean with no lines, static, warping or vertical shifting.</li><li data-bbox="488 1356 1390 1419">▪ If one or both images shift up or down, by a pixel or more, check the CAT5 and coax cables running to the camera heads.</li></ul> <p data-bbox="440 1461 1390 1524"><b>NOTE:</b> On T-DAR systems utilizing more than one stereo head, sync interference on one camera will often induce poor sync performance on other camera heads.</p>
Every twelve (12) months	<p data-bbox="440 1600 756 1633"><b><u>Hardware and Integration</u></b></p> <p data-bbox="440 1640 1406 1671">Check the operation of the mantrap once a year to ensure that all systems are functional:</p> <ul data-bbox="488 1677 1325 1776" style="list-style-type: none"><li data-bbox="488 1677 1162 1709">▪ Confirm the correct operation of door contacts and locks.</li><li data-bbox="488 1713 1325 1745">▪ Test all readers to ensure that users have no trouble receiving validation.</li><li data-bbox="488 1749 1227 1780">▪ Ensure that the alarm outputs are received by building security.</li></ul> <p data-bbox="440 1812 1425 1906"><b>NOTE:</b> To ensure the maximum continuation of protection by the system, security planners should consider purchasing a spare T-DAR control unit to minimize the amount of down time in the rare event of an equipment outage.</p>