



TRES900S Troubleshooting Guide



The 3 Basic Questions before you dig in

1. Are you using our Power Supply, the open frame power supply in the box with reader?
2. How far is the Power Supply from the Reader, should be according to wiring guide.
3. Is the Reader (inside grounding strap) grounded to Earth Ground?

Training

1. Have you taken an online webinar from one of our trained staff or have you downloaded and viewed the pre-recorded training webinar on the CD from our website?
2. Have you read thru the install guide and understand everything written?
3. Did you unpack and TEST the Reader with your controller in your facility prior to installing at the site?

Do and Do Not's Guide

1. Do not put another manufacturers Wiegand readers output wires on the same terminal of the controller as the TRES900S unless you use a Wiegand splitter.
2. Do not mount reader too close to concrete walls or metal surfaces, could cause signal reflection or absorption.
3. Do use the supplied power supply supplied by TRES, use appropriate wire gauge. Warranty is based on its use.
4. Do mount tags in a vertical orientation and test first before applying permanently.
5. Do test the reader in-house before mounting it at jobsite.

Confirm that the unit is operating properly

1. Confirm the beeper is audible with one BEEP when power is first applied.
2. Confirm the beeper is audible when a good tag is presented with a steady BEEP.
3. Check that the **RED** and **BLACK** wires are installed correctly to our supplied power supply, the **warranty** is based on its use.
4. Confirm that the reader is connected to the supplied power supply, if longer runs between power supply and reader, then you need to follow the cable lengths on the install guide wire chart, remember that you must use half the length.
5. Check the voltage at the Reader, if you under cabled the current drop would be too much to power up the Reader but the voltage would be normal.

Reader just beeps and keeps beeping, about 3 x per second

1. If a weak constant audible BEEP or no BEEP at all when power is applied and no tag presented, means reader is either damaged or not enough current is being supplied.
2. Are you using the tres supplied power supply, is it located according to the wiring guide?
3. Not enough power from the power supply, Insufficient power or current.
4. Check the voltage at the Reader, if you under cabled the current drop would be too much to power up the Reader but the voltage would be normal.



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Reader does not recognize a tag (no beep, no outputted tag data)

1. If no beep, check to see if another tag works, maybe the tag is damaged.
2. Are you holding the tag properly, this is a body blocking frequency!
3. Verify Reader operations by connecting to a computer through the RS232 port and running a Terminal program (cool term or hyper term or putty). Install guide will help you with connectivity.

Tag data to panel is scrambled or Reader beeping and no output

1. One or more of the Reader's wiring connections are incorrect. Power down the reader and panel and verify the wiring connections are correct. Check that Data 0, Data 1 and ground are properly attached.
Caution: some panels use the Wiegand Ground to be connected to either the panel ground or to the power supply ground.
2. Earth Ground should terminate at the grounding strap inside the Reader.
3. Do not wire another manufacturer Wiegand output to same terminal as TRES900S.
4. Cable between Reader and panel is too long, check Wiegand specifications
5. Check to insure the TRES900S tag number / site code are properly programmed in the host panel.
6. Check the Wiegand timing that your host is looking for and insure their timing scheme is within the SIA standard parameters.
7. Check to insure the TRES900S tag number / site code are properly programmed in the tag, connect via serial port and read tag.




Read Range too short

1. Ground loop could be an issue here, see if earth ground terminates at the reader. Check by powering reader without reader ground wire connected. Earth ground should terminate at the Reader, check your panel or power supply.
2. Reader orientation, is it pointing down too much, when center pointed to earth read range ends at that point
3. Tag orientation should be in a vertical position for the Readers Antenna maximum performance and distance.
4. Verify thru the Setup program what the power level is set to (less than 30 dBm), sometimes too much power will saturate the amplifier, try different power levels.
5. Is the Reader Earth grounded inside reader?

Reader reading cars in another lane

1. Reader orientation is it pointing too much toward the other lane. Remember that from center of reader you have 4' pattern on all side, an 8' read zone. Point away from the other lane.
2. Too much dBm power, saturation causes too much side and rear power.

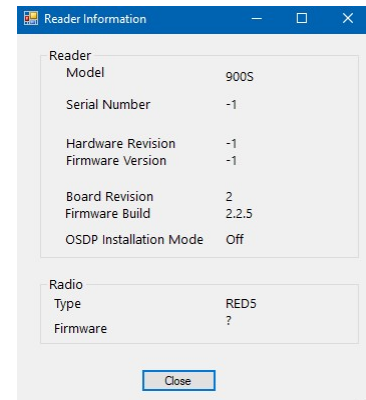
ICON Buttons – Upper Left Window

-  : Information Button, reader specific information
-  : Status Button, reader connection and temperature
-  : Options Button, open tag display and update firmware

Reader Information

The information contained in this window is:

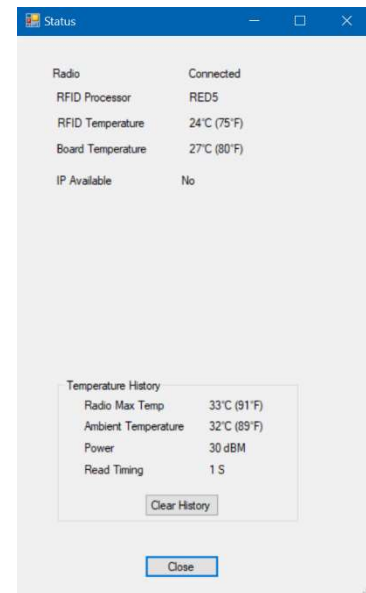
1. Reader model number
2. Reader serial number
3. Hardware and Software version number
4. PCBA and firmware revision number
5. If OSDP is turned on
6. Radio type



Reader Status

The information contained in this window is:

1. Reader radio device connected
2. Reader RFID processor type
3. RF module temperature
4. PCBA temperature
5. If the TCP/IP option installed
6. RFID processor Maximum Temperature seen
7. PCBA maximum temperature, under Microprocessor
8. Maximum power level the unit was set to
9. Lowest read tag timing



Reader Options

The information contained in this window is:

1. Turn the debug on/off
2. Put the Tag display onto your computer window
3. Display the list of IP addresses
4. Update the readers firmware
5. Set the readers IP address, option
6. Set reader ID, factory only

