

Technical Reference

Trouble-Shooting the Access Control Host System

When performance tests on the AWID readers and credentials, and on their interface to the host system indicate that they are all working well – but the host system does not accept or process code input into the controller panel – the problem is in the host system’s ability to accept or to process or to validate the code. Try the following steps.

A. If there is no data input to the host system:

| Problem | Solution |
|--|---|
| No data transmitted from the reader. | 1. If the reader does not indicate a tag read – Repair or replace the reader. Check power at the reader. LR-2000: Check the yellow wire’s connection. (Proximity readers are self-testing. Long-range reader require the Installation Kit’s test unit.) |
| | 2. If the reader does indicate a tag read, the reader’s data driver may be bad. Repair or replace the reader. |
| No data present at the end of the cable. | If the reader does indicate a tag read, check cable continuity. Check all connections and junctions in the cable. |
| Data exiting from the cable, but not indicated in the host system. | Check the panel’s operation. Look for an LED that indicates code input. Look for a displayed event on the host system’s display message. Look for an error message on the display. Substitute a different reader and tag for test. |
| The host system blocks data input if data quality is compromised. | ... (See Technical Reference “Long-Range Readers – Assuring Good Data Flow to System”) |

B. If data input is received but with error:

| Problem | Solution |
|--|--|
| The host system does not read valid cards and tags after their codes are programmed into the system. | 1. Program the System Settings for the correct code format and facility code. |
| | 2. Set the user database with the current time zone, a door group including the door being tested, and the administrator’s priority level. |
| | 3. Do a manual download to the panels after every programming change on the PC. |
| | 4. Reset the panel to remove any restrictive settings or commands. |
| | 5. Close down the system, and then restart it. |

[See “Good Data”]

Set time zone, door group, priority level

Hardware – cable, junctions, connections

Move reader interface connections to reader input port

Code programming – format, fac.code, ID no.

C. Test Techniques

| Purpose | Temporary Test Technique |
|--|--|
| To decide if the problem is the reader -- | Substitute a different reader and card/tag in place of the original reader, connected at the reader-end of the cable. |
| To decide if the problem is the reader's power supply -- | Substitute a backup battery (or a different power supply that meets specifications) in place of the original power supply. |
| To decide if the problem is the cable between the reader and the system's panel -- | Substitute a cable, running on the ground or floor, after disconnecting the original cable at both the reader and the panel. |
| To decide if the problem is the host controller's panel -- | Substitute a different reader and card/tag, connected directly to the panel's reader input port's terminals, after disconnected the original cable at the panel. |

D. Notes

- To test AWID's readers:
Proximity readers are self-testing. Just hold a compatible AWID credential in the field of the powered reader. See Technical Reference "Basic Tests".
Long-range readers require the test unit from the Installation Kit. See the Manual for the reader model.
- Source documents:

| For All Readers and Cards/Tags | For Proximity Readers and Cards/Tags | For Long-Range Readers and Tags | For Particular Access Control Systems |
|---|--|--|---|
| Technical Reference "...trouble-shooting..." | Installation Sheets for individual reader models | LR-2000 Installation & Operation Manual, Section 11.11 | Federal APD Passport: Technical Reference "...Federal APD..." |
| Technical Reference "...matching technologies..." | Technical Reference "...Basic tests..." | LR-911 Installation & Operation Manual, Section 11.11 | (Linear/IEI Hubmax panel may lock up if long-range reader's read repeat rate is at default 3 reads per second. Cycle power to reset panel.) |
| | | Technical Reference "Long-Range readers – Assuring Good Data Flow to System" | |