

PXL-500/PXL-510: Firmware v8.4.10

1.0 PXL-500/PXL-510 Firmware v8.4.10

The PXL-500/PXL-510 Firmware v8.4.10 is the initial release of the PXL-500/PXL-510 controller firmware and replaces the discontinued PXL-250. The PXL-500/PXL-510 controller contains all the features of a PXL-250 controller, plus the following new features.

1. The PXL-500/510 controller may be integrated with the NetworX NX-8E Alarm Control Panel allowing for arming/disarming of the alarm system through presentation of an enrolled card at PXL-500/PXL-510 controlled doors.
2. A Temp Cards feature has been added to allow for future activation and expiration of users. When the Temp Card feature is enabled, user capacity is reduced to 19,110.
3. An RS-485 Wiring Test now makes it possible to test the network wiring.
4. The procedure for setting the controller address has changed. To change the controller address, press the S1 Options button while powering the controller (make sure the JP10 jumper IS NOT in place). When an address change is performed on a PXL-500/PXL-510, the memory is now completely wiped clean.
5. A "System Test" window has been added to appear in the optional LCD-1 Alpha/Numeric Display if the controller thinks it is in the test fixture. Call Keri Systems Tech Support for assistance if this occurs.
6. The PXL-500/PXL-510 reads the 5-Bit CRC contained in Proximity cards eliminating the possibility of ghost reads in a noisy environment. This change means that "ECR" (or "ESP") access control cards manufactured by Proxlock will not work with PXL-500/PXL-510s. These cards were typically used with PXL-35/38/45/48/100 controllers and are often thick and blue or beige in color, with "ESP" and "Proxlock" embossed on one side.

2.0 Application

Firmware release 8.4.10 (PROM v8.4.10 and PIC v2.06) can only be used in PXL-500/PXL-510 controllers. The leading '8' digit in the release number indicates that this release is for the PXL-500/PXL-510.

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3.0 Compatibility

- PROM 8.4.10 and PIC v2.06 are interconnected and both must be installed on a controller for proper operation.
- Firmware release 8.4.10 and Doors v4.10 must be used together to enable all the new features offered by this firmware release.
- An SB-593 is compatible with both a PXL-500/PXL-510 and a PXL-250 (the extra row of connector pins on the SB-593 will “hang” over the PXL-250’s mounting holes).
- A PXL-500/PXL-510 can be added to any existing PXL-250 network and it will function just like a PXL-250. The PXL-500/PXL-510 has additional functionality in terms of card capacity and other features. If PXL-500s/PXL-510s are added to an existing PXL-250 network and the new features will be used (such as Temp Cards), then a PXL-500/PXL-510 must be installed as the master and any controller location that will utilize the function must also have a PXL-500/PXL-510 in place.
- If Alarm Control integration with a NetworX NX-8E alarm panel will be used, a PXL-510 **MUST** be used as the master. This is true for either a PXL-250 network, a PXL-500 network, or a mixed PXL-250/PXL-500 network. In a PXL-250 or a mixed network, any doors participating in alarm control must use a PXL-500/PXL-510.
- When implementing a PXL-500 system that will also incorporate telephone entry (EntraGuard Gold), the telephone entry unit is no longer required to be the master. PXL-250/EntraGuard mixed systems still require an EntraGuard as master.

NOTE: For additional compatibility information, see the [Compatibility Guide - Series 3 \(P/N 01876-001\)](#).

4.0 Known Issues

1. Because of improvements made in the RS-485 circuitry, for network optimization R45 (2.2K) resistors **MUST** be removed from existing PXL-250s when adding a PXL-500/PXL-510. For instructions on how to test for, locate, and remove the R45 (2.2K) resistor from a PXL-250, refer to the [R45 \(2.2K\) Resistor Removal Application Note \(P/N 01736-001\)](#) included in the PXL-500/PXL-510 box or at www.kerisys.com.