Product Release Information: NDE Firmware 02.06.12

<table>
<thead>
<tr>
<th>Product</th>
<th>NDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version Number</td>
<td>02.06.12</td>
</tr>
<tr>
<td>Firmware Release Date</td>
<td>February 19, 2016</td>
</tr>
<tr>
<td>Production Release Date</td>
<td>March 2016</td>
</tr>
<tr>
<td>Customer Support</td>
<td>For more information or support, visit the ENGAGE Technology Solutions web site.</td>
</tr>
</tbody>
</table>

Attention:

This document contains the Release Notes for NDE Firmware Release 02.06.12 and includes feature updates made since the NDE Firmware Release 02.05.14 on November 29, 2015.

Installation and Update Notes:

Installation:

Device firmware updates are made available through the ENGAGE™ cloud database.

From the ENGAGE web portal, each lock may be independently selected by the site administrator to have the latest firmware downloaded during the next scheduled Wi-Fi call. Alternatively, the site administrator may connect to individual locks with the ENGAGE mobile application to update a NDE with the latest firmware.

Additional firmware update information can be found in the Knowledge Center information portal by searching for the “How do I perform NDE Firmware Updates” solution.

Firmware versions that will be installed with this update:

- Main Application : 02.06.12
- Reader Application : 02.00.39
- BLE Application : 01.04.127-1.3.0
- Wi-Fi Application : 4.72.r1722
Who should update?

Allegion recommends keeping all devices up to date with the latest firmware and software. We strive to provide the best products and service for our customers.

Our latest firmware and software releases will allow the customer to get the most from their devices.

Specifically, all customers who would be interested in the following Recent Changes and New Features should update:

Recent Changes:

- After LINKING, NDE will no longer advertise in the ENGAGE “Connect” screen when the LINK is down
  - You can no longer determine the LINK status (down) by seeing the NDE device re-appear and Advertise on the “Connect” screen
  - Users must now check On-Line status with the Access Control Software

- While on-line, NDE now reports the door as “open” during a Magnetic Tamper. Persistent Tamper indications in error are cleared by DPS calibration

- Reader Capacitive-Sense card detection is improved to reduce card reading attempts that occurred when no card is present

- Reader “Days-In-Use” is now properly reported. Day-In-Use was always reported as “0” before this update

- Bluetooth firmware was updated with improved communication response times and improved battery power conservation

- Bluetooth version number was updated to reflect both new stack and new application versions

- A new audit is now reported when Wi-Fi commands fail to load lock configurations: WIFI_UPDATE_CONFIG_FAIL

- General NDE, Reader and Bluetooth and system performance improvements
New Features:

- 3rd party CA certificates now supported by NDE
- Wi-Fi Alert(s) immediate call back can now be disabled to reduce nuisance blinking at the door
  - Device Alerts are always included in the standard audit files in the NDE; but now the immediate Wi-Fi callback of an alert to ENGAGE can be disabled via the Web application; See screen shot below: “ADVANCED” > “Global Settings.”

![Screen Shot of NDE Web Application](image)

NOTE: A nightly call-in or manual server update at each lock is required to push this setting to the lock

- Gateway-to-NDE link “Signal Strength” indicator was added to the NDE
  - After successful linking, the NDE now blinks it’s LED according to the approximate LINK Signal Strength:
    - Strong Signal
      - 5 LONG GREEN flashes
        - Better than -70 dBm signal strength
    - Ok Signal
      - 4 LONG AMBER flashes
        - -70 dBm to - 80 dBm signal strength
    - Weak Signal (NOTE 1)
      - 3 LONG RED flashes
        - Less than - 80 dBm signal strength

**NOTE 1:** The User should move the Gateway closer to the NDE or add another Gateway closer to the installed NDE when weak signal strength is reported.