

System Galaxy Integration Guide

INSTALLATION, CONFIGURATION, OPERATION

SCHLAGE LE/NDE LOCKS

BLUETOOTH READERS & GATEWAYS

NDE/LE Locks can be integrated along with AD-Series Locks
NDE/LE Require 635-CPU & 635-DSI Board (w/ SG 10.5.1 min.)



2024 | SG 11.8.6

SCOPE: this guide covers the following ...

1. NDE/LE Reader Wiring and Install Requirements
2. Using the ENGAGE Mobile App ...
 - Commissioning and configuring of NDE/LE Reader & Gateway
 - Linking NDE/LE Reader to Gateway
 - Upgrading firmware in NDE/LE Reader or Gateway

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1 Allegion NDE Lock Configuration

This guide covers the wiring of Schlage Gateway and configuration of NDE/LE Locks in the Engage app.

1.1 REQUIREMENTS

1. System Galaxy 10.5.1 with v10.5.3 S28 Flash (or higher).
2. 635-CPU and 635-DSI running the correct flash that pairs with the SG software.
3. NDE/LE Locks can be installed on a system that has AD-Series Locks (AD300/AD400) as long as the system is running v10.5.1 (or higher).
4. Gateway module must be set for 2-wire communication (jumpers on device must be correctly installed).
5. Gateway modules must be powered from an external power supply or the power adapter that comes with the device supplied. Do not power a Gateway from the 635-DSI board.
6. You must create an account for the Engage mobile app at <http://portal.allegionengage.com/partner>.
(A valid email account must be supplied to secure an online account with Allegion Engage.)
7. You can download the Engage App from the app store. Sign in using the online account credentials.
8. You must commission each Gateway into a site in the Engage app. Gateway IDs must be unique and valid (1-16 is valid; 0 is not supported). Gateway high/low ranges cannot overlap each other.
9. You must add a Lock to the Engage app and the link it to a Gateway and configured. Lock number must be unique and valid (1-16 is valid; 0 is not supported). Lock number cannot exceed the Gateway high/low range.
10. You can use the engage app to upgrade Gateway and Lock firmware as needed.
11. System Galaxy DSI Reader count must be correctly registered in the SG software.
12. Once locks are configured, you will program the 635-DSI section in the System Galaxy Serial Channel Programming screen.
13. You can program reader settings for each NDE/LE Lock in System Galaxy Reader Properties.
14. **ABOUT RESETTING A LOCK:** If a lock will not show up in the Engage app when you cycle the REX, then the lock must be reset. The reset is done by removing the battery compartment cover, and holding the reset button until the reader beeps. Release the button, and cycle the REX lever three times. You should see a flashing LED on the reader.

1.2 Supporting Documentation

Manuals/Help	
Galaxy Schlage AD400/300 Guide	Covers the configuration in detail of Schlage Readers.
Galaxy 635-Hardware Guide	Covers the hardware installation for boards and reader wiring
Galaxy Software User Guide	Covers the Software Configuration

1.3 Wiring the NDE/LE Gateway to the 635-DSI

You must set the Gateway jumpers to use the 2-wire connection on the RS485.

Gateway	635-DSI
T-	A
T+	B
GND	GND
12vdc	Power may be supplied by the 635-DSI, or an external supply

1.4 Create Online Account

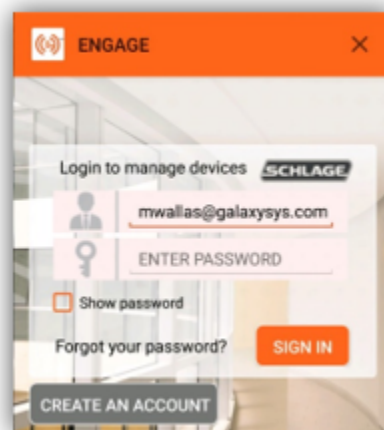
You must create an account to use with the Engage mobile app.

1. Create an account online at <http://portal.allegionengage.com/partner>
2. You will receive an email confirming the account.
3. Follow any instructions as needed.

1.5 Download Engage App and Sign-in to

You can download the Engage App from the app store.

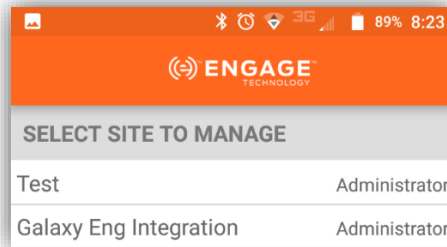
1. Download the Schlage Engage app onto your mobile device.
2. Sign in to the Engage app using the credentials created for the online account.



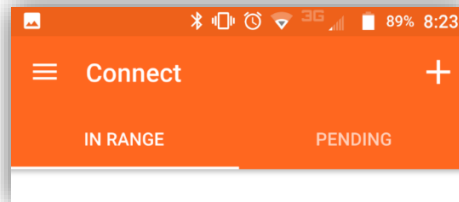
1.6 Commission the NDE/LE Lock

You must choose the correct site for programming the locks.

1. Select the appropriate site to manage.



2. You must “commission” a lock before it can be added to a site.
3. Tap the “+” in the Connect screen, to open the Add Device screen.



3. Turn and release the REX (inside lever) of the lock to cause the lock to appear in the app.
(You may need to refresh the screen by swiping/pulling down in the Add Device screen.)
4. When the lock appears, tap the “Add” button and give the lock a name.
5. Save the lock name.

Note: If a lock will not show up in the Engage app when you cycle the REX, then it will need to be reset to default settings. The reset is done by removing the battery compartment cover, and holding the reset button until the reader beeps. Release the button, and cycle the REX lever three times. You should see a flashing LED on the reader.

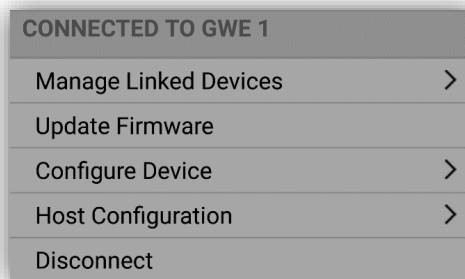
1.7 Commission the Gateway Node

You must commission/add the Gateway in the Engage app before it can be configured.

1. Power up the Gateway node.
The Gateway will go through a power-on self-test.
When the light on the Gateway turns solid red, it is ready to be commissioned.
2. Select the [Connect] button in the ENGAGE app..
3. Select the [+] icon to look for available Engage devices.
4. Select the Engage Gateway.
5. Follow the Commissioning Wizard. Only select and populate the tab for the appropriate mode selection screen (RSI).

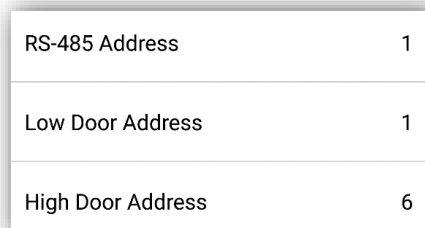
1.8 Configure the Gateway Node

1. In the “Connect” screen, connect to the desired Gateway.
(The blue LED on the Gateway should start to blink)
2. Select the “Host Configuration” option.



CONNECTED TO GWE 1	
Manage Linked Devices	>
Update Firmware	
Configure Device	>
Host Configuration	>
Disconnect	

3. Configure the following settings ...
 - a. RS-485 address (1-16 is valid for System Galaxy; zero is not supported)
 - b. reader low range (cannot overlap another Gateway range)
 - c. reader high range (cannot overlap another Gateway range)



RS-485 Address	1
Low Door Address	1
High Door Address	6

1.9 Upgrade Gateway Firmware

The Gateway will automatically display in the “Connect” screen.

1. To upgrade Schlage Gateway firmware, select “Update Firmware” option.
2. The app will prompt you to open the phone’s WIFI Settings.
3. Select the Schlage Gateway from the ***list of available networks*** in the WIFI Settings.
4. Enter the password into the WIFI Settings.
5. Tap [Join] to cause the phone to connect to the Schlage Gateway.
6. Return to the Engage app and tap the [Send] button in the Update Firmware screen.
7. The firmware will download and install.

1.10 Upgrade Lock Firmware

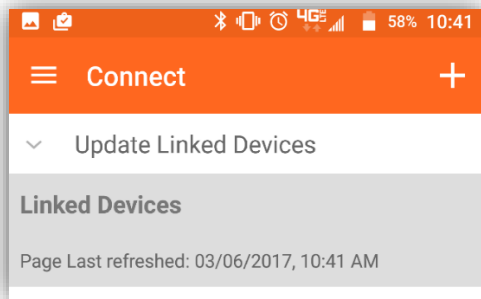
The process for upgrading lock firmware is the same as upgrading the Gateway, except the lock will not automatically display in the “Connect” screen. Turn and release the REX lever to get the lock to display in the connect screen, you must activate the REX lever by, and then refresh the list of devices by swiping the screen.

1. To upgrade Schlage Lock firmware, select “Update Firmware” option.
2. The app will prompt you to open the phone’s WIFI Settings.
3. Select the Schlage Gateway from the ***list of available networks*** in the WIFI Settings.
4. Enter the password into the WIFI Settings.
5. Tap [Join] to cause the phone to connect to the Schlage Gateway.
6. Return to the Engage app and tap the [Send] button in the Update Firmware screen.
7. The firmware will download and install.

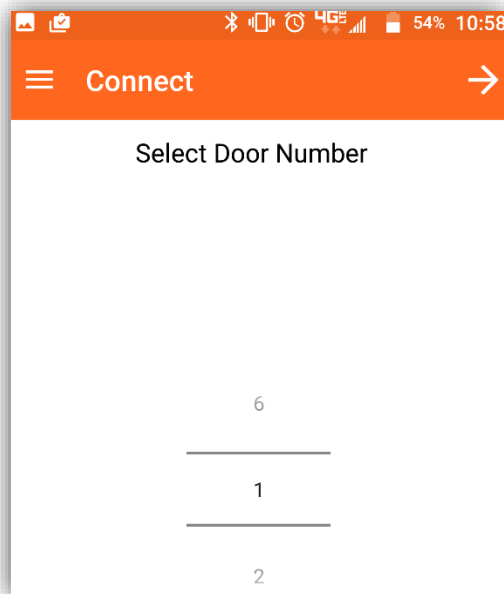
1.11 Link Locks to a Gateway

To link a Lock to a Gateway you must place the Gateway into the ***link mode***.

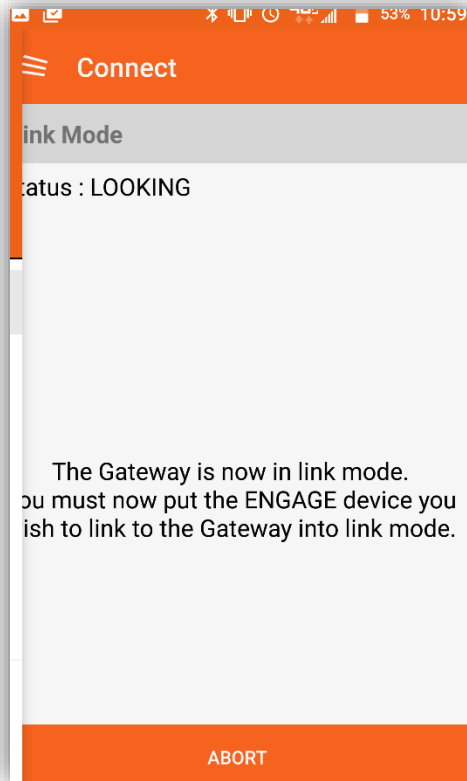
1. Connect to the Gateway in the Engage app.
2. Select the “Manage Linked Devices” option.
3. Tap the [+] button at top of screen and scroll to the desired lock number. You must set the lock address to a number that is within the high/low range settings of the selected Gateway.
4. Tap [Done] button.
5. Then tap the [>] next button at top of screen (this invokes linking mode at the Gateway) .
6. At the Schlage Lock, hold down the REX (inside lever) and present a card. This will put the lock into link mode. (You must hold down the REX lever until the reader LED is blinking.)
7. The Engage app may prompt to confirm this is the correct reader (LED flashing on the reader).
8. Tap the [Link] button to link the Lock/Reader to the Gateway.



9. Select a unique Door Number to assign to the Lock (1 – 16 is valid; zero is not supported). You must choose a number that is within the High/Low Range assigned to the Gateway.

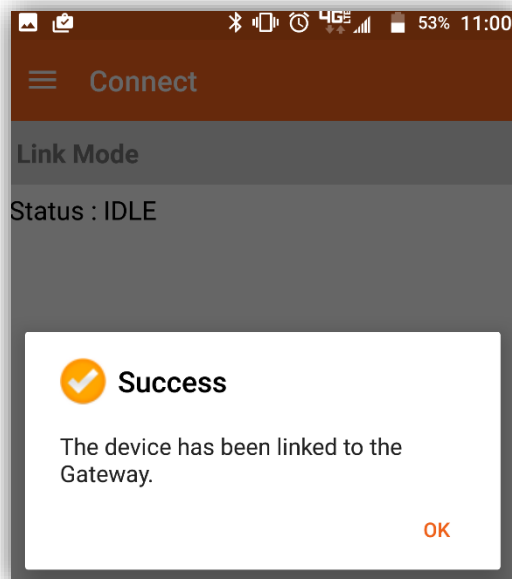


10. Tap [Done] then [>] Next Button at the top of the screen. This initiates the Gateway linking.



11. When the Engage app is finished configuring the Lock, you should see a success prompt.

12. Tap OK to finish.

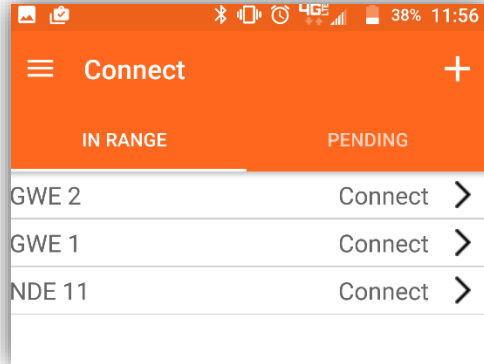


1.12 Recalibrate Lock with Magnetic Switch

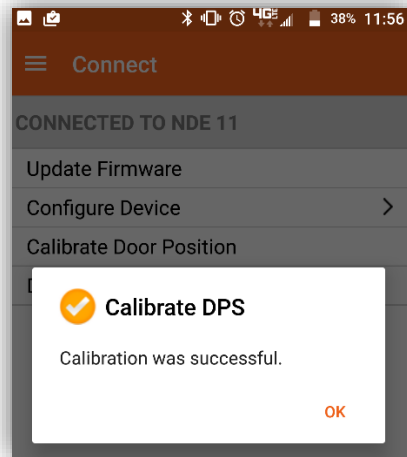
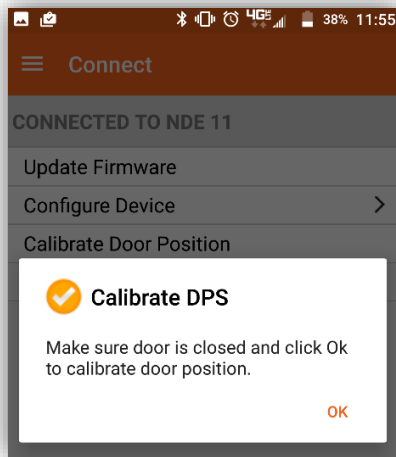
You can recalibrate an NDE lock with magnetic switch if needed due to misalignment or tampering.

Note: the door must be closed, and the magnetic switch must be aligned correctly.

1. Connect to the lock through the mobile app.
2. Hold down the REX (inside lever) while presenting a card to the reader.
3. The lock should appear in the list. (pull down on screen to refresh list)



4. Tap “Connect” for the desired lock .
5. Select the “Calibrate Door Position” option.
6. You will be prompted that the door must be closed. Tap OK to calibrate.
7. When prompted that the calibration is successful, tap OK.



1.13 Programming NDE/LE Locks into System Galaxy

The System Galaxy programming for the DSI Serial Channels are the same for NDE/LE Locks as for the Schlage PIM instructions. Just set the serial channel to “PIM Wiegand”, and check the appropriate lock numbers being used on each DSI Section.

- Tip: Use the Galaxy 635 Embedded Web Server to field test the lock/reader numbers.