
REPLACEMENT OF SRCNX WITH SRCNX-R

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Contents

- INTRODUCTION: 4**

- MAIN/SATELLITE 4**
 - Replacing a Main SRCNX 4
 - Replacing a Satellite SRCNX..... 4
 - Replacing a Single Controller 4

- POWER 4**
 - Controller Power..... 4
 - Device Power 5

- COMMUNICATION PROTOCOL 5**
 - Communicating with CIM 5
 - Communicating with Devices 5

- DEVICE CONNECTION 5**
 - Device Protocol..... 6
 - Configuration..... 7

- DEVICE ADDRESSING 9**
 - SRINX – Channel Based Addressing.....10
 - SRINX – Address Specific Addressing12
 - Schlage VIP14
 - Addressing the VIP Lock16
 - Schlage AD-300 Series17
 - Schlage Wireless (PIM-485-OTD/WAPM).....19

AD-400 Series (PIM400-485-SMS/AD-400 Wireless Locks).....21

CONTACTS AND RELAYS..... 23

SRCNX-R Contact/Relay Details23

Contacts24

Relays.....26

INTRODUCTION:

This document is to instruct installers on how to replace an older SRCNX with the new IP enabled SRCNX-R. Every effort has been made to make the replacement process as simple as possible but, due to the nature of the new device, Main/Satellite configuration, power requirements, communication protocol, device types, and device addressing will be affected in the replacement process.

The SRCNX-R has three different model types depending on the number of contacts and relays associated with the board: **SRCNX-R0**, **SRCNX-R1** and **SRCNX-R2**.

- **SRCNX-R0:** No contacts or relays
- **SRCNX-R1:** One SIONX-8 is attached providing up to 8 contacts and 8 relays
- **SRCNX-R2:** Two SIONX-8s are attached providing up to 16 contacts and 16 relays

NOTE: In this document **SRCNX-R** refers to all three model types. The specific type will only be mentioned when it causes a difference in set up or configuration. If either an SRCNX-R1 or an SRCNX-R2 will work in the configuration then it will be referred to as SRCNX-R1/R2.

MAIN/SATELLITE

The SRCNX-R is neither a Main, nor a Satellite RC device. Due to the IP connection of the SRCNX-R to the CIM, there is no way to connect an SRCNX-R to another SRCNX-R or to an older SRCNX.

Replacing a Main SRCNX

It is recommended at this time that if you are replacing a Main SRCNX in a Main/Satellite configuration that you use one of the satellite SRCNX boards, or a spare SRCNX, to replace the Main SRCNX. The transferred satellite board will then be replaced by a SRCNX-R as a new Single Controller.

Replacing a Satellite SRCNX

The SRCNX-R cannot directly replace a satellite SRCNX. The satellite SRCNX will have to be replaced with a SRCNX-R as a Single Controller.

Replacing a Single Controller

The SRCNX-R can replace a Single Controller SRCNX. Power requirements, device types and device addressing will be affected in the replacement process.

POWER

Power requirements for the SRCNX-R are different from the power requirements of the SRCNX. Also, how connected devices receive power on the SRCNX-R is different from the SRCNX.

Controller Power

The SRCNX requires 16 VAC or 24 VDC at 600mA. The SRCNX-R requires 20 to 32 VDC at 300ma.

- If the SRCNX is being powered by AC then a DC power supply will need to be obtained to power the SRCNX-R.
- If the SRCNX is being powered by 24VDC, the power connector can be switched from J3 on the SRCNX to J2 on the SRCNX-R.

Device Power

Devices connected to the SRCNX could receive power either from J4 through J11 of the SRCNX itself (SRINX, SIONX-24 or SIONX-8 devices only) or from a local power supply.

- If the devices are being powered by the SRCNX then a separate power supply needs to be connected to J1 on the SRCNX-R. This will provide 12 to 24 VDC to devices connected to J4 through J11 on the SRCNX-R.
- If the devices are being powered by a local power supply then continue to power the devices locally when switching to the SRCNX-R.

COMMUNICATION PROTOCOL

The SRCNX is able to communicate via various protocols: RS-232, RS-485, IP (via add on module) or over a modem (via add on module). The SRCNX-R can communicate via IP to the CIM and over RS-485 to connected devices. These differences will need to be taken into consideration when replacing an SRCNX with and SRCNX-R.

Communicating with CIM

The Satellite SRCNX being replaced communicated with the Main SRCNX via RS-485 protocol and the Main SRCNX communicated with the CIM via RS-232 (or IP or modem). The SRCNX-R requires a 10BaseT IP connection to communicate with the CIM.

- Make sure there is an Ethernet connection, on the same network as the CIM, that can be connected to the SRCNX-R.

Communicating with Devices

- RS-485 communication devices may be connected to the replacement **SRCNX-R** device.
- RS-232 devices that may have been connected to the **Satellite SRCNX** using special communication chips will not be allowed to be connected to the replacement **SRCNX-R** device. They will need to be connected to another SRCNX that has been installed with the RS-232 device chipset for communication.

DEVICE CONNECTION

Current **Satellite SRCNX** has 8 channels for devices to be connected and can support up to 16 devices (2 devices of the same protocol per channel). The replacement **SRCNX-R** has 2 channels for devices and can support up to 16 devices (8 devices of the same protocol per channel). Each channel on the

SRCNX-R can only support devices of the same protocol, so some rearranging of devices may be necessary when switching from the SRCNX to the SRCNX-R.

Device Protocol

There are two types of protocol being used by devices:

- **SMS Protocol** - HC11 Reader Interface, SRINX, (New SRINX), SIONX-24 and SIONX-8.
- **F-Series Protocol** - Schlage WAPM, Schlage AD-Series Locks, Schlage VIP (F-protocol only, old VIP Protocol not supported)

When transferring devices from the SRCNX to the SRCNX-R it is important to make sure that only devices of the same protocol are put on the same channel.

- Channel 2 on the **SRCNX-R** (J4 through J7) can be used to connect **F protocol** devices or **SMS protocol** devices. Only one type can be used per channel, mixing protocols on one channel causes conflicts with the devices.
- Channel 3 on the **SRCNX-R0** (J8 through J11) can be used to connect **F protocol** devices or **SMS protocol** devices. Only one type can be used per channel, mixing protocols on one channel causes conflicts with the devices.
- Channel 3 on the **SRCNX-R1** (J8 through J11) can be used to connect **SMS protocol** devices only.
- Channel 3 on the **SRCNX-R2** (J8 through J11) can be used to connect **SMS protocol** devices only.

Example 1: The Satellite SRCNX being replaced is not using any contacts or relays on the SRCNX board, and does not have an SIONX expansion connected to it. It has 16 VIP locks that need to be switched to the SRCNX-R.

Solution: Due to a lack of contacts and relays, a **SRCNX-R0** can be used (no SIONX-8 in use)

- Both channels can be used for F-Series protocol devices.
- 8 of the Schlage VIPs (**F-series protocol**) can be moved to channel 2 on the SRCNX-R
- 8 of the Schlage VIPs (**F-series protocol**) can be moved to channel 3 on the SRCNX-R

Example 2: The Satellite SRCNX being replaced is using 4 contacts and 2 relays on the SRCNX board and 2 relays on the SIONX Expansion Module. It has 16 SRINXs that need to be switched to the SRCNX-R.

Solution: Because of the contacts and relays, a **SRCNX-R1** should be used

- Channel 3 on the SRCNX-R1 must be used for **SMS protocol** devices.
- 8 of the SRINX (**SMS protocol**) can be moved to channel 2 on the SRCNX-R
- 8 of the SRINX (**SMS protocol**) can be moved to channel 3 on the SRCNX-R

Example 3: The Satellite SRCNX being replaced is using 8 contacts and 2 relays on the SRCNX board and 1 contact and 2 relays on the SIONX Expansion Module. It has 8 SRINXs and 8 Schlage VIPs that need to be switched to the SRCNX-R.

Solution: Because of the contacts and relays, a **SRCNX-R2** should be used

- Channel 3 on the SRCNX-R2 must be used for **SMS protocol** devices.
- 8 of the Schlage VIPs (**F-series protocol**) can be moved to channel 2 on the SRCNX-R
- 8 of the SRINX (**SMS protocol**) can be moved to channel 3 on the SRCNX-R

Example 4: The Satellite SRCNX being replaced is using 3 contacts and 2 relays on the SRCNX board. It has 16 AD-300 locks that need to be switched to the SRCNX-R.

Solution 1: To keep the exiting Contacts and Relays on the same SRCNX-R as the AD-300 locks a SRCNX-R1 should be used.

- Channel 3 on the SRCNX-R1 must be used for **SMS protocol** devices
- 8 of the AD-300 locks (**F-series protocol**) can be moved to channel 2 on the SRCNX-R1
- The other 8 of the AD-300 locks (**F-series protocol**) will need to be reconfigured on to other existing SRCNX panels

OR

The other 8 of the AD-300 locks (**F-series protocol**) will need to be reconfigured on to another SRCNX-R.

Solution 2: To keep the all 16 of the AD-300 locks on the same SRCNX-R a SRCNX-R0 should be used.

- Both channel can be used for **F-Series protocol** devices.
- 8 of the AD-300 locks (**F-series protocol**) can be moved to channel 2 on the SRCNX-R0
- 8 of the AD-300 locks (**F-series protocol**) can be moved to channel 3 on the SRCNX-R0
- The contacts and relays will have to be reconfigured on to other existing SRCNX panels

Configuration

There are two primary configuration types with the SRCNX:

- **Multiplex** – 2 devices connected per channel
- **Daisy Chain/Star** – 16 devices connected together and then connecting to Channel 1 on the SRCNX

The SRCNX-R does not support a multiplex configuration. All devices connected to the SRCNX-R will be done so in a daisy chain configuration with 8 devices per channel. J4 through J11 on the SRCNX-R have

been provided to make daisy chaining easier for the installer; the devices do not need to be connected to each other, they can be connected directly to J4 through J11 on the SRCNX-R, similar to the multiplex configuration on the SRCNX. However, this will still be a daisy chain configuration due to the wiring set up of the SRCNX-R.

Satellite SRCNX channels J4 – J11

- Each of these 8 channels could support 2 like or identical devices for a total of 16 devices.
- A Daisy Chain or Star configuration could also be supported on Channel 1 for a total of 16 devices.
- Connector is labeled: **GND, DCD, DTR, TXD(B), RXD(A) & PWR**

SRCNX-R connectors J4 – J11

- These 8 connections have been assigned 2 channels.
- Connections labeled J4 – J7 have been assigned to channel 2
- Connections labeled J8 – J11 have been assigned to channel 3
- Connections have been labeled: **GND, B, A & PWR**
- Up to 8 devices can be connected to channel 2 or channel 3 for a total of 16 devices only.
- For clarification, **B** on the **replacement SRCNX-R** coincides with labeling **TXD (B)** on the current **Satellite SRCNX** and **A** on the **replacement SRCNX-R** coincides with labeling **RXD (A)** on the current **Satellite SRCNX**.

To transfer a SRCNX configuration to a SRCNX-R:

1. Determine the configuration for all devices that have been installed on the current **Satellite SRCNX**.
 - a. Note the current configuration and then determine how these devices will be installed on the **replacement SRCNX-R**
 - **Replacement SRCNX-R** has 2 channels for connecting devices. They are connectors **J4 - J11**.
 - **J4 – J7** is dedicated to channel 2
 - **J8 – J11** is dedicated to channel 3
2. If a multiplex configuration was being used:

- a. The connectors on J4 through J11 of the SRCNX can be moved to J4 through J11 on the SRCNX-R. Device protocols and addressing will need to be considered.
3. If a daisy-chain or star configuration was being used:
 - a. The 16 devices will need to be broken into two groups of 8 devices each. The SRCNX-R only supports 8 devices per channel.
 - b. 8 devices of the same protocol (see above for details on device protocol) can be daisy chained to channel 2 (J4 through J7) on the SRCNX-R
 - c. 8 devices of the same protocol can be daisy chained to channel 3 (J8 through J11) of the SRCNX-R

DEVICE ADDRESSING

When transferring devices from the SRCNX to the SRCNX-R the addresses of the devices will need to be updated. Most devices connected to the SRCNX (VIPs, WAPM, AD-Series) will be addressed with a channel designation of 1 through 8 and an address of 1 through 16. These devices will need to have their channel designations changed in the software to correspond to their new location. Devices addressed as 1 through 8 will not need to be changed while the devices with address 9 through 16 will need to be changed to 1 through 8. The SRINX is an exception to this and will be covered in detail below.

NOTE: In the below examples and instructions the most common device set-ups have been described. Due to the nature of the SMS system, other configurations are possible. Use the below examples as guidelines for the system that is being updated and make changes where necessary. The addressing charts in each section display the necessary address scheme for the SRCNX-R in the second column. If the devices address are made to match the information in that column, no matter what the original configuration on the SRCNX, then it will work with the SRCNX-R.

SRINX – Channel Based Addressing

Channel based addressing is defined as when a specific address (1 through 16) is not assigned to a SRINX, instead it is addressed by which channel it is connected to. In this addressing method a SRINX has an address of **Channel #** followed by **1** or **2** (where 1 is determined by having all the address jumpers installed and 2 is determined by the first address jumper being removed). Channel based addressing is not supported by the SRCNX-R and any SRINXs that are addressed in this manner will need to be re-addressed when they are moved to the SRCNX-R.

NOTE: The older SRINX had addressing jumpers at **W2**. The new SRINX has addressing jumpers at **W10**. For this document we will not be specifying which type of SRINX is in use and will only refer to the address jumpers.

The SRCNX-R has its connectors labeled in the same manner as the SRCNX to help the device transfer process. It is recommended that devices be moved from one connector on the SRCNX to the same connector on the SRCNX-R.

Channel Based Re-Addressing Chart for SRINX		
Connector	Channel/Address when connected to SRCNX	Channel/Address when connected to SRCNX-R
J4	Ch 1 Addr 1	Ch 2 Addr 1
	Ch 1 Addr 2	Ch 2 Addr 2
J5	Ch 2 Addr 1	Ch 2 Addr 3
	Ch 2 Addr 2	Ch 2 Addr 4
J6	Ch 3 Addr 1	Ch 2 Addr 5
	Ch 3 Addr 2	Ch 2 Addr 6
J7	Ch 4 Addr 1	Ch 2 Addr 7
	Ch 4 Addr 2	Ch 2 Addr 8
J8	Ch 5 Addr 1	Ch 3 Addr 1
	Ch 5 Addr 2	Ch 3 Addr 2
J9	Ch 6 Addr 1	Ch 3 Addr 3
	Ch 6 Addr 2	Ch 3 Addr 4
J10	Ch 7 Addr 1	Ch 3 Addr 5
	Ch 7 Addr 2	Ch 3 Addr 6
J11	Ch 8 Addr 1	Ch 3 Addr 7
	Ch 8 Addr 2	Ch 3 Addr 8

Table 1

For the below instructions we are assuming a configuration of 16 SRINXs connected to the SRCNX in a multiplexed configuration (2 devices per connector) using the Channel Based addressing method.

1. Remove **J4 connector** from the current **Satellite SRCNX** and land this connector on **J4** of the replacement **SRCNX-R**.
 - a. Using the address jumpers, re-address the first SRINX connected to J4. See **Table 1** above for the new address.

- b. Using the address jumpers, re-address the second SRINX connected to J4. See **Table 1** above for the new address.
 - c. In the SMS software update the channel and the address for the first SRINX connected to J4.
 - d. In the SMS software update the channel and the address for the second SRINX connected to J4.
 2. Remove **J5 connector** from the current **Satellite SRCNX** and land this connector on **J5** of the replacement **SRCNX-R**.
 - a. Using the address jumpers, re-address the first SRINX connected to J5. See **Table 1** above for the new address.
 - b. Using the address jumpers, re-address the second SRINX connected to J5. See **Table 1** above for the new address.
 - c. In the SMS software update the channel and the address for the first SRINX connected to J5.
 - d. In the SMS software update the channel and the address for the second SRINX connected to J5.
 3. Repeat the instructions given in step 1 and 2 above for each of the SRINXs until they have all been:
 - a. Moved to the corresponding connector on the SRCNX-R board.
 - b. Re-addressed per **Table 1** above.
 - c. Updated in the SMS software with new channel and address designations.

SRINX – Address Specific Addressing

Address Specific addressing is defined as when a specific address (1 through 16) is assigned to a SRINX. In this addressing method a SRINX has an address of **Channel #** followed by **1** through **16** (where each address is determined by the jumper position of the address jumpers). Address Specific addressing is supported by the SRCNX-R, but on a per channel basis. This means that Channel 2 can have devices 1 through 8 and channel 3 will also have devices 1 through 8, for a total of 16 devices. The first eight SRINXs that are addressed in this manner will only need to have their channel numbers updated in the software while the second set (9 through 16) will have to have their channel numbers updated and their addresses changed to 1 through 8.

NOTE: The older SRINX had addressing jumpers at **W2**. The new SRINX has addressing jumpers at **W10**. For this document we will not be specifying which type of SRINX is in use and will only refer to the address jumpers.

The SRCNX-R has its connectors labeled in the same manner as the SRCNX to help the device transfer process. It is recommended that devices be moved from one connector on the SRCNX to the same connector on the SRCNX-R.

Address Specific Re-Addressing Chart for SRINX		
Connector	Channel/Address when connected to SRCNX	Channel/Address when connected to SRCNX-R
J4	Ch 1 Addr 1	Ch 2 Addr 1
	Ch 1 Addr 2	Ch 2 Addr 2
J5	Ch 2 Addr 3	Ch 2 Addr 3
	Ch 2 Addr 4	Ch 2 Addr 4
J6	Ch 3 Addr 5	Ch 2 Addr 5
	Ch 3 Addr 6	Ch 2 Addr 6
J7	Ch 4 Addr 7	Ch 2 Addr 7
	Ch 4 Addr 8	Ch 2 Addr 8
J8	Ch 5 Addr 9	Ch 3 Addr 1
	Ch 5 Addr 10	Ch 3 Addr 2
J9	Ch 6 Addr 11	Ch 3 Addr 3
	Ch 6 Addr 12	Ch 3 Addr 4
J10	Ch 7 Addr 13	Ch 3 Addr 5
	Ch 7 Addr 14	Ch 3 Addr 6
J11	Ch 8 Addr 15	Ch 3 Addr 7
	Ch 8 Addr 16	Ch 3 Addr 8

Table 2

For the below instructions we are assuming a configuration of 16 SRINXs connected to the SRCNX in a multiplexed configuration (2 devices per connector) using the Address Specific addressing method.

1. Remove **J4 connector** from the current **Satellite SRCNX** and land this connector on **J4** of the replacement **SRCNX-R**.

- a. Using the address jumpers, re-address the first SRINX connected to J4. See **Table 2** above for the new address.
 - b. Using the address jumpers, re-address the second SRINX connected to J4. See **Table 2** above for the new address.
 - c. In the SMS software, update the channel and address for the first SRINX connected to J4.
 - d. In the SMS software, update the channel and address for the second SRINX connected to J4.
2. Repeat the instructions given in step 1 above for each of the first eight SRINXs until they have all been:
 - a. Moved to the corresponding connector on the SRCNX-R board.
 - b. Re-addressed per **Table 2** above.
 - c. Updated in the SMS software with new channel and address designations.
3. Remove **J8 connector** from the current **Satellite SRCNX** and land this connector on **J8** of the replacement **SRCNX-R**.
 - a. Using the address jumpers, re-address the first SRINX connected to J8. See **Table 2** above for the new address.
 - b. Using the address jumpers, re-address the second SRINX connected to J8. See **Table 2** above for the new address.
 - c. In the SMS software update the channel and the address for the first SRINX connected to J8.
 - d. In the SMS software update the channel and the address for the second SRINX connected to J8.
4. Repeat the instructions given in step 3 above for each of the remaining SRINXs until they have all been:
 - a. Moved to the corresponding connector on the SRCNX-R board.
 - b. Re-addressed per **Table 2** above.
 - c. Updated in the SMS software with new channel and address designations.

Schlage VIP

Schlage VIP locks are addressed similarly to Address Specific SRINXs. In this addressing method a VIP has an address of **Channel #** followed by **1** through **16** (where each address is determined by the position of the address dip switches). Address Specific addressing is supported by the SRCNX-R, but on a per channel basis. This means that Channel 2 can have devices 1 through 8 and channel 3 will also have devices 1 through 8, for a total of 16 devices. The first eight VIPs that are addressed in this manner will only need to have their channel numbers updated in the software while the second set (9 through 16) will have to have their channel numbers updated and their addresses changed to 1 through 8.

NOTE: Only VIPs with F-Series Protocol will work with the SRCNX-R. The old VIP Protocol is not supported.

The SRCNX-R has its connectors labeled in the same manner as the SRCNX to help the device transfer process. It is recommended that devices be moved from one connector on the SRCNX to the same connector on the SRCNX-R.

Re-Addressing Chart for VIP		
Connector	Channel/Address when connected to SRCNX	Channel/Address when connected to SRCNX-R
J4	Ch 1 Addr 1	Ch 2 Addr 1
	Ch 1 Addr 2	Ch 2 Addr 2
J5	Ch 2 Addr 3	Ch 2 Addr 3
	Ch 2 Addr 4	Ch 2 Addr 4
J6	Ch 3 Addr 5	Ch 2 Addr 5
	Ch 3 Addr 6	Ch 2 Addr 6
J7	Ch 4 Addr 7	Ch 2 Addr 7
	Ch 4 Addr 8	Ch 2 Addr 8
J8	Ch 5 Addr 9	Ch 3 Addr 1
	Ch 5 Addr 10	Ch 3 Addr 2
J9	Ch 6 Addr 11	Ch 3 Addr 3
	Ch 6 Addr 12	Ch 3 Addr 4
J10	Ch 7 Addr 13	Ch 3 Addr 5
	Ch 7 Addr 14	Ch 3 Addr 6
J11	Ch 8 Addr 15	Ch 3 Addr 7
	Ch 8 Addr 16	Ch 3 Addr 8

Table 3

For the below instructions we are assuming a configuration of 16 VIPs connected to the SRCNX in a multiplexed configuration (2 devices per connector). For details on how to address a VIP lock, see the **Addressing the VIP Lock** section below.

1. Remove **J4 connector** from the current **Satellite SRCNX** and land this connector on **J4** of the replacement **SRCNX-R**.
 - a. Using the address dip switches, re-address the first VIP connected to J4. See **Table 3** above for the new address.

- b. Using the address dip switches, re-address the second VIP connected to J4. See **Table 3** above for the new address.
 - c. In the SMS software, update the channel and address for the first VIP connected to J4.
 - d. In the SMS software, update the channel and address for the second VIP connected to J4.
2. Repeat the instructions given in step 1 above for each of the first eight VIPs until they have all been:
 - a. Moved to the corresponding connector on the SRCNX-R board.
 - b. Re-addressed per **Table 3** above.
 - c. Updated in the SMS software with new channel and address designations.
3. Remove **J8 connector** from the current **Satellite SRCNX** and land this connector on **J8** of the replacement **SRCNX-R**.
 - a. Using the address dip switches, re-address the first VIP connected to J8. See **Table 3** above for the new address.
 - b. Using the address jumpers, re-address the second VIP connected to J8. See **Table 3** above for the new address.
 - c. In the SMS software update the channel and the address for the first VIP connected to J8.
 - d. In the SMS software update the channel and the address for the second VIP connected to J8.
4. Repeat the instructions given in step 3 above for each of the remaining VIPs until they have all been:
 - a. Moved to the corresponding connector on the SRCNX-R board.
 - b. Re-addressed per **Table 3** above.
 - c. Updated in the SMS software with new channel and address designations.

Addressing the VIP Lock

There are a set of 12 dip switches on the VIP lock, the first four of which are used to set the address for the device. When addressing or re-addressing a VIP lock refer to the **VIP Address Table** below.

NOTE: Only the first 4 switches are used for addressing.

VIP Address	Switch 1	Switch 2	Switch 3	Switch 4
1	Off	Off	Off	Off
2	On	Off	Off	Off
3	Off	On	Off	Off
4	On	On	Off	Off
5	Off	Off	On	Off
6	On	Off	On	Off
7	Off	On	On	Off
8	On	On	On	Off

VIP Address Table

Schlage AD-300 Series

Schlage AD-300 Series locks are addressed differently than the locks previously discussed. When addressing an AD-300 lock the Schlage Utility Software (SUS) is used. The SUS has an addressing scheme of 0 through 15. This corresponds to 1 through 16 in the SMS software. So a AD-300 lock with an SUS address of 0 has an SMS address of 1. The channel number is not affected by this.

Schlage AD-300 locks are addressed similarly to Address Specific SRINXs. In this addressing method a AD-300 lock has an address of **Channel #** followed by **1** through **16** (0 through 15 in SUS) where each address is determined during set-up of the lock, using the Schlage Utility Software. Address Specific addressing is supported by the SRCNX-R, but on a per channel basis. This means that Channel 2 can have devices 1 through 8 (0 through 7 in SUS) and channel 3 will also have devices 1 through 8 (0 through 7 in SUS), for a total of 16 devices. The first eight AD-300 locks that are addressed in this manner will only need to have their channel numbers updated in the software while the second set (9 through 16) will have to have their channel numbers updated and their addresses changed to 1 through 8 (0 through 7 in the SUS).

The SRCNX-R has its connectors labeled in the same manner as the SRCNX to help the device transfer process. It is recommended that devices be moved from one connector on the SRCNX to the same connector on the SRCNX-R.

Re-Addressing Chart for AD-300				
Connector	Channel/Address when connected to SRCNX		Channel/Address when connected to SRCNX-R	
	SMS	SUS	SMS	SUS
J4	Ch 1 Addr 1	Addr 0	Ch 2 Addr 1	Addr 0
	Ch 1 Addr 2	Addr 1	Ch 2 Addr 2	Addr 1
J5	Ch 2 Addr 3	Addr 2	Ch 2 Addr 3	Addr 2
	Ch 2 Addr 4	Addr 3	Ch 2 Addr 4	Addr 3
J6	Ch 3 Addr 5	Addr 4	Ch 2 Addr 5	Addr 4
	Ch 3 Addr 6	Addr 5	Ch 2 Addr 6	Addr 5
J7	Ch 4 Addr 7	Addr 6	Ch 2 Addr 7	Addr 6
	Ch 4 Addr 8	Addr 7	Ch 2 Addr 8	Addr 7
J8	Ch 5 Addr 9	Addr 8	Ch 3 Addr 1	Addr 0
	Ch 5 Addr 10	Addr 9	Ch 3 Addr 2	Addr 1
J9	Ch 6 Addr 11	Addr 10	Ch 3 Addr 3	Addr 2
	Ch 6 Addr 12	Addr 11	Ch 3 Addr 4	Addr 3
J10	Ch 7 Addr 13	Addr 12	Ch 3 Addr 5	Addr 4
	Ch 7 Addr 14	Addr 13	Ch 3 Addr 6	Addr 5
J11	Ch 8 Addr 15	Addr 14	Ch 3 Addr 7	Addr 6
	Ch 8 Addr 16	Addr 15	Ch 3 Addr 8	Addr 7

Table 4

For the below instructions we are assuming a configuration of 16 AD-300s connected to the SRCNX in a multiplexed configuration (2 devices per connector).

1. Remove **J4 connector** from the current **Satellite SRCNX** and land this connector on **J4** of the replacement **SRCNX-R**.
 - a. If necessary, Using the Schlage Utility Software (SUS), re-address the first AD-300 connected to J4. See the **Table 4** above for the new address.
 - b. If necessary, Using the Schlage Utility Software (SUS), re-address the second AD-300 connected to J4. See the **Table 4** above for the new address.
 - c. In the SMS software update the channel and address for the first AD-300 connected to J4.
 - d. In the SMS software update the channel and address for the second AD-300 connected to J4.
2. Repeat the instructions given in step 1 above for each of the first eight AD-300s until they have all been:
 - a. Moved to the corresponding connector on the SRCNX-R board.
 - b. Re-addressed per **Table 4** above.
 - c. Updated in the SMS software with new channel and address designations.
3. Remove **J8 connector** from the current **Satellite SRCNX** and land this connector on **J8** of the replacement **SRCNX-R**.
 - a. Using the Schlage Utility Software (SUS), re-address the first AD-300 connected to J8. See **Table 4** above for the new address.
 - b. Using the Schlage Utility Software (SUS), re-address the second AD-300 connected to J8. See **Table 4** above for the new address.
 - c. In the SMS software, update the channel and the address for the first AD-300 connected to J8.
 - d. In the SMS software update the channel and the address for the second AD-300 connected to J8.
4. Repeat the instructions given in step 3 above for each of the remaining AD-300s until they have all been:
 - a. Moved to the corresponding connector on the SRCNX-R board.
 - b. Re-addressed per **Table 4** above.
 - c. Updated in the SMS software with new channel and address designations.

Schlage Wireless (PIM-485-OTD/WAPM)

Schlage Wireless PIMs and locks are addressed differently than the locks previously discussed. When addressing a PIM-485-OTD and WAPM locks the Configuration & Demonstration Tool (CDT) is used. The CDT has an addressing scheme of 0 through 15. This corresponds to 1 through 16 in the SMS software. So a PIM or WAPM lock with a CDT address of 0 has an SMS address of 1. Channel address are also different. All WAPM locks use the same channel as the PIM they are associated with.

PIM-485-OTDs and Wireless locks are addressed similarly to Address Specific SRINXs. In this addressing method a PIM has a **Channel #** (whichever channel it is connected to) and followed by **16** (0 in the CDT) while a wireless lock has an address of **Channel #** (whichever channel the PIM is connected to) followed by **1** through **15** (0 through 14 in CDT) where each address is determined during set-up of the lock, using the CDT, with each lock having the same channel as the PIM. Unlike wired devices, all 15 wireless devices can be on the same channel. This means that Channel 2 can have devices 1 through 15 (0 through 14 in CDT) **OR** channel 3 can have devices 1 through 15 (0 through 14 in CDT), for a total of 15 devices. The WAPM locks that are addressed in this manner will only need to have their channel numbers updated in the software.

NOTE: The PIM counts as a device and up to 15 WAPM locks may communicate with it at once. The address of the PIM should be the same as the lowest lock value associated with it. Refer to the Wireless section of the SMS Installation Manual for details on Lo/Hi addressing for the PIM and WAPM.

The SRCNX-R has its connectors labeled in the same manner as the SRCNX to help the device transfer process. It is recommended that devices be moved from one connector on the SRCNX to the same connector on the SRCNX-R.

Re-Addressing Chart for PIM-485-OTD				
Connector	Channel/Address when connected to SRCNX		Channel/Address when connected to SRCNX-R	
	SMS	CDT	SMS	CDT
J4	Ch 1 Addr 16	Addr 0	Ch 2 Addr 16	Addr 0
J5	Ch 2 Addr 16	Addr 0	Ch 2 Addr 16	Addr 0
J6	Ch 3 Addr 16	Addr 0	Ch 2 Addr 16	Addr 0
J7	Ch 4 Addr 16	Addr 0	Ch 2 Addr 16	Addr 0
J8	Ch 5 Addr 16	Addr 0	Ch 3 Addr 16	Addr 0
J9	Ch 6 Addr 16	Addr 0	Ch 3 Addr 16	Addr 0
J10	Ch 7 Addr 16	Addr 0	Ch 3 Addr 16	Addr 0
J11	Ch 8 Addr 16	Addr 0	Ch 3 Addr 16	Addr 0

Table 5

NOTE: Only the channel changes when switching to SRCNX-R

Re-Addressing Chart for WAPM				
Connector	Address when connected to SRCNX		Address when connected to SRCNX-R	
	SMS	CDT	SMS	CDT
N/A	Addr 1	Addr 0	Addr 1	Addr 0
	Addr 2	Addr 1	Addr 2	Addr 1
	Addr 3	Addr 2	Addr 3	Addr 2
	Addr 4	Addr 3	Addr 4	Addr 3
	Addr 5	Addr 4	Addr 5	Addr 4
	Addr 6	Addr 5	Addr 6	Addr 5
	Addr 7	Addr 6	Addr 7	Addr 6
	Addr 8	Addr 7	Addr 8	Addr 7
	Addr 9	Addr 8	Addr 9	Addr 8
	Addr 10	Addr 9	Addr 10	Addr 9
	Addr 11	Addr 10	Addr 11	Addr 10
	Addr 12	Addr 11	Addr 12	Addr 11
	Addr 13	Addr 12	Addr 13	Addr 12
	Addr 14	Addr 13	Addr 14	Addr 13
	Addr 15	Addr 14	Addr 15	Addr 14

Table 6

NOTE: WAPMs have the same channel designation as the PIM they communicate with

For the below instructions we are assuming a configuration of 15 WAPMS with the PIM connected to the SRCNX at J4.

1. Remove **J4 connector** from the current **Satellite SRCNX** and land this connector on **J4** of the replacement **SRCNX-R**.
2. In the SMS software, update the channel number of the PIM-485-OTD.
3. In the SMS software, update the channel number of the first WAPM associated with the PIM.
 - a. Continue updating the channel numbers of the WAPMs in the SMS software until all WAPMs have been updated.

AD-400 Series (PIM400-485-SMS/AD-400 Wireless Locks)

AD-400 PIMs and locks are addressed differently than the locks previously discussed. When addressing a PIM400-485-SMS and AD-400 locks the Schlage Utility Software (SUS) is used. The SUS has an addressing scheme of 0 through 15. This corresponds to 1 through 16 in the SMS software. So a PIM400 or AD-400 lock with a SUS address of 0 has an SMS address of 1. Channel addresses are also different. All AD-400 locks use the same channel as the PIM400 they are associated with.

PIM400-485-SMSs and AD-400 locks are addressed similarly to Address Specific SRINXs. In this addressing method a PIM has a **Channel #** (whichever channel it is connected to) followed by **1 through 16** (0 through 15 in the SUS) while a wireless lock has an address of **Channel #** (whichever channel the PIM400 is connected to) followed by **1 through 16** (0 through 15 in SUS) where each address is determined during set-up of the lock, using the SUS. Unlike wired devices, all 16 wireless devices can be on the same channel. This means that Channel 2 can have devices 1 through 16 (0 through 15 in CDT) **OR** channel 3 can have devices 1 through 16 (0 through 15 in CDT), for a total of 16 devices. The AD-400 locks that are addressed in this manner will only need to have their channel numbers updated in the software.

NOTE: The PIM400 does not count as a device and up to 16 AD-400 locks may communicate with it at once. The address of the PIM400 should be the same as the lowest lock value associated with it. Refer to the AD-400 section of the SMS Installation Manual for details on Lo/Hi addressing for the PIM400 and AD-400 locks.

The SRCNX-R has its connectors labeled in the same manner as the SRCNX to help the device transfer process. It is recommended that devices be moved from one connector on the SRCNX to the same connector on the SRCNX-R.

Re-Addressing Chart for PIM400-485-SMS		
If connected at:	Channel when connected to SRCNX	Channel when connected to SRCNX-R
J4	Ch 1	Ch 2
J5	Ch 2	Ch 2
J6	Ch 3	Ch 2
J7	Ch 4	Ch 2
J8	Ch 5	Ch 3
J9	Ch 6	Ch 3
J10	Ch 7	Ch 3
J11	Ch 8	Ch 3

Table 7

NOTE: Only the channel changes when switching to SRCNX-R.

Re-Addressing Chart for AD-400 locks				
Connector	Address when connected to SRCNX		Address when connected to SRCNX-R	
	SMS	SUS	SMS	SUS
N/A	Addr 1	Addr 0	Addr 1	Addr 0
	Addr 2	Addr 1	Addr 2	Addr 1
	Addr 3	Addr 2	Addr 3	Addr 2
	Addr 4	Addr 3	Addr 4	Addr 3
	Addr 5	Addr 4	Addr 5	Addr 4
	Addr 6	Addr 5	Addr 6	Addr 5
	Addr 7	Addr 6	Addr 7	Addr 6
	Addr 8	Addr 7	Addr 8	Addr 7
	Addr 9	Addr 8	Addr 9	Addr 8
	Addr 10	Addr 9	Addr 10	Addr 9
	Addr 11	Addr 10	Addr 11	Addr 10
	Addr 12	Addr 11	Addr 12	Addr 11
	Addr 13	Addr 12	Addr 13	Addr 12
	Addr 14	Addr 13	Addr 14	Addr 13
	Addr 15	Addr 14	Addr 15	Addr 14
	Addr 16	Addr 15	Addr 16	Addr 15

Table 8

NOTE: AD-400 locks have the same channel designation as the PIM400 they communicate with

For the below instructions we are assuming a configuration of 16 AD-400s with the PIM400 connected to the SRCNX at J4.

1. Remove **J4 connector** from the current **Satellite SRCNX** and land this connector on **J4** of the replacement **SRCNX-R**.
2. In the SMS software, update the channel number of the PIM400-485-SMS.
3. In the SMS software, update the channel number of the first AD-400 lock associated with the PIM400.
 - a. Continue updating the channel numbers of the AD-400s in the SMS software until all AD-400s have been updated.

CONTACTS AND RELAYS

The current **Satellite SRCNX** could support up to **8 contacts** and **2 relays** on the SRCNX board. If connected to a **SIONX Expansion Module (8 contacts and 12 relays)** there would be a total of **16 contacts** and **14 relays**. The SRCNX-R1 has **8 contacts** and **8 relays** and a SRCNX-R2 has **16 contacts** and **16 relays**. Determine which version of the SRCNX-R to use by how many contacts and relays need to be transferred.

SRCNX-R Contact/Relay Details

SRCNX-R0 controller

- This device will not support any I/O for Contacts and Relays

SRCNX-R1 controller

- This device will support up to 8 contacts and 8 relays
- SMS Contact definitions will be defined as **Contacts 1 – 8**
- SMS Relay definitions will be defined as **Relays 1 – 8**
- Software definitions have been added to support 1 attached SIONX-8 device
- The attached SIONX-8 device will be hard coded as device address 15

SRCNX-R2 controller

- This device will support up to **16 contacts** and **16 relays**
- SMS Contact definitions will be defined as **Contacts 1 – 16**
- SMS Relay definitions will be defined as **Relays 1 – 16**
- Software definitions have been added to support 2 attached SIONX-8 devices
- The attached SIONX-8 devices will be hard coded as device address 15 (left) and address 16 (right)

Contacts

On the SRCNX board there are four contact connectors that can support a total of 8 contacts. These are defined as contacts 1 through 8 in SMS. The SIONX expansion connected to the SRCNX also have four contact connectors that can support a total of 8 additional contacts. These are defined as contacts 9 through 16 in SMS. When transferring contacts from the SRCNX to the SRCNX-R1 or SRCNX-R2 it is important to keep in mind the SMS definition of the contacts. SMS defined contact 1 on the SRCNX will be transferred to the SMS contact 1 on the SRCNX-R1 or SRCNX-R2 board. See **Table 9** below for compared Connector and contact values on the SRCNX and the SRCNX-R1/SRCNX-R2.

NOTE: The Contact connector pins are mounted differently on the SRCNX-R1/R2 than they are on the SRCNX. Due to this difference a connector cannot be moved directly from the SRCNX to the SRCNX-R1/R2 without reversing the contact. The directions below reflect this and instruct the installer to move the contacts one point at a time (from CO1 to C1 for example) and not one connector at a time.

Contact Transfer Chart		
	SRCNX	SRCNX-R
SMS Contact Definition	Board Connector	SIONX-8 (Device 15) Connector
1	J17 GND - CO1	P1 GND - C1
2	J17 GND - CO2	P1 GND - C2
3	J16 GND - CO3	P2 GND - C3
4	J16 GND - CO4	P2 GND - C4
5	J15 GND - CO5	P3 GND - C5
6	J15 GND - CO6	P3 GND - C6
7	J14 GND - CO7	P4 GND - C7
8	J14 GND - CO8	P4 GND - C8
SMS Contact Definition	SIONX Expansion Connector	SIONX-8 (Device 16) Connector
9	J7 GND - XCO1	P1 GND - C1
10	J7 GND - XCO2	P1 GND - C2
11	J8 GND - XCO3	P2 GND - C3
12	J8 GND - XCO4	P2 GND - C4
13	J9 GND - XCO5	P3 GND - C5
14	J9 GND - XCO6	P3 GND - C6
15	J10 GND - XCO7	P4 GND - C7
16	J10 GND - XCO8	P4 GND - C8

Table 9

Contact Replacement: SRCNX Board to SIONX-8 (Device 15) attached to SRCNX-R1/R2

1. Remove contact points **GND & C01** from the **J17** connector on the current **Satellite SRCNX board** and land this on **GND & C1** on **P1** of the replacement **SIONX-8 (device 15)** attached to the **SRCNX-R1/R2**.
 - The SMS value when defining the contact will remain 1.
2. Remove contact points **GND & C02** from the **J17** connector on the current **Satellite SRCNX board** and land this connector on **GND & C2** on **P1** of the replacement **SIONX-8 (device 15)** attached to the **SRCNX-R1/R2**.
 - The SMS value when defining the contact will remain 2.
3. Continue transferring contact points from the **SRCNX** board to the **SIONX-8 (device 15)** attached to the **SRCNX-R1/R2** until all contacts have been transferred per **Table 9** above.
4. Update SMS to remove the contact points from the **Satellite SRCNX** and transfer them to the **SRCNX-R1/R2** to make these contact points work properly.

Contact Replacement: SRCNX SIONX Expansion Module to SIONX-8 (Device 16) attached to SRCNX-R2

1. Remove contact points **GND & XC01** from the **J7** connector on the current **Satellite SRCNX SIONX Expansion Module** and land this on **GND & C1** on **P1** of the replacement **SIONX-8 (device 16)** attached to the **SRCNX-R2**.
 - The SMS value when defining the contact will remain 9.
2. Remove contact points **GND & XC02** from the **J7** connector on the current **Satellite SRCNX SIONX Expansion Module** and land this connector on **GND & C2** on **P1** of the replacement **SIONX-8 (device 16)** attached to the **SRCNX-R2**.
 - The SMS value when defining the contact will remain 10.
3. Continue transferring contact points from the **SRCNX SIONX Expansion Module** to the **SIONX-8 (device 16)** attached to the **SRCNX-R2** until all contacts have been transferred per **Table 9** above.
4. Update SMS to remove the contact points from the **Satellite SRCNX** and transfer them to the **SRCNX-R2** to make these contact points work properly.

Relays

On the SRCNX board there are two relay connectors that can support a total of 2 relays. These are defined as relays 1 and 2 in SMS. The SIONX expansion connected to the SRCNX has twelve relay connectors that can support a total of 12 additional relays. These are defined as relays 3 through 14 in SMS. The SIONX-8 (device 15) attached to the SRCNX-R1/R2 has eight relay connectors that can support a total of 8 relays. The SIONX-8 (device 16) attached to the SRCNX-R2 has an additional eight relays connectors that can support a total of 8 relays, giving the SRCNX-R a total of 16 relays.

NOTE: Relay connector pins are mounted identically on the SRCNX-R1/R2 and the SRCNX. Due to this, a connector can be moved directly from the SRCNX to the SRCNX-R1/R2. The directions below reflect this and instruct the installer to move the connectors from one board to the other.

Relay Transfer Chart		
	SRCNX	SRCNX-R
SMS Relay Definition	Board Connector	SIONX-8 (Device 15) Connector
1	K1	P8 Relay 1
2	K2	P9 Relay 2
SMS Relay Definition	SIONX Expansion Connector	SIONX-8 (Device 15) Connector (continued)
3	XK1	P10 Relay 3
4	XK2	P11 Relay 4
5	XK3	P12 Relay 5
6	XK4	P13 Relay 6
7	XK5	P14 Relay 7
8	XK6	P15 Relay 8
SMS Relay Definition	SIONX Expansion Connector (continued)	SIONX-8 (Device 16) Connector
9	XK7	P8 Relay 1
10	XK8	P9 Relay 2
11	XK9	P10 Relay 3
12	XK10	P11 Relay 4
13	XK11	P12 Relay 5
14	XK12	P13 Relay 6
15	N/A	P14 Relay 7
16	N/A	P15 Relay 8

Table 10

Relay Replacement: SRCNX Board to SIONX-8 (Device 15) attached to SRCNX-R1/R2

1. Remove **Relay** connector **K1** on the **Satellite SRCNX board** and land this connector on **P8 Relay 1** of the **SIONX-8 (device 15)** attached to the **SRCNX-R1/R2**.
 - The SMS value when defining the relay will remain 1.
2. Remove **Relay** connector **K2** on the **Satellite SRCNX board** and land this connector on **P9 Relay 2** of the **SIONX-8 (device 15)** attached to the **SRCNX-R1/R2**.
 - The SMS value when defining the relay will remain 2.
3. Update SMS to remove the relay points from the **Satellite SRCNX** and transfer them to the **SRCNX-R1/R2** to make these relay points work properly.

Relay Replacement: SRCNX SIONX Expansion Module to SIONX-8 (Device 16) attached to SRCNX-R1/R2

1. Remove **Relay** connector **XK1** on the **Satellite SRCNX SIONX Expansion Module** and land this on **P10 Relay 3** on the **SIONX-8 (device 15)** attached to the **SRCNX-R1/R2**.
 - The SMS value when defining the relay will remain 3.
2. Remove **Relay** connector **XK2** on the **Satellite SRCNX SIONX Expansion Module** and land this connector on **P11 Relay 4** of the **SIONX-8 (device 15)** attached to the **SRCNX-R1/R2**.
 - The SMS value when defining the relay will remain 4.
3. Continue transferring relay points from the **SRCNX SIONX Expansion Module** to the **SIONX-8 (device 15)** attached to the **SRCNX-R1/R2** until the SIONX-8 (device 15) is full.
4. Remove **Relay** connector **XK7** on the **Satellite SRCNX SIONX Expansion Module** and land this connector on **P8 Relay 1** of the **SIONX-8 (device 16)** attached to the **SRCNX-R2**.
 - The SMS value when defining the relay will remain 9.
5. Remove **Relay** connector **XK8** on the **Satellite SRCNX SIONX Expansion Module** and land this connector on **P9 Relay 2** of the **SIONX-8 (device 16)** attached to the **SRCNX-R2**.
 - The SMS value when defining the relay will remain 10.
4. Continue transferring relay points from the **SRCNX SIONX Expansion Module** to the **SIONX-8 (device 16)** attached to the **SRCNX-R2** until all relays are transferred.
 - There will be two additional relays left over on the **SIONX-8 (device 16)** attached to the **SRCNX-R2**. Additional relays can be added here if desired.
5. Update SMS to remove the relay points from the **Satellite SRCNX** and transfer them to the **SRCNX-R1/R2** to make these contact points work properly.