

Section 1

General Description

The ClearPath Spectrum Coordinator functions in a similar role to traditional wireless system receiver and timing modules, and feature several industry firsts. ClearPath Spectrum products feature digital two-way communication, increasing security and allowing users to pair transmitters to coordinators, identify the transmitter's location, and monitor battery power. Optional SecureActivation will require users of the outside switch to be granted clearance before activation can occur. ClearPath Spectrum coordinators feature two outputs with programmable time delay.

ClearPath Spectrum products operate at 2.4 GHz, making the wave length more than 5 times shorter than commonly-used frequencies. Shorter waves pass through cracks and barriers easier, and transmitters will continue to attempt to contact the coordinator until it receives an acknowledgement.

Section 2

Basic Installation

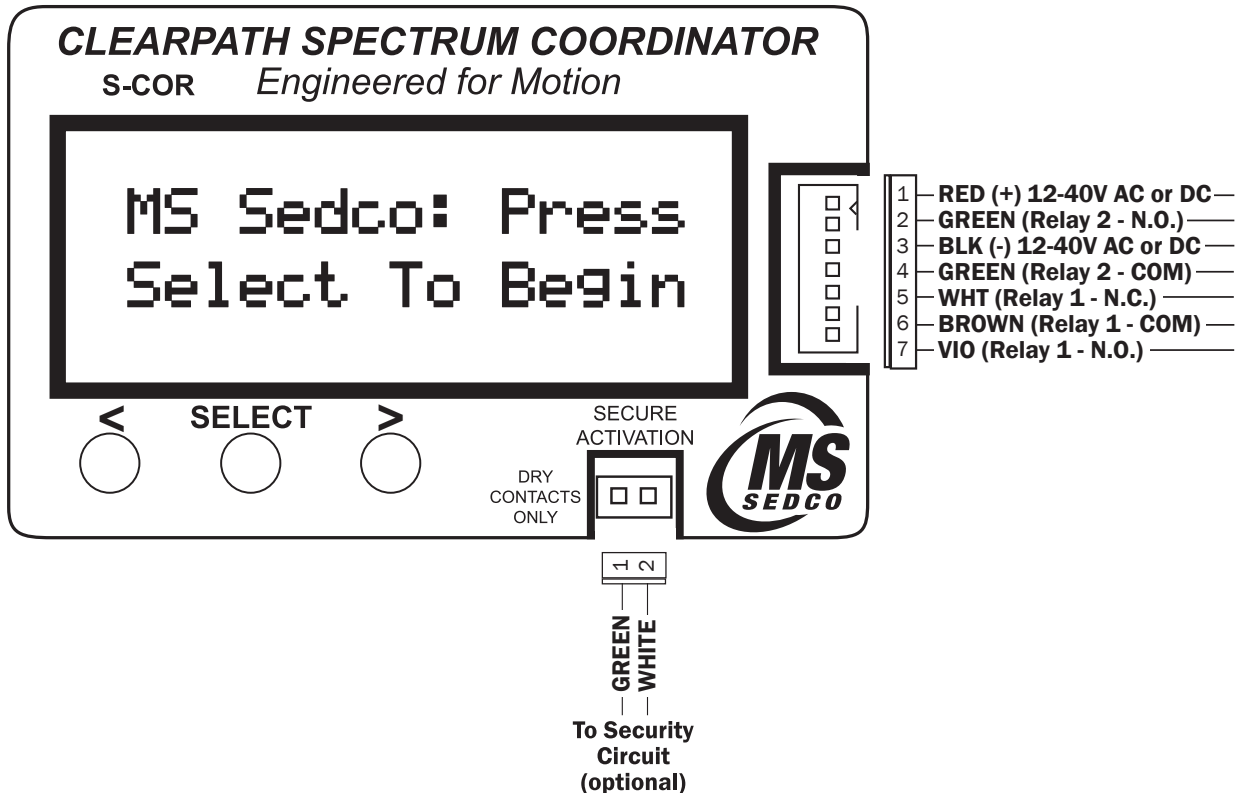
The physical placement of the CS/COR is typically in the door operator housing area since the power supply and operator control are already there.

Section 3

Technical Data

Model.....	ClearPath Spectrum™ S-COR
Input Power.....	12-24V AC or DC
Output Contacts.....	Form C
Relay 1 Contact Rating.....	3A:24V AC
Relay 2 Contact Rating.....	1A:24V AC
Temperature Rating.....	-22 °F to 158 °F (-30 °C to 70 °C)
Weight.....	0.25 lbs.
Physical Size.....	3 3/4"L x 2 1/4"W x 1"H

FIGURE 1
Wiring Diagram



Note that Output 1 will typically be used to trigger an electronic locking device, while Output 2 will be used to activate an automatic door.

Section 4

Programming the Coordinator –

Single Openings:

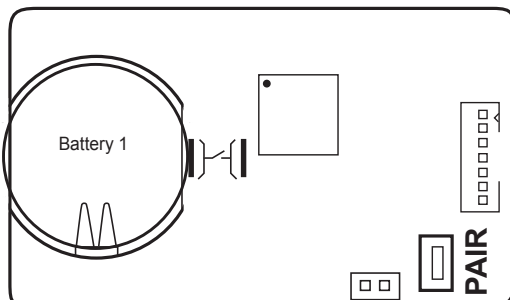
Upon power up, the screen will read “MS Sedco: Press Select to Begin.” Press Select.

The next screen will show “Opening Type.” The default is Single. Press Select to skip this step and move on, or to verify the selection, press the > key. The next screen should then show Single*, with the * indicating the current selection. Press Select to move to the next step, or < to move back to the original screen and press Select.

The next screen will show “Channel Select.” Four channels are available, with the default being channel 1. In most cases, the channel will remain at the default, and the installer may press Select to skip the step, but should one wish to auto scan to the cleanest channel, or manually choose a different channel for greater efficiency if two openings are in close proximity, this can be accomplished by using the arrow keys. Note that in manual mode, the current channel selection will be indicated with an asterisk (*).

The next screen will show “Pair Device.” THE COORDINATOR WILL ONLY RESPOND TO TRANSMITTERS THAT HAVE BEEN PAIRED. Use the arrow keys to choose the location of the transmitter. The available choices are Outside, Inside, and HH (hand held). Choose the appropriate location of the transmitter and press select. The screen will then show “Press Device Pair Button.” Press the PAIR button on the transmitter’s circuit board. (Note: for hand held transmitters, the cover must be removed to access the PAIR button.) Upon pressing the PAIR button, the screen should change to “IDxxx Paired Press Select.” At the end of two minutes, if the coordinator has not received a pairing signal, the screen will read “Pair Failed Press Select.” In either case, the screen will give you an option to pair additional devices. When all devices have been paired, choose “No” or “Skip” to move on the next screen.

TRX Circuit Board



The next screen will read “Add Setting.” This is the place where users can program additional features into the device. Five additional settings are available: HH Signal Range, Output Delay, SecureActivation, Ratchet Relay, and Unpair Devices. These are covered below:

Output Delay – This controls the delay between output relays 1 and 2 and can be adjusted via the arrow keys. Remember, Output 1 is typically the locking device, and Output 2 is typically an automatic door. After adjusting time with the arrow keys, press Select to move on to the next step.

SecureActivation – Many times an automatic door with wireless activation is installed after a security system is already in place. SecureActivation allows the outside transmitter to be integrated into the security system.

When SecureActivation is turned on, the outside switch will not activate the door unless given clearance from the security system. There are two choices for On, Normal Open and Normal Close, depending on whether the circuit is normally open or normally closed.



WARNING: The Security Clearance input requires a dry contact. Do not apply voltage!

Ratchet Relay – If Ratchet Relay is turned on, the output 2 relay will remain closed until a second signal is received.

HH Signal Range – ClearPath Spectrum devices transmit a much greater distance than other wireless products used in the automatic door industry. Since a hand-held transmitter is paired with multiple coordinators in a building, or with two buildings in closer proximity, the default HH Signal Range is set to Reduced, requiring a very strong signal for the hand-held transceiver to operate. If a hand-held transceiver will not be used with used with any openings nearby, the range can be expanded to “Normal” by using the arrow keys and pressing Select when Normal displays on the screen.

Unpair Devices – Transmitters can be unpaired by type, a single device (requiring the PAIR button to be pushed on that device to unpair, or All Devices, which will unpair the coordinator from all transmitters.

Section 5

Programming the Coordinator –

Vestibule Openings:

Upon power up, the screen will read “MS Sedco: Press Select to Begin.” Press Select.

The next screen will show “Opening Type.” The default is Single. Use the arrows to choose Vestibule, then press Select.

The next screen will Vestibule Master. The Master is assumed to be the exterior opening, and controls sequencing the interior opening. For the coordinator to be placed at the interior opening, use the arrows and “Slave” will appear on the screen. **NOTE THAT ALL TRANSCEIVERS WILL BE PAIRED WITH THE MASTER.** If you choose Slave, a screen will appear instructing you to press the < button to complete pairing. Follow the instructions below for the Master coordinator.

The next screen will show “Channel Select.” Four channels are available, with the default being channel 1. In most cases, the channel will remain at the default, but should one wish to auto scan to the cleanest channel, or manually choose a different channel for greater efficiency if two openings are in close proximity, this can be accomplished by using the arrow keys.

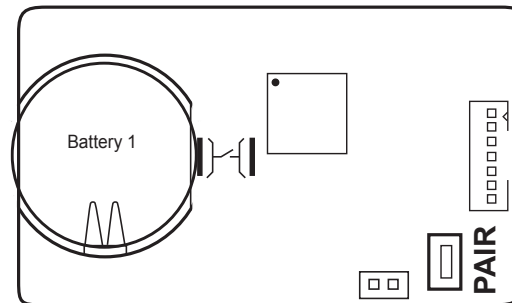
The next screen will show “Pair Device.” **THE COORDINATOR WILL ONLY RESPOND TO TRANSMITTERS THAT HAVE BEEN PAIRED.** Use the arrow keys to choose the location of the transmitter. The available choices are Outside, Inside, Vest Inside, Vest Outside, Vest Both, Slave, and HH (hand held). The functions of these locations are described below:

- Outside will cause the exterior opening to activate, then the interior opening.
- Inside will cause the interior opening to activate, then the exterior opening.
- Vest Inside will only activate the interior opening.
- Vest Outside will only activate the exterior opening.
- Vest Both and HH will activate both openings simultaneously.
- Slave is the coordinator for the interior opening

Choose the appropriate location of the transmitter and press select. The screen will then show “Press Device Pair Button.” Press the PAIR button on the transmitter’s circuit board. (Note: for hand held transmitters, the cover must be removed to access the PAIR button. Also, for the Slave, as per the instructions above and on the Slave

Coordinator’s screen, press the < button.) Upon pressing the PAIR button, the screen should change to “IDxxxx Paired Press Select.” At the end of two minutes, if the coordinator has not received a pairing signal, the screen will read “Pair Failed Press Select.” In either case, the screen will give you an option to pair additional devices. When all devices have been paired, choose “No” or “Skip” to move on the next screen.

TRX Circuit Board



The next screen will read “Add Setting.” This is the place where users can program additional features into the device. Six additional settings are available: HH Signal Range, Output Delay, Vest Delay, SecureActivation, Ratchet Relay, and Unpair Devices. These are covered below:

Output Delay – This controls the delay between output relays 1 and 2 and can be adjusted via the arrow keys. Remember, Output 1 is typically the locking device, and Output 2 is typically an automatic door. After adjusting time with the arrow keys, press Select to move on to the next step.

Vest Delay – The controls the delay in the sequencing of the vestibule doors when the exterior or interior switch is pressed. The delay can be adjusted by pressing the arrow keys.

SecureActivation – Many times an automatic door with wireless activation is installed after a security system is already in place. SecureActivation allows the outside transmitter to be integrated into the security system. When SecureActivation is turned on, the outside switch will not activate the door unless given clearance from the security system. There are two choices for On, Normal Open and Normal Close, depending on whether the circuit is normally open or normally closed.



WARNING: The Security Clearance input requires a dry contact. Do not apply voltage!

Ratchet Relay – If Ratchet Relay is turned on, the output 2 relay will remain closed until a second signal is received.

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UnPair Devices – Transmitters can be unpaired by type, a single device (requiring the PAIR button to be pushed on that device to unpair, or All Devices, which will unpair the coordinator from all transmitters.

Section 6

Operational Mode

The coordinator will display information upon receiving an activation signal, including the ID, battery status of the transmitter, and output relay status.



NOTICE: This device complies with Part 15 of the FCC rules. Operation of this device is subject to the following two conditions: 1) This device may not cause harmful interference and 2) This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by MS SEDCO could void the user's authority to operate this equipment.

Typical Installation Diagram

