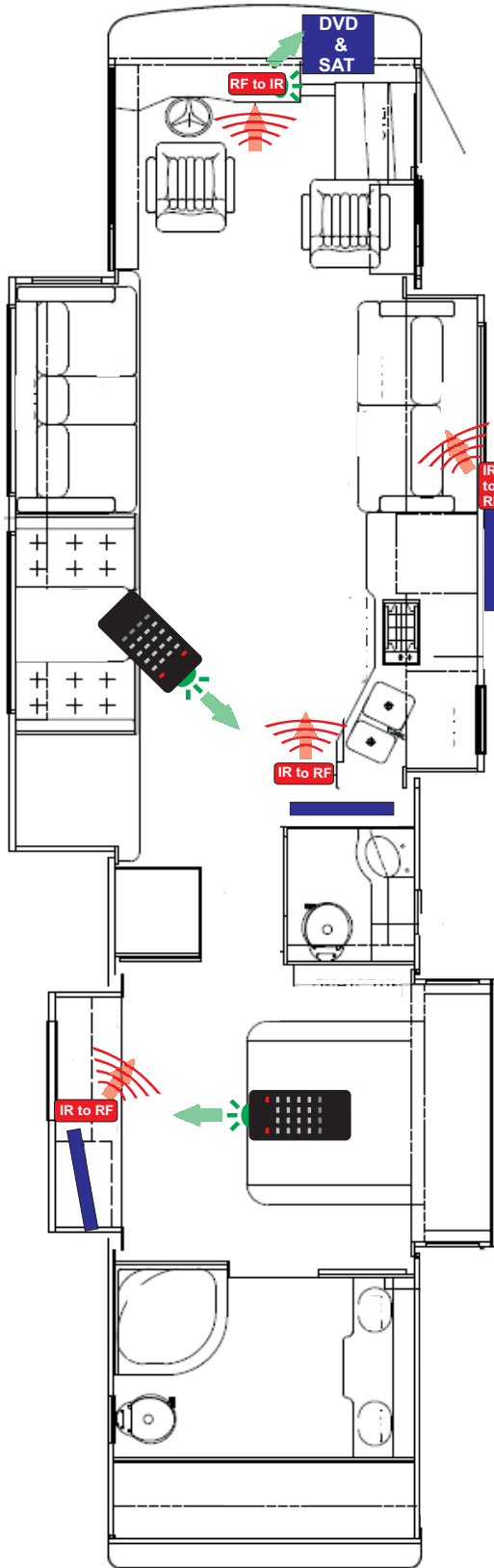




# Spyder Controls Corporation

Defining Innovation and Reliability in System Control

## USER MANUAL FOR: 'WIRE1' WIRELESS INFRA-RED (IR) REPEATER SYSTEM



**DESCRIPTION:** The wireless IR Repeater system allows Infra-Red (IR) signals from Audio / Video (A/V) remote controls to be received in one location and wirelessly transmitted to another location, where the IR signal is then re-emitted. The system uses proven Radio Frequency (RF) technology that is used in numerous automotive security / alarm systems, ensuring reliable operation.

### BENEFITS:

**-COST EFFECTIVE** - Similar or less cost than conventional 'wired' IR Repeater systems

**-WIRE REDUCTION** - Wiring and connector blocks between the IR Receivers and the IR Emitters is completely eliminated

**-SIMPLIFIED INSTALLATION** - With over 50% of the wiring and connections removed completely

**-NO CROSSTALK ISSUES** - A built-in signal filtering system eliminates IR crosstalk where multiple IR receivers are located in the same area



## WIRE1 User Manual

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**Operational Voltage Range:** 5 to 16 VDC

MODEL: WIRE1

**RF Characteristics:**

FCC ID: OV9-WIRE1

IC: 10245A-WIRE1

- ISM band: 900MHz;
- Base frequency: 903MHz;
- Channel spacing: 199.951172MHz;
- Over-the-air data rate: 249.756 Kbs;
- TX power: 0 dBm;
- Number of channels: 52.

**FCC Statement:**

*This device complies with part 15 of the FCC Rules. Operation 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.*

*Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.*

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**Industry Canada Statement:**

*This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.*

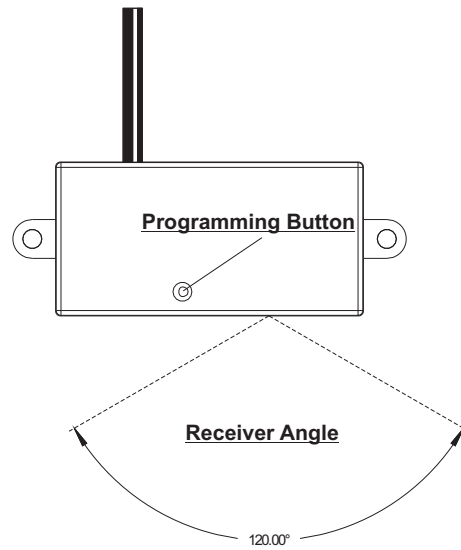
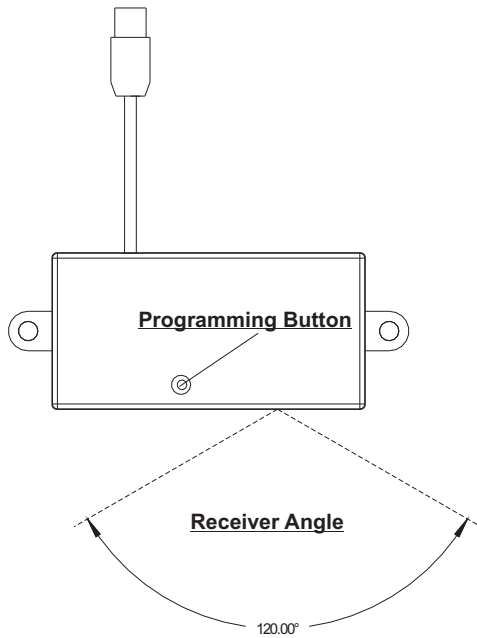
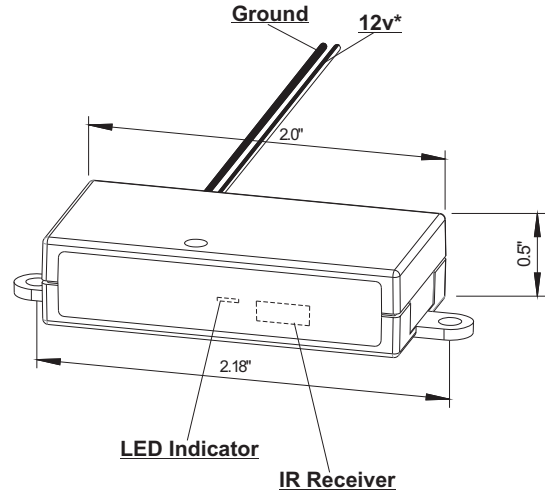
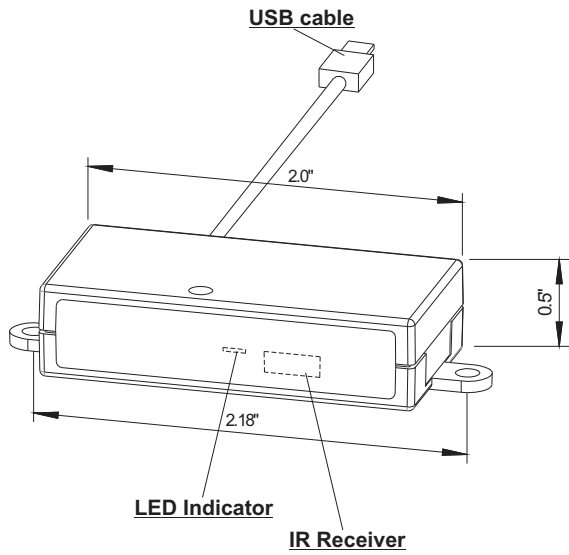
*Cet appareil est conforme la norme d'Industrie Canada exempts de license RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences, et (2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de la appareil.*

*This Class B digital apparatus complies with Canadian ICES-003.*

*Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.*

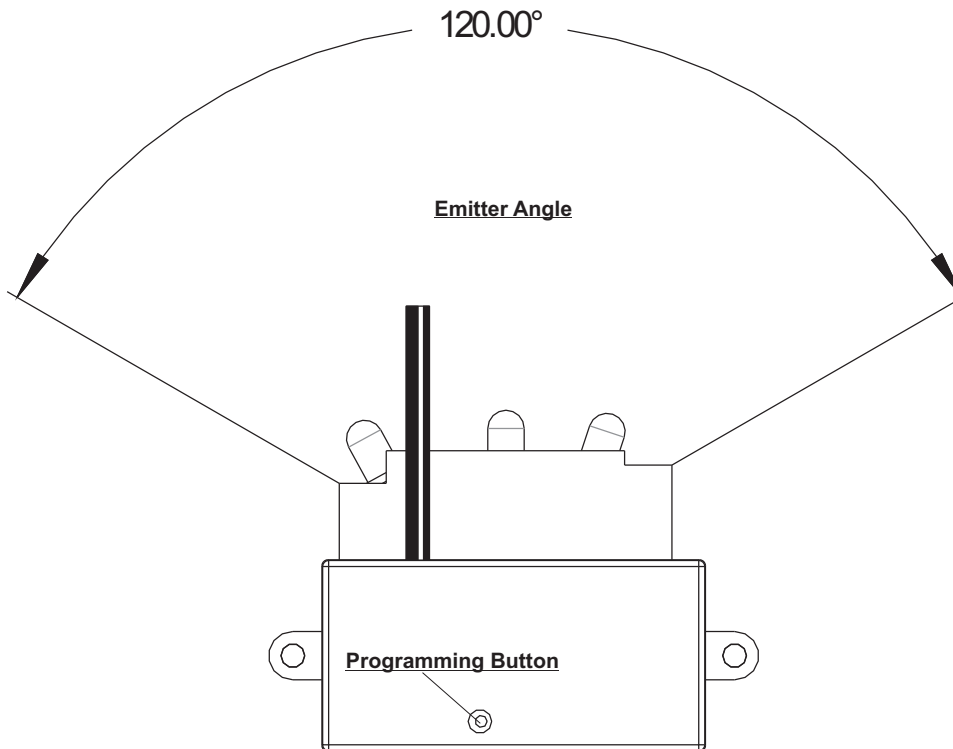
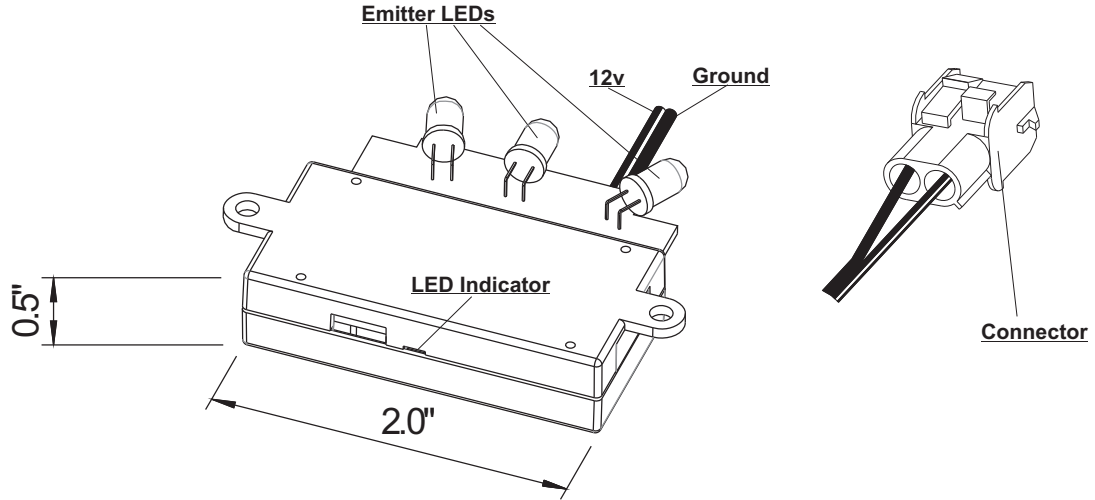


## WIRe Repeater (Receiver)





## wlRe Repeater (Emitter)



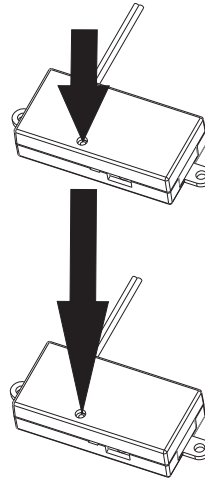


## WIRE Channel Settings

Action	WIRE Response	Indicator
Quick press* (once)	1. Enter the Transmit Learning Codes (TLC) state 2. Transmit "learn" packets 2 times per second	LED flashes slow (1 time per second 1/4s ON, 3/4s OFF)
Long press*	1. Increment RF channel 2. Returns to TLC state	LED is ON for 1 sec
Quick press (once)	1. Exit from TLC mode 2. Entering Main Operation mode	LED stops flashing
2 Quick presses	1. Enter Listening Mode 2. Device 'listens' for an RF signal**. 3. Once an RF signal is received, the device learns (memorizes) that channel. 4. Device will automatically exit Listening Mode and resume normal operation.	LED flashes FAST (2 times per second, 1/4s ON, 1/4s OFF)
2 Quick presses (while in Listening Mode)	1. Manually exit from Listening Mode 2. Revert to the channel it was on before this learning cycle started	LED stops flashing

\* Quick button press would be one that was for less than 1/2 second.

\* Long button press would be one that was for about 1 second.



**Note:**

When in Listening Mode, a WIRE will only act on learn packets that contain its traffic-type byte.

\*\*The wIRe devices operate on 52 unique channels. When a wIRe device enters Learning Mode, it begins with the existing channel stored in memory and 'listens' for a matching RF signal for 1 second. If no matching signal is received within 1 second, the wIRe device increments up to the next channel and listens for 1 second and so on until a matching RF signal is received. It can take up to 52 seconds for a wIRe device to find a matching signal and learn / memorize it.