Installation Manual
SRH-100 Siren

The device can produce loud noise that may cause hearing damange. Please wear adequate ear protection when operating this device. (REF. OSHA 1910.95 for Occupational Noise Expose Guidelines)

NOTE: Do not install and/or operate this product unless you have read and understand all the safety information and instructions contained in this manual.

IMPORTANT!
This manual provides all the necessary information for your SECUR product to be properly and safely installed. Please read all instructions before installation, and make sure you follow them carefully during the installation process. Failure to follow these instructions may result in DAMAGE to the product or vehicle, and/or SERIOUS INJURY to you and your passengers!

Product Code	SRH-100
Approval	R10
Input Voltage	12VDC
Siren Output Power	100 Watts MAX
Impedance	8 ohms
Working Temperature	-30°C~+65°C
Dimension	Siren Amplifer: 134mm x 178mm x 50 mm Hand Held Controller: 148mm x 74mm x 21.6mm
Output Current	20AMP x1 5AMP x 2 0.2AMP x6
Others	Mini SD Card Slot x1

Programming and Function

Reset to Default	
	Press SW1 and SW9 together for 10 seconds to reset all configuration to default factory setting. The Red LED backlights on all the buttons will flash 5 times to indicate the device has been reset.

Horn-In Function	
	When Horn-In function is connected, tap the vehicle horn to activate the following function when button SW1 (I/O C1) is activated - Single tap: To enable siren tone P1. - Single tap while the siren is activated: Cycle siren tone from P1 to P3. - Short double-tap: To disable the siren tone. - Hold: To press AIR-Horn.

Momentary Switch Programming	
Function	To set button as momentary switch
	- Push SW1 and SW2 together for 5 seconds to ender Momentary Switch Programming mode. L1 and L8 will be on steady to indicate you are in programming mode for the momentary switch. - Hold the button you desire to program for 3 seconds to set it as a Momentary Switch. The Red LED backlight will flash three times to indicate it has been set as a momentary button. - Hold for another 3 seconds to reverse the setting. The Red LED Backlight will flash once to indicate it has been set as an ON/OFF switch. - Push SW1 and SW2 together for 5 seconds to exit the programming mode.

Warning / Traffic Light Flash Pattern Indicator: Only Available with ON / OFF Buttons	
Function	To enable LED indicator feature for warning / traffic light function
	- Press SW1 and SW3 together for 5 seconds to enter Warning/Traffic Light Display Programming mode. L2 and L7 will show solid to indicate you are now in the programming mode. - By pressing the button, LED L4 to L8 will indicate which light indicator function has been selected. - After Programming, press SW1 and SW3 together for 5 seconds to exit the programming mode.
L8	Display Warning Light All Flash
L7	Display Middle Towards Outward
L6	Display Arrow from Left To Right
L5	Display Arrow From Right To Left
L4	LED Display Function Disabled

Siren Interlock Function Programming	
Function	To interlock function buttons with siren tone buttons
	- Push P1 and SW5 together for 5 seconds to enter Siren Interlock Programming mode. L1-3 and L6-8 will be solid to indicate you are now in programming mode. - Select your desired Master Buttons from the siren tone section. The Red LED backlight being "ON" indicates the button has been selected. The Red LED backlight being "OFF" indicates the button has not been selected - Select your desired interlock button from SW1-SW9. The Red LED Backlight being "ON" indicates the button has been selected. The Red LED Backlight being "OFF" indicates the button has not been selected. - Push P1 and SW5 together for 5 seconds to exit the programming mode.

Interlock Function Programming	
Function	To interlock function buttons with other function buttons
	- Push SW1 and SW5 together for 5 seconds to enter Interlock Programming mode. L2-3 and L6-7 will be solid to indicate you are now in programming mode. - Select your desired Master Buttons from SW1-SW9. The Red LED backlight will flash rapidly to indicate the button has been selected. The Red LED backlight being "OFF" indicates the button has not been selected. - Select your desired interlock button from the remains of SW1-SW9. The Red LED Backlight will flash slowly to indicate the button has been selected. The Red LED Backlight being "OFF"indicates the button has not been selected. - Push SW1 and SW5 together for 5 seconds to exit the programming mode.

Failure Detection / Input Command for I/O i2		
To set I/O i2 as a signal receiver for Failure Detection Function or as an Input Command Function		
Push SW1 and SW6 together for 5 seconds to enter the programming mode. L4-L5 will be solid to indicate you are in programming mode for I/O i2. - L8 being on indicates you are in setting for failure detection. - L7 being on indicates you are in setting for input command. Press SW8 or SW7 for 3 seconds to switch between the two settings.		
Failure Detection Mode*	To gain accessibility of the siren only when a positive signal is detected from connection i2	
	While you are in setting for failure detection (L8 ON): -Press SW8 to enable or disable failure detection function. The Red LED backlight being “ON” indicates the function has been activated. The Red LED backlight being “OFF” indicates the feature has been disabled. -Push SW1 and SW6 together for 5 seconds to exit the programming mode. -Connect the signal cable from your device to i2.	
Input Command Mode*	To gain accessibility or enable certain buttons base on the receival of input signal from I/O i2	
	While you are in setting forinput command (L7 ON): - Press your desire buttons to interlock with input signal from I/O i2. You may interlock the buttons with I/O i2 to either gain accessibility of the selected buttons or enable the selected buttons. Should you not select any button, I/O i2 will have no function.	
	Accessibility Command	Activation Command
	- Select your desired button from SW1 to SW9. Press once, the button will flash slowly to indicate the button is now in accessibility command mode. - Press SW1+SW6 together for 5 second to exit programming mode. - The selected buttons will now only be accessible when I/O x6 receives a positive signal.	- Select your desired button from SW1 to SW9. Press once, the button will flash rapidly to indicate the button is now in activation command mode. - Press SW1+SW6c together for 5 second to exit programming mode. - The selected buttons will now activate when when I/O x6 receives a positive signal.
*: One single configuration is limited to the usage of connector I/O i2. The first configuration will be disabled and overide by the activation of the second configuration.		

Input Command for I/O x6		
Function	To enable the accessibility or activation of certain function base on the receival of input signal from I/O x6	
	- Press SW5+SW8 together for 5 seconds to enter the programming mode for input command. LED indicator L4-7, and SW8 will be solide to indicate you are now in programming mode. - Press your desire buttons to enable input command for I/O x6. - Press your desire buttons to interlock with input signal from I/O x6	
	Accessibility Command	Activation Command
	- Select your desired button from SW1 to SW9. Press once, the button will flash slowly to indicate the button is now in accessibility command mode. - Press SW5+SW8 together for 5 second to exit programming mode. - The selected buttons will now only be accessible when I/O x6 receives a positive signal.	- Select your desired button from SW1 to SW9. Press once, the button will flash rapidly to indicate the button is now in accessibility command mode. - Press SW5+SW8 together for 5 second to exit programming mode. - The selected buttons will now activate when when I/O x6 receives a positive signal.

Advance Function For MANUAL (MAN) Button	
Function	To enable MAN as a momentary switch to change siren tone
	- Press MAN and SW1 together for 5 seconds to enter the programming mode for MAN Button. The Red backlight for WAIL, YELP, and Hi-Low will light up to indicate you are now in programming mode for MAN Button. - Press MAN to enable or disable the advanced function for MAN. The Red backlight being on indicates the feature has been activated. The Red backlight being off indicates the feature has been disabled. - Press MAN and SW1 together for 5 seconds to exit the programming mode for MAN Button.
	Functions
	- When Siren is not activated: Press MAN to activate or disable siren tone P1 - When Siren is activated: Press MAN to cycle between the current and next siren tone.

Fleet Sync Programming	
Function	To sync configuration from one controller to another
	- After you had finalised the configuration on your controller, you may sync your configuration to another controller via our “ID-CEM” device to shorten your setup time. - Connect the configurated handheld controller (Master) and a non-configurated handheld controller (Slave) via our ID-CEM -Press SW4 and SW5 for 5 seconds on the Master Controller to sync the controllers. * The Red LED backlight on the master controller will flash twice to indicate the two controllers has been synced. * Should the synchronisation process be unsuccessful; the Red LED backlight will flash rapidly to indicate the synchronisation process has failed.

Advance Feature and System Warning

Advance Feature: Output Connection Re-map				
Function	To re-map the position of the I/O to the buttons			
	- Press SW1 and SW8 together for 5 seconds to enter Output Connection Re-map Programming mode for connecting: C1, C2, X1 to X5, i1 and i2 (under output mode). L2-4 and L6-8 will be solid to indicate you are now in the programming mode for Output Connection Re-map. - By pressing the button the LED Indicators will flash to indicate which output connection the switch has been linked to.; You may use the chart on the right to assist you in completing this configuration. - After Programming, press SW1 and SW8 together for 5 seconds to exit the programming mode. - Press SW1 and SW8 for 10 seconds within the programming mode to set the device back to default settings. The Red backlight from SW1 to SW9 will flash five times to indicate the output connection has been reset back to default.			
		Button	Default Mapping	New
L8	C1 / 5Amp	SW1	C1	
L7	C2 / 5Amp	SW2	C2	
L6	X1 / 0.2Amp	SW3	x1	
L5	X2 / 0.2Amp	SW4	x2	
L4	X3 / 0.2Amp	SW5	x3	
L3	X4 / 0.2Amp	SW6	x4	
L2	X5 / 0.2Amp	SW7	x5	
L1	X6 / 0.2Amp	SW8	x6	
L8-7	Radio Re-Brocast	SW9	i4	

Device Warning	
SW1 Flashing	While failure detection function is enabled, should I/O i2 not receive a sufficient positive signal from the connected device, the siren will shut down and SW1 will flash in red to indicate the connected device might be inadequate to its standard performance.
SW1 + SW2 Flashing	Should the device not receive sufficient power from the power supply, the siren will shut down, SW1 and SW2 will flash in red to indicate the device is receiving insufficient power.

Installation

Warning!!!

If you need to drill holes for mounting this product, please be careful not to damage any vehicle components/parts during the process. Please check both sides of the mounting surface before drilling. After drilling, make sure you de-burr any holes and remove any remnants.

- Mounting near the air-bag deployment areas is **"Prohibited"**.
- Secure the device onto the inside of the vehicle. An open air location such as beneath the seating area is suggested.
- For safety purpose, the siren case must be secured on to the vehicle chassis.

WIRING

ONLY use wires that are capable of handling the required current. please see the chart on the righ for suggested wire gauge.

		Wire Gauge (AWG)						
		20	18	16	14	12	10	8
Current Draw (AMP)	10	1.5	2.3	3.7	5.9	9.4	14.9	23.8
	20	0.0	1.2	1.8	2.7	4.7	7.5	11.9
	30	0.0	0.0	1.2	2.0	3.2	5.0	7.9
	40	0.0	0.0	0.9	1.5	2.3	3.8	5.9
	50	0.0	0.0	0.0	1.2	1.8	3.0	4.7
	60	0.0	0.0	0.0	0.9	1.5	2.4	4.0
	70	0.0	0.0	0.0	0.9	1.4	2.1	3.4
	80	0.0	0.0	0.0	0.0	1.2	1.8	3.0

INPUTS

i6 Input Connection – System Power: RED-Positive / Black-Negative
Extend applicable RED Wire (Positive) and BLACK Wire (Negative) from the vehicle battery to the siren. Hole Drilling may be necessary in order to pass the wires through the vehicle firewall. A grommet is suggested to protect the cables.

i4 Input Connection – Radio Re-Brocast Connection: connect to radio's output terminals or its speaker.

i3 input Connection **–** Horn Input Connection: The Horn Ring Transfer input allows activation by an external source of the Air Horn function.

i2 Input Connection **–** Failure Detection Connection: Connect to the failure detection output of your device.
– Input Command Connection: Connect to a positive signal of your choice

i1 Input Connection **–** Ignition Input Connection: This serves as the power switch for the entire unit. Connect to the vehicle ignition via linking from the terminal at the vehicle fuse box. It is not recommended to connect permanentily to the vehicle battery, as this may drain battery.

x6 Input Connection **–** Input Command Connection: when Input Command function is enabled, I/O x6 serves as signal

OUTPUTS

C3 Output Connection – 20 Amp Output, sufficient to supply power to a device with an amp draw below 20 Amp.

C1 Output Connection – 5 Amp Output, sufficient to be used as a function activation switch. Or devices with amp draw below 5 Amp.

C2 Output Connection – 5 Amp Output, sufficient to be used as a function activation switch. Or devices with amp draw below 5 Amp.

x1 Output Connection – 0.2 Amp Output, sufficient to be used as a function activation switch. Or devices with amp draw below 0.2 Amp.

x2 Output Connection – 0.2 Amp Output, sufficient to be used as a function activation switch. Or devices with amp draw below 0.2 Amp.

x3 Output Connection – 0.2 Amp Output, sufficient to be used as a function activation switch. Or devices with amp draw below 0.2 Amp.

x4 Output Connection – 0.2 Amp Output, sufficient to be used as a function activation switch. Or devices with amp draw below 0.2 Amp.

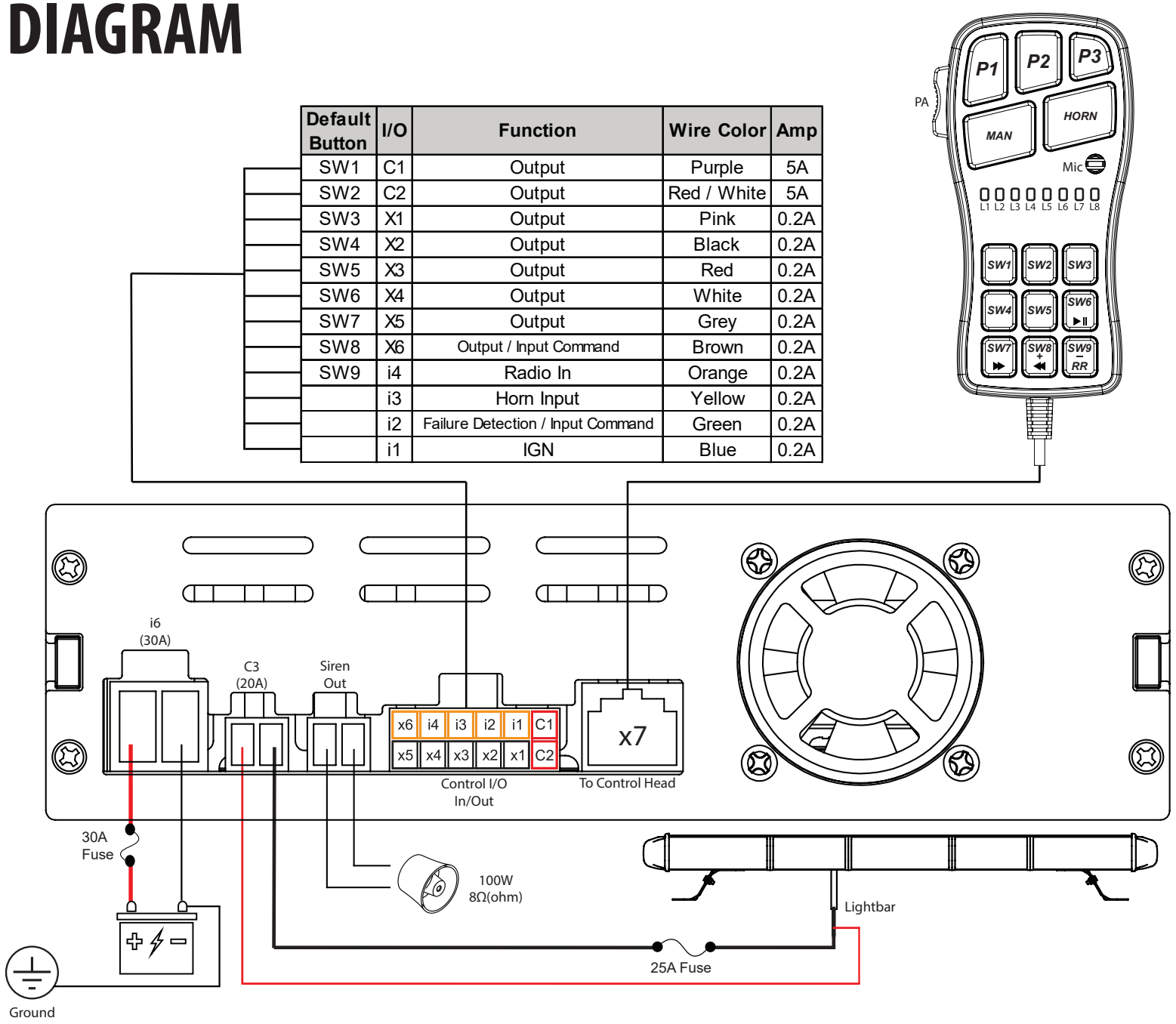
x5 Output Connection – 0.2 Amp Output, sufficient to be used as a function activation switch. Or devices with amp draw below 0.2 Amp.

x6 Output Connection – 0.2 Amp Output, sufficient to be used as a function activation switch. Or devices with amp draw below 0.2 Amp.

Siren Out Connection – Connect the speaker to the connections. Both connections must be used.

DIAGRAM

Default Button	I/O	Function	Wire Color	Amp
SW1	C1	Output	Purple	5A
SW2	C2	Output	Red / White	5A
SW3	X1	Output	Pink	0.2A
SW4	X2	Output	Black	0.2A
SW5	X3	Output	Red	0.2A
SW6	X4	Output	White	0.2A
SW7	X5	Output	Grey	0.2A
SW8	X6	Output / Input Command	Brown	0.2A
SW9	i4	Radio In	Orange	0.2A
	i3	Horn Input	Yellow	0.2A
	i2	Failure Detection / Input Command	Green	0.2A
	i1	IGN	Blue	0.2A



Warning!!!
This product is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws pertaining to warning signal devices. Therefore, he/she should identify all laws and regulations regulating the use of such devices and conform to them. The manufacturer assumes no liability for any loss resulting from the use of this product.

Warning!!!
Proper placement and installation of this product are vital for it to operate at its optimum efficiency. It is your responsibility to determine a suitable mounting location for the product so as to ensure the safety of all passengers onboard. Do not install this product or route any wires within the airbag deployment area of your vehicle as it may damage or reduce the effectiveness of the air bag. In worst-case scenario, it may even become a projectile that could cause serious injury or death. Before installation, please refer to the manual of your vehicle and avoid installing it within the airbag deployment area.

Manufacturer Limited Warranty Policy: Manufacturer warrants that on the date of purchase this product. This Limited Warranty extends for Thirty Six (36) months from the date of purchase.

DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.