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Premier Hazard STC Instructions

Electricity can shock, burn and cause damage to your vehicle!
Disconnect the battery before wiring up the control system.

Drills can be dangerous!
Make sure that the person operating the drill is trained and takes adequate safety precautions.

Electrical cables can melt!
Ensure cable cross sectional area is capable of carrying the required current load.
See electrical wiring section for minimum wire size.

Incorrect fuse ratings can cause cables to over heat and cause fire!
See electrical wiring section for correct fuse ratings.

Electrical cables are prone to damage!
Ensure that adequate protection is provided for cables passing through vehicle panels.

Electrical cables can affect other equipment!
Route product supply cables away from sensitive cables (e.g. Radio, aerials, anti-lock braking etc.)
If this is not possible, cross the cables at 90°.

Back box can become hot during use. Do not obstruct ventilation holes and ensure adequate airflow when installed.

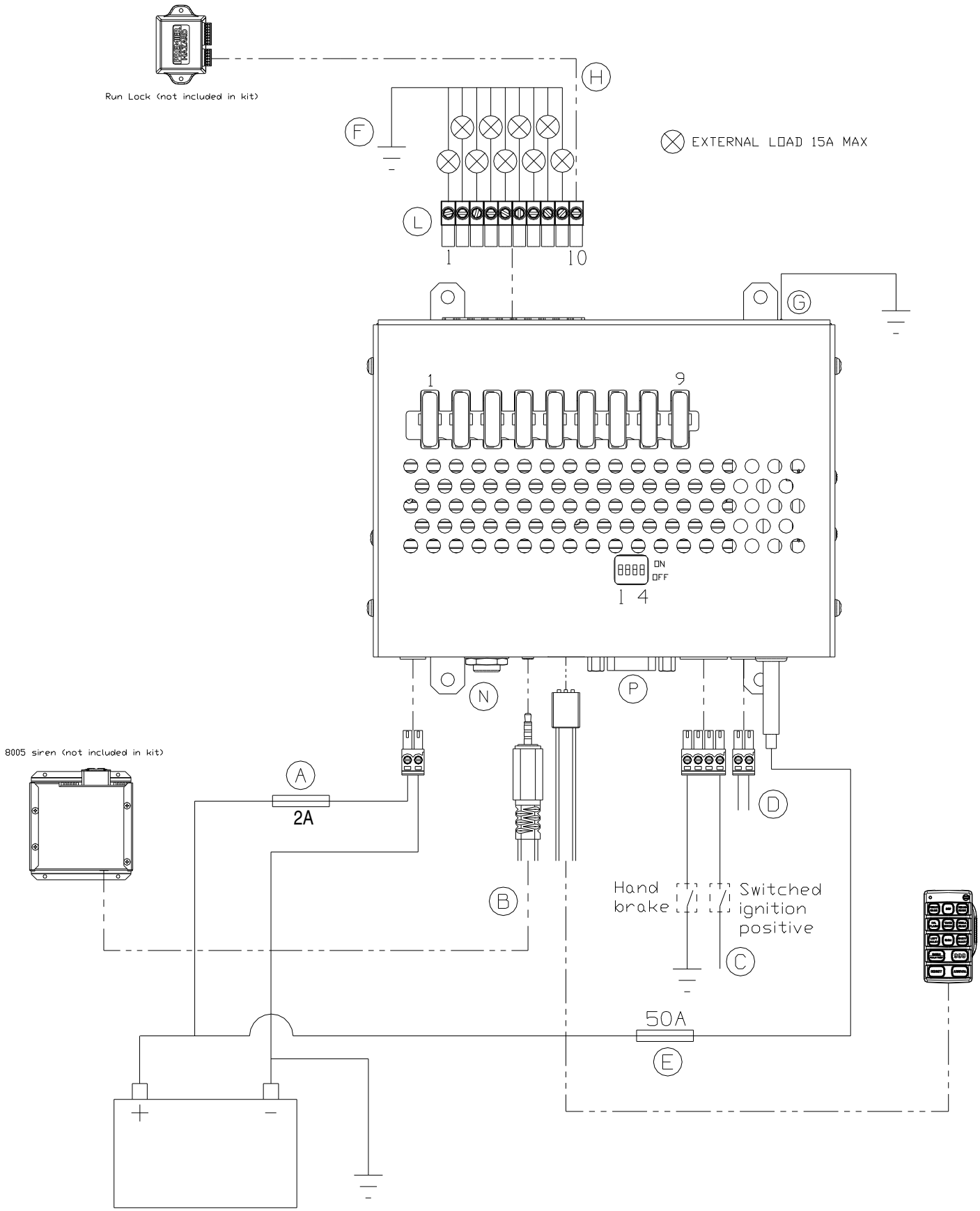
This product complies with EMC directive 89/336/EEC.
This product is approved to EMC directive 95/54/EEC.

This product is dual voltage and can operate from both 12 and 24V systems

Each of the main outputs can provide a maximum of 15A, however the maximum combined total, including arrowstick functions, is 50A.

Please retain these instructions for future reference

Fig 1


Run Lock (not included in kit)
H
F
EXTERNAL LOAD 15A MAX
L
1
10
G
1
9
ON
OFF
1 4
N
P
8005 siren (not included in kit)
A
2A
B
D
Hand brake
Switched ignition positive
C
50A
E

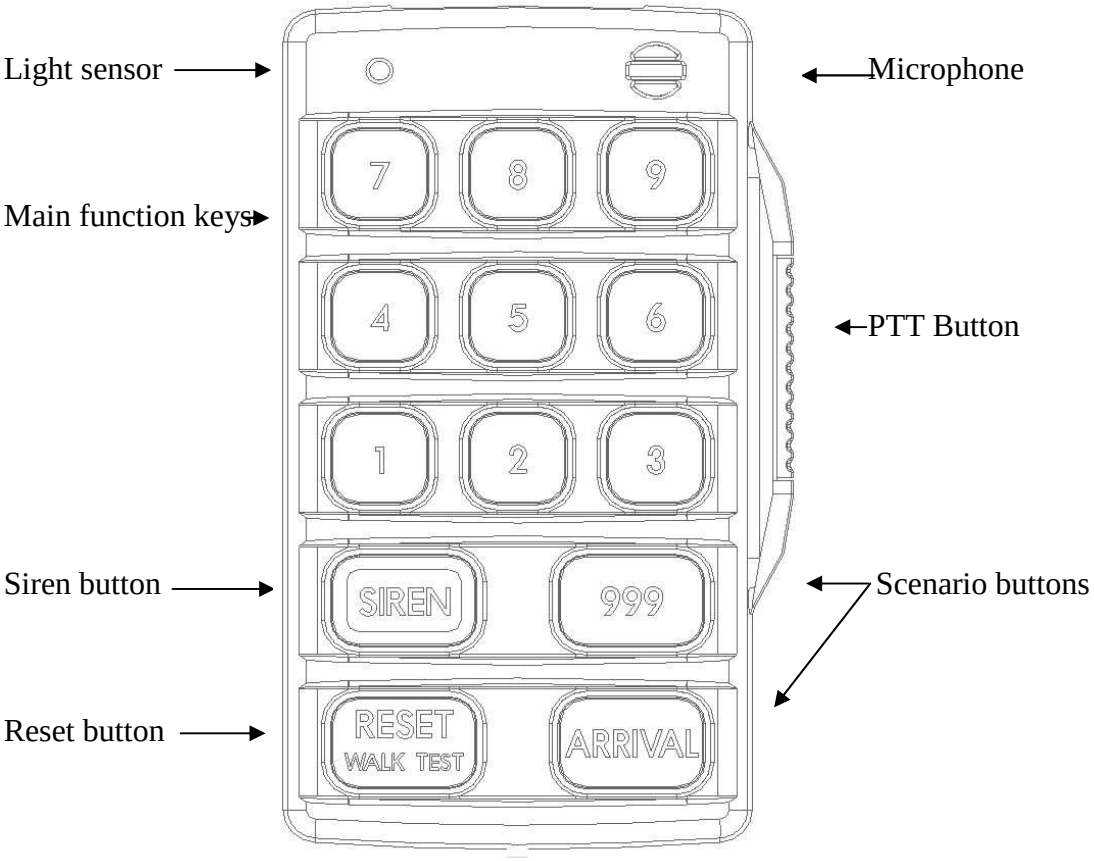
Connections

With reference to fig. 1:

(A) A 2A fuse must be placed between the logic positive input and the positive terminal of the battery
(B) Connection to an 8005 siren is via this cable (part number 507015 – supplied with the 8005 siren)
(C) When 12 / 24V is applied to this input the system will be active, if this input is left floating or connected to 0V then the controller system will enter a low power standby mode and the handset cannot be used.
(D) These terminals provide a normally open auxiliary output that can be selected to close with either the 999 button or the siren button. Max 200mA
(E) The main positive input should have a suitable 50A fuse connected in line with the battery positive terminal.
(F) The negative side of the loads connected to the main outputs should be connected to a suitable chassis ground or the battery negative terminal. This connection must be capable of carrying the full current load.
(G) This terminal should be connected to a suitable chassis ground or the negative terminal of the battery (min 1 mm^2 conductor)
(H) This connection provides a pulse to a run lock when the arrival mode is activated
(L) The main output connector provides positive switched outputs; these correspond to the handset key numbers shown in fig 2. Pin 10 of the main output connector provides a pulse to a run lock device when the system enters arrival mode.

Handset

Fig. 2



General use

While the system is active pressing any of the main handset function keys will activate the corresponding output and will change the backlighting of the key from green to red.
Pressing one of the scenario buttons (fig. 2) will activate all outputs that have been associated with that button by use of the programming mode, this will also deactivate any outputs that were enabled prior to the scenario mode button being pressed. While the system is in a scenario mode, pressing the same scenario button again will disable all outputs.
Pressing the RESET button (fig. 2) at any time will disable all active outputs, including the siren.
If the reset button (fig. 2) is pressed and held for 5s, upon release all the outputs will be activated in turn. At the end of the walk test, normal operation is automatically resumed.
Each output has 2 LED's next to the fuse on the back box, the green LED will illuminate if the output is enabled and the red LED will illuminate if a serious fault has been detected.
The back box contains a thermal monitoring circuit, and in the event of the board temperature becoming too high (high ambient temperature and high output currents) the internal fan will be activated. If the temperature continues to rise then the back box will shut the outputs down before damage to the control circuit can occur. In the event of this occurring, the handset will also show that the outputs have been disabled by reverting the backlighting to green and a warning tone will sound.
In the event that the handset is disconnected from the back box while in use and outputs are active then all the outputs will be shutdown and the siren (if in use) will be turned off.

Programming Mode

With the system connected and powered up plug the programming adaptor into the 9 pin programming port on the back box (fig. 1 (P)), this will cause the buzzer to sound and all of the buttons on the handset to flash red for approximately 2 seconds. The handset will then leave the "999" and "Arrival" buttons lit red.
Pressing one of the scenario buttons will leave the selected button illuminated red, at this point any outputs that are to be assigned to this scenario should be pressed so that they are also illuminated red (including siren if required)*. If during this process a key is inadvertently assigned to the scenario, pressing it again will extinguish the illumination and it will be removed from the program. When all the outputs required for the scenario being programmed have been illuminated the scenario button should be pressed again, the key assignments will then be stored and the keypad will flash red and the buzzer will sound again. After this the two scenario buttons will again be illuminated allowing further programming to be carried out.
When programming is complete, remove the adaptor from the programming port on the back box. The system will then return to normal operation and the handset can be used as usual.
The program information is stored within the back box in non-volatile memory and will be retained even if power is removed from the system; this also means that a handset can be replaced without the need to reprogram the scenario functions.

* Outputs will not be enabled on the back box during programming mode, please remove the adaptor to check functionality when programming is complete.

Siren Functionality

SW2 OFF: 8005 mode (see DIP switch settings)

When the system is configured to work with an 8005 siren and a siren is connected to the CAN pass through via the 507015 connector cable, the siren button when pressed will start the siren with a wail tone*. Subsequent presses of the siren button will step through the tones in the following sequence:
Wail
Yelp
Pulsar

Once activated via the siren button on the MTC control system, the horn ring transfer input on the 8005 can also be used to step through these tones allowing control of the siren via either the horn button or the siren button on the controller.
Either "double tapping" or pressing and holding of the siren button for more than 0.6s will turn the siren off.
Pressing the PTT button on the side of the handset at any time will put the siren into PA mode** and will enable the built in microphone. If a siren tone is active when the PTT button is pressed then this will be cancelled and the siren will enter PA mode.
When configured to work with an 8005 siren, the auxiliary relay contacts will automatically close when the system is in 999 modes.

*It is necessary for the "RUN" input on the siren to be connected to 12V / 24V (8005 sirens are voltage specific) before siren tones can be output.
** There may be a small delay after pressing the PTT button before the siren will output sound.

SW2 ON: Non 8005 siren mode (see DIP switch settings)

When configured to work with sirens other than the 8005, the auxiliary relay contact will close upon activation of the siren button and will remain closed until the siren button is deactivated. This can be used to provide a run signal to a 3rd party siren or can be used to drive an external relay for high current loads*. A pass through connector for the microphone is provided on the back box (fig. 1 (N)).
* The maximum current permissible through the auxiliary contacts is 200mA

DIP Switch settings

SW1	ON	This will enable an audible warning from the handset every 20s while any outputs are active
	OFF	No audible warning will be produced (default)
SW2	ON	Siren button activates the auxiliary relay output
	OFF	Siren button is configured for use with PH 8005 series sirens via CAN interface, the auxiliary relay contacts close when 999 mode is activated (default)
SW3	ON	Automatic change to arrival mode is activated (on hand brake application)
	OFF	No automatic change to arrival mode (default)
SW4	ON	Not used
	OFF	Not used

Trouble Shooting

Fault	Possible cause
No output	Main 50A input fuse blown
	Output fuse blown
	Back box overheated
	Faulty 6 way cable / junction box
	Incorrect connection
System not functioning	Logic power 2A fuse blown
	Ignition input not connected to positive
	Faulty 6 way cable / junction box
Siren (8005) not working	507015 lead not connected
	SW2 not in correct position
	Siren fuse blown
	Run input on siren not connected

Electrical Wiring

This equipment must be installed by a qualified automotive electrician.

Check the table below to ensure correct fuse and cable size is used for your application (note! cable sizes shown are based on PVC insulated automotive cables to BS6862, should a higher rated insulated cable be used then the cable size can be reduced accordingly as per cable manufactures guidelines in line with the fuse rating).
It is essential that the negative connections should have a secure connection to the battery or vehicle chassis (if the vehicle chassis is negative).
Failure to follow fuse and cable size recommendations could result in serious damage to the product and your vehicle.
Always disconnect the battery before making any electrical connections.

Conductor cross section (mm2)	Current rating (Amps)	Maximum loading (watts)		Fuse rating (Amps)
		12V	24V	
0.65	5	65	135	5
1	8	100	200	7.5
1.5	12	150	300	10
2	17	200	400	15
7	50	600	1200	50