NOTE A: TO FULLY UNDERSTAND THE OPERATION OF THE 457RII, YOU MUST GO THROUGH THIS DOCUMENT IN CONJUNCTION WITH THE OPERATORS BOOKLET SUPPLIED WITH THE PRODUCT.

NOTE B: IF YOU ARE UPGRAADING A 276RLI OR 446RLI PRODUCT TO THE 457RII, ALTHOUGH THEY ARE PLUG COMPATIBLE YOU WILL NEED TO ALTER A FEW WIRES TO ACCOMMODATE THE ADDITIONAL FEATURES. (CROSS REFERENCE THE 276RLI OR 446RLI DIAGRAMS TO THE 457RII DIAGRAM TO SEE THE VARIATION IN WIRING)

MECHANICAL INSTALLATION

The control module must be installed in a concealed location inside the vehicle. Do not plug in the control module until the wiring is complete. All wire joints must be soldered and well insulated. Mount the control module vertically with the wires exiting from the bottom to prevent damage resulting from water leaking into the vehicle and into the unit.

1.0 WIRING

NOTE: DO NOT REMOVE WIRE LABELS UNTIL THE INSTALLATION IS TESTING AND WORKING.

1.1 IMMOBILISER CIRCUITS 1, 2 & 3

Circuits 1 & 2 are 20 amp circuits and have two wires each side to ensure adequate current capacity. Circuit 3 uses the Power Line Comms Immobiliser (See Pg 4.) This relay can be fitted anywhere in the vehicle to offer enhanced security. The 12 volt connection should not be made directly at the vehicle battery as this may result in poor communication between the alarm and relay module.

1.2 IGNITION

Connect the wire marked "ignition" to a point that has + 12 volts while the ignition switch is in the "ON" and crank position. Do not connect to the auxiliary position.

1.3 HOTWIRE (TRACKING APPLICATION) (OPTIONAL)

Connect the hotwire input to the load side of an immobiliser positive circuit. Select the Tracking option. When this circuit is hotwired it will fire the alarm and give a negative out on the tracking wire. (See note 5.0) If this wire is not used for a Hotwire application, it can be used as a positive input door. (See Table 7.1 & 7.3).

1.4 GROUNDCROSSHASS

Connect the wires marked "ground" to two independent earth points.

1.5 CENTRAL LOCKING

The central locking output is designed for low current negative lock and unlock systems with a switching duration of 0.3 sec.. For other configurations use the CI 65 (Part No. 065-005). See note 3.1 to extend the time to 3.5 sec. for Pneumatic pumps.

1.6 SELECTIVE UNLOCKING (BLACK/YELLOW WIRE) SEE 3.0 & TABLE 1

Two methods of selective unlocking are available. Program option 123 41. Type 1 is suited to aftermarket installations where central locking motors are retrofitted to the vehicle. This option isolates the passenger motors by interrupting the high current wire to the motor while the drivers door unlocks. Program option 123 42. Type 2 is suited to OEM central locking configurations. With this system the unlock pulse unlocks the drivers door only, and the selective unlock pulse unlocks the other doors. (Additional wiring information is supplied with the CI-65 and Selective Unlock Relay.)

2.0 MOVEMENT SENSOR

Use any PFK movement sensor shown on the diagram. Unless the single piece ultrasonic sensor is used which incorporates the status, light it is necessary to fit the separate LED. (PFK Part No. 674-442). Sensitivity is factory set but can be adjusted with the adjustment screwdriver supplied. Clockwise increases sensitivity.

2.1 EARLY WARNING (SEE 3.0 & TABLE 1)

The early warning option is available using a combination of different sensors. (The dual stage shock sensor can be used on its own but is not acceptable as a level 4c but can be used for the early warning detector, PFK Part No. 168000). To select early warning refer to the programming procedure and enter the code 123 77. See 3.0 & table 1. It is possible to install a one piece sonic (PFK Part No. 312-000 or the 512-000), together with an early warning sensor.

Note: To include an early warning sensor you will require the 2 to 1 special adapter harness (PFK Part No 446-450).

If you are at any stage confused by the number of flashes, wait for 10 flashes then simply start from the beginning again.

3.1 ENTERING PROGRAM MODE.

Once the installation is complete, do a functional test to ensure that the installation is working. Once you are satisfied that the basic features are working, switch the alarm off and allow the immobiliser to arm - indicated by the flashing status light (LED).

The early warning option is available using a combination of different sensors. The dual stage shock sensor can be used on its own but is not acceptable as a level 4c but can be used for the early warning detector, PFK Part No. 168000. To select early warning refer to the programming procedure and enter the code 123 77. See 3.0 & table 1. It is possible to install a one piece sonic (PFK Part No. 312-000 or the 512-000), together with an early warning sensor.

Note: To include an early warning sensor you will require the 2 to 1 special adapter harness (PFK Part No 446-450).

If you are at any stage confused by the number of flashes, wait for 10 flashes then simply start from the beginning again.

a. Switch the ignition ON. The LED will turn steady ON.

b. Switch the ignition OFF, the LED will start to flash. After 1 flash, turn the ignition ON. The LED will be steady ON. This is the first digit - "1" entered.

c. Switch the ignition OFF, the LED will start to flash. After 2 flashes, turn the ignition ON. The LED will be steady ON. This is the second digit - "2" entered.

d. Switch the ignition OFF, the LED will start to flash. After 3 flashes, turn the ignition ON. The LED will flash rapidly to indicate that you have entered the third digit "3" correctly and that you are in program mode. Wait until the LED is steady on again.

e. Enter the first 2 digits of the feature you require. As an example, to select Hijack, the digits 2,2 would need to be entered.

Now enter program mode as follows:

a. Switch the ignition ON. The LED will turn steady ON.

b. Switch the ignition OFF, the LED will start to flash. After 1 flash, turn the ignition ON. The LED will be steady ON. This is the first digit - "1" entered.

c. Switch the ignition OFF, the LED will start to flash. After 2 flashes, turn the ignition ON. The LED will be steady ON. This is the second digit - "2" entered.

d. Switch the ignition OFF, the LED will start to flash. After 3 flashes, turn the ignition ON. The LED will flash rapidly to indicate that you have entered the third digit "3" correctly and that you are in program mode. Wait until the LED is steady on again.

e. Enter the first 2 digits of the feature you require. As an example, to select Hijack, the digits 2,2 would need to be entered.

Proceed as follows:-

i. Switch the ignition OFF, the LED will start to flash. After 2 flashes, turn the ignition ON. The LED will be steady ON. This is the first function digit - "2" entered.

ii. Switch the ignition OFF, the LED will start to flash. After 2 flashes, turn the ignition ON. The LED will flash rapidly to indicate that you have entered the second digit "2" correctly and that you are in program mode. Wait until the LED is steady on again.

2.0 MOVEMENT SENSOR

Use any PFK movement sensor shown on the diagram. Unless the single piece ultrasonic sensor is used which incorporates the status, light it is necessary to fit the separate LED. (PFK Part No. 674-442). Sensitivity is factory set but can be adjusted with the adjustment screwdriver supplied. Clockwise increases sensitivity.

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Note: To include an early warning sensor you will require the 2 to 1 special adapter harness (PFK Part No 446-450).

If you are at any stage confused by the number of flashes, wait for 10 flashes then simply start from the beginning again.

a. Switch the ignition ON. The LED will turn steady ON.

b. Switch the ignition OFF, the LED will start to flash. After 1 flash, turn the ignition ON. The LED will be steady ON. This is the first digit - "1" entered.

c. Switch the ignition OFF, the LED will start to flash. After 2 flashes, turn the ignition ON. The LED will be steady ON. This is the second digit - "2" entered.

d. Switch the ignition OFF, the LED will start to flash. After 3 flashes, turn the ignition ON. The LED will flash rapidly to indicate that you have entered the third digit "3" correctly and that you are in program mode. Wait until the LED is steady on again.

e. Enter the first 2 digits of the feature you require. As an example, to select Hijack, the digits 2,2 would need to be entered.

Proceed as follows:-

i. Switch the ignition OFF, the LED will start to flash. After 2 flashes, turn the ignition ON. The LED will be steady ON. This is the first function digit - "2" entered.

ii. Switch the ignition OFF, the LED will start to flash. After 2 flashes, turn the ignition ON. The LED will flash rapidly to indicate that you have entered the second digit "2" correctly and that you are in program mode. Wait until the LED is steady on again.

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2.1 EARLY WARNING (SEE 3.0 & TABLE 1)

The early warning option is available using a combination of different sensors. (The dual stage shock sensor can be used on its own but is not acceptable as a level 4c but can be used for the early warning detector, PFK Part No. 168000). To select early warning refer to the programming procedure and enter the code 123 77. See 3.0 & table 1. It is possible to install a one piece sonic (PFK Part No. 312-000 or the 512-000), together with an early warning sensor.

Note: To include an early warning sensor you will require the 2 to 1 special adapter harness (PFK Part No 446-450).

If you are at any stage confused by the number of flashes, wait for 10 flashes then simply start from the beginning again.
457 RLi FEATURE SELECTION TABLE

<table>
<thead>
<tr>
<th>NO</th>
<th>FEATURE</th>
<th>FEATURE SELECTION CODE</th>
<th>INDICATION</th>
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<tbody>
<tr>
<td>1.1</td>
<td>Trigger Report back</td>
<td>1.1</td>
<td>LED flashes RED ( \times 6 ) ( \times \frac{1}{2} ) sec</td>
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<tr>
<td>2.2</td>
<td>Hijack - Selection</td>
<td>2.2</td>
<td>ON *  OFF</td>
</tr>
<tr>
<td>3.3</td>
<td>Hijack Time Selection</td>
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<td>45 SECS</td>
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<tr>
<td>3.4</td>
<td>Lock with ignition</td>
<td>3.4</td>
<td>ON *  OFF</td>
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<td>3.5</td>
<td>Lock with ignition</td>
<td>3.5</td>
<td>ON *  OFF</td>
</tr>
<tr>
<td>3.6</td>
<td>Selective Unlock not used</td>
<td>3.6</td>
<td>ON *  OFF</td>
</tr>
<tr>
<td>4.1</td>
<td>Selective Unlock - Type 1</td>
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<td>ON *  OFF</td>
</tr>
<tr>
<td>4.2</td>
<td>Selective Unlock - Type 2</td>
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<td>ON *  OFF</td>
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<tr>
<td>4.3</td>
<td>Selective Unlock inhibit</td>
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<td>ON *  OFF</td>
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<td>4.4</td>
<td>Selective Unlock / Neg. Out when armed</td>
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<td>Reg. Out *  Selective</td>
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<td>5.0</td>
<td>Window / Turbo Run On Time</td>
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<td>PAGING WINDOW</td>
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</tr>
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<td>Window 45 second wind time</td>
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<td>Trunk / Turbo Run On</td>
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<td>Brake Input</td>
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<td>Lock when Auto Arm or Auto Rearranging</td>
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<td>Door open audible warning</td>
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<td>3.0 sec</td>
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</tbody>
</table>

**NOTE**: A ZERO IS REPRESENTED BY TEN FLASHES in the table above.

5.0 PAGER & TRACKING OUTPUT. (SEE 3.0 & TABLE 1 note 5.1)

- Note that this option is not available if the window winding option is required. The output is a low current output that can be connected to a pager or a tracking unit. It will switch to ground:
  - i) Five seconds after the alarm is triggered.
  - ii) If the hotwire input is switched to 12 volts while the vehicle is immobilised.
  - iii) Five seconds after the end of the hijack sequence.

6.0 TURBO RUN ON MODE (SEE 3.0 & TABLE 1)

When selecting this option trunk release will be disabled. Use the Blue/Grey wire to energise the relay(s) to feed power to the ignition circuits required to keep the vehicle running after the vehicle is turned off. The feed-points should be identified after fitting the immobilisation. The default run-on time is 180 seconds but this can be altered to 60 seconds using the program option - see Table 1 - Option 5.7.

7.0 AUTO ARMING/AUTO REARMING (SEE 3.0 & TABLE 1 note 8.5)

The factory default is to auto rearm but auto arming can be selected. The doors can be programmed to lock when auto arming or auto rearming.

8.0 SIREN/SPEAKER

A siren can be used in place of a horn speaker. In this case the output wire is connected to the negative door wire (pink label marked "doors"). The light will fade on and off.

9.0 INTERIOR LIGHT

The interior light switching circuit is connected to the negative door wire (pink label marked "doors"). The light will fade on and off.

10.0 QUICK TEST

- To enter quick test, enter the Program Code, 1, 2, 3. The arming time and the siren time are shortened to facilitate quick and easy testing. Hi-jack time remains the same. To exit quick test, do not trigger the alarm for a period of two minutes and the unit will exit automatically. Alternatively, select any programmable feature.

11.0 TRIGGER REPORT BACK

In the event of a false alarm complaint from a customer, the cause can be accessed using the Trigger Report Back feature. To access this information, enter the program code, 1, 2, 3, followed by the code 1, 1. The LED begins to flash a number of times to indicate the cause of the alarm.

These flashes are as follows:
- 1 Flash : Movement Sensor (Ultrasonic or WPIR)
- 2 Flashes : WPIR Zone (When allocated to its own zone)
- 3 Flashes : Panic
- 4 Flashes : Ignition
- 5 Flashes : Negative / Hijack Door
- 6 Flashes : Positive Door / Hotwire
- 7 Flashes : Boot
- 8 Flashes : Bonnet

The trigger information is cleared once the alarm has been turned on and off 10 times without triggering.

12.0 PROGRAMMING NEW REMOTE CONTROLS

The unit has the ability to learn up to 6 remotes. To program, refer to the 5 digit user code supplied with the unit or the code attached to the control module and proceed as follows:

- a. Enter each digit of the code using the flashing LED and ignition switch. After entering the last digit, the LED will flash rapidly for 2 seconds.
- b. Enter the two digit code 1, 1. The LED will flash rapidly for 2 seconds.
- c. Transmit with the new remote for approximately half a second, pausing for half a second between each transmission, until the LED flashes rapidly indicating that the remote is now programmed. Further remotes may now be programmed.
- d. Note that if a seventh transmitter is programmed into the alarm system it will overwrite the first code learnt. To remove all transmitters, fill the 6 memory spaces with 6 new transmitters, or a single transmitter 6 times.
- e. To exit program mode, either wait for 10 seconds without transmitting or switch the ignition off.

13.0 PROGRAMMING NEW WPIR'S

The unit has the ability to learn up to 6 WPIR's. To program, refer to the 5 digit user code supplied with the unit or the code attached to the control module and proceed as follows:

- a. Enter each digit of the code using the flashing LED and ignition switch. After entering the last digit, the LED will flash rapidly for 2 seconds.
- b. Enter the two digit code 3, 3. The LED will flash rapidly for 2 seconds.
- c. Within 8 seconds press the button on the WPIR. The LED will turn on, and a barp will be heard indicating that the WPIR has been detected. Within 5 seconds, the WPIR needs to be confirmed in its zone by pressing the "Arm/Lock" or any other button. ("Arm/Lock" will program the WPIR to operate in conjunction with the movement sensor in its zone) (Any other button will program the WPIR to operate independently in its own zone). Once done the LED will flash off and a barp will be heard to confirm the WPIR has been successfully programmed.
- d. Note that if no button is pressed within the given 5 seconds the detected WPIR will be ignored and you will have a further 5 seconds in which to press a button on another WPIR and once detected you may confirm it as above.
- e. To exit program mode, either wait for 10 seconds or switch the ignition off.

14.0 HAZARD PULSE

To check that the 'Hazard Pulse' mode is suitable for a particular car, access the back of the vehicle’s hazard light switch and momentarily connect a ground (via a 5amp fuse) to the switch side. The hazard lights should come on and will continue to flash until the ground wire is connected again to the same point on the switch. If the test is satisfactory, enable 'hazard' while programming (Table 1 option 8.9) and the yellow wire from the alarm to the switched side of the hazard light switch. If central locking drives hazards, connect "yellow indicator wires" to park lights.

15.0 FITTING THE SECURITY HOUSING

Once the installation is complete and fully tested the security cover can be fitted. Ensure that the slide in the security housing is not fitted and route all the wires, with the exception of the LED and MOVEMENT SENSOR wires, through the slot and fit the slide. Attach the security housing to the main casing using the screws provided and insert the anti-tamper Screw caps.

AUTOWATCH 457 RLi ALARM/IMMOBILISER WIRING DIAGRAM
SELECTIVE UNLOCKING WIRING OPTIONS

OPTION 1 (A)

THIS CONFIGURATION IS IDEAL WHEN USING SLAVE DOOR MOTORS

JOIN TO CORRESPONDING CONTROL WIRES FROM ALARM

OPTION 1 (B)

THIS CONFIGURATION IS IDEAL WHEN INSTALLING A 4-DOOR CENTRAL LOCKING KIT

NOTE: Following this modification, the passenger doors will no longer unlock when the driver's door is unlocked manually.

OPTION 2

THIS CONFIGURATION IS IDEAL FOR MODIFYING FACTORY FITTED CENTRAL LOCKING MOTORS

POWER LINE COMMS IMMOBILISER

REAR VIEW OF 10-WAY HARNESS

1. (Black wire) Join with black wire from pin 6.
2. (Black wire) Join with black wire from pin 7.
3. Not used
4. Not used
5. Ground (Black wire)
6. (Black wire) Join with black wire from pin 1.
7. (Black wire) Join with black wire from pin 2.
8. Not used
9. Ignition (Green wire)
10. +12V (Red wire)

AUTOWATCH 457 Rii ALARM/IMMOBILISER WIRING DIAGRAM

REV. 3
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