

## 1100F FORD PATS/ SECURILOCK REMOTE START INTERFACE-DATA

**IMPORTANT!** Please read this installation guide thoroughly before installing the 1100F. Use only a high quality digital multi-meter for testing. This product connects to the vehicle's low voltage signal wire and improper installation or testing can result in damage to the vehicle. Never use a test light or logic probe to test wires in this vehicle!

#### PRODUCT DESCRIPTION

The 1100F interface module is used when installing remote start products in Ford vehicles equipped with a factory immobilizer. The 1100F allows for easy interfacing between the remote start and the factory immobilizer, while maintaining the integrity of the OEM system. The factory transponder-based anti-theft system uses a small electronic chip hidden in the key to send a code to the vehicle's transceiver when the ignition is energized. The key must be placed in the ignition and turned to the RUN position. This energizes a coil surrounding the key, which in turn energizes the chip, which sends a code to the vehicle. If the vehicle does not detect the code being sent, the vehicle will start and then immediately shut off or will just crank, and the anti-theft light will flash. The 1100F provides a valid code to the vehicle whenever it is remote started, but does not affect the immobilizer system during normal vehicle operation; the immobilizer system remains fully functional.

#### **MODULE WIRING**

Refer to the Transponder Cross Reference Chart and Vehicle Specific Transponder Connector Type to and install all wire according the wiring diagram below. Once all connections have been made, plug the module into the wiring harness and follow the programming steps below.

#### PROGRAMMING STEPS

#### STEP 1: SELECTS INSTALLATION MODE

This procedure determines whether the module will operate using the conventional manner using the ground when running signal or a data type connection not used in this application.

**CAUTION:** For security purposes this step is programmable only once. Please ensure the proper mode is activated.

To change the installation mode, the module must be reset and reprogrammed.

- 1. Complete wire connections to vehicle and insert harnesses into module.
- 2. Press programming button once or twice to select the installation type. The LED will flash green the same number of times to confirm selection.
- 1. 1 x green flash = Unused installation mode.
- 2. 2 x green flashes = Standard installation mode.
- To register your selection, press and hold the programming button until the green LED turns on solid.
- 4. The installation mode is now selected and programmed.

#### STEP 2: DETERMINE TRANSPONDER TYPE

Refer to the transponder cross reference chart to determine transponder type and programming procedure.

- 1. If the transponder type is 1, proceed to 2A.
- 2. If the transponder type is either 2 or 3, proceed to 2B

#### 2A: TRANSPONDER TYPE 1

- 1. Insert the vehicle key into the ignition.
- 2. Turn ignition to the "ON" position and wait for the LED to illuminate green for two seconds.
- 3. Programming is complete.
- 2B: TRANSPONDER TYPE 2 OR TYPE 3

**IMPORTANT:** Both keys are required to complete the programming procedure. A maximum 5 second delay between each step is permitted. If the delay is exceeded, the vehicle will not allow programming to continue. The programming procedure must be restarted.

- Insert the 1st key into the ignition. Turn ignition to the "ON" position, the LED will illuminate green. Wait for the car security light to turn off, turn ignition to the "OFF" position and remove the key.
- Insert the 2nd key into the ignition. Turn ignition to the "ON" position and wait for the car security light to turn off. Turn ignition to the OFF" position and remove the key.
- Press and release the programming button once and remote start the vehicle. Wait for LED to illuminate green for two seconds. Programming is complete.

#### LED DIAGNOSTICS

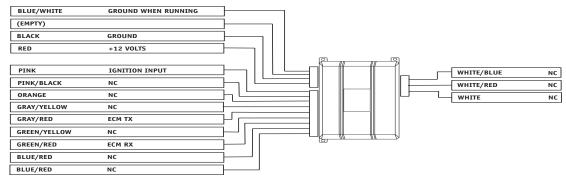
- During STEP 1, if the LED flashes red this indicates the wire connections are incorrect.
- Once programming has been completed, if the LED flashes red the module failed to learn correctly. Reset module and repeat the programming procedure.
- 3. When the remote starter is engaged, the led will flash green to indicate the current transponder mode as follows.
  - 1 x green flash = Type 1
  - 2 x green flashes = Type 2
  - $3 \times \text{green flashes} = \text{Type } 3$

If the LED remains illuminated red, the device is incorrectly programmed.

#### **FACTORY RESET**

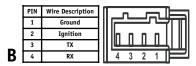
Press and hold the programming button while inserting the power harness into the module. Release the programming button once the LED begins to flash. Module is now reset.

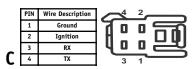
#### Wiring Diagram

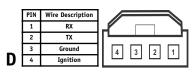


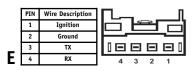
### Vehicle Specific Transponder Connector Type

# PIN Wire Description 1 Ground 2 Ignition 3 RX 4 TX









### **Transponder Cross Reference Chart**

Sport Trac         1 A         1 A         3 A         3 B         3 B         3 B         3 B         3 B         3 E           Taurus         1 A         1 A         3 A <td< th=""><th>Car</th><th>1998</th><th>1999</th><th>2000</th><th>2001 Before 7/24</th><th>2001 After 7/24</th><th>2002</th><th>2003</th><th>2004</th><th>2005</th><th>2006</th></td<>	Car	1998	1999	2000	2001 Before 7/24	2001 After 7/24	2002	2003	2004	2005	2006
Blackwood	Aviator							3 B	3 B	3 B	
Slackwoold	B3000		1	1	3	3	3	3	3 C		
Continental 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1	B4000		1	1	3	3	3 C	3 C	3 C		
Contour	Blackwood						3 A				
Cougar	Continental	1 A	1 A	1 A	1 A	1 A	1 A				
Crown Victoria	Contour	1 B	1 B	1 B	1 B						
Escape	Cougar	1 B	1 B	1 B	1 B	1 B	1 B	1 B			
Excursion 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1	Crown Victoria	1 A	1 A	1 A	1 A	1 A	1 A	3 C	3 C	3 E	3 E
Expedition	Escape			2 B	2 B	2 B	2 B	2 B	2 B	3 B	3 B
Explorer 1 A 1 A 1 A 1 A 1 A 1 A 1 B 3 B 3 B 3 B 3 B 3 B 3 B 5 E F150	Excursion		1 A	1 A	1 A	1 A	1 A	1 A	1 A	1 A	
Fi50	Expedition		1 A	1 A	1 A	1 A	3 B	3 B	3 B	3 B	3 B
Five Hundred Focus  2 B 2 B 2 B 2 B 2 B 2 B 2 B 2 B 2 B 2	Explorer	1 A	1 A	1 A	1 A	1 A	3 B	3 B	3 B	3 B	3 E
Focus    2   B   2   B   2   B   2   B   2   B   2   B   2   B   2   B   2   B   3   B	F150		1 A	1 A	1 A	1 A	1 A	1 C	3 B	3 B	3 B
Freestyle  Fusion  Fusion  Fusion  Freestyle  Fusion  Fusion	Five Hundred									3 E	3 E
Fusion	Focus			2 B	2 B	2 B	2 B	2 B	2 B	2 B	3 B
Grand Marquis	Freestyle								3 C	3 C	3 C
Ford GT  Lincoln Ls6/8  2 B 2 B 2 B 2 B 3 B 3 B 3 B 3 B 3 B  Marauder  3 C 3 C  Mariner  3 B S S S S S S S S S S S S S S S S S S	Fusion										3 E
Lincoln Ls6/8	Grand Marquis		1 A	1 A	1 A	1 A	1 A	3 C	3 C	3 E	3 E
Marauder       3 C 3 C         Mariner       3 B         Mark LT       3 B         Mazda 3       3 D 3 D 3 D 3 D 3 D 3 D 3 D 3 D 3 D 3 D	Ford GT										3 B
Mariner       3 B         Mark LT       3 B         Mazda 3       3 D       3 E	Lincoln Ls6/8			2 B	2 B	2 B	2 B	3 B	3 B	3 B	3 B
Mark LT       3 B         Mazda 3       3 D       3 E	Marauder							3 C	3 C		
Mazda 3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         3         3         3 </td <td>Mariner</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3 B</td>	Mariner										3 B
Mazda 6         3 D         3 E	Mark LT										3 B
Marda Rx8         3 D 3           Milan         3 E 3 E           Montego         3 C 3 C 3 C           Monterey         3 C 3 C 3 C           Mountainer         1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	Mazda 3								3	3	3
Milan  Montego  Monterey  Mountainer  1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1	Mazda 6							3 D	3 D	3	3
Montego         3 E         3 E         3 E         3 E           Monterey         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 C         3 E         3 E         3 E         3 E         3 E         3 C         3 C         3 C         3 C         3 C         3 E	Mazda Rx8								3 D	3	
Monterey         3 C         3 E           Mustang         1 A	Milan										3 E
Mountainer         1 A	Montego									3 E	3 E
Mustang         1 A	Monterey								3 C	3 C	3 C
Mystique         1 B         1 B         1 B           Navigator         1 A         1 A         1 A         1 A         1 A         1 A         3 B <t< td=""><td>Mountainer</td><td>1 A</td><td>1 A</td><td>1 A</td><td>1 A</td><td>1 A</td><td>3 B</td><td>3 B</td><td>3 B</td><td>3 B</td><td>3 E</td></t<>	Mountainer	1 A	1 A	1 A	1 A	1 A	3 B	3 B	3 B	3 B	3 E
Navigator         1 A         1	Mustang	1 A	1 A	1 A	1 A	1 A	1 A	1 A	1 A	3 B	3 E
Ranger 1 C 1 C 1 C 3 C 3 C 3 C 3 C 3 C 3 C 3 C	Mystique	1 B	1 B	1 B							
Sable         1 A         1 A         3 A         3 A         3 A         3 A         3 A         3 A         3 A         3 A         3 A         3 A         3 A         3 B         3 A </td <td>Navigator</td> <td>1 A</td> <td>1 A</td> <td>1 A</td> <td>1 A</td> <td>1 A</td> <td>3 B</td> <td>3 B</td> <td>3 B</td> <td>3 B</td> <td>3 B</td>	Navigator	1 A	1 A	1 A	1 A	1 A	3 B	3 B	3 B	3 B	3 B
Sport Trac         1 A         1 A         3 A         3 B	Ranger		1 C	1 C	1 C	3 C	3 C	3 C	3 C	3 C	3 C
Taurus         1 A         1 A         3 C         3 C         3 C         3 C         3 C         3 C         3 E         3 E         3 B         3 B         3 B         3 B         3 B         3 A         3 A         3 A         3 C         3 C         3 B         3 B         3 B         3 B         4 B<	Sable	1 A	1 A	3 A	3 A	3 A	3 A	3 A	3 A	3 A	
Thunderbird         2 B 2 B 3 C 3 C           Town Car         1 A 1 A 1 A 1 A 1 A 1 A 3 C 3 C 3 C 3 E           Tribute         2 B 2 B 2 B 2 B 3 A 3 C           Windstar         1 A 1 A 1 A 3 A 3 A 3 C	Sport Trac			1 A	1 A	3 A	3 B	3 B	3 B	3 B	3 E
Town Car         1 A         1 A         1 A         1 A         1 A         3 C         3 C         3 C         3 E           Tribute         2 B         2 B         2 B         2 B         2 B         3 B           Windstar         1 A         1 A         1 A         3 A         3 A         3 C	Taurus	1 A	1 A	3 A	3 A	3 A	3 A	3 A	3 A	3 A	
Tribute         2 B         2 B         2 B         2 B         2 B         3 B           Windstar         1 A         1 A         1 A         3 A         3 C	Thunderbird						2 B	2 B	3 C	3 C	
Windstar 1 A 1 A 1 A 3 A 3 A 3 C	Town Car		1 A	1 A	1 A	1 A	1 A	3 C	3 C	3 C	3 E
	Tribute				2 B	2 B	2 B	2 B		3 B	
Zephyr 3 E	Windstar		1 A	1 A	1 A	3 A	3 A	3 C			
	Zephyr										3 E

1 = Type 1 2 = Type 2 3 = Type 3

#### LIMITED ONE-YEAR CONSUMER WARRANTY

For a period of ONE YEAR from the date of purchase of a Directed Electronics remote start or security accessory product, Directed Electronics, Inc. (hereinafter "DIRECTED") promises to the original purchaser, to repair or replace (at DIRECTED's election) with a comparable reconditioned piece, the security or remote start accessory piece (hereinafter the "Part"), which proves to be defective in workmanship or material under normal use, provided the following conditions are met: the Part was purchased from an authorized DIRECTED dealer in the United States; and the Part is returned to DIRECTED, postage prepaid, along with a clear, legible copy of the receipt or bill of sale bearing the following information: consumer's name, address, telephone number, the authorized licensed dealer's name, date of purchase and complete product and Part description.

This warranty is non-transferable and is automatically void if the Part has been modified or used in a manner contrary to its intended purpose or if the Part has been damaged by accident, abuse, unreasonable use, neglect, water, theft, improper service, installation or other causes not arising out of defect in materials or construction. This warranty is automatically void if any Part has had the serial number defaced, altered, or removed. This warranty is automatically void if the Part has had Repair Service performed by anyone other than the Directed Repair Department. This warranty does not cover damage to any Part caused by installation or removal of the Part or any system related thereto. This warranty does not cover labor costs for the removal or reinstallation of the Part.

TO THE MAXIMUM EXTENT ALLOWED BY LAW, ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, ARE EXPRESSLY EXCLUDED TO THE MAXIMUM EXTENT PERMITTED BY LAW; AND DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR ENTITY TO ASSUME FOR IT ANY DUTY, OBLIGATION OR LIABILITY IN CONNECTION WITH ITS PRODUCTS. DIRECTED HEREBY DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING DEALERS OR INSTALLERS. IN THE EVENT OF A CLAIM OR A DISPUTE INVOLVING DIRECTED OR ITS SUBSIDIARY, THE PROPER VENUE SHALL BE SAN DIEGO COUNTY IN THE STATE OF CALIFORNIA. CALIFORNIA STATE LAWS AND APPLICABLE FEDERAL LAWS SHALL APPLY AND GOVERN THE DISPUTE. THE MAXIMUM RECOVERY UNDER ANY CLAIM AGAINST DIRECTED SHALL BE STRICTLY LIMITED TO THE AUTHORIZED DIRECTED DEALER'S PURCHASE PRICE OF THE PART. DIRECTED SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, ANY CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, DAMAGES FOR THE LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECONOMIC OPPORTUNITY AND THE LIKE.

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