

#### PRODUCT DESCRIPTION

The 1100X interface module is used when installing remote start products in Toyota/Lexus vehicles equipped with a factory immobilizer. The 1100X 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 1100X 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.

#### PROGRAMMING INSTRUCTIONS

#### **STEP 1: SELECTS INSTALLATION MODE**

This procedure determines the module will operate using a conventional manner using the ground when running signal.

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 (see Factory Reset procedure).

- 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.
    - $1 \times \text{green flash} = \text{Unused mode}.$
    - $2 \times \text{green flashes} = \text{Standard installation mode (for directed systems)}.$

# 1100X INSTALLATION GUIDE MODE 1

- After selecting the correct mode, press and hold the programming button until the LED displays a solid green light.
- 4. The installation mode is now selected and programmed.

#### STEP 2: PROGRAMMING PROCEDURE MODE 1

- Insert the vehicle key into the ignition and turn to "run" position.
- 2. The module LED will illuminate green to confirm learning procedure has been completed.
- If LED illuminates red, remove key and follow LED diagnostic nstructions.

#### **LED DIAGNOSTICS**

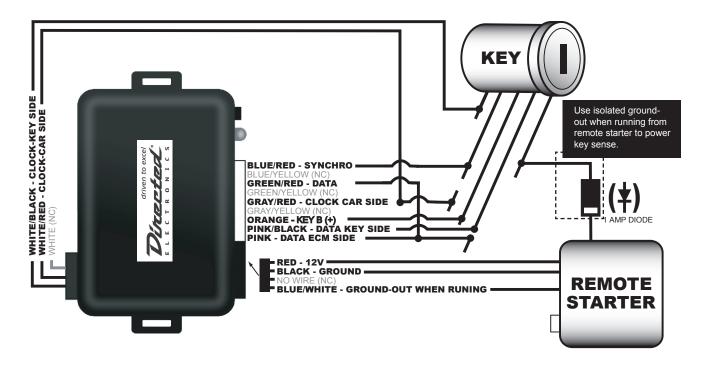
- During STEP 2, if the LED flashes red this indicates the wire connections are incorrect. Insure connections are soldered, no T-Taps or Scotch Locs
- 2. Once programming has been completed, if the LED flashes red, the module failed to learn correctly.
  - Reset module and repeat the programming procedure.
- When the remote starter is engaged, the LED will flash green to indicate the module has been correctly programmed
  - If the LED remains illuminated red, the device is incorrectly programmed.

#### **FACTORY RESET**

- 1. Unplug all connectors from the module.
- Press and hold the programming button while inserting the 4-PIN standard connector.
- The LED will begin to flash red. Immediately release the program ming button. The LED will turn on solid for 2 seconds to confirm module reset.
- 4. Plug remaining connectors and return to: STEP 1: SELECT INSTALLATION MODE.

### **MODE 1** WIRING DIAGRAM

Please refer to the Vehicle Wiring Cross Reference Chart to identify vehicle-specific pin locations & wire colors.



# 1100X INSTALLATION GUIDE MODE 1

## **MODE 1** VEHICLE WIRING CROSS REFERENCE CHART\*

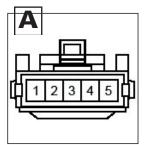
	CONNECTOR	

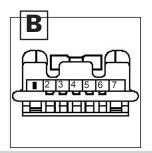
MODEL	YEAR	PIN	KEY B (+)	PIN	DATA		CLOCK		SYNCRO	PIN	GROUND (-)	KEY SENSE*	
CONNECT.													
Avalon	1998-1999	1	Light Green	2	Black/Red	3	Yellow	4	Green	5	White/Black	Red/Yellow*	Α
Avalon	2000-2004	1	Black/White	2	Pink/Green	3	Blue/Orange	4	Blue/yellow	5	White/Black	Red/White*	Α
Camry	1998-2001	1	Black/Yellow	2	Green/White	3	Red/Blue	4	Blue/Yellow	5	White/Black	Blue/Black*	Α
Camry 4cyl.	2002-2005	1	Black/Red	4	Green/White	3	Red/Blue	5	Blue/Yellow	7	White/Black	Blue*	В
Camry 6cyl.	2002-2005	1	Black/Red	4	Green/White	3	Red/Blue	5	Blue/Yellow	7	White/Black	Blue*	В
ES300	1998-2001	1	Black/Yellow	2	Green/White	3	Red/Blue	4	Blue/Yellow	5	White/Black	Blue/Black*	Е
ES300	2002-2003	1	Black/Red	4	Green/White	3	Red/Blue	5	Blue/Yellow	7	White/Black	Blue*	В
GS 300	1998-2005	1	Black/Red	2	Green/Black	3	Black/white	4	Blue/Red	5	White/Black	Yellow*	Α
GS 400	1998-2000	1	Black/Red	2	Green/Black	3	Black/white	4	Blue/Red	5	White/Black	Yellow*	(1)
GS 430	2001-2005	1	Black/Red	2	Green/Black	3	Black/white	4	Blue/Red	5	White/Black	Yellow*	Α
Highlander	1999-2000	1	White/Blue	2	Grey/Red	3	Red/Black	4	Pink/Black	5	Brown	Yellow/Red*	$\bigcirc$
Highlander	2001-2003	1	White	4	Grey/Blue	3	Pink	5	Grey	7	White/Black	Blue*	В
IS 300	2001	1	Black/Red	2	Green	3	Purple	4	Pink	5	White/Black	Black/Yellow*	Α
IS 300	2002-2005	1	Black/Red	2	Green/Black	3	Purple	4	Pink/Black	5	White/Black	Black/Yellow*	Α
<b>Land Cruiser</b>	1998-2002	1	Black/Yellow	2	Blue/Black	3	Purple/Green	4	Red/Yellow	5	White/Black	Red/Black*	$\bigcirc$
LS 400	1998-2000	1	White	2	Red/White	3	Red/Black	4	Red	5	White/Black	Yellow*	(1)
LX 470	1998-2002	1	Black/Yellow	2	Blue/Black	3	Violet/Green	4	Red/Yellow	5	White/Black	Red/White*	В
RAV4	2001-2003	5	Black/Red	2	Yellow/Green	4	Yellow	1	Yellow/Black	3	White/Black	Blue/Red*	С
RX 300	1999	1	Blue/White	2	Purple	3	Black	4	Grey	5	White/Black	Blue*	$\bigcirc$
RX 300	2000	1	Blue/White	2	Purple	3	Pink	4	Grey	5	White/Black	Blue*	(1)
RX 300	2001-2003	1	Black/Red	2	Purple	3	Pink	4	Grey	5	White/Black	Blue*	(1)
SC 300	1998-2000	1	Black/Red	2	Black/Orange	3	Blue	4	Green/Orange	5	White/Green	Yellow*	(1)
SC 400	1998-2000	1	Black/Red	2	Black/Orange	3	Blue	4	Green/Orange	5	White/Green	Yellow*	(1)
Sequoia	2001-2002	1	Black/Red	4	Red/Yellow	5	Light Green	6	Yellow/Green	2	Orange	Yellow/Green*	D
Sienna	1999-2003	1	Black/Red	2	Brown/White	3	Brown/Red	4	Brown/Yellow	5	White/Black	Blue/Black*	Α
Solara	1999-2003	1	Red	2	Green/White	3	Red/Blue	4	Blue/Yellow	5	White/Black	Blue/Black*	Α

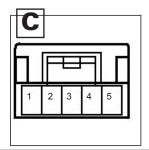
<sup>\*</sup>If vehicle model is not listed above, see reverse. ① = Connector picture not determined. Refer to wire colors for proper connections.

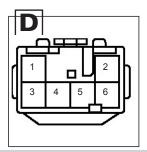
# VEHICLE IMMOBILIZER CONNECTOR (Front View)

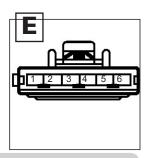
Located at transponder module beside the key barrel











**NOTICE:** The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. This guide has been written for properly trained technicians; a certain level of skill and knowledge is therefore assumed. Please review the Installation Guide carefully before beginning any work.



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#### **PROGRAMMING INSTRUCTIONS**

#### **STEP 1: SELECT INSTALLATION MODE**

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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 (see Factory Reset procedure).

- Complete wire connections to vehicle and insert harnesses into module
- Press programming button to select the installation type. The LED will flash green the same number of times to confirm selection.
  - $1 \times \text{green flash} = \text{unused mode}.$

### **WARNING! READ MANUAL PRIOR TO INSTALLATION**

## 1100X INSTALLATION GUIDE MODE 2

- 2 x green flashes = Standard installation mode (for Directed systems).
- To register your selection, press and hold the programming button until the LED displays a solid green light.
- 4. The installation mode is now selected.

#### **STEP 2: PROGRAMMING PROCEDURE MODE 2**

- Insert the key into the ignition and start the vehicle.
- The module LED will illuminate green to confirm learning procedure has been completed.
- If LED illuminates red, remove key and see diagnostic section.

#### **LED DIAGNOSTICS**

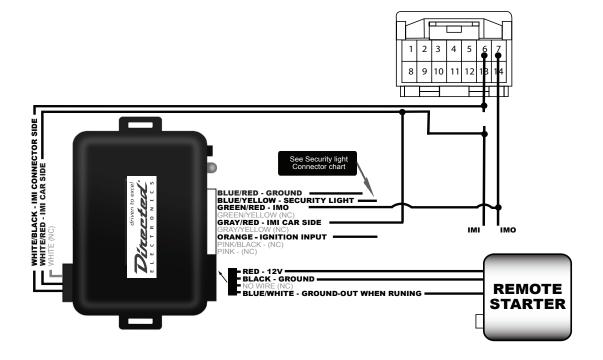
- 1. If the LED displays a red light while the ignition is on, the module failed to learn correctly.
  - Check your connection, reset the unit and repeat the programing from step 1.
- When the remote starter is engaged, the LED will flash green to indicate the module has been correctly programmed. If the LED remains illuminated red, the device is incorrectly programmed.

#### **FACTORY RESET**

- 1. Unplug all connectors from the module.
- 2. Press and hold the programming button while inserting either the 4-PIN standard or 4-PIN optional iDatalink connector.
- 3. The LED will begin to flash red. Immediately release the programming button. The LED will turn on solid for 2 seconds to confirm module reset.
- Plug remaining connectors and return to: STEP 1: SELECT NSTALLATION MODE.

### **MODE 2** WIRING DIAGRAM

Please refer to the Vehicle Wiring Cross Reference Chart to identify vehicle-specific pin locations & wire colors.





# 1100X INSTALLATION GUIDE MODE 2

## **MODE 2** VEHICLE WIRING CROSS REFERENCE CHART\*

#### **IMMOBILIZER CONNECTOR**

Model	Year	IMO Wire	Pin #	IMI wire	Pin#	Sec. light	wire	Pin :	# Con #	Theft ECU location
4 Runner	2003-2006	Blu/red	7	wht/red	6	vio/wht		3	А	Above and behind glove box
Avalon	2005-2006	blue	12	brown	13	pink		8	В	drivers side left of steering column
Corolla	2005-2006	black	7	white	6	red/wt		3	Α	high left of steering column
ES 330	2004-2006	blu/yel	12	red/blu	13	vio		8	В	Above and behind glove box
GX470	2003-2006	blu/red	7	wht/red	6	vio/wht		3	А	Above and behind glove box
Highlander Hy	brid 2006	violet	7	orange	6	white		3	Α	behind glove box
Highlander	2004-2006	violet	7	black	6	white		3	Α	behind glove box
Land Cruiser	2003-2006	yellow	7	white	6	grn/red		3	Α	Above and behind glove box
LS430	2002-2006	gry/red	7	blk/yel	6	red	Note1		Α	left of steering column/Transponder key
										computer
LX470	2003-2006	yellow	7	white	6	grn/red		3	А	Above and behind glove box
Matrix	2005-2006	black	7	white	6	red/wt		3	Α	high left of steering column
RAV4	2004-2005	red	7	red/grn	6	grn/red		3	Α	high left of steering column
RAV4	2006	lt grn	12	pink	13	yellow		8	В	right of steering column/behind radio area
SC430	2002-2005	wht/blu	7	wt/blu	6	blk	Note 2	2	Α	Behind instrument cluster right side/Tran-
										sponder key computer
SC430	2006	lt grn	7	lt blu	6	blk	Note 2	2	А	Behind instrument cluster right side/Tran-
										sponder key computer
Sequoia	2003-2006	It blu/yel	10	pink/grn	11	grn/blk		7	В	right of steering column/behind radio area
Sienna	2004-2006	brn/wt	7	brn/red	6	blk		3	Α	Above and behind glove box
Solara coupe	2004-2006	brn/wt	7	vio/grn	6	red/wt		3	Α	behind glove box
Solara										
convertible	2004-2006	brn/wt	7	brn/red	6	violet		3	А	behind glove box
Tacoma	2005-2006	lt grn/blk	12	It blu/wt	13	vio/wt		8	В	at firewall behind instrument cluster
Tundra	2006	pink	10	wht/grn	11	blk/org		7	В	right of steering column/behind radio area
Yaris	2006	orange .	12	white	11	It green		8	В	right of steering column/behind radio area

Note 1 Security light wire available at theft ECU above and behind glove box. Pin 3 connector C
Note 2 Security light wire available at theft ECU high in drivers kick. Pin 3 connector C

\*If vehicle model is not listed above, see reverse. (!) = Connector picture not determined. Refer to wire colors for proper connections.

#### 

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#### 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. (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, 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 THE LIKE.

Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights and you may also have other rights that vary from State to State. DIRECTED does not and has not authorized any person or entity to create for it any other obligation, promise, duty or obligation in connection with this Part.