Quick Reference Install Guide
Remote Start with Keyless Entry
Model 4105

Wiring Connections

Main Harness, 9-pin connector
1. LIGHT GREEN BLACK (-) 200mA FACTORY ALARM 12V (Ign)
2. GREEN/WHITE (+) 200mA FACTORY ALARM (Ign)
3. YELLOW (+) GROUND (TO ALARM)
4. WHITE/BLUE (+) ACTIVATION INPUT
5. ORANGE (+) 200mA GROUND WHEN LOCKED/ANTI-GRIND OUTPUT
6. WHITE/BLUE (-) ACTIVATION OUTPUT
7. BLACK/WHITE (-) NEUTRAL SAFETY SWITCH INPUT
8. BLUE (-) 200mA STATUS INPUT
9. RED (+) 30A HIGH CURRENT 12V INPUT

Door Lock, 3-pin connector
1. BLUE (-) UNLOCK
2. EMPTY NOT USED
3. ORIGIN (-) LOCK

Remote Start, 6-pin connector
1. RED (+) 15A HIGH CURRENT 12V INPUT
2. PINK/WHITE OUTPUT TO SECOND IGNITION/ACCESSORY CIRCUIT
3. RED (+) 15A HIGH CURRENT 12V INPUT
4. ORANGE OUTPUT TO ACCESSORY CIRCUIT
5. PURPLE OUTPUT TO STARTER CIRCUIT
6. PINK OUTPUT TO PRIMARY IGNITION CIRCUIT

Satellite harness, 4-pin connector
1. BLUE (+) TACHOMETER INPUT WIRE
2. ORANGE (+) 200mA ACCESSORY OUTPUT
3. PURPLE (+) 200mA STARTER OUTPUT
4. PINK (+) 200mA IGNITION OUTPUT

Remote Start harness, 5-pin connector
1. BLACK/WHITE (-) NEUTRAL SAFETY SWITCH INPUT
2. GRY (-) 20mA BRAKE SHUTDOWN INPUT WIRE
3. BROWN (+) HOOD PIN SWITCH SHUTDOWN WIRE
4. VIOLET/WHITE (+) 60mA STOP/IGNITION INPUT WIRE
5. BLUE/WHITE (+) 20mA NEUTRAL SAFETY SWITCH INPUT

Installation Points

Tach Learning
To learn the tach signal:
1. Start the vehicle with the key.
2. Within 5 seconds, press and hold the Valet button.
3. After 3 seconds the LED will light constant when the tach signal is learned.
4. Release the Valet button.

Important: This unit can learn the tachometer with the analog input or through d2d using an interface module. The unit confirms which source is used by flashing the parking lights. When programming tach learning with:
- Analog, the parking lights flash once.
- D2D interface module, the parking lights flash twice.

If the tachometer input on the system is connected to the vehicle, the d2d tachometer input is ignored.

Virtual Tach
Note: Virtual tach is not recommended for diesel vehicles

To program Virtual Tach:
1. After the install is complete, remote start the car.
2. If the car does not start on the first attempt, let the remote start attempt again.
3. Once the car starts, let it run until the parking lights come on.
4. When the parking lights come on, shut off the remote start with the remote - that's it! Virtual Tach is programmed.

Virtual Tach handles disengaging the starter motor during remote starting - it does not address overrevs. If the customer wants to have the over-rev protection capability, the tach switch must be connected. This may involve more installation shop charges than initially quoted.

Important: NEVER connect a 200mA low current output directly to a motor or high current device (motor etc). The package adds a Protective (3-50mA) diode, but it is not a substitute for solid state switch.

Virtual Tach Reset
Delets off previously learned values for Virtual Tach, and on the next remote start sequence the unit begins virtual tach initialization.

Virtual Tach ShutDown Diagnostics

Remote Start ShutDown Diagnostics

ShutDown diagnostics: If the remote start activates but fails to stay running, the remote start module has the ability to inform you of what may have caused the remote start failure. Before performing shutDown diagnostics it is important that you let the customer and end user know that if they attempt to start 3 times then shut down, if this is not done the unit will report the shut down you used to shut off the remote start.

ShutDown diagnostics does not report if the vehicles factory immobilizer is causing the problem.

To perform shutDown diagnostics:
1. Press and release the Valet button. The LED flashes to report the last shut down for one minute or until the ignition is turned on, as shown in the following table.

<table>
<thead>
<tr>
<th>LED Flashes</th>
<th>Shutdown Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 flash</td>
<td>Turn off</td>
</tr>
<tr>
<td>2 flashes</td>
<td>Overseer shutDown</td>
</tr>
<tr>
<td>3 flashes</td>
<td>Low or no RPM, low battery voltage and virtual tach modes</td>
</tr>
<tr>
<td>4 flashes</td>
<td>Transmitter shutDown (optional push button)</td>
</tr>
<tr>
<td>5 flashes</td>
<td>(3) Hood shutDown (5 pin Gray wire)</td>
</tr>
<tr>
<td>6 flashes</td>
<td>(4) ShutDown (5 pin Brown wire)</td>
</tr>
<tr>
<td>7 flashes</td>
<td>(5) Neutral safety shutDown (5 pin Black/White wire)</td>
</tr>
<tr>
<td>8 flashes</td>
<td>(5) WarmStart timed out</td>
</tr>
</tbody>
</table>

Reset and Deletion
If it feature/virtual tach needs to be reset or the remote controls need to be deleted, use the following procedure.

1. Turn the ignition to the ON position (The heavy gauge pink wire must be connected)
2. Within 10 seconds, press and release the Valet button: 2 times if you want to delete remotes, 3 times to reset features or 4 times to reset virtual tach. These features are described next.

Delete remotes: This feature erases all remotes from the memory of the system. It is used in cases when a customer’s remote is lost or stolen.

Note: This does not reset the programmed features of the system or reset the Virtual Tach setting.

Reset Features: This resets all features of the system to the factory default settings.

Note: This feature does not delete the remotes from the system or reset the Virtual Tach setting.
Programming System Features

The System Features Learn Routine dictates how the unit operates. It is possible to access and change most of the feature settings using the Valet button.

1. Turn the ignition on, then off.
2. Select a Menu. Press and hold the Valet button. The number of LED flashes and horn hons indicates the menu number. A single LED flash and horn indicates menu 1. Two LED flashes and 2 horns indicates menu 2.
3. When the desired menu LED flashes and horn hons are heard, release the Valet button.
4. Select a Feature. Press and release the Valet button the number of times corresponding to the feature you wish to change. Then press and hold one more time to select the feature. The LED flashes and the horn hons to indicate which feature is selected.
5. Program the Feature. While holding the Valet button, you can program the feature using the remote control.

For features with only two options, selects the option in ascending order. The System Features Learn Routine dictates how the unit operates. It is possible to access and change most of the programming system features.

To access another feature in the same menu:
1. Press and release the Valet button the number of times necessary to advance from the feature you just programmed to the next one you want to program.
2. Then press the Valet button once more and hold it.

To select another menu:
1. Press and hold the Valet button.
2. After 3 seconds, the unit advances to the next menu, the horn hons and LED flashes indicating which menu has been accessed.

The learn routine exits if any of the following occurs:
- The ignition is turned on, then off.
- There is no activity for 30 seconds.
- The learn routine exits if programming is complete.
- Another menu can be selected.
- Other features can be programmed within the same menu.
- Once a feature is programmed:
- The learn routine can be exited if programming is complete.
- Note: See Owner’s guide for more details.

Remote Programming

1. Turn key to the CFI position.
2. Within 5 seconds, press and release Valet button one time.
3. Within 5 seconds, press and hold the Valet button. The LED will flash one time and the horn hons to confirm entry into remote programming.
4. Press the button on the remote control.
5. The horn hons to confirm the remote has been programmed.
6. Release the Valet button, and turn the key to the Off position.
7. The horn sounds one long honk to confirm that remote programming has been exited.

The programming routine exits if any of the following occurs:
- The ignition is turned off.
- There is no activity for 30 seconds.
- The Valet button is pressed too many times.

Basic Remote Functions

**LED BASIC COMMANDS**

- **LOCK**
  - Pressing for one second locks the system (if the door locks are connected)
- **UNLOCK**
  - Pressing for one second unlocks the doors (if connected)
- **REMOTE START**
  - Press to remotely start and run the vehicle for a programmable period of time or press to turn off if vehicle is already remote started
- **SILENT MODE/AUX**
  - Silent Mode works by pressing this button for less than one second before locking or unlocking. This button can also be used for an optional auxiliary function such as trunk release

**AUXILIARY FUNCTION**

- **COMMANDS**
  - Press to remotely start and run the vehicle for a programmable period of time or press to turn off if vehicle is already remote started

**ICON BASIC**

- **REMOTES CONFIG**
  - Press the button for less than one second before locking or unlocking. This button can also be used for an optional auxiliary function such as trunk release

**ILIARY FUNCTION**

- **REMOTE CONTROL**
  - Press to remotely start and run the vehicle for a programmable period of time or press to turn off if vehicle is already remote started

Note: See Owner’s guide for more details.

Guide Translations

For a Spanish or French version of the Installation Guide, please download it from www.directechs.com under “Resources”.

Traduction des manuels:

Pour obtenir une version en Espagnol ou en Français du Manuel d’installation, descontrole.com ou www.directechs.com bajo el título “Resources” ("Resources").

Traduction du guide:

Pour une version française ou espagnole du guide d’installation, veuillez le télécharger à www.directechs.com sous «Resources».

Bitwriters - Only Options

If programming with the Bitwriter®, the learn routine can be locked or unlocked. If the learn routine has previously been locked, it must be unlocked with Bitwriter® - this cannot be done manually with the Valet button.

The Bitwriter® gives you access to a wider range of system options. These features and the adjustments that may be programmed are described in the table below:

### Menu 1

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Horn function</td>
<td>Off</td>
<td>Siren</td>
<td>Siren</td>
<td>Siren</td>
<td>Siren</td>
</tr>
<tr>
<td>2</td>
<td>Ignition controlled lock</td>
<td>On</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>3</td>
<td>Ignition controlled unlock</td>
<td>On</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>4</td>
<td>Doorlock out put duration</td>
<td>0.8 sec.</td>
<td>3.5 sec</td>
<td>0.4 sec</td>
<td>0.4 sec</td>
<td>0.4 sec</td>
</tr>
<tr>
<td>5</td>
<td>Double pulse unlock</td>
<td>Off</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>6</td>
<td>Double pulse lock</td>
<td>Off</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>7</td>
<td>Factory Alarm Disarm function</td>
<td>with unlock</td>
<td>Before unlock</td>
<td>Remote start only</td>
<td>Remote start only</td>
<td>Remote start only</td>
</tr>
<tr>
<td>8</td>
<td>Factory Alarm Disarm Pulses</td>
<td>Single</td>
<td>Double</td>
<td>Double</td>
<td>Double</td>
<td>Double</td>
</tr>
<tr>
<td>9</td>
<td>Comfort Closure</td>
<td>Comfort Closure 1</td>
<td>Off</td>
<td>Comfort Closure 2</td>
<td>Comfort Closure 2</td>
<td>Comfort Closure 2</td>
</tr>
<tr>
<td>10</td>
<td>Panic</td>
<td>Off</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
</tr>
</tbody>
</table>

### Menu 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Engine check</td>
<td>Virtual latch voltage</td>
<td>Off</td>
<td>tachometer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Engine Runtime</td>
<td>12 min</td>
<td>24 min</td>
<td>60 min</td>
<td>60 min</td>
<td>60 min</td>
</tr>
<tr>
<td>3</td>
<td>Peak light output</td>
<td>Pulsed</td>
<td>Constant</td>
<td>Constant</td>
<td>Constant</td>
<td>Constant</td>
</tr>
<tr>
<td>4</td>
<td>Cranking time</td>
<td>0.6 sec.</td>
<td>0.8 sec</td>
<td>1.0 sec</td>
<td>1.2 sec</td>
<td>1.4 sec</td>
</tr>
<tr>
<td>5</td>
<td>Activation pulse count</td>
<td>1 pulse</td>
<td>2 pulses</td>
<td>3 pulses</td>
<td>3 pulses</td>
<td>3 pulses</td>
</tr>
<tr>
<td>6</td>
<td>2nd Ignition behavior</td>
<td>Ignition</td>
<td>Accessory</td>
<td>Accessory</td>
<td>Accessory</td>
<td>Accessory</td>
</tr>
<tr>
<td>7</td>
<td>2nd Ignition behavior</td>
<td>Accessory</td>
<td>Ignition</td>
<td>Ignition</td>
<td>Ignition</td>
<td>Ignition</td>
</tr>
<tr>
<td>8</td>
<td>2nd Status behavior</td>
<td>Normal</td>
<td>Latch near deadlock</td>
<td>Pulse near deadlock</td>
<td>Pulse near deadlock</td>
<td>Pulse near deadlock</td>
</tr>
<tr>
<td>9</td>
<td>AntiGrind</td>
<td>Off</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>10</td>
<td>Diesel start delay</td>
<td>Off</td>
<td>Timed 1.5 sec</td>
<td>Timed 30 sec</td>
<td>Timed 45 sec</td>
<td>Timed 45 sec</td>
</tr>
<tr>
<td>11</td>
<td>Timer mode run time</td>
<td>12 min</td>
<td>3 min</td>
<td>6 min</td>
<td>9 min</td>
<td>9 min</td>
</tr>
</tbody>
</table>

See full Installation Guide for more detailed information on this system. More can be found online at www.directechs.com.