

DIRECTED®

SMARTSTART® BLUETOOTH® Module

Introduction

This product can be used as a standalone product or in conjunction with an existing Directed product. It is compatible with most Directed Security, Remote Start and hybrid systems.

If the SmartStart Bluetooth module is being installed as a standalone device, refer to the *Wiring Diagram for Standalone Applications* and Feature Programming Procedure sections. When installing the SmartStart Bluetooth system in standalone mode, no programming is required if you are using the default output settings. See the table in Feature Programming/RF Selection Menu for the specific default settings for each of the four outputs.

If the SmartStart Bluetooth module will be connected to a compatible Directed system, first determine whether that system uses 6-pin or 4-pin IVU (RF) connectors. For 6-pin IVU systems, refer to the *Wiring Diagram for use with Existing Product using 6-pin RF connectors* section. For 4-pin IVU systems, refer to the additional adapter harness connections in the 8210 RF Adapter Kit wiring diagram section.

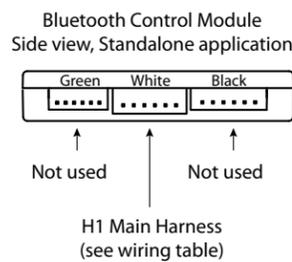
Refer to the *Simplified System Programming* section for all applications where the SmartStart Bluetooth® module will be connected to a compatible Directed system.

Mounting the Module

Determine an appropriate location for the DSM50BT module such as along the dashboard. It is recommended that you mount the module in the highest unobstructed position possible to achieve maximum range. Keep in mind the owner will need to be able to access the pairing switch if they change phones or add a new phone to the system.

The DSM50BT module comes with a mounting bracket and hardware. Mount this bracket first using the provided hardware and insert the module into it.

Wiring Diagram for Standalone Applications



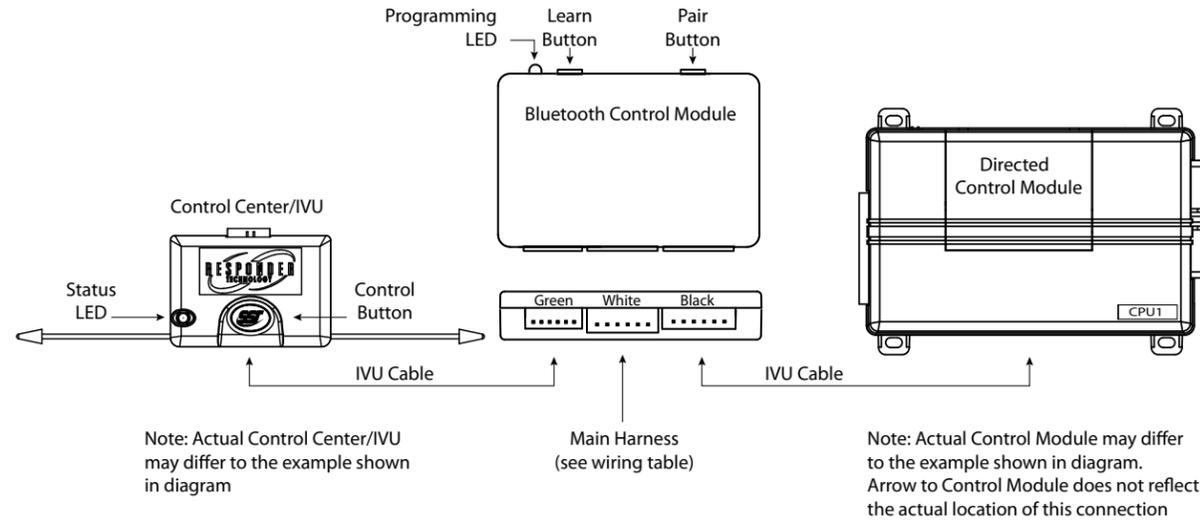
Connect system as shown in H1 6-pin harness wiring table. When complete, go to *Linking the Bluetooth to a Smartphone* section of this guide. Test the system using the SmartStart app on linked smartphone.

H1 6-pin Harness		
Pin #	Wire Color	Connection/Description
1	Red	+12V
2	Black	GND
3	Green	Lock (output 1)
4	Blue	Unlock (output 2)
5	White	Start/Stop (output 4)
6	Pink	Trunk (output 3)

Quick Reference Install Guide

VSM50BT/DSM50BT/ASM50BT

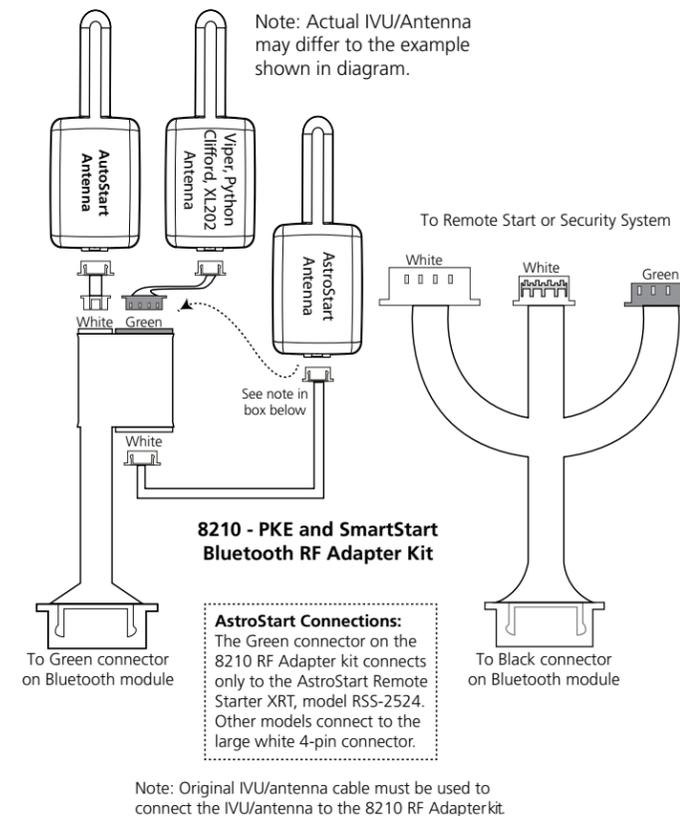
Wiring Diagram for use with Directed systems with 6-pin RF connectors



1. Unplug the existing system's IVU cable from the Control Center/IVU.
2. Connect the IVU cable from the green port of the DSM50BT module to the existing Control Center/IVU.
3. Now connect the disconnected end of the Control Center (IVU) cable to the black connector of the Bluetooth module.
4. Connect the main harness connector end to the white port of the DSM50BT module and connect power and ground as noted in the table below.

H1 6-pin Harness		
Pin #	Wire Color	Connection/Description
1	Red	+12V
2	Black	GND
3	Green	Not Connected
4	Blue	Not Connected
5	White	Not Connected
6	Pink	Not Connected

8210 RF Adapter Kit wiring diagram (required for 4-pin Control Center/IVU systems only)



Linking the Bluetooth to a Smartphone (all applications)

For iPhone, iPad, or iPod Touch:

1. Press and hold the Pair button on the SmartStart Bluetooth device (furthest from LED) until the Blue LED lights.
2. Release the Pair button and the Blue LED will flash once per second.
3. On your iPhone go to Settings/Bluetooth and turn Bluetooth on.
4. Wait until the SmartStart Bluetooth device appears on your "devices" list then tap on it to connect, and wait for it to display "Connected".
5. Now open the SmartStart app and go to the Cars tab. Use the "Add a SmartStart BT device" button to add your SmartStart Bluetooth system to the Cars list. If you already have a cellular-connected SmartStart system in the car, click on the ">" on that car's line to access the "Link a BT device" button.
6. Once connected, the Blue LED on the SmartStart Bluetooth module will be on solid. Now you can test the installed SmartStart Bluetooth system.

For Android smartphones or compatible tablets:

1. Open the SmartStart app and navigate to More/Settings, then scroll to Bluetooth Control and make sure the Bluetooth Status box is checked. If the Bluetooth wireless function of your phone is currently off, the app will attempt to turn it on and a permission box will pop up asking you to confirm that selection.
2. Press the Pair button (furthest from LED) and hold it until the LED turns blue. Ignore the Red LED that comes on first.
3. Release the Pair button and the blue LED will flash once per second. The Bluetooth module stays in Pairing mode for 60 seconds before it automatically exits. If this happens, repeat step 2 to re-enter Pairing mode.
4. Navigate to the Cars tab of the SmartStart app and tap the "Add a SmartStart BT device" button to add your SmartStart Bluetooth system to the Cars list. If you already have a cellular-connected SmartStart system in the car, click on the ">" on that car's line to access the "Link a BT device" button.
5. The phone will display "attempting to connect", then if successful it will display "connected successfully" and the Blue LED on the SmartStart Bluetooth module will blink steady. Now you can test the installed SmartStart Bluetooth system.
6. If it is not successful you will see "Connection attempt failed"; repeat steps 4 and 5. If the Blue LED turns off on the SmartStart Bluetooth module, place it in Pairing mode again (steps 2, 3) then repeat steps 4 and 5.

Simplified System Programming

The following programming may be required, depending on the specific application:

- Standalone application using default settings (see table): no system programming required
- Standalone application using custom settings: follow Feature Programming Procedure
- Connected to compatible Directed system: RF selection must first be programmed (follow RF Selection Procedure), and the SmartStart Bluetooth module must then be paired with the connected system (Pairing with Connected System).

Navigating SmartStart Bluetooth module programming mode

The following steps are used to navigate programming mode for RF Selection or Feature Programming:

1. Within 60 seconds of applying power to the SmartStart Bluetooth module, press and hold the Learn and Pair buttons simultaneously for five seconds, until the Red LED comes on solid.
2. Release the buttons. The Red LED shuts off and starts flashing once every two seconds to confirm entry into the RF Selection/Feature Programming list, menu item #1.
3. Press/release the Pair button (further away from LED) to navigate to the desired option for that menu step. If you go past the desired setting, you can advance to the end of the options and then restart at option 1. The option selected will be shown by number of blue LED flashes.
4. Press/release the Learn button (closer to the LED) to navigate to the desired menu step. The menu step will be indicated by number of Red LED flashes. Selecting menu step 10 will reset the module to default, standalone programming values.
5. You can exit programming at any time by holding the Pair and Learn buttons down until you see a combined Blue/Red flash on the LED. If you stop entering menu or option steps, the module will exit programming automatically after 60 seconds.

Feature and RF Options Menu

Default settings are in **bold** type. Refer to the *Feature and RF Selection Description* section at the end of this guide if you are unsure about the correct settings for your application.

Menu Item	Feature	Opt. 1	Opt. 2	Opt. 3	Opt.4	Opt. 5+
1	RF Learning 1	Off (standalone)	Keeloq	Supercode	Astro	
2	RF Learning 2 Autostart *	HDR-AM-TYPE1	HDR-AM-TYPE2	HDR-AM-TYPE3	HDR-AM-TYPE4	5. HDR-FM 6. LDR-FM
3	Lock output	0.8 sec.	0.4 sec.	3.5 sec.	0.4 sec. x2	
4	Unlock output	0.8 sec.	0.4 sec.	3.5 sec.	0.4 sec. x2	
5	Comfort Close	Off	CC1	CC2		
6	Output 1 type	lock	Unlock	Trunk	Start	5. Aux 1 6. Aux 2
7	Output 2 type	lock	Unlock	Trunk	Start	
8	Output 3 type	lock	Unlock	Trunk	Start	
9	Output 4 type	lock	Unlock	Trunk	Start	
10	Factory Reset					
*	For Autostart models, look up the RF mode Option number using the Autostart RF type Table on page 2.					

Feature Programming Procedure (standalone applications)

1. No programming is required if you are using the default flex output configuration as shown in the table above (bold options).
2. Follow the procedure above to place the SmartStart Bluetooth in programming mode.
3. Press/release the Learn button (closer to the LED) to navigate to the desired menu step.
4. Feature settings for standalone mode start at Menu Item 3, do not change the option settings for Menu Items 1 or 2.
5. Press/release the Pair button (further away from LED) to navigate to the desired option (feature) for that menu step.
6. When you've configured the outputs to the desired settings, exit programming and use the SmartStart app on a linked handset to test the system.

RF Selection Procedure (when used with compatible system)

1. You must always select the correct RF type when connecting the SmartStart Bluetooth® module to a compatible security or remote start system.
2. Follow the procedure above to place the SmartStart Bluetooth in programming mode.
3. Press/release the Learn button (closer to the LED) to navigate to the desired menu step.
4. RF Selection settings are either made in Menu Item 1 (Directed or AstroStart systems) or Menu Item 2 (Autostart systems).
5. For Autostart systems, look up the correct option setting for Menu Item 2 in the Autostart RF Type Table.
6. Once you've selected the correct RF Setting to match the connected system, exit programming.
7. You must now Pair the SmartStart Bluetooth with the connected system before moving on to testing the system.

Pairing with Connected System

1. Make sure the SmartStart Bluetooth module has been programmed correctly for RF type. If your system has RF transmitters, you can send a command via the transmitter; the system will respond if the Bluetooth module was programmed to the correct RF type. If it doesn't respond, go back to RF Selection Procedure and make sure the correct option was selected.
2. Place the connected system in Transmitter Learn routine (refer to the installation guide for the specific connected system for correct procedure).
3. When the connected system has entered Transmitter Learn routine, press/release the Pair button on the SmartStart Bluetooth module (button further from the LED).
Note: some systems have a very short window where they will accept a command during Learn routine. Make sure you are pressing the Pair button on the SmartStart Bluetooth module during that window.
4. When you press the Pair button, the LED should flash blue indicating a Lock command was generated, and the connected system should respond indicating it received the command and accepted the SmartStart Bluetooth module as an authorized transmitter.
5. If you get that acknowledgement, exit Transmitter Learn routine on the connected system. If you do not get that acknowledgement, go back to the RF Selection Procedure to make sure you selected the correct RF type for that system.

Feature and RF Option descriptions

1. RF Learning 1: Off/Keeloq/Supercode/Astro
 - Off (Standalone): The RF function of the unit is disabled and the Flex Outputs are active (see Note at end of this step).
 - Keeloq: Directed older generation receiver technology
 - Supercode: Directed new generation receiver technology
 - Astro: AstroStart receiver technology
2. RF Learning 2 (Autostart), HDR-AM type 1,2,3,4/HDR-FM/LDR FM
 - AS HDR AM: Autostart HDR (AM based) receiver technology.
 - AS HDR FM: Autostart HDR (new generation FM based) receiver technology.
 - AS LDR: Autostart LDR (older generation) receiver technology.
3. Lock output:
 - 0.8 sec.:** the lock output pulses = 800 ms
 - 0.4 sec.: the lock output pulses = 400 ms
 - 3.5 sec.: the lock output pulses = 3.5 sec
 - 4s X2: the lock output pulses twice, each pulse 400 ms duration
4. Unlock output:
 - 0.8 sec.:** the unlock output pulses = 800 ms
 - 0.4 sec.: the unlock output pulses = 400 ms
 - 3.5 sec.: the unlock output pulses = 3.5 sec
 - 4s X2: the unlock output pulses twice, each pulse 400 ms duration
5. Comfort Closure:
 - Off:** Comfort Closure is defeated when locking
 - Comfort Closure 1: the door lock pulse (or 2nd pulse for double pulses) remains on for 20 seconds.
 - Comfort Closure 2: 800 mS following the end of the door lock pulse (or 2nd pulse for double pulses); the door lock output turns on again for 20 seconds.

6. Output 1-4
 - Opt 1 Lock: Output 1 operates as a Lock output
 - Opt 2 Unlock: Output 1 operates as an Unlock output
 - Opt 3 Trunk: Output 1 operates as a Trunk Release output
 - Opt 4 Start: Output 1 operates as a Remote Start trigger output (to an add-on remote starter)
 - Opt 5 Aux 1: Output 1 operates as the AUX 1 output when activating from the app
 - Opt 6 Aux 2: Output 1 operates as the AUX 2 output when activating from the app
 - Opt 7 OEM Arm: Output 1 operates as Factory Alarm Arm and pulses prior to the Lock pulse from the system when Locking from the app
 - Opt 8 OEM Disarm: Output 1 operates as Factory Alarm Disarm and pulses prior to the Unlock pulse from the system when Unlocking from the app
7. Output 2 same option choice and definitions as Output 1 options except default option is 2: Unlock
8. Output 3 same option choice and definitions as Output 1 options except default option is 3: Trunk (Please refer to * note after Menu table for this Opt.)
9. Output 4 same option choice and definitions as Output 1 options except default option is 4: Start (Please refer to * note after Menu table for this Opt.)
10. Factory Reset, returns the system to the factory default settings. When resetting the unit, the features programming mode exits and is indicated by the LED flashing Red/Blue once.

Note 1: Resetting the unit does not delete paired smartphones from memory. The Blue LED may come on after the reset and exit from programming mode if the module is still connected to a paired smartphone.

Autostart RF type Table

RF Menu 9 steps:	Opt 1	Opt 2	Opt 3	Opt 4	Opt 5	Opt 6
RF type:	HDR-AM-TYPE1	HDR-AM-TYPE2	HDR-AM-TYPE3	HDR-AM-TYPE4	HDR FM	LDR FM
Model list:	1W 5btn RS/Combo	1W 4btn Combo	1W 2btn RS	1W 4btn RS	2W LED/LCD RS/Combo	2W LED/LCD RS
AUTOSTART	AS-1775, AS-6270		AS-1271, AS-1272	AS-1475, AS-1470	AS-2371TW-FM, AS-1875FM, AS-2471TW-FM, AS-6870TW-FM	
AUTOSTART USA	AS-2775, AS-1775U, AS-6270U		AS-2272, AS-1272U, AS-1271U	AS-1475U	AS-3372TW-FM, AS-2372TWU, AS-3472TW-FM, AS-2472TWU, AS-6870TWU	
PolarStart	PS-3175, PS-3175E, PS-7270				PS-3675FM, PS-7870TWE-FM	PS-4461TWE-FM PS-4661TWE-FM, PS-3655EFM
Nordic Start				NS-1074	NS-2430TW-FM, NS-2432TW-FM, NS-5070TW-FM	
Command Start	CS-398i				CS-2371TW-FM, CS-2372TW-FM, CS-1875i, CS-2471TW-FM, CS-2472TW-FM, CS-6870TW-FM	
Orbit						OB-3475, OB-3671, OB2471
Prostart		CT-3471, CT-5072, CT-5472	CT-3271	CT-3371		
Premier Defense	PD-2.8				PD-371, PD-372, PD-471, PD-472, PD-870	
Visions					AS-2373TW-FM-v, AS-2472TW-FM-v	

Table note: Panic and Trunk may not be supported on all models.

Notes: Bluetooth response time can vary depending on range and proximity to the vehicle. Operating temperature range: -30°C to +70°C (-22°F to +158°F).

Additional information can be found at: www.directechs.com

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