

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. This guide also assumes that the user has already downloaded the bluetooth app to their smartphone, its required for installation testing.

First determine whether the system is being installed as a standalone or being connected to an existing product. If being used with an existing product, determine whether the 8210 RF adapter kit is also required. Start with the following installation procedure then go to the appropriate standalone or existing product procedure and follow the instructions provided.

Installation Procedure

First, 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. This offers the best signal reception. The harness length and wiring route through the dashboard may also dictate the position chosen.

Note: Do not extend harnesses beyond the manufactured length.

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

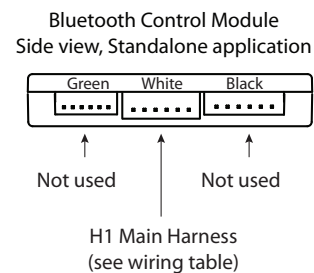
Note: Caution should be taken when mounting the bracket due to possible interference with existing harnesses or equipment around or behind the mounting position.

As a Standalone

1. Connect the unterminated end of the H1 main harness first using the following wiring table and diagram.
2. Connect the H1 connector end to the middle port (white) of the module.

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)

Wiring Diagram for Standalone



Quick Reference Install Guide

VSM50BT/DSM50BT

With an Existing Product

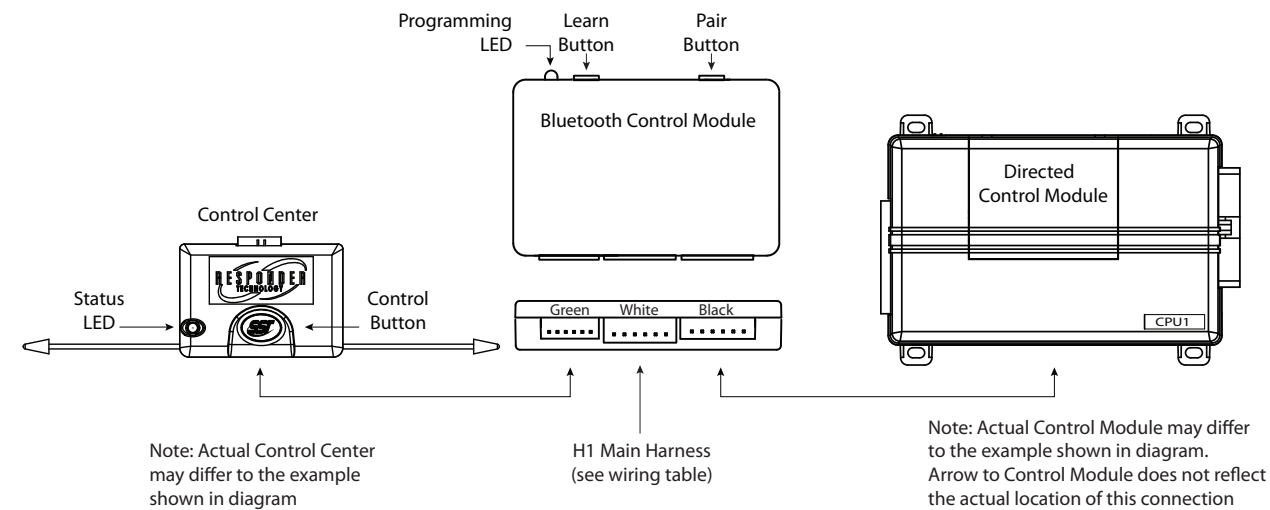
1. Unplug the existing control center (IVU) cable.
2. Connect the H2 harness from the green port of the DSM50BT module to the control center (see note).
3. Now connect the disconnected end of the control center cable to the black port on the module (see note).
4. Terminate only the required loose wires of the H1 main harness first using the following wiring table and diagram.
5. Connect the H1 connector end to the white port of the DSM50BT module.

Note: If the supplied cables do not fit the Directed system, then the system requires the 8210 RF adapter kit which is sold separately.

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

Note: Cut unused wires back to harness sleeve to prevent possible shorts.

Wiring Diagram for use with Existing Product



Programming, Pairing and Learning the System

The smartphone must be paired with the system for both Standalone and Existing Product configurations.

For configurations involving an existing product the Bluetooth module must also be paired to the control module of the existing product.

Note: Programming or Learning must be done within 60 seconds of power up. Power up and if no activity is detected after accessing these modes begins a 60 second timer, once this period has expired, access to these modes is no longer available while the system is still powered on. Cycle power to re-initiate access period.

To Pair the Smartphone to the DSM50BT module:

1. Press and hold the Pair button on the module for ten seconds, continue holding until the red LED (approximately five seconds) changes to solid blue.
2. Release the Pair button. The blue LED begins flashing to indicate Pairing mode. **Note:** Perform the next steps within sixty seconds or the unit will exit pairing mode.
3. Turn on the Bluetooth feature of your cellular device, enter the pairing menu and select "SmartStartBT-####" from the available devices list. Each Directed DSM50BT device has a unique ID.
4. The Blue LED begins flashing rapidly and then turns on solid to indicate successful pairing and connection between the smartphone and Directed DSM50BT device.
5. Press and release the Pair button to exit pairing mode manually. The LED turns off to indicate exit. If this step is not performed, Pairing mode exits automatically within sixty seconds.

Note: The system can only be paired or connected with one smartphone at a time.

Feature Programming Procedure:

1. Disconnect power from the unit and then reconnect and power the unit. **Note:** Programming can only be done within sixty seconds of the unit being powered up, if the time has elapsed before you have entered programming you can power the unit down and up again to enter programming again.
2. Press and hold the Learn and Pair buttons simultaneously for five seconds (within sixty seconds of power up), the Red LED comes on solid.
3. Release the buttons. The Red LED shuts off and starts flashing once every two seconds to confirm entry into the feature list, menu item #1.
4. Press/release the Learn button to advance to the next feature in the menu (see Feature Option Menu). The Red LED flashes the corresponding number of times as the menu item # you have selected. Example: 3 red LED flashes at a time = Menu item #3 **Note:** If the number of menu items is exceeded, the routine loops back to Menu Item 1.
5. To access the available options for a selected feature in the menu, press/release the Pair button; the Blue LED flashes the corresponding number of times as the option # you have selected (see Features Option Menu). Example: 3 Blue LED flashes at a time = Opt. 3 **Note:** If the number of options is exceeded, the routine loops back to Opt 1.
6. Once a desired option is reached, press/release the Learn button to save the option, change and advance to the next feature on the menu, or continue to press/release the Learn button until another desired feature is reached.
7. Press and hold the Learn and Pair buttons simultaneously for five seconds to exit programming manually or wait sixty seconds for the module to automatically exit feature programming. The LED flashes Blue/Red for one second to confirm feature programming has been exited.

Feature Option Menu

Default settings are in **bold** type.

Menu Item	Feature	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 5+
1	Lock output	.8s	.4s	3.5s	.4s x2	
2	Unlock output	.8s	.4s	3.5s	.4s x2	
3	Comfort Close	Off	CC1	CC2		
4	Output 1 type	Lock	Unlock	Trunk	Start	5. Aux 1
5	Output 2 type	lock	Unlock	Trunk	Start	6. Aux 2
6	Output 3 type	lock	Unlock	Trunk	Start	
7	Output 4 type	lock	Unlock	Trunk	Start	
8	RF Learning 1	Off (flex out)	Keeloq	Supercode	Astro	
9	RF Learning 2 Autostart *	HDR-AM-TYPE1	HDR-AM-TYPE2	HDR-AM-TYPE3	HDR-FM-TYPE1	5. HDR-FM-TYPE2 6. LDR-FM
10	Factory Reset					

* For Autostart models, look up the RF mode Option number using the Autostart RF type Table on page 2.

Feature Option descriptions

1. Lock output: Selects pulse duration
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 with each pulse 400 ms in duration
2. Unlock output: Selects pulse duration
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 with each pulse 400 ms in duration
3. Comfort Closure: Selects CC type for the Lock output wire
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.
4. Output 1-4 type selects the function of the Output 1-4 wire
 - 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
 5. Output 2 same option choice and definitions as Output 1 options except default option is 2: Unlock
 6. Output 3 same option choice and definitions as Output 1 options except default option is 3: Trunk
 7. Output 4 same option choice and definitions as Output 1 options except default option is 4: Start
 8. RF Learning 1: Off/Keeloq/Supercode/Astro
 - Off (Flex Out): The RF function of the unit is disabled and the Flex Outputs are active*.
 - Keeloq: Directed older generation receiver technology
 - Supercode: Directed new generation receiver technology
 - Astro: AstroStart receiver technology

NOTE: When setting up the Bluetooth system for an RF Type, you can enter the remote programming procedure of the host system and proceed through each option to program the RF output of the Bluetooth system (see RF Learning Procedure section of this guide for more information).
 9. RF Learning 2 (Autostart), HDR-AM type 1,2,3/HDR-FM 1,2/LDR FM
 - ASHDRAM: Autostart HDR (AM based) receiver technology
 - AS HDR FM: Autostart HDR (new generation FM based) receiver technology
 - ASLDR: Autostart LDR (older generation) receiver technology

NOTE: When setting up the Bluetooth system for an RF Type, you can enter the remote programming procedure of the host system and proceed through each option to program the RF output of the Bluetooth system (see RF Learning Procedure section of this guide for more information).
 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 for one second. It can be re-entered utilizing the Features Programming Procedure.
- Note: Resetting the unit does not delete the Paired Smartphone from memory (if one is already programmed).

RF Learning Procedure:

RF Learning 1

When this unit is connected to the RF input of a host system, the easiest way to program the RF type is to have the host system setup for remote programming and go through the RF programming setup for the Bluetooth unit (item #8 in features programming).

1. Enter the Features Option Menu for the Bluetooth module (see Features Programming Procedure section)
2. Choose option #8.
3. Enter the Transmitter Learn Routine for the host system.
4. Choose the appropriate RF type.
5. When the correct RF type is chosen, the host system returns a learned confirmation as when programming a remote control (the Bluetooth module sends out a corresponding signal for the RF type (option) selected).
6. Exit the programming mode on both systems.
7. RF Type is now programmed.

RF Learning 2 (Autostart only)

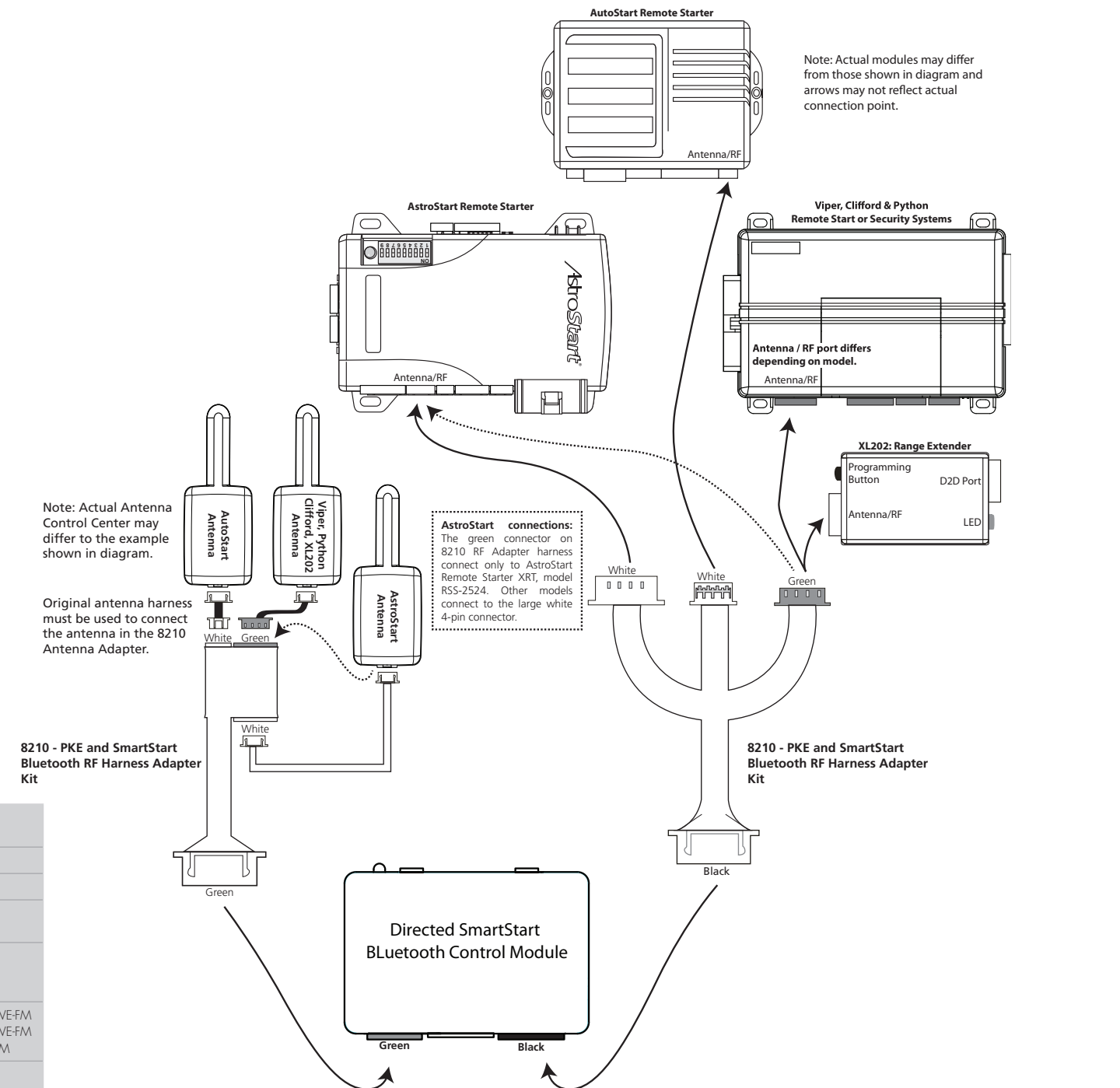
1. Enter the Features Option Menu for the Bluetooth module (see Features Programming Procedure section).
2. Choose Item #9 and select the appropriate option.
3. Put the host system in learn mode.
4. Press and hold Learn button (Autostart requires holding the button for an extended period).
5. The host system should return a learned confirmation via the Parking lights. If no reply, then the RF mode is incorrect, try another one.

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-FM-TYPE1	HDR FM-TYPE2	LDR FM
Model list:						
AUTOSTART	AS-1775 AS-6270	AS-1475 AS-1470	AS-1271 AS-1272	AS-2371TW-FM AS-1875FM	AS-2471TW-FM AS-6870TW-FM	
AUTOSTART USA	AS-2775 AS-1775U AS-6270U	AS-1475U	AS-2272 AS-1272U AS-1271U	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-3371 CT-3471 CT-5072 CT-5472	CT-3271			
Premier Defense	PD-2.8			PD-371 PD-372	PD-471 PD-472 PD-870	
Visions				AS-2373TW-FMv	AS-2472TW-FMv	

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

Optional 8210 RF adapter wiring diagram (if required).



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

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

DIRECTED