



POLARIS®

INTERACTIVE DIGITAL DISPLAY OWNER'S MANUAL



Bluetooth®



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Welcome

Thank you for purchasing a Polaris Interactive Digital Display (PIDD), and welcome to the Polaris RiderX family. Your PIDD is easy to use and will allow you to customize the information displayed through the use of alternate screen selections. The RiderX app gives you the power to plan, track and share your rides, as well as connect to radar weather, rider services and more.

For a safe and enjoyable riding experience with your new PIDD, please read your vehicle's owner's manual and this PIDD owner's manual. If you should need additional assistance with PIDD operation or software updates, please see your Polaris dealer or visit RiderX.com.

WARNING! *Do not enter information or adjust this device while operating your vehicle. Distracted driving can result in loss of control, collision or accident, which may result in serious injury or death. Avoid using any features and devices while driving that may take your attention away from the road or trail and safe driving habits, even for a moment.*

The operator assumes all risk associated with using this device. Please read the owner's manual provided with your vehicle.

CAUTION! *The speedometer may display incorrect values at the existence of electromagnetic radiation ≥ 10 V/m.*

Quick Start Guide

Before Riding With Your New PIDD

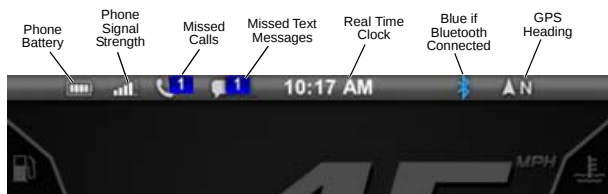
1. Read this entire manual.
2. Familiarize yourself with the features and operation of the PIDD *while the vehicle is stationary*.
3. Register for a RiderX account (page 68).
4. Register your PIDD (page 69).
5. Update trails data or maps/trails data to verify that the trails data on the PIDD is current (page 69).

NOTE: *Trails data expires 90 days from the file's release date.*

PIDD Features



The icon bar at the top of the screen allows quick access to cell phone-related information, a real time clock and the GPS heading.



In most situations, the GPS and mapping features will function best while the vehicle is outdoors in an open space. The GPS signal may be impeded by overhead structures or by being too close to a structure.

Please follow the installation instructions provided in the accessory kit or see your dealer for assistance.

Getting Started

Use the ignition key to turn the PIDD on or off, or to reboot (when necessary).

Models With Battery

ON	Turn the key to the ON/RUN position.
OFF	Turn the key to the OFF position.
REBOOT	Option 1: Turn the key OFF for 5 seconds, then turn the key to ON/RUN.
	Option 2: With the key ON, press and hold Display Key 5 for 20 seconds, then release.

Models Without Battery

ON	Start the engine.
OFF	Turn the key to the OFF position.
REBOOT	Option 1: Turn the key OFF for 5 seconds, then start the engine.
	Option 2: With the engine running, press and hold Display Key 5 for 20 seconds, then release.

NOTE: Using the auxiliary engine stop switch on a snowmobile to turn off the engine will not turn off the PIDD.

Interactive Digital Display

The PIDD features a 4.3-inch high resolution full color LCD display that provides access to the following information and functions.

Performance

View the speedometer, tachometer, dual trip meters, odometer.

Operating Conditions

View fuel level, coolant temperature, battery voltage, gear position, all-wheel drive status, diagnostics and maintenance warnings.

Riding Conditions

View the clock, change display settings.

Bluetooth Functionality

Use Bluetooth-enabled communication with cell phone (with notification of incoming calls and texts, and ability to view battery strength and signal strength).

GPS/Mapping

NOTE: *The compass is controlled by the GPS system. Calibration is not required.*

Use the compass and full-featured GPS when the GPS receiver is installed (includes the display of latitude, longitude and elevation). Mark and save waypoints and tracks.

Security (Snowmobiles)

If security is enabled, lock your vehicle using a security code.

Screen Options

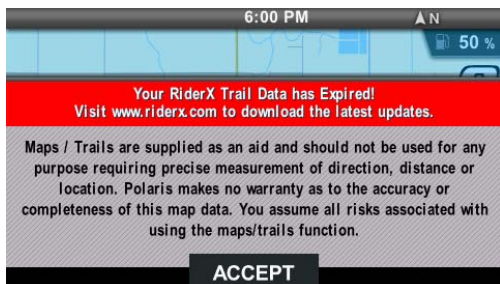
Customize screens.

Software Upgrades

Update software for the life of the vehicle.

Update the PIDD every 90 days or more often (especially before long trips) to ensure the most recent trails data is on your PIDD at all times. Log in at RiderX.com to download the latest software updates. If you need assistance, please see your Polaris dealer.

NOTE: *Trails data expires 90 days from the file's release date. If an update is not performed within 90 days, a notification screen displays.*



Maps/Trails are supplied as an aid and should not be used for any purpose requiring precise measurement of direction, distance or location. Polaris makes no warranty as to the accuracy or completeness of this map data. You assume all risks associated with using the maps/trails function.

General Information

Device Operating Requirements

Phone functionality is dependent on the capabilities of your cell phone. Text messaging functionality may vary depending on your phone's operating system.

NOTE: *Some cell phones or operating systems will not work as shown in this manual.*

Care and Maintenance

Use a soft cloth to clean the housing. Mild soap and water may be used. Do not use harsh or abrasive cleaners.

For best results, use a microfiber towel to clean the screen. Window cleaner or alcohol may be used.

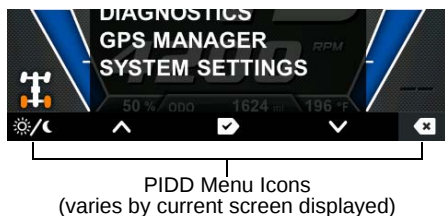
NOTICE: *Immediately clean off any gasoline that splashes on the display.*

Storage

When preparing the vehicle for storage, make sure the ignition switch is in the OFF position to prevent battery drain and a shortened battery life.

Display Keys

Use the five display keys to access the PIDD menus. Press and release any key to display the PIDD menu icons at the lower edge of the screen. With the menu icons displayed, press a specific key to view menu options for that key.



Key 1 - Alternate Home Screen Selection

1. Press any key to display the PIDD screen icons.
2. Press Key 1 repeatedly to display each home screen option.

	Off-Road Vehicle Home Screen Options	Snowmobile Home Screen Options
PRIMARY		
SECONDARY		
AUXILIARY		
AUXILIARY 2		

Key 2 - Odometer / Trip Meter / Engine Hours

1. Press any key to display the PIDDD screen icons.
2. Press Key 2 repeatedly to display each option.
 - Odometer (ODO)
 - Trip 1
 - Trip 2
 - Trip Hours (TRIP)
 - Engine Hours (ENG)



Key 3 - Main Menu

1. Press any key to display the PIDDD screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle through the menu.
 - Key 2: Toggle up
 - Key 4: Toggle down
4. Use the remaining keys to perform other actions in the main menu.
 - Key 1: Toggle between day and night screen (brightness) (See page 28 to adjust brightness levels for both screen options.)
 - Key 3: Select
 - Key 5: Exit menu

Key 4 - Battery Voltage / Coolant Temperature

1. Press any key to display the PIDD screen icons.
2. Press Key 4 repeatedly to display each option.
 - Battery Voltage
 - Coolant Temperature

NOTE: The display will automatically switch to the appropriate bar graph and turn red when a fault is detected.



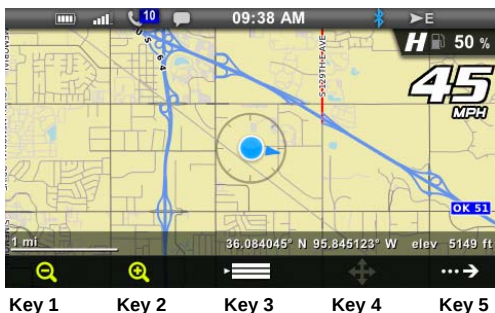
Key 5 - Bluetooth Menu (or Diagnostics Menu)

1. Press any key to display the PIDD screen icons.
2. Press Key 5 to display Bluetooth features. If a fault exists, Key 5 enters the Diagnostics menu (see page 37).
3. Use the display keys to access Bluetooth features.
 - Key 1: Phone
 - Key 2: Text
 - Key 3: Toggle Bluetooth on/off
 - Key 4: Settings
 - Key 5: Exit menu
4. If Audio is enabled, Keys 1 and 2 change to the following:
 - Key 1: Audio
 - Key 2: Phone/Text

Maps/Trails

View Map

1. Press any key to display the PIDD screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle to MAPS/TRAILS. Press Key 3 to select.

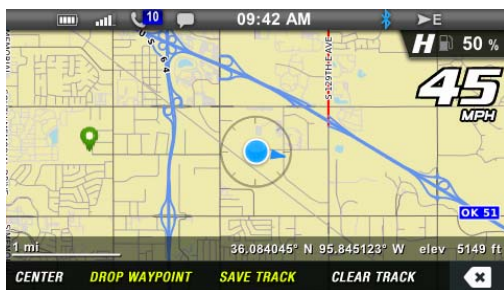


4. Use the display keys to access the map features.
Key 1: Zoom out
Key 2: Zoom in
Key 3: Display menu
Key 4: Pan (disabled above 10 MPH / 16 km/h)
Key 5: Advance to next screen (GPS/Tracks Map)

GPS/Tracks Map

Use the display keys to navigate the GPS/Tracks menu.

Key 1: Centers the map on your GPS location. The centering will occur after vehicle speed exceeds 10 MPH (16 km/h). Once the map is centered, Key 1 toggles between COURSE UP and NORTH UP.



Key 1

Key 2

Key 3

Key 4

Key 5

COURSE UP: The arrow points towards the front of the vehicle and the map rotates around the center arrow. The direction the vehicle is traveling is displayed in the upper right hand corner. When in this mode, NORTH UP is shown for Key 1. selecting Key 1 switches display to NORTH UP mode.



NORTH UP: The top of the map is North and the arrow rotates indicating the directions the vehicle is traveling. When in this mode, COURSE UP is shown for Key 1. Selecting Key 1 switches display to COURSE UP mode.



Key 2: Places a marker at your GPS location. If your vehicle is stopped, the keyboard will display so you can name and save the waypoint. (See *Keyboard Operation* on page 18.) If your vehicle is moving, the waypoint will be placed and automatically named. Press and hold Key 2 to enter the Waypoint Manager menu.

Key 3: Displays the keyboard to name and save the track. Up to 10 tracks can be saved. Press and hold Key 3 to enter the Track Manager menu.

Key 4: Displays a confirmation message before clearing the current track.

Key 5: Exit

Keyboard Operation

1. Use the display keys to navigate the keyboard.



Key 1: Move left

Key 2: Move up

Key 3: Select the letter or number

Key 4: Move down

Key 5: Move right

Phone - Audio Disabled (if equipped)

1. Press any key to display the PID screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle to PHONE. Press Key 3 to select.



4. The phone main menu screen displays.

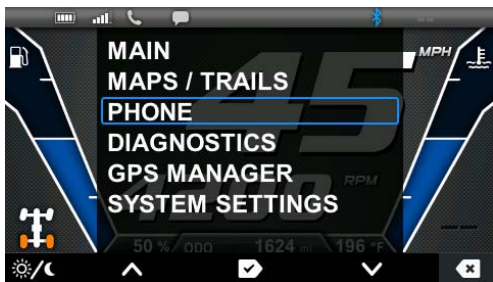


5. Use the display keys to navigate the phone main menu.
- Key 1: Missed Calls
Key 2: Text Messages (if equipped)
Key 3: Turn Bluetooth on/off
Key 4: Bluetooth Settings
Key 5: Exit
6. When one of the PIDD main screens is displayed, press any key to display the PIDD screen icons. Press Key 5 to access the phone menu. (The diagnostic screen displays if an active fault exists. See page 37.)



Phone - Audio Enabled (if equipped)

1. Press any key to display the PIDD screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle to PHONE. Press Key 3 to select.



4. If audio is enabled, the display will go directly to the Audio Screen.

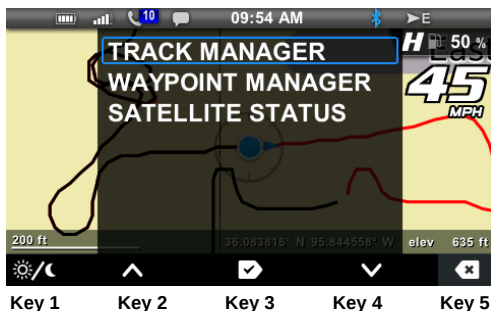


5. Use the keys to control Audio Track and Volume.
Key 1: Toggle between Volume and Track control
Key 2: Volume Down or Previous Track
Key 3: Play/Pause
Key 4: Volume Up or Next Track
Key 5: Back to Phone Menu

For additional information about the Bluetooth functions, see page 44

GPS Manager

1. Press any key to display the PIDD screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle to GPS MANAGER. Press Key 3 to select.
4. Toggle through the menu.
 - Track Manager
 - Waypoint Manager
 - Satellite Status
5. Press Key 3 to select.



Track Manager / Waypoint Manager

The Track Manager allows you to edit a track name, hide or display a track and import or export a track. Track Manager also displays the Track distance and Time on Track for selected tracks.

The Waypoint Manager allows you to edit, delete, import or export a waypoint or view a saved waypoint on the map.

When Go To is turned ON in the Waypoint Manager, an arrow displays on the map, pointing in the direction of the selected waypoint. The distance to the waypoint is shown in the lower right hand corner of the display and is based on shortest possible distance to waypoint (as the crow flies). This feature can be used for only one waypoint at a time.

1. Press Key 5 to toggle to the selection list.
2. Press Key 4 until Go To is highlighted. Press Key 5 to toggle the setting ON or OFF.



3. Press Key 5 to exit the map.

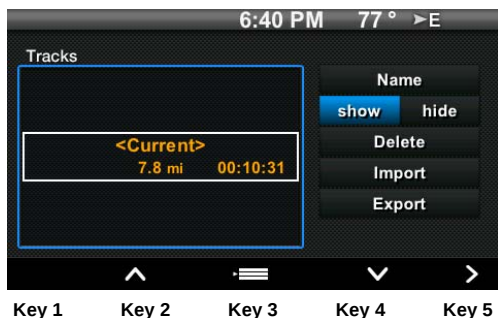


NOTE: When Go To is ON, the orange arrow points to the waypoint that was selected when Go To was turned ON.

Importing and Exporting Tracks and Waypoints

Importing or exporting tracks and waypoints requires a USB drive in the accessory connector. An exported file will be a .gpx format file that can be read by various devices or imported into mapping software. Any files you import must be available on the USB drive at the root level (not in a folder) and must be .gpx format files.

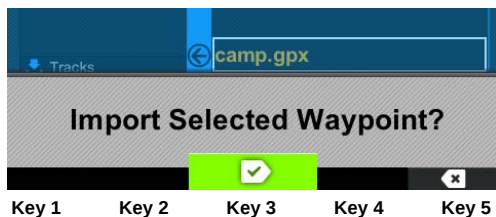
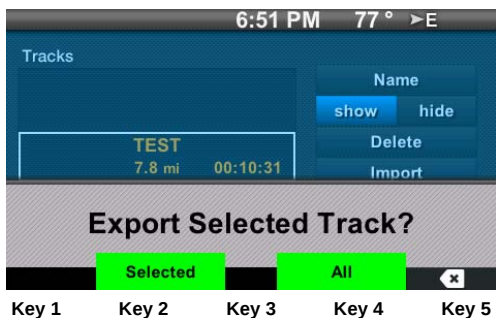
1. Enter the desired manager menu (Tracks or Waypoints).
2. Press Key 5 to toggle to the selection list. Toggle to Import or Export. Press Key 5 to select.



3. Toggle to the desired track or waypoint file name. Press Key 5 to select.



4. Press Key 2 to export selected tracks or waypoints. Press Key 4 to export all tracks or waypoints. Press Key 5 to reject.



5. If exporting, the file will be saved to the USB drive.

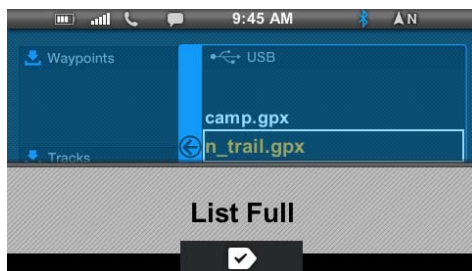
6. If importing, the processing screen displays.



Possible Errors

One of the following screens displays if a processing error occurs.

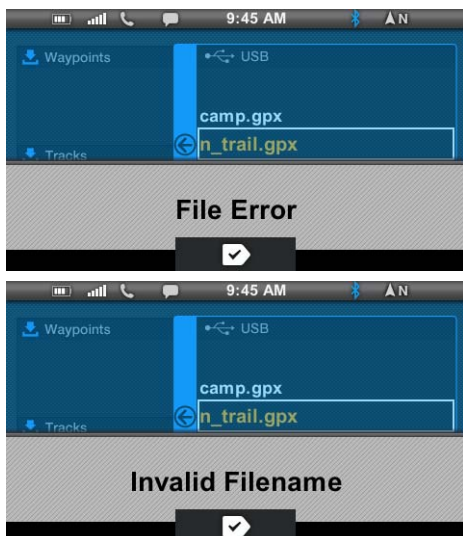
- The device does not contain enough space to save the waypoint or track.



- The USB device is not seated properly.



- The file or file name contains an error.



Satellite Status

In the GPS Manager menu, select Satellite Status. The screen displays all available satellites in the area. Press Key 3 to exit.



Key 1

Key 2

Key 3

Key 4

Key 5

System Settings

1. Press any key to display the PIDD screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle to System Settings. Press Key 3 to select.

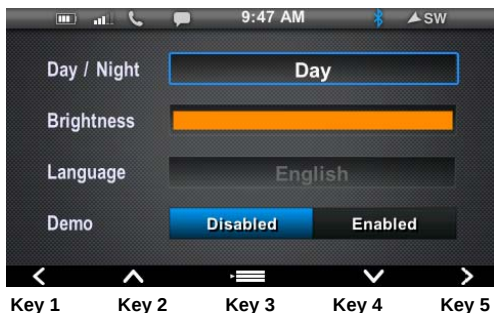
NOTE: If demo mode is enabled, you can toggle through the resulting menu to view options without the risk of changing settings. This tool is useful as a tutorial or for training at your dealership. See page 28 for instructions.



4. Toggle through the menu.
 - Display
 - Service
 - Units
 - Time
 - System Info
 - Vehicle Settings
 - Media (if equipped)
5. Press Key 3 to select.

Display

1. In the System Settings menu, select DISPLAY.
2. Toggle to the desired setting.
 - Day/Night/Auto mode
 - Brightness level
 - Language
 - Demo (enable/disable)



3. Press Key 1 or Key 5 to change a setting.

NOTE: *If Day is selected, changing the brightness will change the day mode brightness level. If Night is selected, changing the brightness will change the night mode brightness level.*

NOTE: *If Auto is selected, the display will automatically switch between Day and Night modes based on time of day and day of year.*

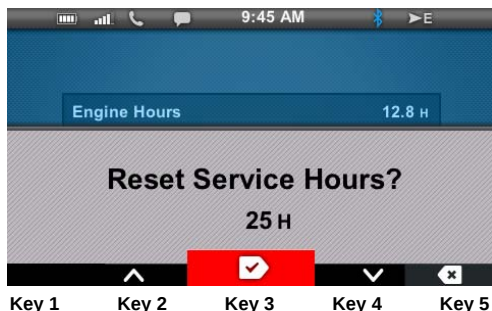
4. Press Key 3 to exit.

Service and Engine Hour Information (Not Available for Snowmobiles)

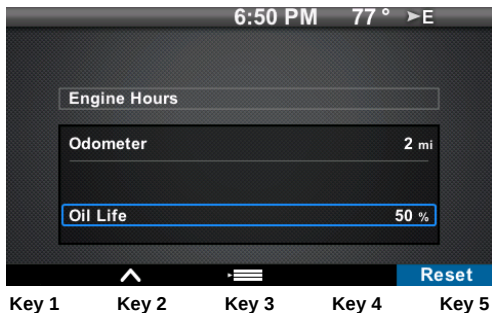
1. In the System Settings menu, select SERVICE.
 - Engine Hours displays hours of engine operation since manufacture.
 - Interval is an editable setting that provides a service reminder at the set interval. Interval can be set to any 5-hour increment between OFF and 100 hours.
 - Hours to Service displays hours remaining to reach the set service interval.
2. Press Key 5 to reset.



3. Press Key 2 to increase the interval or Key 4 to decrease the interval, if desired. Press Key 3 to confirm a change or reset the existing interval.



4. Press Key 2 to view additional odometer information
- Odometer
 - Oil Life.



5. Press Key 5 to reset Oil Life. A warning displays at startup if vehicle milage exceeds the Oil Life Milage.

NOTE: *Initial Oil Milage Warning is set to go off at 500 miles. After first reset, Oil Milage Warning will display every 1000 miles.*

Units

The units can be set to display U.S. customary units or the International System of Units (metric) and a 12-hour clock or a 24-hour clock.

1. In the System Settings menu, select UNITS.
 - Speed
 - Temperature
 - Clock



2. Toggle to the desired setting.
3. Press Key 1 or Key 5 to change the setting.
4. Press Key 3 to exit.

Time

1. In the System Settings menu, select TIME.
 - Source (GPS satellites)
 - GMT (Greenwich Mean Time) Offset
 - DST (Daylight Savings Time) (Enable/Disable)



2. Toggle to the desired setting.

NOTE: *Enabling DST adds one hour regardless of the date. DST does not automatically update and must be selected by the rider.*

3. Press Key 1 or Key 5 to change setting.

System Info

1. In the System Settings menu, select SYSTEM INFO.
2. View the following system information in this display.
 - PIDD Serial Number
 - Bootloader Version
 - Display Operating System Application Version
 - Software Configuration and Date
 - Map Data Version Build Date
 - Trails Data Version and Build Date

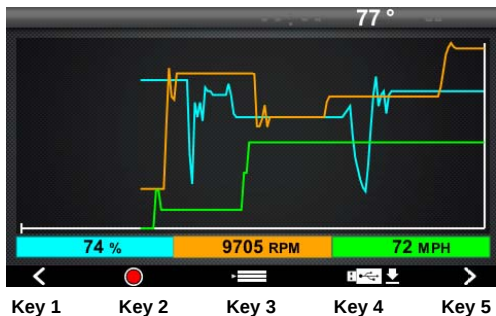
Display	Serial No.	102112
	Loader	2 . 3 . 20026 . 0000
	App	2 . 7 . 10182 . 0003
	Bluetooth	5 . 0 . 00002 . 0818
	Config	2.7.10442 2014-07-28
	Map data	www.openstreetmap.org/copyright USA 2014 -05 -14
	Trails	US-ATV 2014 -07 -07
Vehicle	VIN	
	Vehicle Model	ZFELBA2000
Initialize		Update
Key 1 Key 2 Key 3 Key 4 Key 5		

3. To initialize an PIDD for a snowmobile (when required), see page 39. To update software, see page 69.
4. Press Key 3 to exit.

Vehicle Settings

1. In the System Settings menu, select VEHICLE SETTINGS.
 - Clutching

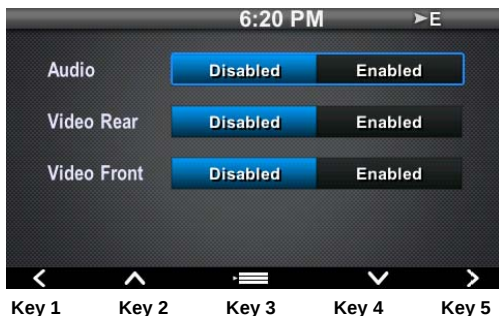
Clutching



2. Key 2 starts and stops recording graph data.
3. Key 4 downloads recorded graph data to a USB drive inserted in the vehicle's USB port. Data is saved as a .csv file.

Media

1. In the System Settings menu, select MEDIA.
2. Toggle to desired setting.
 - Audio
 - Video Rear (if equipped)
 - Video Front (if equipped)



3. Press Key 1 or Key 5 to change the setting.
4. Press Key 3 to exit.

Video Rear (if equipped)

1. If enabled, the display will automatically switch to rear camera when vehicle is in reverse.



2. Press Key 5 to toggle between front and rear video (if equipped).

Video Front (if equipped)

1. Press any key to display the PIDD screen icons.
2. Press Key 1 repeatedly to display each home screen option.
3. If enabled, front camera will follow the Auxiliary 2 home screen.



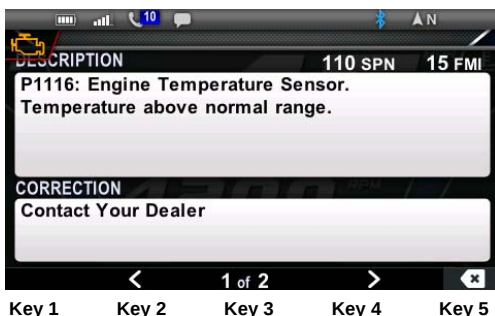
4. Press Key 5 to toggle to Rear Video (if equipped).
5. Press Key 1-4 to go to the primary riding screen.

Diagnostics

1. Press any key to display the PIDD screen icons.

NOTE: For snowmobiles, only active faults display and the engine must be running to view faults. If the Malfunction Indicator Light (MIL) illuminates, stop the snowmobile but do not stop the engine if you wish to view the faults.

2. Press Key 3 to display the main menu options.
3. Toggle to DIAGNOSTICS. Press Key 3 to select.
4. If any faults have been detected, a description screen displays with the number of faults listed at the bottom center of the display.



5. Press Key 2 or Key 4 to scroll through the faults.

NOTE: Faults display if they were active at least once during the current ignition cycle. If the Malfunction Indicator Light (MIL) is ON, one or more of the faults in this list is an active fault.

6. Press Key 5 to exit.
7. For a system diagnostics inspection and/or service, please see your authorized Polaris dealer.

PIDD for Snowmobiles

General Snowmobile PIDD Information

Certain PIDD features are active only when using the display on snowmobiles. Some PIDD features may function only while the engine is running (such as Security and Diagnostics). If an PIDD feature seems non-functional, start the engine to access that feature. Do not allow an engine to run in an enclosed area without adequate ventilation.

Snowmobile-specific PIDD features include:

- Left Hand Controls
- Fuel Type Selection
- Security (if enabled)
- Average / Max Speed

PIDD features that are not active when installed on a snowmobile include:

- Gear selection (reverse only)
- All-Wheel Drive Indicator

CAUTION! *The speedometer may display incorrect values at the existence of electromagnetic radiation ≥ 10 V/m.*

The PIDD initialization process must be performed on some snowmobiles in order for a new or newly installed PIDD to function properly. It must also be performed every time the PIDD is updated with files from the RiderX web site. See page 39. These models include:

- 600 AXYS models
- Any non-AXYS model for which an accessory PIDD is available

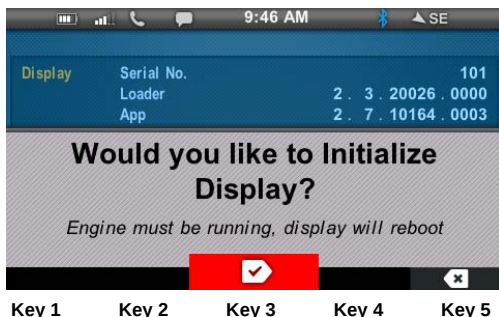
Initialization Process

The initialization process must be performed when the engine is running. Not all models require this procedure. See page 38.

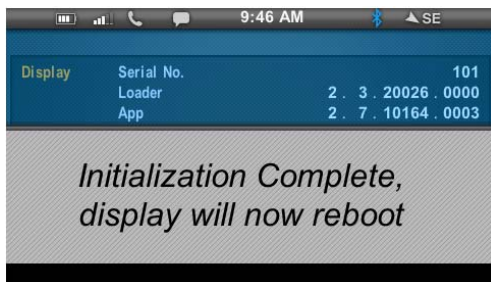
1. Start the engine. Do not allow an engine to run in an enclosed area without adequate ventilation.
2. In the System Settings menu, select SYSTEM INFO.



3. Press and hold Key 1 until the next screen displays.



4. Press Key 3. The display will reboot and begin the configuration process.



Left Hand Controls

The left hand controls on AXYS and 600/800 PRO-RIDE models allow riders to switch screens, zoom in or out and drop waypoints without removing their hands from the handlebars.

WARNING! *Do not enter information or adjust this device while operating your vehicle. Distracted driving can result in loss of control, collision or accident, which may result in serious injury or death. Avoid using any features and devices while driving that may take your attention away from the road or trail and safe driving habits, even for a moment.*

The operator assumes all risk associated with using this device. Please read the owner's manual provided with your vehicle.

MODE and SET Switch

Pressing the MODE and SET switches quickly (press/release) or slowly (hold 2 seconds or longer) allows riders to change a variety of display options. The functionality of each switch is based on the screen the PIDD is displaying at the time.

Switch functions are outlined in the following tables. Review these tables to become familiar with the functions of each switch.

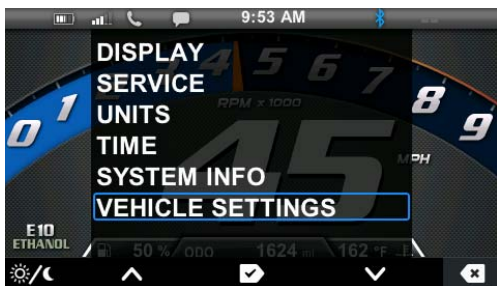


Switch Functions While Viewing Maps		
Quick = Press/Release Slow = Hold 2+ Seconds		
Switch	Motion Speed	Result
SET	Slow	Toggle between MAPS/TRAILS and MAIN screens
SET	Quick	Zoom IN (+)
MODE	Quick	Zoom OUT (-)
MODE	Slow	Drop waypoint at current location

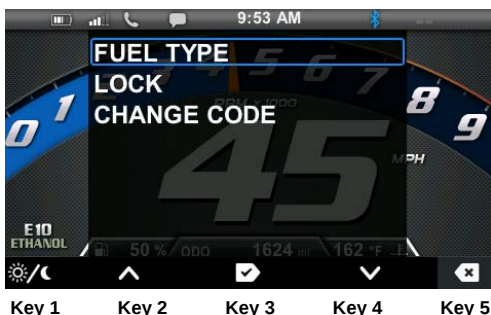
Switch Functions While Viewing Main Screens		
Quick = Press/Release Slow = Hold 2+ Seconds		
Switch	Motion Speed	Result
SET	Slow	Toggle between MAPS/TRAILS screen and MAIN screens
SET	Quick	Toggle between Battery Voltage and Coolant Temperature
MODE	Quick	Toggle between Odometer, Trip 1 and Trip 2
MODE	Slow	Clear the current trip meter

Vehicle Settings

1. Press any key to display the PIDD screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle to System Settings. Press Key 3 to select.



4. In the System Settings menu, toggle to VEHICLE SETTINGS (specific to snowmobiles). Press Key 3 to select.
 - Fuel type
 - Lock
 - Change Code



NOTE: Lock and Change Code display only if the engine is running and the PIDD has been initialized.

Fuel Type Selection (Ethanol/non-Ethanol)

1. In the Vehicle Settings menu, toggle to FUEL TYPE.
2. Press Key 3 to select.



3. Press Key 2 or Key 4 to toggle between the fuel types. When the screen displays the fuel type used in the fuel tank, press Key 3 to exit.

PIDD Power Sources

NOTE: On snowmobiles equipped with an electric start battery and PIDD, always turn the key off when the PIDD is not in use. If the key remains in the RUN position after using the auxiliary engine stop switch to stop the engine, the PIDD remains active, drawing power from the battery.

NOTE: The PIDD is not dependent on the battery while the engine is running, but the battery supplies a constant power source when the engine is off or when the engine is transitioning between forward and reverse operation. If a battery is not installed, the PIDD reboots when the engine is started and when electronic reverse (PERC) is used.

Average Speed / Max Speed

When using the PIDD on a snowmobile, two additional features are available for KEY 2, Average Speed and Max Speed.

1. Press any key to display the PIDD screen icons.
2. Press Key 2 repeatedly to display each option.
 - Odometer (ODO)
 - Trip 1
 - Trip 2
 - Trip Hours (TRIP)
 - Engine Hours (ENG)
 - Average Speed (AVG)
 - Maximum Speed (MAX)



Key 1

Key 2

Key 3

Key 4

Key 5

3. Average Speed (AVG) displays the average speed of the vehicle since the last user reset.
4. Max Speed (MAX) displays the fastest speed reached since the last user reset.
5. To reset AVG or MAX, press any key to bring up the menu icons, then hold Key 2 to reset value.

Lock the Ignition

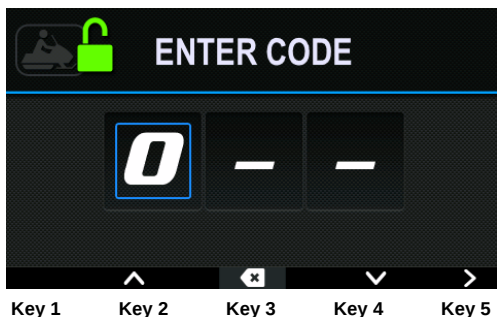
First Time Activation

Snowmobiles equipped with the PIDD are equipped with a security function that can be activated by an authorized Polaris dealer. If you have this feature activated, you can lock the ignition to prevent unauthorized use when leaving the snowmobile unattended. A locked system will limit engine speed to 3000 RPM, which prevents clutch engagement, and the snowmobile will not move when throttle is applied.

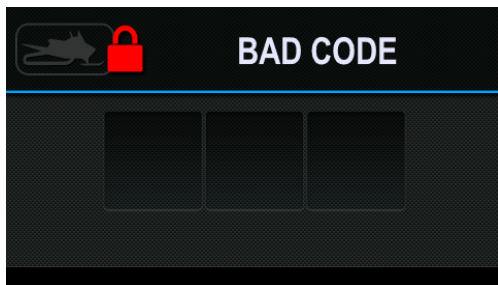
1. Have the security system activated by your authorized Polaris dealer.
2. The factory default security code is “000”. Change the default security code to a code of your own choosing. See *Change Security Code* on page 48.

Locking the Ignition

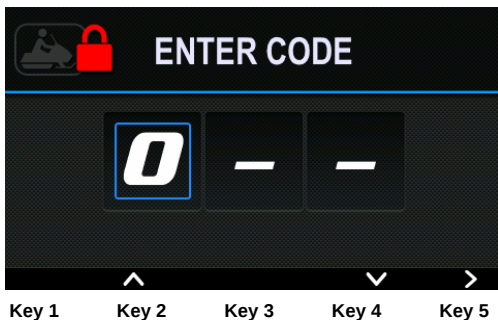
1. Start the engine. Do not allow an engine to run in an enclosed area without adequate ventilation.
2. Press any key to display the PIDD screen icons.
3. Press Key 3 to display the main menu options.
4. Toggle to System Settings > Vehicle Settings > LOCK.
5. Press Key 3 to select. The ENTER CODE screen will display.



6. Press Key 2 or Key 4 to enter the current 3-digit security code. Press Key 5 to toggle to each digit.
7. If the code is not accepted, a BAD CODE screen will display.

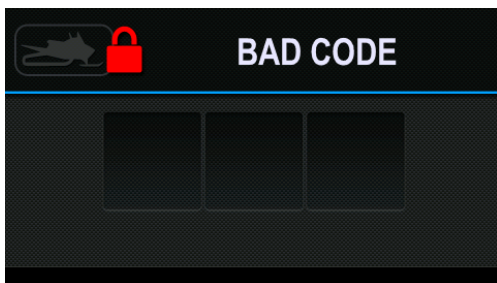


8. Follow the prompts and re-enter the current security code. When the code is accepted, the "locked" symbol and ENTER CODE screen displays. The ignition is locked.

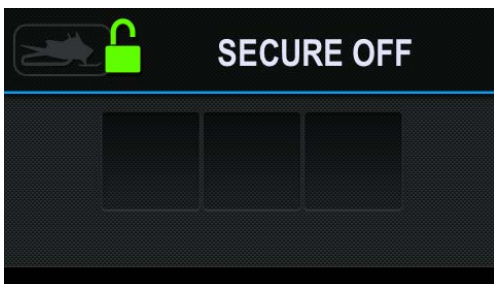


Unlocking the Ignition

1. Start the engine. The locked symbol and ENTER CODE screen displays. Do not allow an engine to run in an enclosed area without adequate ventilation.
2. Press Key 2 or Key 4 to enter the current 3-digit security code. Press Key 5 to toggle to each digit.
3. If the code is not accepted, a BAD CODE screen will display. Follow the prompts and re-enter the current security code.



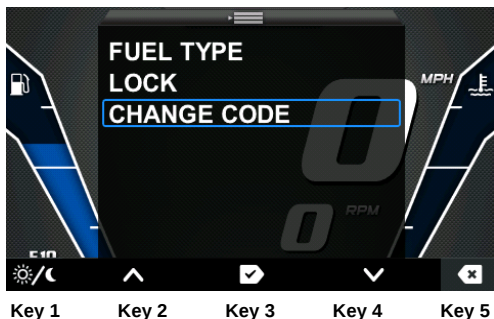
4. When the code is accepted, the "unlocked" symbol and SECURE OFF screen displays. The ignition is now unlocked.



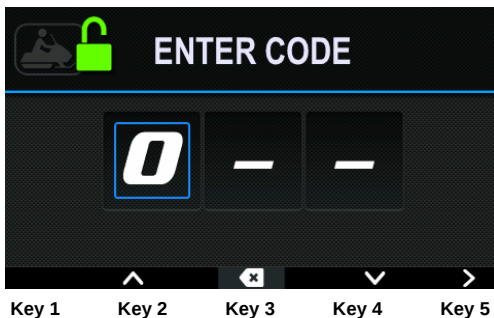
Change Security Code

The first time you change the security code, enter the default security code (000) at step 4.

1. Start the engine. Do not allow an engine to run in an enclosed area without adequate ventilation.
2. Toggle to System Settings > Vehicle Settings > CHANGE CODE.

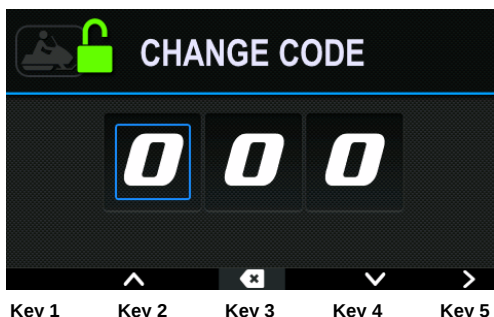


3. Press Key 3 to select. The ENTER CODE screen will display.



4. Press Key 2 or Key 4 to enter the current 3-digit security code. Press Key 5 to toggle to each digit.

5. After successfully entering the current security code, the CHANGE CODE screen will display. Enter your new 3-digit security code.



6. Any time you change your security code, record the new code below for future reference. Keep this manual (or your security code) in a secure location where others will not be able to access your code.

Code: _____ Date: _____

Code: _____ Date: _____

Code: _____ Date: _____

Code: _____ Date: _____

NOTE: If you lose or forget your code please see your authorized Polaris dealer to have the code reset to the default code (000). Only authorized Polaris dealers may reset a lost or forgotten security code.

Detonation Elimination Technology (DET)

The DET system prevents damage to the engine from detonation by entering an engine protection mode whenever the DET system is active.

When excessive detonation is detected, the check engine light will illuminate. You may notice decreased engine performance and RPM when the DET system is activated. In most cases this is temporary and no action is required. The engine will return to its normal performance automatically.



If severe detonation occurs:

- The check engine light begins to flash steadily.
- The PIDD displays "Detonation Detected - MAG (or PTO)".
- The engine enters DET latching (limp home) mode.
- On 2015 800 AXYS models, the ECU closes exhaust valves to limit engine power in DET latching mode. On all other 2015 AXYS and PRO-RIDE models, the ECU will shut down the engine during DET latching mode. In either event, restart the engine to reset the mode.
- For all 2015 AXYS and PRO-RIDE models, the ECU will shut down the engine during a critical overheat condition.

Engine Overheat Indicators

Temperature Scale

The engine temperature scale at the right side of the PIDD screen changes to *RED* and the check engine temperature indicator at the top left of the screen illuminates when the engine is overheating. *Take action to cool the engine.*



The indicator will flash when engine temperature reaches critical levels. *Stop the engine immediately.*

NOTE: Please see your vehicle owner's manual for more information.

A flashing indicator indicates continued operation could result in serious engine damage. The engine management system will automatically reduce engine power and create a misfire condition. *Stop the engine immediately.* Allow the engine to cool down.

NOTE: If engine overheating seems to be caused by something other than poor cooling conditions, see your dealer for service.

Bluetooth

Before Connecting Compatibility

1. Refer to your phone's user manual before attempting to connect to the PIDD.
 - Review how to connect your phone to a Bluetooth device.
 - Review the different types of connections offered by your phone manufacturer and how the connection type affects information sharing.
2. Verify that your phone is equipped with Bluetooth and that Bluetooth is turned on.

NOTE: *Some of the features and functionality of the PIDD may vary due to the operations software on your phone.*

Connection Management

Enabling/Disabling Bluetooth

1. Press any key to display the PIDD screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle to PHONE. Press Key 3 to select.



4. The phone main menu screen displays.

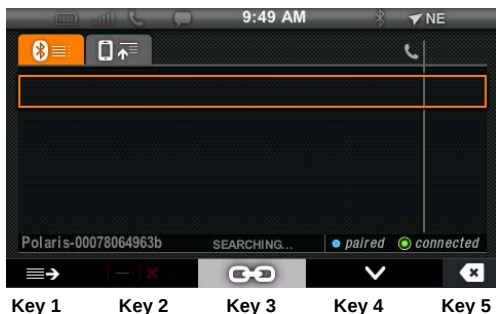


5. Press Key 3 to turn Bluetooth on or off.

NOTE: The display will remember the state of Bluetooth at the next power-up. It will automatically connect to a paired device following the order set in the priority list.

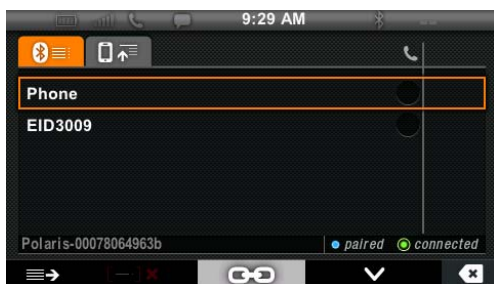
Bluetooth Settings

1. With the phone main menu screen displayed, press Key 4 to open Bluetooth Settings.
2. When the display opens Bluetooth Settings it becomes discoverable to other Bluetooth devices. After 5 seconds the display will start searching for devices.



NOTE: *Devices must be discoverable to show up in the list. Your phone settings may need to be changed to allow notifications and missed calls and text messages to display.*

3. When the search is completed, the PIDD displays any devices found. Press Key 4 to toggle through the list. The indicators at the lower right edge of the screen indicate whether the selected device is paired and/or connected.



Key 1

Key 2

Key 3

Key 4

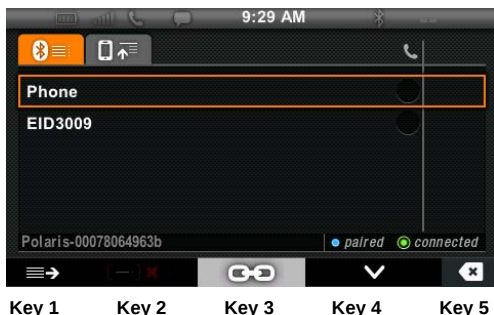
Key 5

<i>Color/Indicator</i>	<i>Description</i>
BLUE	The device is paired but not connected.
GREEN	The device is paired and connected.
None	The device is not paired.

4. The PIDD will perform the search again every 10 seconds until the device is paired.
5. The display will not search for devices again unless one of the following occurs:
- You exit and re-enter the display
 - The device is disconnected

Pairing From the Display

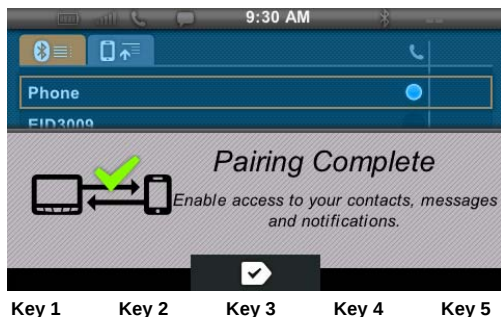
1. Refer to your phone's user manual before attempting to connect to the PIDD. See page 52.
2. Toggle through the list to the desired device.



3. Press Key 3 to pair.
4. Accept the pairing request on your phone.
5. Press Key 3 to accept the request on the display. To cancel the request, press Key 5.



6. When the device is connected, the *Pairing Complete* screen displays.

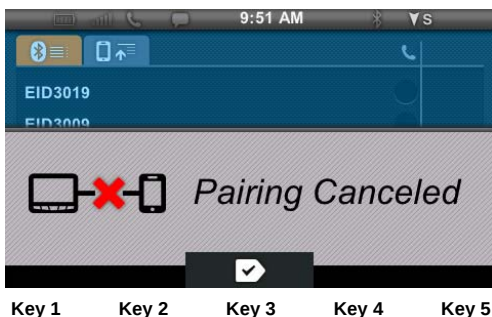


7. Press Key 3 to exit.

Pairing From the Device

To pair from the device follow the device's instructions to pair with the display. Accept the request on the display when it appears. The device will automatically connect after pairing.

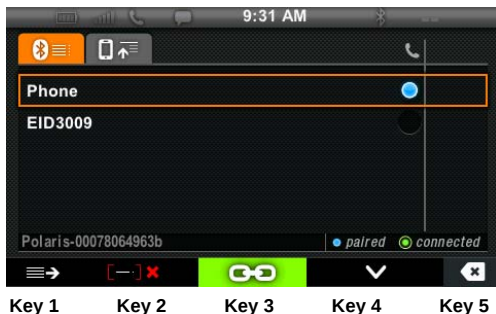
If an error occurs during pairing, or if the pairing is rejected by either device, the *Pairing Canceled* screen displays.



8. Press Key 3 to exit.

Connecting a Formerly Paired Device

1. To connect a device that was previously paired, toggle to the device in the display. Press Key 3.

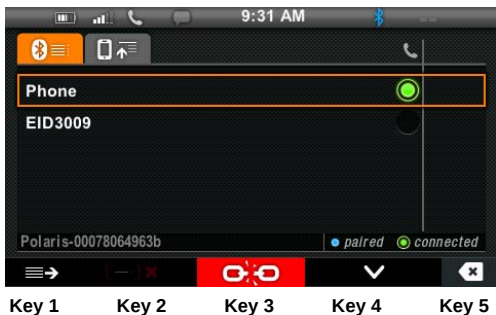


2. After connecting, the display will request the number of missed calls and update the display.

NOTE: Phone compatibility may vary. Some functions are dependent on phone settings that must be set by the user. Refer to your phone's user manual for more information.

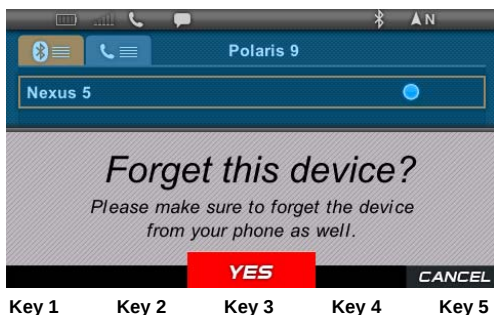
Disconnecting a Device

To disconnect a device, toggle to the device in the display. Press Key 3.



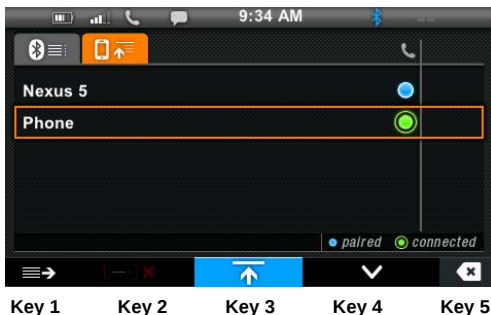
Unpairing a Device

1. If the device is connected, disconnect the device before unpairing.
2. To unpair a device, toggle to the device in the display. Press Key 3 to unpair.
3. The confirmation screen displays. Press Key 3 to confirm.

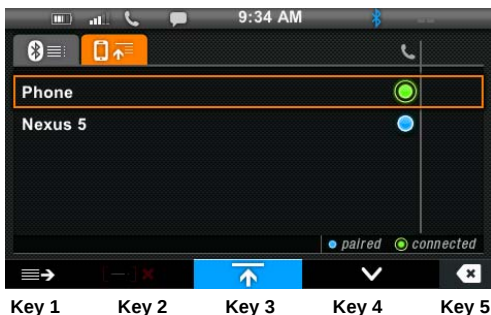


Changing Device Automatic Connection Priority

1. To change which device automatically connects, toggle to the desired device in the display. Press Key 1 to display the priority screen.



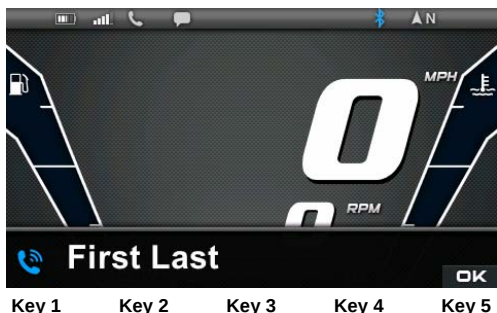
2. Press Key 3 to move the selected device up the list.



3. Press Key 5 to exit.

Phone

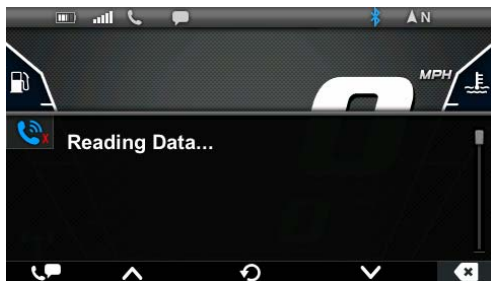
If a phone call is received while the phone is connected, the caller's name (if available) or phone number (if supported) displays. Press Key 5 to acknowledge and remove the notification.



NOTE: If the text messaging symbol in the upper left corner of the display does not illuminate (in white), the device is either not connected or not compatible with this feature. Check your phone's text notification settings to make sure this feature is enabled.

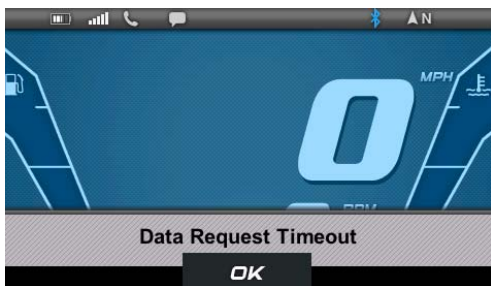
View Missed Calls List

1. With the phone main menu screen displayed, press Key 1 to request missed calls. The screen displays the phone symbol and “Reading Data”.



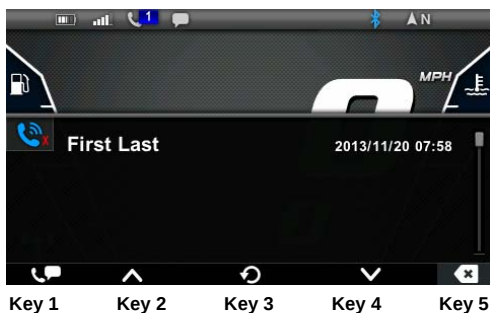
NOTE: To switch between Missed Calls and Unread Text Messages while navigating either menu, press Key 1.

2. If an error occurs during the request, an error message screen displays. Press Key 3 to accept.



- For a “Data Request Timeout” message, press Key 3 to repeat the request.
- For a “Data Error from Phone” message, verify that your phone is compatible and that Bluetooth is turned on before repeating the request.

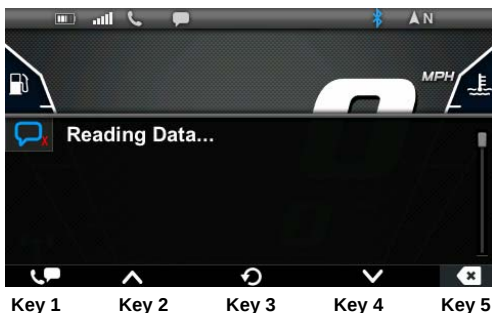
3. If the phone is compatible, the screen displays the most recent missed calls (up to 20) or “No Missed Calls”.



4. Press Key 2 or Key 4 to toggle through the list.
5. Press Key 3 to refresh the list.

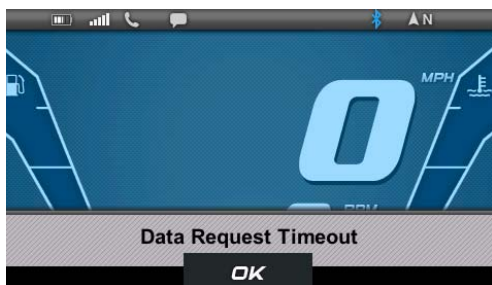
View Unread Text Messages List

1. With the phone main menu screen displayed, press Key 2 to request unread text messages. The screen displays the text message symbol and “Reading Data”.



NOTE: To switch between Missed Calls and Unread Text Messages while navigating either menu, press Key 1.

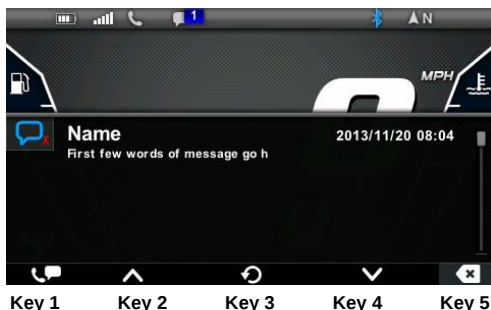
2. If an error occurs during the request, an error message screen displays.



Key 1 Key 2 Key 3 Key 4 Key 5

- “Data Request Timeout”: Press Key 3 to accept. Press Key 1 to repeat the request.
- “Data Error from Phone”: Press Key 3 to accept. Verify that your phone is compatible and that Bluetooth is turned on before repeating the request.

3. If the phone is compatible, the screen will display a list of the unread messages. If there are no unread messages since the device was paired, "No new messages since connected" displays.

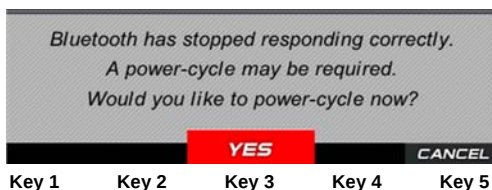


NOTE: Most Android phones will display ALL unread messages. Other phones may display unread messages only since connection with the display.

4. Press Key 2 or Key 4 to toggle through the list.
5. Press Key 3 to refresh.

Bluetooth Not Responding

Press Key 3 to reboot or press Key 5 to cancel. Bluetooth may not be functional until the device is rebooted.





RiderX is the #1 resource for power sports enthusiasts. RiderX provides everything you need to enhance your riding experience. For the PIDD, RiderX provides downloadable trails. For more information about all of our free features, please visit RiderX.com.

Hardware

USB Hardware Recommendations

For software updates, Polaris recommends using a SanDisk® or similar USB flash drive with a minimum of 4G in available memory, formatted using the FAT32 file system. For assistance, search the web for "How to format FAT32". For best results, remove all files from the flash drive before starting the update process.

USB Connection Locations

NOTICE: *The USB connection is not designed or intended to support the connection of any phone or device other than the recommended USB drive. The vehicle's USB connection is designed to support PIDD updates and allow the user to upload and download tracks and waypoints.*

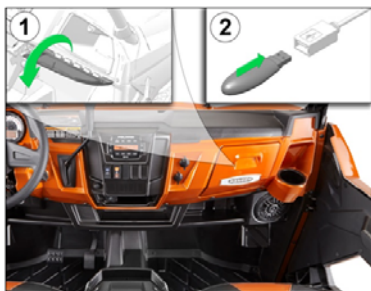
RZR Models

The USB connector (if equipped) is located behind the storage compartment/glove box on the dash.



RANGER Models

The USB connector (if equipped) is located inside the glove box.



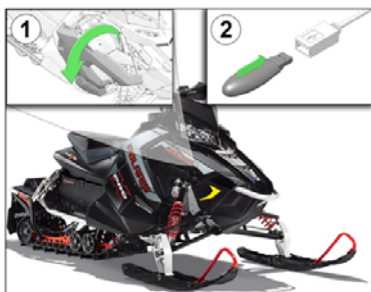
ATV Models

The USB connector (if equipped) is located on the front side of the right handlebar controls.



AXYS Snowmobile Models

The USB connector (if equipped) is located under the hood near the rear of the hood vents. Open the right side panel to access the connector.



Connect, Register and Update

Connect Your Smartphone to the PIDD

The PIDD can be used with most smartphones. RiderX can be used to provide trail data for the PIDD device. Before registering and connecting the PIDD to RiderX, use the following steps to connect your smartphone to the PIDD.

1. Open your phone's Bluetooth menu and make your phone discoverable.
2. On the vehicle, turn the ignition key to the ON/RUN position. The engine does not have to be running.
3. View the Bluetooth settings on your phone. The PIDD Connect Bluetooth Adapter should appear as "Polaris - # # # #" (the last 4 digits of the adapter's address).
4. When the adapter is visible, select it to connect your phone to the adapter.
5. Launch the PIDD and verify that the connection status bar indicates the phone is connected.

Register for a RiderX Account

1. If you don't already have a RiderX account, go to RiderX.com.
2. Click *Sign In* at the upper right corner of the page.
3. Scroll down and complete the online form to register for a free account.

NOTE: *Multiple PIDD devices can be registered to the same RiderX account. Additional accounts are not required for multiple devices.*

Register an PIDD (Rider or Dealer)

Be prepared to provide the following information when registering an PIDD:

- The vehicle's Vehicle Identification Number (VIN) (see the vehicle's owner's manual for location)
- The PIDD serial number (located in the Systems Info display on the PIDD) (see page 33)

1. Log in at RiderX.com.
2. Select *Digital Displays* in the menu bar.
3. If you are a Polaris dealer, check the box next to "I have a dealer number". Enter your 7-digit dealer number.

NOTE: *When a user (rider or dealer) logs in to a RiderX account, the user information for that account will automatically populate the online registration form.*

4. Click on *Register My Display*.

Update Trails Data or Maps/Trails Data

The Trails data and the Maps/Trails data on your PIDD can be updated using files downloaded from your RiderX account.

NOTE: *Trails data expires 90 days from the file's release date.*

An update involves four (4) procedures:

- Download the data
- Copy files to a USB flash drive
- Update the PIDD
- Verify the update appears in SYSTEM INFO and in the MAPS/TRAILS display.

Each procedure is outlined in detail on the following pages. For future reference, a condensed version of the entire update process is provided in a flow chart on page 78.

NOTE: *Before updating the PIDD, fully charge the vehicle's battery (if equipped). A 12-volt minimum is required for completing the updates.*

Download the Data

1. Log in at RiderX.com.
2. Select *Digital Displays*.
3. Select *Download Trails Data* (recommended every 90 days) or *Download Trails and Map Data* (recommended seasonally) for your vehicle type.
4. Accept the User Acknowledgement.
5. Choose "Save" if prompted to Run or Save. The download may take several minutes depending on your internet connection speed.

Copy Files to USB Flash Drive

Connect the recommended USB flash drive to the computer used to download updates from RiderX.com. See page 66.

The general procedures for extracting the files and saving them to the USB drive are outlined below. Your procedure may differ slightly depending on your computer's operating system.

NOTE: *Do not place the extracted files inside a folder on the USB drive. Place only the extracted files on the flash drive.*

MAC Computers

1. Locate the downloaded zipped file (.zip) on your computer. Double-click the file to extract the contents.
2. Locate the extracted files and copy them onto the USB flash drive.

WINDOWS Computers

1. Locate the downloaded executable file (.exe) on your computer. Double-click the file. Select "Run".
2. Make a note of the file path shown in the "Extract to" window. Click "Extract".
3. Navigate to the file location noted in the previous step. Open the folder and copy all of the extracted files onto the USB flash drive.

Update the PIDD

1. Before updating the PIDD, always export your existing tracks and waypoints to a USB drive to avoid losing them. When the PIDD update is performed, all formerly saved tracks and waypoints will be erased from the PIDD.
2. After downloading an update from your RiderX account and saving the extracted files to the USB flash drive, connect the flash drive to the USB connector on your vehicle. For vehicle USB connector locations, see page 66.

NOTE: Always download the most recent data from RiderX.com before updating the PIDD.

3. Turn the ignition key to the ON/RUN position. If your vehicle does not have a battery, start the engine and allow the idle to stabilize before continuing. Do not allow an engine to run in an enclosed area without adequate ventilation.
4. Press any display key to display the PIDD screen icons.
5. Press Key 3 to display the main menu options.
6. Toggle to System Settings. Press Key 3 to select.
7. In the System Settings menu, select SYSTEM INFO.



Key 1

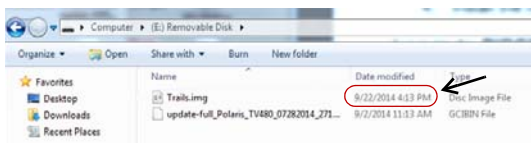
Key 2

Key 3

Key 4

Key 5

8. Compare the “Trails date” on this screen with the “date modified” of the newly downloaded file on your USB drive or computer.



9. Continue with the update only if the new file date is more recent than the date listed in the PIDD.

NOTE: *Trails data expires 90 days from the file's release date.*

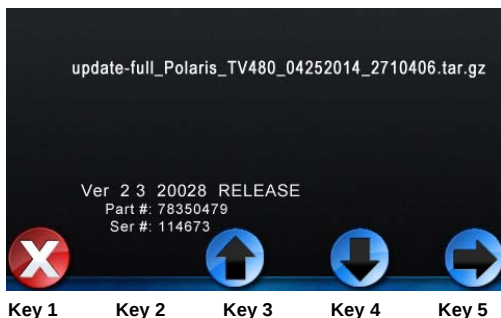
10. Press Key 5 *twice* to continue.
11. If an error message occurs, perform one or all of the following actions to resolve the issue.
- Remove and reconnect the USB flash drive securely.
 - Make sure the RiderX files are not inside a folder on the flash drive.
 - Make sure *only* RiderX files are on the flash drive. Remove any other files if necessary.
 - Try using a different USB flash drive.
12. If files are found by the device, you'll be prompted to restart in bootloader mode. Press Key 3 to confirm.



13. After the restart, read the warning message.

“WARNING! Maps/Trails are supplied as an aid and should not be used for any purpose requiring precise measurement of direction, distance or location. Polaris makes no warranty as to the accuracy or completeness of this map data.”

14. Press Key 3 to accept. The screen displays the files found on the USB flash drive.



15. Press Key 3 or Key 4 to toggle to the desired file. Press Key 5 to select.



16. Press Key 5 to confirm.

NOTE: Do NOT turn the ignition key off while the file is downloading. A Trails Data update will take about 5 minutes. A Trails and Map Data update will take about 35 minutes.

17. Wait for the process to complete. If the update indicator at the upper left corner of the screen is spinning, the update is processing even if the status bar stops moving.



NOTE: If an error message displays, if the update takes much longer than expected or if a black screen displays when Maps are selected (after update is complete), an interruption or other event may have resulted in corrupt files. Perform the update manually by following the Manual PID Update procedure on page 76.

18. The PID will reboot automatically when the download is complete.
19. Turn the ignition key off.
20. Remove the USB flash drive from the vehicle. Close the protective cover on the USB connector.
21. Return the USB connector to its secured position if it was moved when connecting.



22. Repeat steps 3-7 to verify the update in SYSTEM INFO. The “Trails date” should now reflect the more recent file date.



23. Press Key 3 to exit.
24. Perform the following steps for snowmobiles after every update.
- *800 AXYS models*: Turn the ignition key off. Start the engine to allow the PIDD to automatically initialize (AWD indicator will disappear when completed).
 - *600 AXYS and all non-AXYS models*: Turn the ignition key off. Perform the manual initialization procedure. See page 39.

Manual PIDD Update

Use this procedure only in the event of a failed update using the previous procedure.

1. Delete the formerly downloaded (corrupt) files from the USB drive. Return to RiderX.com and download new files. See *Download the Data* on page 70.
2. Turn the ignition key off for at least 10 seconds.
3. Connect the flash drive to the USB connector on your vehicle.
4. Press and hold any PIDD key while turning the ignition key to the ON/RUN position. Continue to hold the PIDD key until "Booting..." is no longer displayed. Release the PIDD key.
5. Return to page 73 and perform steps 13-24 of the *Update the PIDD* procedure.
6. For more assistance:
 - See your Polaris dealer
 - Go to RiderX.com
 - Go to Polaris.com (Select your product group and click on the "Help" link at the upper right corner of the page. When the help page displays, look for "Helpful Links" at the right side of the page.)

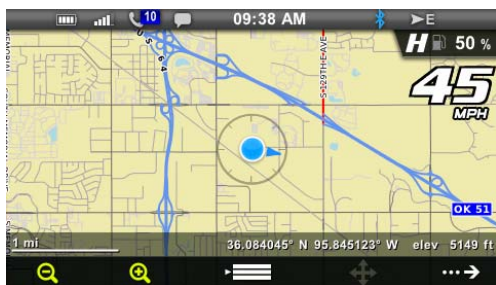


Verify the Update in MAPS/TRAILS Display

1. Press any key to display the PIDD screen icons.
2. Press Key 3 to display the main menu options.
3. Toggle to MAPS/TRAILS. Press Key 3 to select.
4. Read the warning message that displays.

"WARNING! Maps/Trails are supplied as an aid and should not be used for any purpose requiring precise measurement of direction, distance of location. Polaris makes no warranty as to the accuracy or completeness of this map data."

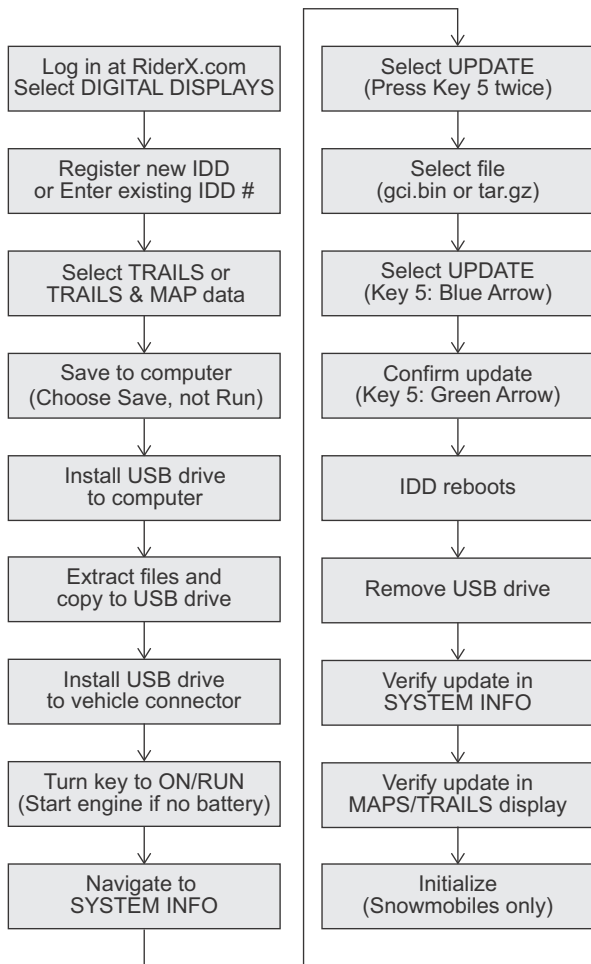
5. Press Key 3 to accept.
6. Press any key to display the PIDD screen icons.
7. Press Key 1 multiple times to zoom out.



8. Verify that the updated trails data is on map. Toggle to System Settings > SYSTEM INFO. The Trails and Map dates should now reflect the more recent file dates.

Update Process Flow Chart

This flow chart is a condensed version of the procedures outlined on the preceding pages.



Frequently Asked Questions

Q: How do I register my device?

A: Log in at RiderX.com to register your device and receive access to maps and trails updates. See page 69.

Q: How do I update my trails/map on my display?

A: Log in at RiderX.com to download the latest MAPS/TRAILS data. Then transfer the files to the PIDD using a USB flash drive. Refer to Update TRAILS or MAPS/TRAILS Data on page 69.

Q: How do I find the USB connection on my specific vehicle?

A: Refer to USB Connection Locations on page 66.

Q: How can I place, name and save a waypoint?

A: Refer to GPS/Tracks Map on page 16.

Q: Why does my display not acquire satellite signal or GPS?

A: The GPS can take a few minutes to lock from a cold start. After warm-up, if less than 4 satellites are shown in the GPS satellite screen move the vehicle to an area free of overhead obstructions. Refer to GPS Settings on page 21.

Q: How can I save, import and export a track or waypoint?

A: Refer to GPS/Tracks Map on page 16 or Importing and Exporting Tracks and Waypoints on page 23.

Q: I get a "Memory Full" warning while in the MAPS/TRAILS screen, what should I do?

A: You are reaching the limit allowed for an individual track. Save the current track and start a new track. Up to 10 tracks can be saved.

Q: How can I select different fuel types on the display for my snowmobile?

A: Refer to Fuel Type Selection on page 43.

Q: How do I set the security function on the display for my snowmobile?

A: Refer to Lock the Ignition on page 45.

Q: How do I connect my phone via Bluetooth to the PIDD?

A: Refer to Bluetooth on page 52. Refer to the phone's user manual for specific Bluetooth functionality.

Q: How do I change the screen brightness from day to night mode?

A: Option 1: While viewing the main menu screen, press Key 1 to switch between Day/Night mode.

Option 2: Main Menu > System Settings > Display > Day/Night

Q: How do I find what version of software my display currently has?

A: Main Menu > System Settings > System Info > Config File

Q: How do I set the clock on my display?

A: Option 1: Make sure the time zone (GMT offset) and daylight savings mode is correct for your location if in GPS mode. See page 32. GPS automatically sets the clock when there is a locked GPS signal.

Option 2: Main Menu > System Settings > Time

Q: What happens if I lose or forget my security code for my snowmobile?

A: If you lose or forget your code please see your authorized Polaris dealer to have the code reset to the default code (000). Only authorized Polaris dealers may reset a lost or forgotten security code.

Screen Locked “Frozen”:

1. Reset the PIDD by pressing and holding KEY 5 for 20 seconds.

Screen Goes Black During Update:

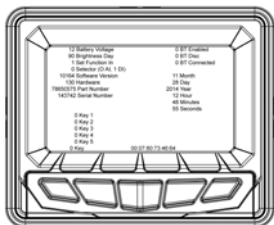
Typically caused by a failed update or corrupted file on USB flash memory drive.

IMPORTANT: Formatting the flash drive will erase all of its contents.

1. Remove flash drive and re-format as FAT 32.
2. Re-download latest update files from RIDER X website.
3. Verify downloaded files are not in a folder on the flash drive and non-PIDD files are cleared from drive.
4. Turn off PIDD with key switch (disconnect battery power or turn off engine if applicable) and wait for at least 10 seconds.
5. Plug USB drive into USB port.
6. Press and hold any key on keypad and then turn on PIDD.
7. Once “Booting” is no longer shown on the screen, release the key button.
8. The PIDD will go into bootloader mode. Use the PIDD key buttons to select the update file on the flash drive and install.

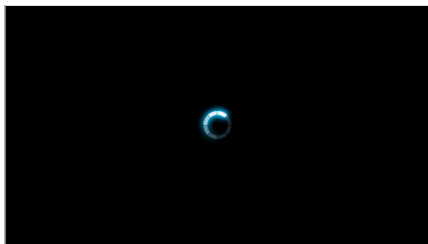
White Screen

If the following screen is displayed after the PIDD turns on, the PIDD was inadvertently left in the diagnostics mode during manufacture testing.



1. To exit this mode, push and hold KEY 5 until the PIDD reboots.
2. After re-booting the PIDD, update the PIDD with the most-current software, and applicable RIDER X trails and maps software.

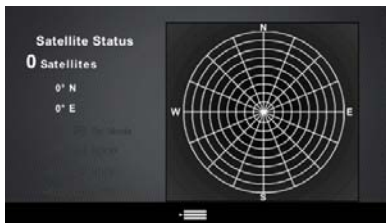
Booting Screen



A booting screen is displayed when the PIDD is powered on. Depending on the model and version of firmware loaded on the PIDD, the booting screen will appear as a circular icon (shown above), or the word, “booting” will appear on the display.

GPS antenna not communicated with display (DOP window greyed out)

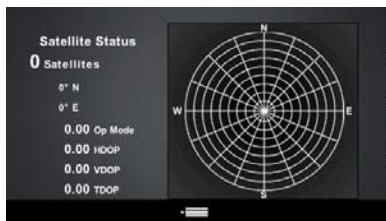
The HDOP, VDOP, and TDOP fields are greyed out and there is no position data.



1. The antenna is either not powered, defective, or there is a CAN communication link wiring issue. Check pinout on antenna connector.

No satellite reception (DOP values are all zeros)

CAN communication link between antenna and display is functional, but antenna has not yet acquired satellites.



1. There will be no speed indication on the display. This is normal during the first 30 to 90 seconds after power up if the GPS has been off for several days.
2. If the antenna has been off for a few hours the signal should be acquired in a few seconds. If satellites are not acquired after several minutes, check for clear view of the sky or interfering electrical devices near the antenna.
3. If these are ok, antenna is possibly defective.

Poor satellite reception

The number of satellites is greater than zero, and the PIDD has acquired a signal from each satellite listed, but has not calculated a position or the position is not very accurate.



1. A HDOP number of 100 and no lat/lon indicates no position has been calculated. If a valid lat/lon number is indicated, but the HDOP number is still high (>5), the position will not be very accurate. The speed indication on the display will jump around and the position at rest in the map screen will jump around. This could be due to poor visibility of the sky, electrical interference or a defective antenna.

Good satellite reception

Typically you will see more than 4 satellites and HDOP numbers less than 2.





For your nearest Polaris dealer,
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