



DataStorm D2 Software

v3.7.5

Release Notes



* **New partial isolation routine [Xpol] to improve connection reliability**

A new Xpol routine has been introduced for improved connection through the satellite.

> Automatic

* **New background peaking option**

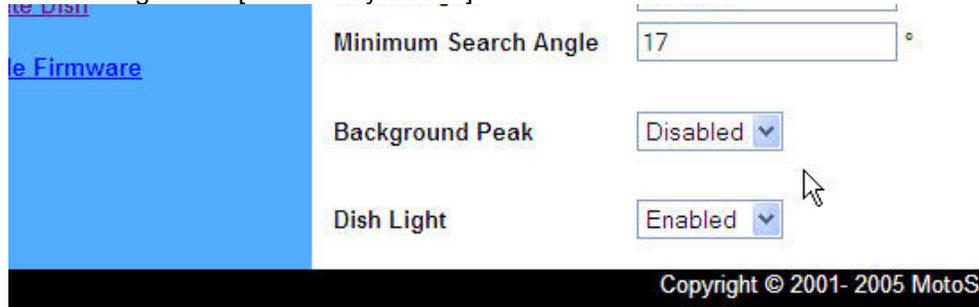
If enabled when the signal quality drops below 5 points, the dish will automatically repeak itself for optimal signal gain.

Location: >Configuration [Disabled by default]

* **New dish light enable option**

Adds the ability to turn off/on the blue LED dish lights.

Location: > Configuration [Enabled by default]



* **New skew origin setting (to help align dish)**

After performing a successful Xpol the D2 will take the projected skew of the satellite and the actual ending skew value and make the necessary adjustments to even out the value.

> Automatic

* **New telnet GPS command for debugging GPS problems**

Shows the following information about GPS:

version-Version of the upper control board

sats-The number of GPS satellites currently found

max # sats-The maximum number of GPS satellites ever found

first time sat-The time it took to see the first GPS satellite

lock time-The time taken to acquire a GPS lock in order to find satellite [4-5 GPS satellites required]

temp-The upper control board temperature

By default this will refresh once a second for 1000 seconds.

> Telnet > type 'GPS'

```
Telnet 192.168.0.250
DATASTORM % gps
    version = 7
    # sats = 6
    max # sats = 6
    first sat time = 47 sec
    lock time = 233 sec
    temp = 77
1 of 1000

    version = 7
    # sats = 6
    max # sats = 6
    first sat time = 47 sec
    lock time = 233 sec
    temp = 77
2 of 1000
```

*** New upper control board GPS reset**

The D2 will automatically manage and if necessary reset the Furuno GPS module on the upper control board. This eliminates many 'n/a' GPS situations that could be troubleshot as a failing GPS module.

> Automatic

*** New Modem status link**

Links directly to the satellite modem based on the modem gateway in the network configuration.

*** New resident firmware upgrade utility that allows users access to faster future updates without entering the bootloader**

Adds the ability to directly upgrade the software from the D2 HTML interface. By clicking the Upgrade Firmware link you can directly access the typical HTML upgrade utility and browse for and load a new software update without pressing any buttons, or changing any IP addresses.

The screenshot shows the D2 HTML interface. On the left is a blue sidebar with 'Standard Functions' (System Status, Configuration, Product Registration, About, Modem Status) and 'Advanced Functions' (Manual Motor Control, Calibrate Compass, Calibrate Tilt Sensors, Calibrate Dish, Upgrade Firmware). On the right, there are tabs for 'LNB' and 'LAN'. Below the tabs are signal quality and strength indicators, TX/RX status, and a search box. A 'SENSORS' section lists various measurements like Dish Elevation, Azimuth, Skew, GPS coordinates, and True/Magnetic Compass. Arrows point to 'Modem Status' and 'Upgrade Firmware' in the sidebar.

This screenshot shows the 'UPGRADE FIRMWARE' utility. The sidebar on the left is identical to the previous screenshot, with an arrow pointing to 'Upgrade Firmware' labeled '1'. The main content area has a title bar 'UPGRADE FIRMWARE' and a warning message: 'DataStorm must shutdown in order to launch the firmware upgrade utility. This will be done automatically if you choose to continue. Click next to continue or cancel to quit.' Below the message are three buttons: '< Back', 'Next >', and 'Cancel'. An arrow labeled '2' points to the 'Next >' button.

*** Automatic network settings restart**

When changing any network setting [except **modem gateway**], the D2 will automatically reboot and try and connect at its IP address after a change has been confirmed.

Location: > Configuration > Configure Network Parameters

MOBILE TWO-WAY IN

ions

You have modified some configuration parameters that require a system restart. The system will restart in 10 seconds...

*** Enhanced iDirect support**

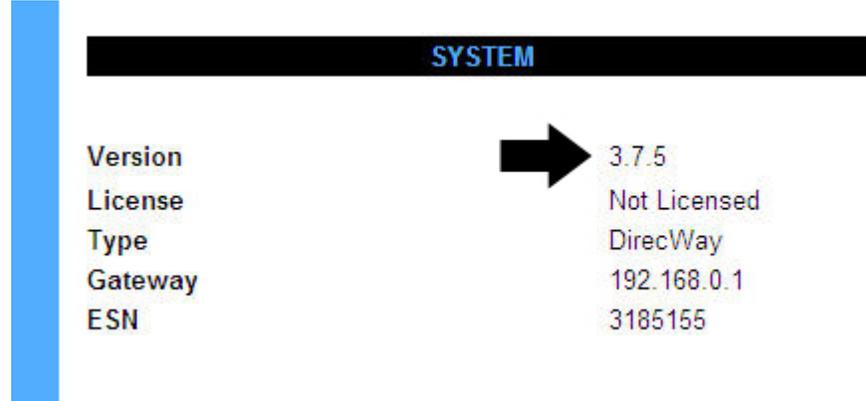
Adds more refined iDirect code.

> Automatic

*** New About information**

Adds the version of D2 firmware you are currently running.

Location: > About



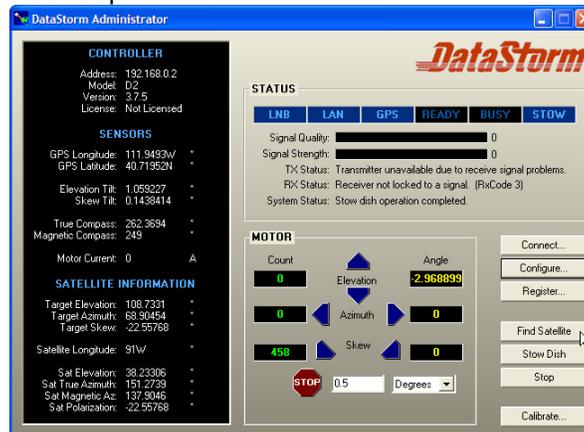
*** New Windows administration utility**

Similar to early releases of the DataStorm software, this Windows based utility allows users to run their DataStorm system while not using a web browser. Some features and benefits are:

- Faster refresh times on values
- All-in-one easy to manage interface
- Import and Export options on D2 configurations [using the 'Configure' button properties]
- Smoother running manual motor functions
- D2 IP address finder [using the 'Connect' button]
- Easy to setup installation

This new utility is for Windows XP users only. This is not a replacement for the HTML interface; rather, it's an optional user interface experience.

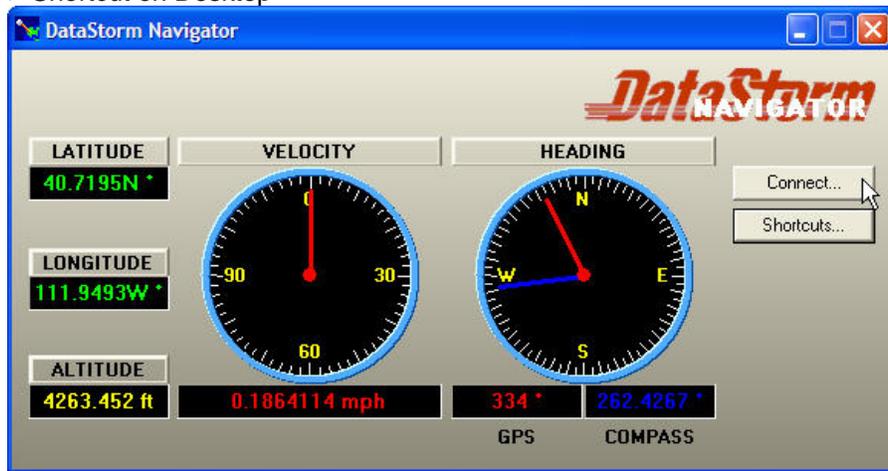
Location: > Shortcut on Desktop



*** BETA New Windows navigator utility**

Another Windows only utility. This enables DataStorm users to use the GPS information from their dish for other purposes. As it stands when a user is driving in a straight line for 3-4 seconds with Navigator open, you can use it as a compass calibrator to see how well your calibration of the compass was done. The GPS heading is always the value to compare against. If found that the compass is more than 15° off, a compass calibration is needed. Taking the GPS heading number in red, subtracting it from the compass heading in blue, will give you this offset in order to determine your compass accuracy. **Keep in mind that the accuracy will be non-effective when making any kind of turn or the vehicle is moving less than 10 mph.**

In the future this tool's abilities will be expanded using the now defunct 'shortcuts' button.
Location: > Shortcut on Desktop



*** Added automatic network clock update**

When the DataStorm gets online it will automatically set its internal clock via a web based time server.

> Automatic

*** Removed "checking last known position" when changing satellites**

*** Default azimuth search window in 45°**

The default search window in azimuth is now set at 45° instead of 25°