

# **SPRINT-Nav Mini Release Notes**

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### 1.3.641

This software release is based on the v1.2.607 and contains breaking changes to the Machine to Machine API, for command and control. Specifically, the gRPC + Protocol Buffer and JSON implementations. The underlying .proto files have been expanded and an "any" field has been added. Sonardyne do not intend to regularly make breaking changes to any API.

- The new API is available below, which contains a link to documentation containing gRPC code examples in <a href="Python">Python</a>, <a href="C#">C##</a> and <a href="C++">C++</a> and also comprehensive JSON examples.
  - o https://github.com/Sonardyne/son-idl

This is not a mandatory update for anyone not using the API, only API functionality has changed. however, the old API is now deprecated, and API users should move to this version going forwards.

Improvements are detailed below.

#### Notes

Added "Any" field to .proto used to mark if data is public (user) or private (Sonardyne)

Added ability to request minimum/maximum boundaries for allowable values

API responsiveness improved, commands should now be expected to be actioned in milliseconds, not seconds as previously

.proto files updated to <a href="https://github.com/Sonardyne/son-idl">https://github.com/Sonardyne/son-idl</a>

Extensive changes and improvements to documentation to make the API easier to work with <a href="https://sonardyne.github.io/son-idl">https://sonardyne.github.io/son-idl</a>

### 1.2.607

This software release is based on the v1.1.273 release and supports all SPRINT-Nav Mini variants (Navigator and Guidance).

This update includes:

- New Web UI colour theme
- Internal battery
- Output Triggers
- ADCP functionality
- Other Bug fixes and Improvements, see table below.

Notes Notes Notes	
Configure a manual USBL latency	
Rebrand of web user interface	
Addition of TSS1 output message (not including heave)	
Addition of EM3000 output message	
Addition of HDT output message	



#### **Notes**

Addition of a PSONDIGI output message to output pressure from SPRINT-Nav pressure sensor

Addition of 1 PPS and ZDA output (time server) functionality

Addition of NTP client functionality

Use \$PSGDS message for SV input

Add "Port link" functionality allowing the viewing and control of data from connected serial devices on a network port

Added power off button to shutdown CPU and DVL

Velocity quality added to data viewer

GNSS, USBL and XPOS Manual Quality Noise User Configurable

Support Output Triggers for outputting ZDA + 1PPS

Allow logfiles to be downloaded over SFTP

Support ADCP Configuration and output. ADCP is license controlled functionality.

View comms in all input configuration pages

Alarms visible on all pages

Manual XPOS update

Raw sensor acceptance. Highlight how many observations are accepted/rejected in last 60s.

Add LNAVUTC output message

API over ethernet (Protocol buffers + gRPC)

See <a href="https://github.com/Sonardyne/son-idl/releases">https://github.com/Sonardyne/son-idl/releases</a> for latest version

Allow use of Mxx and Bxx transponder codes in PSIMSSB

API over ethernet (JSON)

Update User Manual to Revision B4

### 1.1.273

You can keep the text in here from last time a software update happened. So that there's a history going back as to what we have changed and why.

#### **Notes**

Update user manual to revision B3

# 1.1.229

You can keep the text in here from last time a software update happened. So that there's a history going back as to what we have changed and why.

#### **Notes**

Addition of startup messages on all SPRINT-Nav Mini serial ports containing IP Address and baud rate of RS232-1

SON2 output messages requires a space between Heading and Variance fields

Update user manual to revision B2.



# **Software/Hardware Compatibility**

The following instrument firmware and software versions have been tested with the latest software version. As a minimum, these firmware versions must be installed in each component when used with this version:

Instrument / Software	Firmware / Software Version
Janus	1.6.1.14
Messaging Extractor	1.02.00.127

# **Software Requirements**

Tested on Google Chrome. If the installation does not work first time it is recommended to power down the SPRINT-Nav mini and then upload the new firmware to the unit within 5 minutes of the web user interface being available. This will speed up the loading of the firmware.

# **Hardware Requirements**

Optimised for 1920x1080 displays.

## **Additional Information**

Improvements will be made in a subsequent version of SPRINT-Nav mini software (1.4) to solve the below known issues:

- Users can currently set a loopback address of 127.0.0.1 on the unit, this will cause the unit to be non-responsive and requires it being sent back to Sonardyne.
- Additional data will be added to the GGA and Depth fields in PD0.
- ADCP data output on PD0 may fail if over 160 bins are set, a limit of 150 should be used with 1.3.641 and 1.2.607.
- A "get" configuration for DVL will fail unless a set command has already taken place, this will be resolved in a future release.