



# Marksman & Ranger 2

## Release Notes 6.03.03



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## 6.03.03

**From 6.03.01 onwards Ranger 2 / Marksman will not install/run on windows 7. For more information on windows 7 please contact customer support, using the details at the end of these release notes.**

### Hardware Requirements

Marksman and Ranger 2 have the following computer hardware requirements to run

Item	Minimum Specification	Recommended Specification
CPU	i5 2.8GHz	i7 2.8GHz
Memory	8 GB RAM	8 GB RAM
Harddisk	240 GB SSD or hard disk	500 GB SSD
Graphics	32-bit colour, Direct-X V10 or later	32-bit colour, Direct-X V10 or later
Monitor Resolution	1280 x 1024	1920 x 1080
USB	4 USB Ports	4 USB Ports
Operating System	Windows 10 Professional x64	Windows 10 Professional x64

### Firmware

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

Instrument	Firmware Version
HPT	4.02.01.01
MRT	1.00.04.05
NSH	2.00.03.107
ESH	1.00.07.00
Lodestar	3.02.01.1019
C6/GyroC6	3.12.07.13
WSM6+	3.05.00.04
RN6	3.05.06.12
WMT	3.12.02.02
PGT6	3.05.09.07
SST6	1.00.04.01
Marker 6	1.00.04.03
DART	3.02.02.11
AVC	2.04.02.06
iWand	1.01.01.05



## New Features

### Summary

Functional Area	Ref	Description

## Bug Fixes

For more details on any of the fixes below please contact Sonardyne customer support

Functional Area	Ref	Description
Tracking	MMR2-34304	HPT3000 AHRS offsets not being applied
CASIUS	MMR2-34303	Export button in CASIUS saving results incorrectly to mini Ranger 2 and GyroUSBL transceivers.



## 6.03.02

**From 6.03.01 onwards Ranger 2 / Marksman will not install/run on windows 7. For more information on windows 7 please contact customer support, using the details at the end of these release notes.**

### Hardware Requirements

Marksman and Ranger 2 have the following computer hardware requirements to run

Item	Minimum Specification	Recommended Specification
CPU	i5 2.8GHz	i7 2.8GHz
Memory	8 GB RAM	8 GB RAM
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WSM6+	3.05.00.04
RN6	3.05.06.12
WMT	3.12.02.02
PGT6	3.05.09.07
SST6	1.00.04.01
Marker 6	1.00.04.03
DART	3.02.02.11
AVC	2.04.02.06
iWand	1.01.01.05



## New Features

### Summary

Functional Area	Ref	Description
Manual	MMR2-34286	Update the NSH-Tcvt Cable drawing
Manual	MMR2-34289	Clarify Micro Ranger 2 manual features
Support	MMR2-34299	Update DAT for SQL2019 and databases from older servers
Security	MMR2-34288	Update ApplicationSetting code (not to create instance name)
Security	MMR2-34287	Uninstall SQL 2014 from Windows 10 (Sonardyne instance only).

### Bug Fixes

For more details on any of the fixes below please contact Sonardyne customer support

Functional Area	Ref	Description



## 6.03.01

**6.03.01 for all Ranger 2 and Marksman editions includes all enhancements and fixes released in 6.02.01 (which was only released for the Micro-Ranger 2 edition). Full details of all changes are included in these release notes.**

**6.03.01 will not install/run on windows 7. For more information on windows 7 please contact customer support, using the details at the end of these release notes.**

## Hardware Requirements

Marksman and Ranger 2 have the following computer hardware requirements to run

Item	Minimum Specification	Recommended Specification
CPU	i5 2.8GHz	i7 2.8GHz
Memory	8 GB RAM	8 GB RAM
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## Firmware

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WSM6+	3.05.00.04
RN6	3.05.06.12
WMT	3.12.02.02
PGT6	3.05.09.07
SST6	1.00.04.01
Marker 6	1.00.04.03
DART	3.02.02.11
AVC	2.04.02.06
iWand	1.01.01.05





## New Features

### Summary

Functional Area	Ref	Description
Average Fix	MMR2-34216	Can't create an average fix for an ROV
Average Fix	MMR2-33685	Please add lat/long to average fix report
Average Fix	MMR2-33371	Please add the system configuration before the average fix results in the PDF report.
CASIUS	MMR2-34189	Add a Before/Calculated position for each beacons in the results page
CASIUS	MMR2-32950	Show before and after tcvr offsets, heading pitch and roll and SV on the CASIUS results tab
Deployment Machine	MMR2-34174	Please clarify Deployment Machine warning messages.
Deployment Machine	MMR2-33179	When Deployment Machine status logo is double clicked the UI now opens
Installer	MMR2-34191	Modify the Release folder with all required files
Installer	MMR2-34160	Add .net 4.8 installer to Ranger2/Marksman
Installer	MMR2-34030	Update R2/MM release notes shortcut to launch ReleaseNotes.pdf instead of VersionHistory.rtf.
Installer	MMR2-34146	Remove installer for Adobe Reader - allow the user to choose their own pdf reader
Instrumentation	MMR2-34233	Please add AvTrak6 to default list of transponders in Micro and Mini-Ranger 2 MF
Instrumentation	MMR2-16992	Beacon: Low battery C6 not raising an alarm
Library Updates	MMR2-34176	Update Logger's server management objects to support SQL Server 2019
Library Updates	MMR2-34170	Modify code and installer files to support SQL 2019
Library Updates	MMR2-34179	Upgrade the Chart library with SharpDx
Library Updates	MMR2-34167	upgrade the system status provider application (remote monitoring) to .net 4.8
Library Updates	MMR2-34152	Replace usage of Microsoft XML parser
Library Updates	MMR2-34151	Update .NET version to 4.8
Library Updates	MMR2-34148	Update version of SQL Server used to SQL server express 2019
Scheduler	MMR2-34183	Create configurable limit on number of CIS replies



Scheduler	MMR2-34182	Create CIS dongle flag
Security	MMR2-34190	Update and add the Installer tool LogWindowsEvent
Security	MMR2-34185	Update Utilities projects to .net 4.8
Security	MMR2-34162	As export controller I want to see range limits imposed
Security	MMR2-34161	Include SQL 2019 Express in Ranger 2 installer
Security	MMR2-34159	Remove merge packages from installer
Security	MMR2-34144	Remove pre-installer SE46 information
Security	MMR2-34147	As a user I would like Ranger 2 to not have to start in Administrator mode
Support	MMR2-34228	Marksman/Ranger 2 and Hardware User Manuals Link
Support	MMR2-34227	Add Marksman/Ranger 2 Training videos to the .iso
Support	MMR2-34009	Generate Log files for each install
Support	MMR2-33895	Add directory listing to CEF logs
Support	MMR2-28937	Add a dongle settings file to the CEF
Support	MMR2-14847	CEF Export Tool - Include Dongle information in the SystemInformation.txt file
Time Sync	MMR2-34180	Add an SNTP client TOD device
Tracking	MMR2-34001	Allow vehicles to be added to Mini and Micro-Ranger 2 to enable a depth sensor to be used in high elevation tracking
Tracking	MMR2-33648	On a DP-INS system if all beacons are set to mobile an INS reset should be sent, so we don't provide a degraded position to the DP desk

### MMR2-34216 Can't create an average fix for an ROV

The Average Fix Tool now supports subsea vehicles, as well as mobile beacons.

### MMR2-33685, MMR2-22271 Changes to Average Fix Report

The Average Fix PDF report now includes more information to make it comparable to the CASIUS calibration report. The average fix can be used to confirm that the system performance has not changed since the last CASIUS calibration. An average fix report can be generated that records system settings, and performance prior to going to work without needing a full CASIUS calibration.



### MMR2-32950, MMR2-34189 Show before and after values on the CASIUS results tab

It is now easier to see the changes that a CASIUS calibration has made. The initial and computed values are now shown so that it is easier to see significant changes.

### MMR2-34174 Please clarify Deployment Machine warning messages

A tooltip has been added to the 'Position Unknown' warning message that is displayed when the operator has not fully deployed the pole, or fully opened the gate valve.

### MMR2-34233 Please add AvTrak6 to default list of transponders in Micro and Mini-Ranger 2 MF

Existing users of Mini or Micro-Ranger 2 MF will need a dongle update before AvTrak6 beacons will be offered in the 'Add Beacons' list. Use the 'Security Tool' to generate a dongle update request using the 'Request Update' button. Contact customer support for more details.

### MMR2-16992 Low battery beacon alarm

The system will now raise an alarm if a Compatt 6 reports that it has low battery.

### Library and Security updates

Various libraries have been updated, or replaced for Window 10 compatibility, and to enhance the software security. As a result of these change Windows versions prior to Windows 10 can no longer be supported.

### MMR2-34182 Create CIS option

A dongle flag has been created to control which product variants support CIS.

### MMR2-34183 Create a configurable limit on the number of CIS replies

Previously this was fixed at 10, but it is now possible to configure this value for different transceivers. Contact customer support for more details.

### Support updates

Several changes have been made to log more data to provide better customer support.

### MMR2-34180 Add an SNTP client TOD device

UTC synchronisation previously required a GNSS time feed. This remains the most precise way to synchronise time to UTC (approximately 1 micro second), but it is now possible to synchronise to UTC using an external NTP server.

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#### Note

**To connect to an NTP server involves connecting the system to a vessel network. It is essential that vessel IT security policies are followed to protect the system from viruses and other malware.**

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### MMR2-34001 Allow vehicles to be added to Mini and Micro-Ranger 2 to enable a depth sensor to be used in high elevation

Mini Ranger 2 and Micro Ranger 2 can now support 1 additional vehicle so that a mini beacon and a depth sensor can be used to track an ROV or a towfish. For existing users this feature may require a dongle update.



## MMR2-33648 On a DP-INS system if all beacons are set to mobile an INS reset should be sent, so we don't provide a degraded position to the DP desk

Once the Lodestar inertial position is no longer being aided by any seabed references, the inertial solution will now be reset so that free inertial data does not continue to be sent.

## Bug Fixes

For more details on any of the fixes below please contact Sonardyne customer support

Functional Area	Ref	Description
Average Fix	MMR2-34244	Average fix report contains tcvr error value not offsets
Average Fix	MMR2-34213	Average Fix Tool Units - offsets in the report are displayed in m when the rest of the system is in ft, and csv data is still in m
Average Fix	MMR2-34212	CSV export - depth data is displayed as a negative
Average Fix	MMR2-34211	Please display the depth of the average fix instead of positive z
CASIUS	MMR2-34249	OFS command not sent to GyroUSBL
CASIUS	MMR2-34234	Casius didn't converge due to no initial position for the beacon
CASIUS	MMR2-30004	Simplify names of discovered beacons so that they display correctly in the CASIUS PDF report
CASIUS	MMR2-33719	Ensure resources released on exit from CASIUS
CASIUS	MMR2-33525	Resolved untrapped exception.
Deployment Machine	MMR2-30162	Improve raising/clearing of Deployment Machine alarms
Deployment Machine	MMR2-33177	Disable Deployment Machine Close Valve button when powered off
Deployment Machine	MMR2-33176	Change description of Deployment Machine fault message
Deployment Machine	MMR2-33174	Report Deployment Machine fault for bad positions
Installer	MMR2-34267	Create DAT shortcut in the R2/MM menu
Instrumentation	MMR2-34255	SST6 has release option but no commands are sent
Instrumentation	MMR2-34253	Can't add a WSM6+
Instrumentation	MMR2-34251	Unnecessary commands sent when disabling a GyroC6
Instrumentation	MMR2-34246	Output telegram source changes by itself with no user interaction



Instrumentation	MMR2-34230	Changing RovNav Tx signal not applied
Instrumentation	MMR2-34215	DigiQuartz depth sensor does not persist its units if disabled from then re-enabled for use in tracking
Instrumentation	MMR2-24574	Tracking should use the highest power if all beacons are on the same CIS
Instrumentation	MMR2-33976	Missing field in PSONMEAS telegram output
Instrumentation	MMR2-33708	Get status does not send SUB command
Instrumentation	MMR2-33437	discover of a wsm6+ and not identify > import causes beacon not to be added with the exception
Instrumentation	MMR2-32912	If you change the telegram port to another ESH port the data is no longer output
Instrumentation	MMR2-34257	System failed to start tracking when Compatt 6 added in Quick Track Tool
Instrumentation	MMR2-34270	Pinger Locator will not plot AODC beacons
Instrumentation	MMR2-34243	CIS Telemetry Track - if one of the beacons being tracked is asleep no wakeup tone is sent
Remote Control	MMR2-33677	Simplify automatically generated names for discovered beacons for use over remote control UI
Remote Control	MMR2-33674	Resolve Async 'On change' output issues when GPS active
Remote Control	MMR2-33623	Correct RCT connection over UDP when displaying CASIUS legs
Remote Control	MMR2-33609	Remote Control protocol inconsistent when adding WSM6+
Remote Control	MMR2-34268	Importing a large number of beacons via csv results in R2 adding some as omni and some as directional
Security	MMR2-34252	It's possible to exceed the 99 beacon limit by using Discover
Security	MMR2-33873	Ranger 2 / Marksman need to be able to run from a Windows 10 Standard User account
Support	MMR2-34266	Reports are not flagging simulate mode correctly.
Support	MMR2-34248	Admittance command parsing does not support negative numbers.
Support	MMR2-34204	Pulse position depth collected whilst tracking results in Log file filling up with Job data
Support	MMR2-34177	Data is not always exported in time order
Support	MMR2-33864	Resolve CEF generation problems
Support	MMR2-33503	waypoints cannot be imported in Micro-Ranger 2
Support	MMR2-33396	Resolved issue writing Events CSV files



Support	MMR2-33232	If you switch between jobs an alarm is raised saying 'Job save failed. Device: Ⓓ has no corresponding Reference Frame'
Time Sync	MMR2-34202	Prevent TOD Re-Sync button causing the application to crash if NSH not present.
Time Sync	MMR2-33928	2s time error seen when synchronising to UTC
Time Sync	MMR2-33906	Alarm raised reporting huge time error
Time Sync	MMR2-33896	Please limit the NSH UTC Sync offset to +/-500ms
Tracking	MMR2-34247	Kalman filter creating 2 readings per update when an optimized HPT is used with TS9 global payload
Tracking	MMR2-34224	Resolve telemetry tracking issue when beacon was moved from mobile to ROV
Tracking	MMR2-33607	Don't raise the 'telegram not possible' alarms if the user has stopped tracking
User Experience	MMR2-34256	WSM6+ release text refers to WSM6Plus
User Experience	MMR2-34245	PitchRoll1 added to another instrument rather than vessel
User Experience	MMR2-34238	Please grey out the telemetry track box when a beacon is set to a NAV channel
User Experience	MMR2-34223	Output Editor is sluggish and slow to create new outputs
User Experience	MMR2-34079	Choice to display position in Latitude / Longitude is not persistent
User Experience	MMR2-33590	Job not created correctly
User Experience	MMR2-34219	Tracking single beacon at long range causes position data to overlap labels in position pane
User Experience	MMR2-34262	Changing an output telegrams port will still show the original port until UI is closed and re-opened
User Experience	MMR2-34214	System changes from tracking in world reference to waypoint reference when the system is rebooted
User Experience	MMR2-34254	GyroC6 Off alarm takes a while to clear when GyroC6 is turned on
User Experience	MMR2-34276	Power is left blank when importing attached CSV.



## Contact Information

For further support please contact:

### **24/7 Emergency Helpline**

T. +44 (0) 1252 877600

### **Email Support**

[support@sonardyne.com](mailto:support@sonardyne.com)

### **Website**

[www.sonardyne.com](http://www.sonardyne.com)