Release Note

Topic	**FW V1.04 – PMP 1.04 Firmware for NEO-D9S** UBX-20006297
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Contents

1 General information

1.1 Scope

The release note describes firmware PMP 1.04 for L-band correction data receiver NEO-D9S-00B. This FW V1.04 supersedes all prior versions.

1.2 Related documentation

[1] NEO-D9S-00B Data sheet, R05 (UBX-18012996)
[2] NEO-D9S-00B Integration manual, R03 (UBX-19026111)
[3] NEO-D9S-00B Interface description, R02 (UBX-19048765)
[4] Release Note FW V1.03 - PMP 1.03 Firmware for NEO-D9S product (UBX-19054388)

2   Released firmware image

Firmware image for module NEO-D9S	
File	ROX_JU_FINAL_PMP_DCDC.af360e49a19cdd2d387404eb56e0738c.bin
FW version	EXT CORE 1.00 (cd6322)
Extensions	ROM BASE 0x118B2060 FWVER=PMP 1.04 PROTVER=24.00 MOD=NEO-D9S GPS

2.1 Related software

Version 19.12 (or later) of u-center GNSS evaluation software is recommended for use.

3   Firmware description

3.1 Functionality

Firmware PMP 1.04 can be configured to receive and decode a selected L-band satellite signal and output the raw correction data.

3.2 Feature overview

Feature	Specification
Center frequency configuration steps	1 Hz, in the range 1525 MHz to 1559 MHz
Center frequency search window	0 to 65 kHz
User data rates	600, 1200, 2400, 4800 bps
Service identifier	Configurable
Descrambler	Configurable
Descrambling initialization vector	Configurable
Pre-scrambler	Enable/Disable
UniqueWord	Configurable
Communication interface	UART/USB/I2C/SPI
Communication speed	Up to 921600 baud UART, USB 2.0
Software backup mode	Available

3.3 New features and improvements compared to previous release

3.3.1 New features

- None

3.3.2 Improvements

- Improved USB functionality robustness.

3.4 Removed features

- None

3.5 Known limitations

• None

3.6 Configuration

For details, refer to the Interface description document [3].

4 Message interface

The detailed message interface is described in NEO-D9S Interface description document [3].

Message	Class/ID	Description (Type)
UBX-RXM – Receiver manager messages		
UBX-RXM-PMP	0x02 0x72	• Correction data output (Periodic)
UBX-RXM-PMREQ	0x02 0x41	• Power management request (Command)
UBX-CFG – Configuration and command messages		
UBX-CFG-PRT	0x06 0x00	• Polls the configuration for one I/O port (Poll request) • Port configuration for UART ports (Get/set) • Port configuration for USB port (Get/set) • Port configuration for SPI port (Get/set) • Port configuration for I2C port (Get/set)
UBX-CFG-RST	0x06 0x04	• Reset receiver / clear backup data structures (Command)
UBX-CFG-VALDEL	0x06 0x8c	• Delete configuration item values (Set) • Delete configuration item values (with transaction) (Set)
UBX-CFG-VALGET	0x06 0x8b	• Get configuration items (Poll request) • Configuration items (Polled)
UBX-CFG-VALSET	0x06 0x8a	• Set configuration item values (Set) • Set configuration item values (with transaction) (Set)
UBX-MON – Monitoring messages		
UBX-MON-HW2	0x0a 0x0b	• Extended hardware status (Periodic/polled)
UBX-MON-VER	0x0a 0x04	• Poll receiver and software version (Poll request) • Receiver and software version (Polled)
UBX-INF – Information messages		
UBX-INF-ERROR	0x04 0x00	• ASCII output with error contents (Output)
UBX-INF-NOTICE	0x04 0x02	• ASCII output with informational contents (Output)
UBX-INF-WARNING	0x04 0x01	• ASCII output with warning contents (Output)
UBX-ACK – Ack/Nak messages		
UBX-ACK-ACK	0x05 0x01	• Message acknowledged (Output)
UBX-ACK-NAK	0x05 0x00	• Message not acknowledged (Output)