

Note: Only customer-relevant changes are summarized below.

## RT-500-M System [Rev 4.04] / [Rev 4.05] → [Rev 4.06]

### RT-500-M Application Software [Rev. 2.20] → [Rev. 2.26]

- **Changed license concept:** The license key is generated based on a RT-500-M DCU serial number (RT-500-M antenna unit serial number is not needed). This allows for the replacement of the antenna unit without the need to generate a new license key for a system.
- **Time Settings Menu:** Added setting for seconds (see User Manual RT-500-M [Rev 1.07], chapter 7.4.3.14 Time Settings).
- **LAN Configuration Menu:** Added the ability for up to eight users to simultaneously connect to the DCU via network (see User Manual RT-500-M [Rev 1.07], chapter 7.4.4.3 LAN Configuration).
- **NMEA DF Remote Menu:** Added filter for standard baud rates for the COM interface (see User Manual RT-500-M [Rev 1.07], chapter 7.4.4.2 NMEA DF Remote, section "Baudrate").
- **COM Monitor:** Added Monitoring function for input sentences on COM1, COM2 and COM3 (see User Manual RT-500-M [Rev 1.07], chapter 7.4.4.1 COM Monitor).
- **Compass Configuration:** Added header for a magnetic compass (HDM) (see User Manual RT-500-M [Rev 1.07], chapter 7.4.4.4 NMEA Compass, section "NMEA Header").
- **NMEA input sentences for GLONASS and GALILEO:** Added RMC (Recommended Minimum Sentence C) sentences for GNSS and GLONASS. RT-500-M DCU understands "\$GPRMC" and "\$GNRMC" sentences.
- **Setup Menu:** Added measurement and display of RT-500-M DCU input voltage in Setup/System menu (see User Manual RT-500-M [Rev 1.07], chapter 7.4.5 Service).

## RT-500-M System [Rev 4.06] → [Rev 4.07]

### RT-500-M Application Software [Rev. 2.26] → [Rev. 3.00]

- **DF Remote Functionality:** Added NMEA sentence for time setting (see NMEA Protocol Documentation for RT-500-M / RT-800 [Rev 3.01], chapter 5.2.27).
- **SAR Scan Functionality:** Added the ability to remove 243 MHz frequency from scan algorithm (see User Manual RT-500-M [Rev 1.07], chapter 7.2.5).

## RT-500-M System [Rev 4.07] → [Rev 4.08]

### RT-500-M Application Software [Rev. 3.00] → [Rev. 3.01]

- **LAN Configuration Menu:** Added settings for Gateway and Netmask (subnet mask) as required for network configuration (see User Manual RT-500-M [Rev 1.07], chapter 7.4.4.3 LAN Configuration).
- **Scan List Functionality:** Scanning of a wider frequency range due to changed scan algorithm (see User Manual RT-500-M [Rev 1.07], chapter 7.2.6 Scan List).

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## RT-500-M System [Rev 4.08] → [Rev 4.09]

### RT-500-M Application Software [Rev. 3.01] → [Rev. 3.02]

- **LAN Configuration Menu:** TCP port setting added to menu.
- **Status out (Pin 10):** Status out is triggered only with internal error (warnings are excluded).
- **NMEA Protocol optimization:** Bearing information disappears immediately after RF- signal has been switched off.

## RT-500-M System [Rev 4.10] → [Rev 4.11]

### RT-500-M Application Software [Rev. 3.02] → [Rev. 3.03]

- **GPS NMEA sentence:** NMEA sentence according to the IEC 61162-1 (2016) supported. Flexible support of NMEA talker IDs (GPS, GLONASS, Gallileo etc.).
- **Compass Protocol optimization:** Multiple compass headers allowed ("NMEA bad data" warning message is no longer displayed if different compass headers are present on COM interface).
- **COM Port:** NMEA messages from Compass and GPS can be sent to the same COM port (Only if these messages do not overlap).
- **Audio:** The test signal for antenna unit is muted at the speaker output when switching on the device, the volume of the test signal is reduced to possible minimum at the line output.
- **Hotkey "Ch16" during a Scan:** By pressing the hotkey "Ch16" during a scan, a dialog for stopping the scan appears.
- **Hotkey "Ch16" and new frequency input:** The new active frequency is switched on automatically via the frequency input dialog.
- **Administrator and Operator access level:** Visual separation between these access levels added.
- **Naming change:** "Antenna offset" to "Antenna Mechanical Correction".

Note: (15.12.2021) GPIOs initialization issue ("ALARM relay" and "Prog. Out" does not working).

## RT-500-M System [Rev 4.11] → [Rev 4.12]

### RT-500-M Application Software [Rev. 3.03] → [Rev. 3.04]

- **NMEA sentence:**
  - DCU supports NMEA sentences with TAG block (TAG information is not used).
  - Increased maximal length of the NMEA message from 79 to 1500 bytes.
  - DCU process NMEA sentences with the same talker IDs for compass and GPS connected to the same COM Port of DCU (e.g.: \$INHDT and \$INRMC).
- **GPS NMEA sentence:** Implemented \$xxGGA sentence content for position calculation (priorities: first RMC then GGA).

Note: (15.12.2021) GPIOs initialization issue ("ALARM relay" and "Prog. Out" does not working).

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## RT-500-M System [Rev 4.12] → [Rev 4.13]

### RT-500-M Application Software [Rev. 3.04] → [Rev. 3.05]

- **GPIO:**
  - Optimization for GPIOs initialization ("ALARM relay" and "Prog. Out" functions restored)
- **Bearing indication hold time:**
  - Endless and zero settings removed

## RT-500-M System [Rev 4.13] → [Rev 4.14]

### RT-500-M Application Software [Rev. 3.05] → [Rev. 3.06]

- **Update:**
  - Problem with updating earlier revisions (Rev. 2.20 – Rev. 3.00) fixed
- **COSPAS-SARSAT Decode:**
  - Decoding and displaying of additional protocol:  
RLS, RLS Test, ELT(DT), ELT(DT) Test, ELT Cancel
  - Protocol identifier list in CPSSDTA1 sentence for Remote NMEA expanded:  
"R" for RLS; "E" for ELT(DT)
- **Bearing Page:**
  - Optimizations: more stability, better data timing
  - Problem with last bearing time indication after switching to other pages is fixed.
- **Bearing indication hold time:**
  - Endless and zero settings added
- **Alarm:**
  - Logic for ELT alarm trigger changed (alarm needs to be confirmed)
  - Alarm indication on display disappears after 90 seconds, if the alarm (Decode/Beeptone/ELT) is confirmed.
- **Remote Control:**
  - Remote Mode with condition „E" added (start SAR Scan or Monitoring Scan with ELT/PLB filtering)
  - If PTT is used, bearing value is blocked.
  - Skip frequency for Marine scan with SCANOPT command added.
  - Start of Fast Channel Scan is blocked if no frequencies where defined.
  - Squelch setting optimized for whole Scan List (Previously, it was only applied to the bearing frequency).
  - Allow remote change of frequency while in Decode mode.
- **Graphics:**
  - Warning and Alarm indications overlapping fixed.
- **Dialogs:**
  - Opening of Squelch Dialog in other dialogs by pressing the squelch key disabled.