

# Summary of changes RAY17

## Release 1.1.10.0

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2013-11-29

Notice: Should the station be equipped with FW lower than 0.1.14.0, the FW 0.1.14.0 has to be installed prior to this FW version installation (see lower).

- New features:
  - SNMP: New value added: Calculated BER.
  - SNMP: New values added: User data throughput EthInThroughput and EthOutThroughput.
  - Web: On-line help items addition and fixes.
  - Web: Copy local time feature to make the manual time setting easier.
  - The nominal frequency table for RAY11 C,D updated.
  - The nominal frequency table for RAY24 updated.
- Fixed bugs:
  - SNMP: The maxNetBitrate value fixed. The output of this value is the maximum available user data throughput according to the installed feature key.
  - SNMP: A few minor fixes (ServiceVlanId, RfPower, ...).
  - The Link uptime calculation fixed.

## Release 1.1.5.0

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2013-08-12

Notice: Should the station be equipped with FW lower than 0.1.14.0, the FW 0.1.14.0 has to be installed prior to this FW version installation (see lower).

- New features:
  - New Ethernet phyttter drivers implemented.
  - Name of the following services changed (http, telnet, ssh)
- Fixed bugs:
  - Auto-negotiation at Ethernet interface fixed - 1000HD mode removed.

## Release 1.1.4.0

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2013-04-27

Notice: Should the station be equipped with FW lower than 0.1.14.0, the FW 0.1.14.0 has to be installed prior to this FW version installation (see lower).

- New features:
  - RAY11 A and B: Bandwidth 1.75MHz implemented. Higher modulation schemes at narrow bands implemented. Channels with bandwidth 40 MHz and channel spacing according to ITU-R F.387 added.
  - Radio link status indication by AIR status diode implemented.

## Release 1.1.3.0

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2013-04-27

Notice: Should the station be equipped with FW lower than 0.1.14.0, the FW 0.1.14.0 has to be installed prior to this FW version installation (see lower).

- New features:
  - Web interface Help system implemented.
  - RAY11 C a D: bandwidth 1.75 MHz implemented. Higher modulation schemes at narrow channels implemented.
- Fixed bugs:
  - RAY11: Fixes of the the internal tables with radio sensitivity which are used for ATPC.

## Release 1.0.1.0

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2013-04-12

Notice: Should the station be equipped with FW lower than 0.1.14.0, the FW 0.1.14.0 has to be installed prior to this FW version installation (see lower).

- New features:
  - FW numbering scheme adjusted.
- Fixed bugs:
  - Default GW lost fix. Default GW could be lost within specific working conditions.
  - Small fixes within MIB table.

## Release 0.1.18.0

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2013-04-10

Notice: Should the station be equipped with FW lower than 0.1.14.0, the FW 0.1.14.0 has to be installed prior to this FW version installation (see lower).

- New features:
  - So called "Frequency tables" are distributed as a part of the firmware starting with this version. It is not necessary to load them from the external file any more. It is still possible to choose one table from the predefined set of tables (if they do exist for the specific radio band).
  - The MIB table can be downloaded directly from the unit.
- Fixed bugs:
  - Unit polarization detection constants values fixed..
  - Multicast error fixed. User data speed were limited to approx. 100 Mbps in case of multicast+broadcast+undestined\_unicast packets of total capacity above 100 Mbps did exist in the user data traffic stream..

## Release 0.1.15.0

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2013-04-04

Notice: Should the station be equipped with FW lower than 0.1.14.0, the FW 0.1.14.0 has to be installed prior to this FW version installation (see lower).

Notice: Due to the Feature keys implementation, the User data speed Feature key has to be installed after the FW upgrade.

- New features:
  - Feature keys for User data speed limit implemented.
  - The Station Location configuration item added. This item is mainly intended for NMS supervision using the SNMP protocol.
  - Several items to SNMP added (actual output RF power, Link uptime, service ethernet).
  - RAY17 only: Antenna gain configuration added. The EIRP limit can be checked.
  - Spectrum analyzer continuous mode added.
  - So called "Frequency tables" (see user manual chapter 6.4.3) can be changed by user from the web and CLI interfaces.
- Fixed bugs:
  - Wrong SNMP values in negative temperature range fixed.

## Release 0.1.14.0

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2013-04-04

**\* Important notification: Installation of this firmware is necessary prior to any higher firmware version installation. Installation of this firmware version (0.1.14.0) has to be done by RACOM technicians. To be able to perform the remote installation, the ssh service access is sufficient.**

## Release 0.1.13.0

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2013-01-23

- New features:
  - Many enhancements of the web GUI
  - Station type (L/U) switch accessible from the web GUI.
- Fixed bugs:
  - SW fix due to new PHY chip revision