

<p style="text-align: center;">COMEGA® QP 2001 – 031 (3.x.16) RELEASE NOTES</p>

Date: December the 18th 2002

Current version 031 (3.xx.16)

With x correspond to:

0 for FTA (Free To Air)

1 for Viaccess

3 for Conax

1. Changes

with version 3.x.16:

- PMT Update modification. When the PMT is updated on the stream, the decoder was just looking for conditional access modifications but it was not looking at the whole program. Thus, for example if Audio and/or Video PID were changing, the decoder was not able to detect it. Now the receiver will parse the whole transponder when the PMT of the current program will be updated.
- Almost all "OSD blanks" has been suppressed from the software. "OSD blank" is a special mode of the MPEG decoder, which outputs a black picture instead of the MPEG stream. This mode is used when the user switches from one channel to another or when the reception is poor, the decoder displays a black picture till it can display a correct picture. In this new version, the decoder will use less this mode. Consequence is that the receiver may display strange pictures when the reception is poor or when the user (or the watchdog) switches channel.

with version 3.x.15:

- "VF" (Video Format) command has been added. This command can be used to cope with WSS (Wide Screen Signalling) signal. This WSS signal must be coped by the TV connected to the receiver: the receiver does not change the video format; it asks the TV to change it. The "VF" configuration is saved in the Flash memory so it remains the same after reboots. 4 modes have been designed:
 - "VF=0" disables the Automatic video format signalling. This is the default mode. In this mode the receiver has the same functionality than with the previous software version 3.xx.14.
 - "VF=1" enables the Automatic video format signalling. The receiver checks the Video format described in the DVB stream and in the Teletext stream and if necessary it activates WSS signal.
 - "VF=2" disables the Automatic video format signalling and forces the receiver to send the WSS signal corresponding to 4/3 Video format.
 - "VF=3" disables the Automatic video format signalling and forces the receiver to send the WSS signal corresponding to 16/9e Video format.
- "Q" command changing. This "Q" command was not described in the command list but it exists. Some of our customers were using it. Unfortunately, this command was designed for test and is not safe for the QP 2001 behaviour. Things that were dangerous for the QP 2001 in the "Q" command have been removed.
- The user parameters structure saved in Flash memory has been modified. Thus, after the download of this version, the user must re-configure the QP 2001: DAC configuration, Audio mode, ... and also tuning and services configuration.
- Smartcard No Rights modifications. When the receiver loses Video and/or Audio and it detects the Smartcard has no more rights:
 - The watchdog should perform a switch on the same channel almost every 7 minutes. If Audio and/or Video have no rights, then the watchdog should switch on the same channel and then wait during almost 7 minutes.
 - After 4 switch on the same channel, the watchdog should perform a reboot of the board. So if Audio and/or Video have no rights, the watchdog should switch on the same channel almost every 7 minutes and thus the watchdog should reboot the board almost every 30 minutes.

with version 3.x.14:

- "TXT" command has been added. If this mode is disabled, the Teletext stream (if exists on the current channel) will not be output and will not be available for the end user. By default this mode is enabled and the Teletext stream (if exists) is available for the end user. The current mode used is saved in Flash memory and remains the same after restarting the board.

- There was a bug in I2C features. 'XIR' and 'XIS' was not behaving correctly and you were not able to send commands on the I2C bus with these 2 serial line commands.
- The tuning timeout timer has been increased from 1minute to 2 minutes. This was done to cope with some transponders like 12207;v;27500 on Astra where CanalSat has changed this Radio transponder configuration and now there are about 60 PMT's to parse when tuning this transponder. In the previous versions, the tune on that transponder ends with a timeout, now it ends correctly.
- Watchdog modification has been done to try to be more reliable.
- Mediaguard Driver has been updated.
- Conax Driver has been updated.
- Smartcard Driver has been modified in order to cope with some smartcard communication problems.
- The user parameters structure saved in Flash memory has been modified. Thus, after the download of this version, the user must re-configure the QP 2001: DAC configuration, Audio mode, ... and also tuning and services configuration.

with version 3.x.13:

- There was a bug when inserting / extracting a smartcard. The decoder may not detect the card but a reboot did not solve the problem. Now when a card is present and correctly plugged into the smartcard reader, a reboot of the board (by the watchdog) solve this detection problem and then after the reboot everything works correct.

with version 3.x.12:

- There was a bug when downloading from software less or equal to 3.xx.7 to software more or equal to 3.xx.9. On some transponders, the decoder was rebooting all the time after the download and the user can not recover from that stage. Bug solve.
- Smartcard driver has been optimised in order to cope well with some channels like "Canal+ Gul".
- Now decoder should not reboot when watchdog is Off. This could occur in previous software.
- Minimum time between 2 reboots in Watchdog mode 2 ('w=2') (if No Audio and/or No Video and no smartcard rights), has been set to 60 minutes.

with version 3.x.10:

- Audio PID selection on slaves was not working, using always the first one.
- Watchdog is disabled in case of right card missing in both mode 1 and 2
- Improve internal smartcard buffer management

with version 3.x.9:

- New management of MPEG errors
- Reduce smartcard answering timeout for Conax

with version 3.x.8:

- version upgraded for clarification.

with version 3.x.7:

- Fix Mediaguard trouble on unencrypt/crypt transitions
- sometimes OSD radio disappears.

with version 3.x.6:

- Audio PID trouble on channel with stream update
- Change default Vsync Connexant parameter.
- Minor Mediaguard changes
- Improve Conax behaviour

with version 3.x.5:

- Bad audio level initialisation on audio decoder component

2. Known problem

- SCPC reception: with particular SCPC transponder, the QP 2001 module is not able to tune them.
- Audio/Video synchronisation trouble: with specific channel a special mode should be used (see service command list).