AC3210 SOFTWARE RELEASE HISTORY

General

Minimum recommended software version: 1.7.5

Software update methods:

- **Local update:** CATVisor Commander 2.9 or later, service port connection with USB cable. Typical update time 1 min.
  File: *AC3210_appl_x.x.x.srec*

- **CATVisor mode remote update:** Unicast update with CATVisor Commander or SmartLoader, or broadcast update with SmartLoader. Typical unicast update time 5 min.
  File: *AC3210_appl_x.x.x.srec*

- **HMS mode remote update:** With SCTE-HMS-DOWNLOAD-MIB (SCTE 38-8 2002 / HMS063) compatible download tool. Typical update time 5 min.
  File: *AC3210_appl_x.x.x_HMS-download.srec*

- **DOCSIS mode remote update:** Unicast update with CATVisor Commander or SmartLoader, or with SCTE-HMS-DOWNLOAD-MIB compatible download tool. Typical update time 1 min.

LATEST VERSION

Version 1.12.3, released 10.11.2021 – AC6993 support

Compatibility

Compatible with all AC3210 hardware versions.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6983, AC6991, AC6992 and AC6993 transponders.

All required viewer files are included in DUS100 package version 5.27 or later.

New features

- Added support for AC6993 transponder. (Shout 41523, 41524, 41525, 42819)

Fixes

- Internal changes not visible to end user. (Shout 42578, 42819)

OLDER VERSIONS

Version 1.12.0, released 26.8.2021 – Minor fixes

Compatibility

Compatible with all AC3210 hardware versions.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6983, AC6991 and AC6992 transponders.

Fixes

− Fixed: Using SNMP community strings longer than 15 characters with remote SNMP communication does not work and may cause a memory leak which eventually causes a reboot. (Shout 38170, 39117)

− Fixed: AC699x transponder in HMS mode: Remote IP address setting via HMTS does not work if IP address last octet is >223. (Shout 39282, 39283)

− Fixed: Some AC6983 transponder hardware version B units may display 5 dB too high modem receive level value. (Shout 38528)

− Fixed: If automatic alignment is started with both "*Run forward path pilot based alignment*" and "*Set reserve pilot target level to measured value*" options enabled, the resulting reserve pilot target levels can occasionally be incorrect. (Shout 39469, 39489)

− Added reset reason to be visible in alarm log. (Shout 41996)

− Internal changes not visible to end user. (Shout 38286, 41523, 41677, 42358, 42332)

Version 1.11.3, released 6.9.2019 – Minor fixes

Compatibility

Compatible with all AC3210 hardware versions.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6983, AC6991 and AC6992 transponders.

Fixes

− Fixed: "Settings changed" alarm appears when iRPC adjusts return path. (Shout 37714)

− Fixed: "Settings changed" alarm stays on when AC6983 transponder is used with IPv6 address. (Shout 37712)

− Improved AC698x DOCSIS transponder watchdog. (Shout 37661, 37731, 37749, 37750)

− Internal changes not visible to end user. (Shout 37639, 37713)

Version 1.11.0, released 2.7.2019 – Enhancements

Compatibility

Compatible with all AC3210 hardware versions.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6983, AC6991 and AC6992 transponders.

New features

- Added intelligent Return Path Control (iRPC) feature. When ALSC and iRPC are both enabled, the return path gain and slope are automatically adjusted based on temperature and forward path gain and slope changes to compensate for typical air cable behaviour. (Shout 35821)

- Added support for TXX4C1 equaliser plug-in module. (Shout 37299)

- Added support for automatic alignment with AC6918 RIS+ALSC module. Needs automatic alignment product key. (Shout 36484)

Fixes

- Internal changes not visible to end user. (Shout 37099)

Version 1.10.3, released 6.5.2019 – Enhancements and minor fixes

Compatibility

Compatible with all AC3210 hardware versions.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6983, AC6991 and AC6992 transponders.

New features

- Changed pilot, spectrum and ingress detector type parameters to allow more detector types in the future. This requires no user action when software is updated from <1.10.3 to ≥1.10.3 for the first time. If software is later updated from ≥1.10.3 to <1.10.3 or again from <1.10.3 to ≥1.10.3, the detector types will be wrong and must be manually corrected after software update. (Shout 36494)

- Added support for SNMPv2c GETBULK operation with AC6991 / AC6992 transponder. (Shout 36765)

- Added support for remote power save control with AC6915 / AC6918 RIS receiver. (Shout 36337)

Fixes

- Fixed: AC3210 3rd gen support bugs in previous version 1.9.2: Wrong interstage slope range etc. (Shout 36667)

- Fixed: Spectrum and ingress limits are not always taken into use properly if they are loaded with SettingsSaver. Software reset fixes this. (Shout 37025)

- Fixed: Remote AC voltage alarm limits are set during automatic alignment also when the voltage is below 5 V, indicating local powering. (Shout 37118)

- Internal changes not visible to end user. (Shout 36326, 36373, 36416, 36575, 36650, 36912, 36920, 36932, 36976, 36984, 36997, 37099)

Version 1.9.2, released 8.1.2019 – 3rd gen AC3210 support , enhancements and minor fixes

Compatibility

Compatible with all AC3210 hardware versions.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6983, AC6991 and AC6992 transponders.

New features

- Added support for 3rd gen AC3210 hardware which has a plug-in slot for bypass / output 3 port. (Shout 35998)

- Added new options for automatic ingress blocking: "Turn off during ingress alarm" and "Attenuate during ingress warning, turn off during ingress alarm". (Shout 35996)

Fixes

- Fixed: Spectrum and ingress alarm hysteresis introduced in software version 1.8.18 works incorrectly: If "spectrum/ingress warning" is already active, then "spectrum/ingress alarm" is activated 1 or 2 dB before alarm limit. (Shout 36133)

- Fixed: Output gain 1 and output 2 gain difference is not maintained during forward path automatic alignment if the difference is >7 dB. (Shout 36144)

- Internal changes not visible to end user. (Shout 31331, 35011, 35649, 35821, 36085)

Version 1.8.18, released 19.9.2018 – AC6983 support , enhancements and minor fixes

Compatibility

Compatible with 1st and 2nd generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6983, AC6991 and AC6992 transponders.

New features

- Added support for AC6983 transponder.

- Added fixed 1 dB hysteresis to spectrum alarm and 2 dB hysteresis to ingress alarm to prevent toggling alarms. For example, if spectrum high limit is 100 dBμV, then 100.5 dBμV measured level causes alarm to be activated, and measured level needs to go below 99.5 dBμV for the alarm to go off. This applies collectively to all measurement points, i.e. all measurements must be within (limit – hysteresis) for the alarm to go off. (Shout 35196)

Fixes

- Fine-tuned AC6981 and AC6992 transponder forward path level measurement accuracy at higher frequencies. (Shout 35490, 35524, 35559)

- Internal changes not visible to end user. (Shout 34868, 34974, 35330, 35561, 35598, 35662)

Version 1.7.5, released 24.5.2018 – Minor fixes

Compatibility

Compatible with 1st and 2nd generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6991 and AC6992 transponders.

Fixes

- Fixed: Updating AC6992, AC6980 or AC6981 transponder tuner software or AC6992 transponder modem software via AC3210 can cause automatic alignment to be started. What happens then depends on automatic alignment settings: If forward path alignment task is enabled in automatic alignment settings (as it usually is) then the operation stops immediately and nothing changes, except in software version 1.7.2 the ALSC goes to disabled state. But if forward path alignment task is not enabled in automatic alignment settings, then automatic alignment executes all remaining tasks that are enabled. (Shout 34739)

- Fixed: Return path ingress measurement results are +7 dB too high. This applies only to software version 1.7.2. (Shout 34672)

- Fixed: When transponder is changed to another transponder of the same type, the "Lid open" alarm stays on until next software reset. (Shout 34550)

- Internal changes not visible to end user. (Shout 34648)

Version 1.7.2, released 8.3.2018 – TXX2C1 support and minor fixes

Compatibility

Compatible with 1st and 2nd generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6991 and AC6992 transponders.

New features

- Added support for TXX2C1 equaliser plug-in module. (Shout 34139)

- Changed AC6915 and AC6918 RIS functionality: Added "Locked" status, indicated with blinking green "RIS" led, where packets are received OK but no packets are addressed to this unit. This usually means that device is not on HDM155 RIS controller's device list. (Shout 31367, 33630)

Fixes

- Fixed: Moving USB cable from one unit to another while viewer is open may in some cases cause software reset. (Shout 33294)

- Fixed: Return path plug activation based on measured ingress (="Use if ingress alarm is active") does not work if automatic ingress blocking is not enabled. (Shout 32922)

- Fixed: AC6980/AC6981: DOCSIS modem transmit level shown on "Transponder" page is 1 dB too low. (Shout 33670)

- Fixed: AC6992 in HMS mode: Modem transmit level is not remembered after reset. (Shout 33616)

- Fixed: SNMP: OID 1.3.6.1.2.1.1.7.0 returns wrong value. (Shout 33016)

- Fixed: SNMP: Fixed scaling of commonModemRxFrequency and commonModemTxFrequency parameters. (Shout 33599)

- Internal changes not visible to end user. (Shout 28030, 30002, 31669, 31702, 32638, 32664, 32840, 32910, 32918, 33110, 33184, 33225, 33559, 33729, 33739)

Version 1.6.11, released 10.7.2017 – 2nd gen AC3210 support and minor fixes

Compatibility

Compatible with 1st and 2nd generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6991 and AC6992 transponders.

New features

- Added support for 2nd generation AC3210 hardware which has extended interstage slope range but no 1.0 GHz mode. (Shout 31954)

- Return path automatic alignment ends with error and yellow ALSC led blinking only if calculated gain or slope value is at least 1 dB outside adjustment range. In earlier software versions this tolerance is 0 dB. (Shout 31838)

- Forward path automatic alignment now disables ALSC if automatic alignment stops due to an error. Previous software versions left ALSC enabled if it was enabled when automatic alignment was started. (Shout 31799)

Fixes

- Fixed: Forward path automatic alignment does not always adjust output gain to lower value if alignment was started with high output gain. (Shout 31763)

- Fixed: Forward path automatic alignment status can be wrong if adjustment result is close to the limits. (Shout 31761)

- Fixed: Editing AC6992 transponder related settings can in some rare cases cause software reset. (Shout 31776, 31783)

- Fixed: AC6980, AC6981 and AC6992 software update via AC3210 fails, especially when using HMS protocol. (Shout 29919, 31971, 32616, 31751)

- Internal changes not visible to end user. (Shout 29739, 31550, 31726, 32612)

Version 1.5.7, released 29.3.2017 – Minor fixes

Compatibility

Compatible with 1st generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6991 and AC6992 transponders.

All required viewer files are included in DUS100 package version 4.48 or later.

Fixes

- Fixed: Automatic plug-in enabling / disabling during forward path automatic alignment introduced in software version 1.5.5 doesn't always work correctly. (Shout 31757)

- Internal changes not visible to end user. (Shout 31687, 31702, 31719)

Version 1.5.5, released 22.3.2017 – Enhancements and minor fixes

Compatibility

Compatible with 1st generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6981, AC6991 and AC6992 transponders.

New features

- Added support for AC6981 DOCSIS transponder.

- Added support for AC6257 return path output module. AC6257 extends the return path slope adjustment range from 3…18 dB (with AC6256) to 0…18 dB. (Shout 31546)

- Added support for TXS015 cable simulator plug-in module. (Shout 31483)

- Added support for TXX1G2 equaliser plug-in module. (Shout 31535)

- Added support for more intelligent and flexible forward path slope division between input and interstage controls during automatic alignment. The "Input slope out of range" and "Interstage slope out of range" status messages have been replaced with more informative "Slope too low" and "Slope too high". Changed slope warning limit from 2.0 to 1.5 dB. (Shout 30072, 31517, 31699)

- Added support for automatically enabling / disabling installed forward path plug-in during automatic alignment. This is done only when the automatically detected plug-in type is TXS004, TXS008, TXS012 or TXS015 and the automatic alignment would otherwise (using the current plug-in enabling status) end with "Slope too low" or "Slope too high" error. (Shout 30072)

- Added ALSC led red blinking after return path automatic alignment if forward path plug is installed and enabled but its type is not known. (Shout 31411)

- Removed ±3 dB limits from "Return path gain / slope boost" parameters. Now these parameters can be used also for compensating an external device causing "non-linear" (i.e. other than combination of flat + cable) attenuation, such as RE100 amplifier. (Shout 31298)

- Increased pilot / spectrum / ingress measurement speed. (Shout 30638)

Fixes

- Fixed: ALSC led blinks in green if automatic alignment is started with no tasks selected. (Shout 31503)

- Fixed: IP address cannot be changed while USB powered. (Shout 31122)

- Internal changes not visible to end user. (Shout 27102, 29919, 31024, 31116, 31335, 31495, 31515, 31526, 31560, 31704)

Version 1.4.31, released 30.11.2016 – Minor fix

Compatibility

Compatible with 1st generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6991 and AC6992 transponders.

Fixes

- Fixed: Return path slope adjustment element may occasionally exhibit periodic ~100 µs glitches with some units and slope settings. This can be seen as <0.05 % return path packet loss and degraded BER. (Shout 30927)

Version 1.4.9, released 20.9.2016 – Enhancements

Compatibility

Compatible with 1st generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6991 and AC6992 transponders.

New features

− Added support for "Return path gain / slope boost" parameters. These are editable via "Automatic alignment settings" dialog and affect return path gain and slope calculation only during return path automatic alignment.
These values are added to the calculated theoretical return path gain and slope values and can be used to fine-tune automatic alignment. Fine-tuning may be needed e.g. in networks where pilots are placed on the "bumps" or "valleys" of the overall system frequency response.
The default value for new units is gain = slope = 0 dB. For older units updated to 1.4.x from previous versions gain = -0.5 dB and slope = 0 dB to guarantee identical adjustment with 1.3.x software versions. (Shout 30319)

− Added support for automatic detection of new "v2" versions of TXX258, TXS004, TXS008 and TXS012 plug-in modules in forward path universal plug-in slot.
When a plug-in module with detection support is installed, its type is automatically detected and taken into account in return path automatic alignment. The user no longer needs to enter the plug type manually. (Shout 30280)

− Fine-tuned TXX258 plug-in module compensation in return path automatic alignment so that low pilot frequency and its effect to forward path automatic alignment result is taken into account. (Shout 30400)

− AC6915 & AC6918 transponders: Added support for receiving "Channel ID" information from HDM155. (Shout 30124, 30423)

Fixes

− Fixed: Ingress analyser enabling/disabling does not always work correctly. (Shout 30434)

− Fixed: AC6915 & AC6918 transponders: Displayed RIS receive level is 8 dB too low. (Shout 30461, 30462)

− Fixed: AC6915 & AC6918 transponders: Automatic alignment does not work correctly without product key. (Shout 29923, 30447)

− Fixed: AC6915 & AC6918 transponders: Occasional packet loss. (Shout 30488)

− Internal changes not visible to end user. (Shout 30408, 30465, 30475, 30476, 30495, 30449, 30505, 30266, 30130)

Version 1.3.5, released 26.8.2016 – Minor fixes

Compatibility

Compatible with 1st generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6991 and AC6992 transponders.

Fixes

– Fixed: AC6992 transponder "Modem" led is green also when modem is not connected. (Shout 29859, 29951)

– Fixed: Pilot and spectrum measurements can occasionally show single ~19 dB too small values. (Shout 30154, 30027)

Version 1.3.0, released 20.6.2016 – Enhancements and minor fixes

Compatibility

Compatible with 1st generation AC3210 hardware.

Compatible with AC6915, AC6918, AC6980, AC6991 and AC6992 transponders.

All required viewer files are included in DUS100 package version 4.42 or later.

New features

– Added support for AC6915, AC6918 and AC6992 transponders.

– Added support for TXX258 plugin. (Shout 29952)

– Added support for return path measurements up to 204 MHz with AC6980 transponder hardware versions below E. (Shout 29809)

Fixes

– Fine-tuned gain and slope display value resolution. (Shout 29417, 29502)

– Fixed: Automatic alignment option "Set reserve pilot target levels to measured levels" is not remembered after reset. (Shout 29864)

– Fixed: Spectrum alarm/warning may be activated if loaded measurement table contains illegal frequency. (Shout 29870)

– Fixed: Return path gain values above 28 dB change to 28 dB after reset with 204 MHz return path configuration. (Shout 29822)

– Fixed: Total gain and input gain values are not always correctly set, depending on the order they are set by the user. (Shout 29998)

– Fixed: Return path ingress level measurements results are ~7 dB too low. (Shout 29858, 29873)

– Fixed: SNMP: Port 2 HMS ingress control object doesn't exist. (Shout 30010)

– Internal changes not visible to end user. (Shout 29106, 29188, 29206, 29522, 29696, 29712, 29730, 29783, 29860, 29877, 29901, 29905, 30046, 30048, 30100, 30115)

Version 1.2.41, released 27.5.2016 – Enhancement

Compatibility

Compatible with 1st generation AC3210 hardware.

Compatible with AC6980 and AC6991 transponders.

Fixes

– Fine-tuned return path automatic alignment to adjust gain to slightly lower value. (Shout 29999)

Version 1.2.4, released 7.4.2016 – Minor fixes

Compatibility

Compatible with 1ˢᵗ generation AC3210 hardware.

Compatible with AC6980 and AC6991 transponders.

New features

− Added support for AC6980 new hardware version. (Shout 28791)

− Software update using CATVisor protocol no longer accepts same software version that is already running. (Shout 29535)

Fixes

− Added 1 s delay to software reset to improve USB connection stability. (Shout 29358)

− Improved return path automatic alignment accuracy with 204 MHz return path. (Shout 29590, 29650)

− Fixed: Return path automatic alignment adjusts gain to too high value. (Shout 29552, 29646, 29601)

− Fixed: Automatic ingress blocking for port 2 doesn't work correctly. (Shout 29416, 29512, 29648)

− Fixed: "Internal error", "Unknown module" and "Powered from USB" alarms do not work correctly simultaneously. (Shout 29153, 29347)

− Fixed: Transponder button does not always start automatic alignment correctly. (Shout 29224)

− Fixed: Older alarm log timestamps change to wrong values after AC6980 is connected to CMTS. (Shout 29546)

− Fixed: Remote software update using HMS download fails. (Shout 29522)

− Fixed: "Application updating" alarm does not work correctly. (Shout 29515)

− SNMP: Removed excessive characters from commonNetworkAddress reply. (Shout 29614)

− SNMP: Changed spectrumAnalyserValueTable and currentAlarmState to read-only. (Shout 29616)

− SNMP: Changed rfPerformanceControl to allow only values "high" and "powersave". (Shout 29615)

− SNMP: Added limit checks to coordinates and trap life time. (Shout 28674, 28622)

− SNMP: Trap text ALC changed to ALSC. (Shout 29617)

− Internal changes not visible to end user. (Shout 29571)

Version 1.0.12, released 11.3.2016 – First customer release

Compatibility

Compatible with 1ˢᵗ generation AC3210 hardware.

Compatible with AC6980 and AC6991 transponders.

AC3210_SWhistory_1-12-3.docx