CX300 Auto-Test Software Release Notes

Auto-Test Version 1.3.7

08/09/2024

The CX300 must have System Software Version 2.2.0 or greater.

Option	Description	Version
CX300-TPMA	Motorola APX™ Series Auto-Test and Alignment	1.3.0

New Features

1. Added T05 UC,SS,QS and KS radios.

Fixes

1. Fixed an issue where the script would abort during the mobile power alignment.
2. Fixed an issue where 800/UHF Dual band portables skipped the UHF band front-end alignment.

Option	Description	Version
CX300-TPHP25	L3Harris P25 Series Auto-Test and Alignment	1.0.6

Improvements

1. Re-arranged the Rx AGC and Rx RSSI alignments in the menus.

Fixes

1. Added missing Band ID for the XG-75Pe UHF-H radio.

Option	Description	Version
CX300-TPHXL	L3Harris XL Series Auto-Test and Alignment	1.2.0

New Features

1. Added XL-85M support.

Improvements

1. Auto-Test now checks for radio software version R19A18 to determine if radio supports 900 MHz.

Fixes

1. Corrected 700 MHz mobile high power limits.

Option	Description	Version
CX300-TMKNX	Kenwood NX-3000/5000 Series Auto-Test and Alignment	1.0.9

New Features

1. Added NXDN BER and Tx Parametrics tests.

Option	Description	Version
CX300-TDM	Motorola MOTOTRBO™ Series Auto-Test and Alignment	1.1.2

Fixes

1. Fixed an issue with the H56QD (CSA) radio identification.

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To help you stay informed of Radio Test Set Updates, please sign up for notifications at https://comms.viavisolutions.com/Software-Update-Notifications.

For suggestions or ideas to improve our products, reach out to us at avcomm.sales@viavisolutions.com.

Auto-Test Version 1.3.5

05/22/2024

The CX300 must have System Software Version 1.1.0 or greater.

Option	Description	Version
CX300-TPBK	BK KNG Series Auto-Test and Alignment	1.1.1

Fixes

1. Fixed an issue with the power parameters for the M150LP/B150LP 7W radio.

2. Dropped the volume adjustment target from 6.00 V to 3.50 V for mobiles.

Option	Description	Version
CX300-TPIP25	Icom 7000/7500 Series Auto-Test and Alignment	1.1.2

Improvements

1. Added the ability to use the MIC/ACC connection to key the radio.

2. Added the 700-800 band to the bands list.

3. Added the Gen Level to the results.

4. Added paragraph titles, and table names.

5. Added restore of original softpot value if error encountered.

Fixes

1. Corrected the F7540 power channel list.

2. Added missing 800 MHz band paragraph title.

3. Fixed an issue where the squelch softpot wasn't being restored if abort is pressed.

4. Fixed the FM Deviation alignment.

5. Fixed issue where the RAMP tuner limits weren't getting set.

Option	Description	Version
CX300-TMKNX	Kenwood NX-3000/5000 Series Auto-Test and Alignment	1.0.7

Fixes

2. Fixed an issue where it would not switch to P25 if the radio had both P25 and DMR options.

3. If abort is pressed during script startup, the radio will now get taken out of tune mode.

4. If abort is pressed during alignment, the beginning softpot value is restored.

Option	Description	Version
CX300-TPKV	Kenwood Viking Series Auto-Test and Alignment	1.0.7

Improvements

1. Optimized test within CX300 framework.

Option	Description	Version
CX300-TPHP25	L3Harris P25 Series Auto-Test and Alignment	1.0.5

New Features

1. Add the XG-75Pe UHF-H radio.
2. Added the XG-75M 800 MHz single band radio.

Improvements

1. Added NPSPAC bandwidth option for 800 MHz radios.

Fixes

2. Do the 800 band only check before checking to see if it is a 700/800 MHz radio.
3. Add Wideband paragraph title.
4. Change "700_800" and "7_800" to "700-800" and "7-800".

Option	Description	Version
CX300-TPHXL	L3Harris XL Series Auto-Test and Alignment	1.1.0

Improvements

1. Updates to support the 900 MHz band. 900 MHz support requires radio firmware >= R19A00.

Option	Description	Version
CX300-TPMA	Motorola APX™ Series Auto-Test and Alignment	1.2.5

New Features

1. Added M22VR mobile.

Improvements

1. Run low power test before high power test to ensure the test set is receiving power.

Fixes

3. Corrected power test frequency band for UHF 2 radios.

Option	Description	Version
CX300-TDM	Motorola MOTOTRBO™ Series Auto-Test and Alignment	1.1.0

Fixes

2. Fixed an issue where the front-end filter support detection was not working, causing the test to be run on radios that don't support it.

Release Group: January 2024

The CX300 must have System Software Version 1.1.0 or greater.

Option	Description	Version
CX300-TPBK	BK KNG Series Auto-Test and Alignment	1.1.0

New Features

3. Added M150/B150 HP, 7W radio.
4. Added five new product series.

Improvements

1. Tightened the Tx Power Curve alignment limits.
2. Implemented using the CX-300 Microphone to key the radios during the mod deviation test. This allows mobile radios, and portable radios running older firmware to do that test.
3. Updated the connection diagrams.
4. Added setup to check versions and instruct user to set defaults if versions have changed.
5. Added beginning and ending softpot values to the results.
6. Added cable loss to all results.
7. Added test result footer to all results.
8. Change displayed audio level resolution to 2 digits.
9. For the 700-800 MHz radio, add the band being aligned to the test results.
10. Doesn't allow power test/alignments on HP radios if there is no compensation for an attenuator.
11. Fixed version decoding displayed in the radio information block.
12. Fixed some configuration file issues with the P400 radio.

Fixes

3. Change product type 14 and 15 to M150LP.
4. Separate the BKR 9000 identification from the BKR 5000.
5. Corrected no attenuator message in the power tests and alignments.
6. Fixed the high power check code.
7. Corrected the M150, M150LP prompt.
8. Fixed an issue where the power test results always had 700 MHz in the title.

Option	Description	Version
CX300-TPIP25	Icom 7000/7500 Series Auto-Test and Alignment	1.0.7

Improvements

6. Optimized popups for test selected.

7. Added setup to check versions and instruct user to set defaults if versions have changed.

Fixes

6. Resolved an issue with the 800 MHz band power test limits.

7. Corrected F7540 Model identification.

8. Corrected logic check on sensitivity test resulting in improved readings.

9. Corrected issue with an index on channel list causing 800 MHz radios to use wrong frequencies for testing.

Option	Description	Version
CX300-TMKNX	Kenwood NX-3000/5000 Series Auto-Test and Alignment	1.0.6

Improvements

5. Updated the generator level for the Frequency Alignment and removed the prompts to change ports.

6. Added setup to check versions and instruct user to set defaults if versions have changed.

7. Renamed Freq Error to Tx Freq Error Test.

8. Renamed Rx Frequency to Frequency Align.

Option	Description	Version
CX300-TPKV	Kenwood Viking Series Auto-Test and Alignment	1.0.6

New Feature

1. Added the VP8000 All Band radio.

Improvements

2. Added the Assist frequency lists for the UHF High portable radio.
3. Added setup to check versions and instruct user to set defaults if versions have changed.
4. Updated the high-power prompts.

Fixes

1. Fixed an issue where if the Tx Parametrics test failed to decode.
2. Fixed the handling of the zone and channel.

Option	Description	Version
CX300-TPHP25	L3Harris P25 Series Auto-Test and Alignment	1.0.4

Improvements

2. Added setup to check versions and instruct user to set defaults if versions have changed.

Fixes

5. Fixed the identification for the XG-75Pe radio.
6. Fixed menus that had the BER test before the power test.

Option	Description	Version
CX300-TPHXL	L3Harris XL Series Auto-Test and Alignment	1.0.5

Improvements

2. Added setup to check versions and instruct user to set defaults if versions have changed.
3. Added prompt to turn off mobile test head before testing.
4. Changed the order of the RSSI tests.

Option	Description	Version
CX300-TPMA	Motorola APX™ Series Auto-Test and Alignment	1.2.2

New Features

2. Added T05TS mobile.

3. Added H15UC.

4. Added H25 all bands.

5. Added H35 all bands.

6. Added H15KC, H15QD, H15SD.

Improvements

2. Change H15KC to H15KD.

3. Added H51WC to main menu.

4. Added a popup/screen log message indicating to the user the radio has timed out. This condition can occur with bad cabling or inadequate power capability or setup.

5. Added ability to select bands for dual band portables in save profiles.

6. Added setup to check versions and instruct user to set defaults if versions have changed.

Fixes

4. Corrected issues where T05KS, QS, SS, UR were not getting frequency list filled and causing an abort.

5. Corrected H92 & H93 frequency upper limit.

6. Incorporate PA Bias fix for "B" mobiles.

Option	Description	Version
CX300-TDM	Motorola MOTOTRBO™ Series Auto-Test and Alignment	1.0.8

New Feature

1. Added new R2 radios.

Improvements

1. Improved error checking during radio initialization.
2. Frequency list updates for R7 radios.
3. Frequency list changes for H06UC, H06ND, H87ND.
4. Changed SLR to XLR in Microphone calibration dialogs.
5. Changed 'H56QC' to 'H56QC ATEX'.

Fixes

3. Fixed an issue with the mobile power alignment if the calculated value is out of range.
4. Fixed an issue where the Tx tests would throw an exception on abort.

Option	Description	Version
CX300-TDTPM	Tait DMR Series (Test Only)	1.0.3

Fix

1. Cable loss info was missing from the radio information.

Option	Description	Version
CX300-TPTPM	Tait P25 Series (Test Only)	1.0.3

Fix

1. Cable loss info was missing from the radio information.

Release Group: January 2023

The CX300 must have System Software Version 1.1.0 or greater.

Option	Description	Version
CX300-TDM	Motorola MOTOTRBO™ Series Auto-Test and Alignment	1.0.3

Improvements

1. Added support for firmware R02.22.02.3001.
2. Add R7 family of radios.
3. Add Speaker Calibration (Requires acoustic box option TDM-ACOUSTIC).
4. Standardized the Rx BER and TX Tests limit resolution.
5. Added a picture to the shunt connection dialog.
6. Added prompt titles.

Fixes

1. Set Corrected the handling of the H88QC/H81QC 3W banded specs.

Option	Description	Version
CX300-TPMA	Motorola APX™ Series Auto-Test and Alignment	1.1.0

Fixes

1. Set M37 Rx duty cycle title.
2. Balance alignment set to 30k IF and 5k LPF for other radios while keeping setting for H92- APX900.
3. Corrected frequency issue on B models with host version greater than 17, 479.025 to 479.925.
4. Fixed issue with APX900 (H92QD) failing to get frequency list.
5. Handle radios that are now reporting a second band 06 which is unknown.
6. Corrected frequency issue with M25KS, changed 136.1025 to 136.0125.

Option	Description	Version
CX300-TMKNX	Kenwood NX-3000/5000 Series Auto-Test and Alignment	1.0.2

Improvements

1. Set Added additional log messages to digital modulation tests for when protocols are skipped.

Option	Description	Version
CX300-TPIP25	Icom 7000/7500 Series Auto-Test and Alignment	1.0.1

Fixes

1. Added RSSI tolerances to radios that were missing them.
2. Fixed incorrect soft pot ranges for reference oscillator on radios other than F7010.

Release Group: July 2022

The CX300 must have System Software Version 1.1.0 or greater.

Option	Description	Version
CX300-TDM	Motorola MOTOTRBO™ Series Auto-Test and Alignment	1.0.0

New Feature

1. Added support for the Motorola MOTOTRBO Series of radios.

Option	Description	Version
CX300-TDTPM	Tait DMR Series (Test Only)	1.0.0

New Feature

1. Added support for the Tait DMR Series of radios.

Option	Description	Version
CX300-TPHP25	L3Harris P25 Series Auto-Test and Alignment	1.0.1

New Feature

1. Added support for the L3Harris P25 Series of radios.

Option	Description	Version
CX300-TMKNX	Kenwood NX-5X00 Series Auto-Test and Alignment	1.0.0

New Feature

1. Added support for the Kenwood NX-5X00 Series of radios.

Option	Description	Version
CX300-TPBK	BK KNG Series Auto-Test and Alignment	1.0.0

New Feature

1. Added support for the BK KNG Series of radios.

Release Group: July 2022

Option	Description	Version
CX300-TPMA	Motorola APX™ Series Auto-Test and Alignment	1.0.5

Fixes

1. Corrected issue with Power detector for some mobiles not being written to the radio.
2. B Model mobiles now reading frequency list back from radio.
3. Set low power limits to 1 W for generic Mobile VHF/UHF/UHF2
4. Corrected issue with not reading L Consolette models
5. Corrected M37TS power characterization alignment