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Handheld Code Loader 32 bit
Version 3.34

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Disclaimer:

The Handheld Code Loader program is designed to work with the Anritsu Handheld “**Master**” family products (Site Master™, Spectrum Master™ and Cell Master™) for downloading new firmware to Handheld Product’s internal flash ROM.

Software Requirements:

Intel Pentium 90 MHz or better PC
16 MB of system memory
5 MB of free hard disk space
Available COM port

Creating a Shortcut in the Desktop:

Right click in the Desktop
Select Shortcut
Browse from C:\Program Files\Handheld Code Loader\codeloader_v3.34.exe
Click Next
Click Finish to create a Shortcut in your Desktop

Compatibility:

The Handheld Code Loader program is compatible with the following Models of Handheld Products only:

Model	Current Firmware Version	.HEX/.BIN File
Site Master™		
S112, S113	V3.12 (Supported from V3.00 and above)	S3_MVXXX.HEX (VXXX=version number)
S330A, S331A, S400A	V4.24 (Supported from V4.10 and above)	S2AMVXXX.HEX
S810A, S818A, S820A	V6.20	S4_MVXXX.BIN
S120A, S235A, S250A	V5.08	S5_MVXXX.BIN
S251A	V5.86	S5pMVXXX.BIN
S251B	V1.59	S56MVXXX.BIN
S113B, S114B, S113BQ, S114BQ	V1.53	S63MVXXX.BIN
S331B, S332B	V1.53	S62MVXXX.BIN
S120CT, S251C	V2.23	251CVXXX.BIN
S331C, S332C	V2.53	33XCVXXX.BIN
S113C, S114C, S113CQ, S114CQ, S115BQ	V2.53	11XCVXXX.BIN
S810C, S820C, SM5896, SM5896/5	V2.15	8X0CVXXX.BIN
S810D, S820D	V1.11	8X0DVXXX.BIN
S331D, S332D	V3.10 V3.10	CM_VXXX.BIN CMCVXXX.BIN
Spectrum Master™		
MS2711	V1.53	S62MVXXX.BIN
MS2711A	V1.46	MSAVXXX.BIN
MS2711B	V2.23	2711BXXX.BIN
MS2711D	V3.10 V3.10	CM_VXXX.BIN CMCVXXX.BIN

Cell Master™		
MT8212A	V3.10	CM_VXXX.BIN
	V3.10	CMCVXXX.BIN
MT8212B	V3.10	CMBVXXX.BIN
Also supported		
Anritsu Cable Mate™		
C751, C752	V3.12 (Supported from V3.00 and above)	S3_MVXXX.HEX

Operation:

NOTE:

1. MAKE SURE YOUR HANDHELD PRODUCT HAS ATLEAST 50% BATTERY CHARGE OR IS CONNECTED TO A POWER CORD BEFORE CODE LOADING.
2. IF YOU CODELOADED THE FIRMWARE FOR THE WRONG MODEL, RECODELOAD AND CANCEL THE PROCESS AFTER 10% OF CODELOADING.START CODELOADING AGAIN, THIS TIME CHOOSING THE CORRECT MODEL.
3. IF YOUR MODEL DOESN'T EXIST IN THE DROP DOWN LIST BOX, PLEASE CONTACT CUSTOMER SERVICE @ 1-800-ANRITSU.

- 1) Launch the Handheld Code Loader program from Windows.
- 2) If this is the first time you run Code Loader, Select "Tools" and click Setup to configure your COM port.
- 3) With your Handheld Product power OFF, connect it to your PC's COM port via a NULL modem cable(the same one that is provided for communicating with the Software Tools).
- 4) Follow the on screen instructions:
Press and hold the F1, F3, and F5 soft keys, then press the ON/OFF button to turn the Handheld Product On. The Handheld Product's LCD should go blank.
- 5) The Code Loader will automatically download the firmware it contains if that version is greater than the version installed in the Handheld Product. For example, if your Handheld Product has version 1.40 and the version shipped with Code Loader is version 1.41, the software download will begin immediately. If the Site Master's version is equal to the Code Loader version, you will be prompted and asked to continue or abort. If the Site Master's version is newer than the version in Code Loader, the download will not take place.
- 6) The Handheld Product will reset itself once the download is completed. You may click on the "Re-Start" button on the Code Loader to initiate another session of firmware download.

Troubleshooting:

- 1) Code Loader Program returns "File not found" error.

Solutions:

Check and see if the firmware files(.hex/.bin files) are in the application directory . If not, reinstall software or obtain firmware files from Anritsu Company.

- 2) Code Loader Program returns "Version Check Failed" error.

Solutions:

The version of firmware available for download is older than the version on the Handheld Product. Please make sure that the latest version of Firmware files are in the application directory.

Version History

V3.34

Added CM_V316.BIN, CMBV316.BIN, CMCV316.BIN for Models S331D, S332D, MS2711D, MT8212A and MT8212B (V3.16)

What is new in V3.16?

Added:

- Added cable's attenuation offset into power meter, spectrum analyzer, CDMA, EVDO, and GSM
- Added a view in CW Generator mode, to see both power monitor reading and CW reading simultaneously

Bug Fixed:

- Added B8ZS support in T1 mode
- In spectrogram, there is no way to see where the spectrum graph stops and the spectrogram starts, lowest signal color is very similar to the background. Changed lowest signal color to dark gray instead of pitch black.
- In CW Gen mode, after exiting from remote mode, the frequency window is blank and stays that way until we press Freq/Dist button – Fixed.
- Once in remote mode, the display doesn't get updated with the new averaging values even though they get set. We need to get out from the remote mode to see them updated on the screen. The problem is that once we set it to be a certain value, lets say 8, and if later we go to a smaller value, lets say 3, the system doesn't seem to display the right AVR=3/3 but rather AVR=8/3.
- GPS icon shows up on start up screen.
- T1/E1 Test soft key does not show up in the self test status page.
- Preamp is turned off when dynamic attenuation is pressed, and it's not restored back when attenuation is auto or manual even though preamp button's state indicates it's on
- Added marker display functionality for zero span mode
- GSM frame view, the last pixel always draws to 0, creating an erroneous yellow line on the right of the graph
- Going into signal strength affects spectrogram span, RBW, and VBW settings If a marker is on top of a graticule line, it becomes not visible
- CW generator offset truncates any offset to an integer
- CDMA CDP displays "CDP Bit Reverse" while the system is in 64 bit mode
- Instrument prints out junks using Seiko printers
- Ref level offset yields incorrect marker value reading
- Under remote mode for some time, the box will display mode selection list for apparently no reason.
- When there is a min or max hold on, SPA sweep will either go to the top or bottom depending on the ref level offset value
- Edit box display for loop up and down code for T1E1 is not right
- Reading in CW mode is different between before transmission measurement mode is calibrated and after it's calibrated
- Cable loss value in DTF changes, if user goes to a different mode or if user saves a setup and then recalls it.
- When the graph is doing trace math, marker reading is off

Added 8X0DVXXX.BIN for Site Master Model S810D, S820D (V1.15)

What is new in V1.15?

Bug Fixed:

- Marker is overwritten by graticule when they line up.
- GPS icon is displayed in Selftest box.
- Trace overlay displays an incorrect trace at bottom of graph.
- When marker is selected for Marker to Peak/Valley function, perform a calibration, marker is no longer selected.
- Beep for LCD contrast adjustment not available.

- Add user defined cal kits for waveguide and coaxial media. Request cal user interface improvements.
- Made cable loss measurements more accurate.
- Added a serial command to read out marker values.
- Added OSLK50, OLSN50, and TNC calibration kit component numbers to calibration connect device message.
- Spikes at band switch points (e.g. 4.8 GHz) when Fixed CW OFF (Dither ON, Immunity HIGH).
- Noise on phase display with Fixed CW OFF (Dither ON, Immunity HIGH).
- DTF amplitude changes when changing window type.
- Speed up Option 5 Power Monitor
- Serial command Recall Waveguide (#134, 86h) does not return the correct number of bytes.
- Option 5 Power Monitor abbreviation changed from PM to PMON.
- TNC Male and Female DUT connector calibration open and short offsets were switched.

V3.33

Added **CM_V310.BIN**, CMBV310.BIN, CMCV310.BIN for Models S331D, S332D, MS2711D, MT8212A and MT8212B (V3.10)

What is new in V3.10?

Bug Fixed:

- In EVDO CDP status window, in the bottom right hand corner box where red bars and values are being displayed, sometimes some of the values went below -100, causing value display to extend close to the soft button area. Consequently when value went up to less than -100, then part of the least significant digit of previous values ≤ -100 was left unerase.
- When dBm/Watt button is turned on in either CDMA or EVDO mode, the effect is going to be carried over to the other mode when user switches from EVDO to CDMA or CDMA to EVDO. It causes the mismatch between the button and the power values displayed.
- Power meter mode - power reading is noticeably higher after changing center frequency and restoring back. Go to OTA screen, select SYS->GPS, turn GPS on, press the Quality button, then the GPS Of/Off button will change into light yellow color which is hard to see.
- In EVDO OTA screen, both multipath table and pilot scan table always show the power in dBm. However this unit is not indicated on the screen. It may be confusing to the user since CDMA's OTA has the corresponding numbers in dB.
- In SPA, when the span setting is restricted by some sort of measurement setting i.e. signal standard, an error message or beep should appear when the user tries to set the span to some value that is not allowed.
- In EVDO Data mode, blank, white rectangle left in the middle of the screen when External reference is briefly lost and regained.
- Pressing the contrast button does not produce an error, but doesn't seem to change anything on the screen.
- When changing the Measurement speed parameter, user would expect the up arrow to move toward FAST and the down arrow to move toward SLOW.
- Power monitor mode when the hourglass comes up it erases the upper right corner of the power monitor shaded box. It does not refill in the corner until the mode is exited and re-entered.
- MS2711D, User's Guide page3-12, For "Reset A" button, it says "Clears the current runtime trace and restart the sweep." But actually nothing happens when this button is pressed. the user expect that it can clear the max hold, min hold, and averaged sweep and restart again.
- In Spectrogram Display, there is a label at the bottom of the screen that says "Scale=5 dB/Div". But there is no division.
- SPA mode press span press up 1/2/5 when done, the menu reverts to the top menu, not allowing you to press it again; similarly, press center frequency press shift left 1Div again, it reverts to top menu, not letting you shift one more division left.
- Some of the bandwidths in the signal standards' table are wrong. They have been corrected according to spec.
- Zero function didn't work in Power Monitor or Power Meter.
- EvDO mode is now Rev. A compliant. When set to MAC 128 mode, we can demodulate physical layer of subtype 2

- Calls calibration if there is enough temperature change from the last calibration. Calibration check is now added to power meter, CDMA, EVDO, GSM, transmission measurement, Channel Scanner, CW Signal Generator.
- Measurement window print-outs has a black background with no graticules.
- Graph isn't redrawn when recalling a setup, while max-hold is activated.
- In EVDO CDP Data, active data power is displaying idle data power values.
- EVDO RF graph (idle and active) display was wrong.
- In EVDO Text Only, there should be no more label switching between "Overall EVM" and "MAC EVM". Show "Overall EVM" all the time and always display EVM value.
- In VNA mode, selected marker that user was editing can't be edited anymore after the calibration.
- Power offset reading is not reflected in Pilot Scan Results in EVDO-Data(MAC) mode.
- Fifth blank soft key in Power Monitor mode is doing something and setting the box cursor to busy mode.
- Menu buttons still have CDP and Text Only buttons available even though option 63 isn't there.
- In power meter mode, if user presses ENTER without editing channel number, the channel number as well as signal standard goes blank.
- In EVDO, CDP bar graph shouldn't display bars if data code powers are less than -50.0 dB. Change the message from "No Active Slot" to "No Data Captured."
- In serial remote mode, Calibration took off the serial port echo.
- Power Offset number is overwritten by Mask Value in EVDO RF mode.
- Multi path power's displayed value changes when a key is pressed. It gets corrected only after the screen is refreshed.
- Measurement switches to MAC CDP screen whenever user changes the MAC Code setup.
- In EVDO Text Only screen, noise floor reading shouldn't changed when dBm/Watts button is pressed.
- In EVDO RF/ Advanced Settings/ Mask On/Off will stay pressed even when we turn it OFF.
- In CW Signal Generator, display needs to show offset if user selected.
- In EVDO Text Only, display wasn't updating properly to reflect switching between idle and active data pwr.
- In Interference Analysis mode, Signal Strength measurement, if a user presses the "Volume" soft key and then "Speaker Tone On/Off" soft key to turn off the speaker, it was still possible for user to adjust volume.
- In Interference Analysis mode, Signal Strength measurement, if the speaker tone is turned off and user presses the "Volume" soft key, the speaker is turned on, but "Speaker Tone On/Off" button isn't shown as pressed.
- There isn't battery status display in a lot of EVDO measurements.
- Added variable channel increment steps when selecting freq channels in spectrum analyzer, CDMA, and EVDO.
- Min/Max Data Code display in EVDO Data CDP measurement isn't properly displayed.
- Button status display issue for volume soft key in Signal Strength is fixed.
- PN number of 65535 is shown, when GPS is auto triggered and GPS antenna was taken out suddenly.
- Marker edit number display wasn't matching with status box numbers in EVDO CDP/Data Code Power.
- A warning message needs be displayed when user is changing VNA Cal mode from OSLCal to FlexCal.
- IA display type menus buttons status isn't showed correctly.
- In Interference Analyzer, Min and Max RSSI needs to display with units.
- The display for Channel Freq and Power in Channel Scanner sometimes goes out of proper display area.
- In RL mode, the marker doesn't want to stop at 0th point if user presses DOWN button for a long time.
- Display averaged Pilot & Mac power in both idle and active screens instead of displaying idle Pilot & MAC and active Pilot & MAC power respectively in each screen in EVDO RF.
- In EVDO RF Idle screen, change Data Power to On/Off Ratio and show the difference in power between Pilot & MAC and data.
- In T1/E1 self test, change the message back to "Connect Tx to Rx and press ENTER to start"

- In EVDO RF screen, On/Off Ratio display is affected by dBm/Watts conversion.
- In EVDO Setup/PN Search/External Manual, the PN offset editing box range is given as 0 to - 2147466241. The correct range should be 0 to 511.
- In EVDO OTA or Text screen, changing Mask On/Off setting will cause black patches to appear on the screen.
- Channel scanner reports the minimum channel number is 16256 and the maximum channel number is 16800 instead of 1 to 20.
- When user tries to overlay a trace and there is no saved traces, the list box says "Press ENTER to continue" instead of listing saved traces. If user presses ENTER, then the measurement window will show a trace that's at the very bottom of the graph. But there is no stored traces.
- When the user had either held the current trace or in single sweep setting, and user tried to overlay a signal by pressing On/Off button while there was no saved traces, the list box would flash an error message which urged user to press ENTER to continue, but if user pressed ENTER then the list box for choosing saved traces will appear that says "Press ENTER to continue." If user pressed ENTER yet again, the screen would return to measurement window but the error message which urges user to press ENTER to continue would pop up again. At this point, the error message would keep popping up as user continued pressing ENTER.
- VNA mode - RL/CL etc doesn't display the selected Signal Standard.
- Save and Recall Trace A - Trace B bug fixed.

V3.32

Added **CM_V301.BIN**, CMBV305.BIN, CMCV305.BIN for Models S331D, S332D, MS2711D and MT8212B (V3.01/V3.05)

What is new in V3.05?

- In EVDO RF measurements the Active Data shows dBm even when Watts is selected (Fixed)
- Add Signal Standard to CW Signal Generator
- In EVDO RF measurements the Idle Data shows dBm even when Watts is selected (Fixed)
- BW/SWEEP button does not display more in F6 for MS2711D (Fixed)
- CDMA does not measure multicarrier power accurately (Fixed)

V3.31

Added **CM_V301.BIN**, CMCV301.BIM for Models MT8212A, S331D, S332D and MS2711D (V3.01)

What is new in v3.01?

- Internal Fix.

Added CMBV301.BIM for Cell Master Model MT8212B (V3.01)

What is new in v3.01?

- If you exit GSM mode with no input, and then try to re-enter GSM mode, later, the noise floor is too high, and the reported power is too low
- When changing the frequencies, the correct cable loss is not applied until the cable is selected again after the frequencies are entered.
- DTF Aid, the cable loss data is bounded by a less than function. it will cause less confusion if the check is for less than or equal to. i.e. cable list shows 1000MHz, most would expect that the test frequency of 1000 would be included within that parameter.
- If f1 =1000 and F2=1200, it should be possible to change f1 to something larger than f2, with the software correcting f2 to be equal to the changed value. The same is true for trying to set f2 lower than f1. f1 should be adjusted at the same time to match this lower value.
- VNA measurements with windows were not as accurate as they could be
- ACPR measurements were not as good as they could be
- Need to change the display type from PM to the following:
 - PMET - Power Meter
 - PMON - Power Monitor
- Naming of option 29 in the MODE list isn't correct. Instead of "Power Meter - NB" it should be "Power Meter - Internal"
- DTF AID changing frequencies should not be constrained to a specific order based on the value of the other frequency. If f1 =1000 and F2=1200, it should be possible to change f1 to

something larger than f2, with the software correcting f2 to be equal to the changed value. The same is true for trying to set f2 lower than f1. f1 should be adjusted at the same time to match this lower value.

- DTF Aid, the cable loss data is bounded by a less than function. it will cause less confusion if the check is for less than or equal to. i.e. cable list shows 1000MHz, most would expect that the test frequency of 1000 would be included within that parameter.
- DTF Aid issues. When changing the frequencies, the correct cable loss is not applied until the cable is selected again after the frequencies are entered.
- CW Signal Generator Mode: Display Setup Picture says Cell Master - change to Cell Master/Site Master.
- CW Signal Generator Mode: When changing the frequency, the new frequency and power values will show up before the frequency window is completely removed.
- In Spectrum Analyzer and Spectrogram modes, instead of showing "Std=???" and "Channel=N/A" show them as "Std= " and "Channel= "
- CDMA CDP mode - use of serial command A402h (followed by any value) to change the scale always results in a scale setting of 0dB/Div. A subsequent entry of the FF byte to exit remote, results in a black screen that does not recover. [e.g.: 45 + A4,02,01 + FF]
- RSSI (Recall 33) command - HHST can't display any RSSI trace currently, the firmware sets zero for the first four bytes- (Amplitude). This has broken in the current firmware. When HHST v6.50 was released, it was working.
- MS2711A - CW Signal generator. Press the Start Cal / Trace button and the trace menu comes up. None of the buttons seem to have an adverse affect on the CW sig gen, but I would think that pressing Trace would generate an error beep, like limit, marker, etc do. Transmission Measurement. If you recall a display that is not a TM type (say Power meter) and hit escape, a 'Performing Cal' message appears. There should be no need to perform a cal after just recalling and exiting a saved display. Also appears in 2711D model
- Transmission measurement. The battery indicator icon is only half seen when any parameter key is pressed in this mode. The icon is seen fully at the end of the next sweep. This does not happen in the 2711D model.
- Transmission Measurement. When I enter this mode, the detector is in Sample. When I choose Noise Marker, the detector is RMS and when I choose Regular Marker, it reverts to Pos Peak. Firstly - I don't think a user should be allowed to choose Regular or Noise Marker when all markers are off (this is currently possible). Since there are no controls for Detection in this mode, we need to be consistent on the detector choice for Non-noise markers - I'm not sure if Sample or Pos Peak is more appropriate. This happens in both S332D as well as 2711D
- MS2711A - IA. Recall setup -> Default. Select IA->Signal strength->volume->50%. With no antenna connected, the received signal is about -100 dBm. The beeps are low and slow. Press Freq->Signal standard->GSM1900. Connect antenna. Set channel to 629. Press UPLINK. Note that -250 dBm is displayed on the screen and unit stops making measurements
- EVDO testing - External Ref Freq without actually having one connected. Got Warning as appropriate but had to press Enter twice to remove it.
- Upper ACPR measurement is off by 3dB
- Sweep time terminator for seconds is "S" should change it to "s"
- Turn ON Bias Tee. Attach FCN Module. Bias Tee remains ON Try turning OFF bias tee, a warning message pops up saying feature unavailable
- All buttons appear to be locked up when unit is in the middle of a long sweep with RMS average on in ACPR. Is it a feature? For example, In SPA mode, The unit is set for ACPR RMS Avg of 25. RBW 3 KHz and VBW 1 KHz, start frequency of 1.9999 GHz and stop of 2.001 GHz. The sweep time in this mode is 104.35 (perhaps set by mistake). Now the user wants to change mode (e.g. to EVDO), but all the buttons are locked out, even the ESC.
- MS2711A - IA. Recall setup -> Default. Select IA->Signal strength->volume->50%. With no antenna connected, the received signal is about -100 dBm. The beeps are low and slow. Press Freq->Signal standard->GSM1900. Connect antenna. The beeps are fast and high

pitched. Disconnect antenna (so received signal drops to about -100 dBm. Note that the beeps are still fast and high.

- MS2711A - channel scanner. Sys->System options. The status window for system options is not displayed (Units, printer, date format, etc)
- MS2711A - channel scanner. Complete 1 full measurement. Put unit into HOLD mode. Save measurement. Now press RUN/HOLD button. Notice that the bars are only partially drawn now.
- Cable list issues Add none in the cable list. Add customer cable list folder.

V3.30

New:

Added 8X0DVXXX.BIN for Site Master Model S810D, S820D (V1.11)

Added CMBV216.BIM for Cell Master Model MT8212B (V2.16)

What is new in v2.16?

BUG FIXED:

- Change the unit to OTHER THAN dBm. Now go to Amplitude - Ref Level - type the maximum level which appears in the text box, It will not allow if you type the maximum level. It just beeps
- Need time terminator keys for AM/FM demod time.
- Linear scale, Watts units. Edit the reference level, press uW terminator. Instead of going back to the amplitude menu, you end up back in the atten/preamp menu. Same problem with pW selection.
- Had battery charging issues due to high temperatures within the units. Most of the complaints have been associated with Color units and most have been related to the use of the soft case, and all have been in the SPA mode.
- A new GSM standard needs to be added to the frequency standard list.
- "Start Cal" should go back to starting the cal in Option 21 in addition to the meas/dispatch method of starting the cal.
- Mode selection screen, it would be convenient if pressing up arrow from the top line would put the cursor on the bottom line, and pushing down arrow from the bottom line would put the cursor on the top line.
- Spectrogram - marker button should bring up the cursor menu.
- RSSI errors (e.g., mixer saturation) persist forever.
- Spa Trigger: In most spectrum analyzers, pressing "single" again will retrigger a sweep.
- In SPA mode: Display a trace on both trace A and trace B. Put the unit in "HOLD" mode. Press the "RECALL TRACE -> B" button and press "ESCAPE" to exit the dialog. Trace A is redrawn but trace B is not. The menu shows that "VIEW B" is selected. Now press "BACK" and then "TRACE B". The menu now shows that the "CLEAR B" option is selected.
(1) Would expect that the trace that was previously held in trace B would be restored when I press "ESC" to exit the dialog. (2) You may also decide that Trace B is lost when the recall trace dialog is opened, but in that case, the menu should show "CLEAR B" as the selected option when the dialog is closed.
- Put SPA in single sweep mode. Change center freq. After change is made, unit sweeps again and stops. Press Enter to trigger another sweep, it triggers correctly. Now modify a marker. When pressing enter to accept, it doesn't trigger a new sweep - this is fine, the data is still valid. Now press Enter to trigger another sweep and all it does is redraw the current sweep...it doesn't measure again.
- Channel Scanner : Channel Frequency in the bottom of the trace - doesn't display the right value in kHz, MHz or GHz. Example it displays Channel Frequency MHz and display 2.669 GHz as 2.669 MHz
- In T1/E1 mode when logging is enabled, G.821 results are not logged.
- In T1 and E1 measurement duration times can be selected as "1 HOURS" and "1 DAYS"
- Make a T1 BERT Measurement, Be in the Raw DATA display screen. Once the measurement is done. Save the trace and go to E1 mode. From E1 mode, if you recall the saved T1 trace. It doesn't have valid data, most of the data displays "UNAVAILABLE"

- RSSI - Send a enter remote command 69. Once the unit is in remote, Press the ESCAPE KEY in the unit. The unit starts sweeping, but it doesn't clear the old trace. It overlays above the old trace. so you can see more than one trace in the screen.
- All SPA related modes should use the same start/stop frequencies. so a change in GSM mode affects CDMA, SPA, IA, ChScan, PwrMtr, etc.

V3.29

New:

Added 251CV223.BIN for Site Master model S251C (V2.23)

What is new in v2.23?

BUG FIXED:

- The thru CAL was not done correctly in IG/IL mode.

V3.28

New:

Added CMBV117.BIN for MT8212B (V1.17)

Added USB support, This tool will now work with most of the USB adapter in the market.

- New Firmware files bundled

CM_V209BIN & CMCV209.BIN for models MT8212A, S331D, S332D and MS2711D (V2.09)

What is new in v2.09?

BUG FIXED:

- On changing the stop frequency when CP measurement is ON, the unit hangs.
- DTF, Enter in 5dB/m cable loss-look at the trace-change units to English, The trace still looks correct.
- Press DTF aid. Note Cable Loss is reported as 1.524 dB/ft, which is correct. Press Esc (without even changing anything!) Now the trace is using 1.524dB/m cable loss, which is not what was entered. Go back to DTF Aid, and try to enter a cable loss value. We're in English units, but Min and Max are listed as "dB/m" When a value is entered, it uses the value as dB/m, but displays under DTF Aid as dB/ft
- When Bias Tee is ON and the attenuation is less than 20dB, on changing a parameter the measurement box comes back with an OVERLOAD
- Channel power values must be calculated before they are sent in response to command #86. Currently, the function relies on the global channel power/density variables. This is fine as long as the box is in the measure menu and the data is updated. Unfortunately, when operating via remote mode, that is not often the case.
- Adjacent channel power values must be calculated before they are sent in response to command #88. Currently, the function relies on the global ACPR variables. This is fine as long as the box is in the measure menu and the data is updated. Unfortunately, when operating via remote mode, that is not often the case.
- Factory default settings for PM center min freq are incorrect in boxes where no option 6 is installed.
- Fix bug with E1 E-bit histogram all-errors not stopping once started
- Timers are not needed during DSP Comm.
- One can't find any way of seeing when full averaging is taking place (in other words there have been at least four sweeps when four cycles are averaged) from the PC. If one sets averaging, the display shows "AVG 1/4", "AVG 2/4", "AVG 3/4", "AVG 4/4" (assuming four sweeps are averaged). This does not happen when command #118 (Set Sweep Averaging) is used to change averaging from a high value to a lower value. For example, setting averaging to 25 from the PC makes the display go from "AVG 1/25" to "AVG 2/25" to "AVG 25/25" as expected. However, when the averaging is reduced via the PC the display shows the new average factor, but the old number of cycles i.e., switching the averaging from 25 to 2 via the PC gives "AVG 25/2" on the display - an invalid value. This does not happen when the front panel is used.
- In S21 Modes there are certain frequencies where the level dips down about 50 db

- To Pass EMI, change the way graticules are displayed
- For user's who want to capture sweep data to the PC in close-to-real-time, enter remote/exit remote convention is too time-consuming.
- Video trigger was off by a couple dB in Zero Span mode with the 30kHz RBW
- In transmission measurement mode, with low RBW and VBW, unnecessary spikes in the noise floor are sometimes visible.
- In zero span mode, if RBW = 30kHz, and the sweep time is not short, the trace will read low by 2.4dB.
- In Zero Span Mode, if you choose a long sweep time with RMS average detection, the first point takes too long to appear.
- In Zero Span Mode, if you change parameters a very large number of times, we can run out of memory, and many bad things can happen.
- Set Channel Power serial command sometimes causes lock fail.
- Set Channel Power serial command causes unit to start sweeping while still in remote mode.
- Firmware required for communication with Trimble Lassen SQ GPS module
- Set factory defaults (escape on), now recall the runtime setup via serial port. Screen says attenuation is 31 dB, but recalled bytes say 30 dB.
- AM/FM demod serial command does not work with S332D. Impedance not sent correctly in command #29 of S332D.
- In Zero Span Mode, at extremely low power levels, the trace sometimes jumps up to the top of the screen.
- Set signal std=802.11b, max hold on. Switch to 802.11FH. The span changes, but max hold is not cleared.
- Enable ACPR or channel power. Turn off the box, turn it back on. Go to the measure menu. Measurement date is invalid until the first sweep completes, even if there is good data.
- Set impedance to 75 ohms and turn on max hold. On each sweep the offset value for the impedance change is added to the trace and consequently the trace marches off the top of the screen.

8X0CV215.BIN for Site Master model S810C, S820C (V2.15)

What is new in v2.15?

Internal Bug Fixed.

251CV222.BIN for Site Master model S251C (V2.22)

What is new in v2.22?

Internal Bug Fixed.

V3.27

New Firmware files bundled

CM_V200.BIN & CMCV200.BIN for models MT8212A, S331D, S332D and MS2711D (V2.00)

What is new in v2.00?

ADDED:

- AM/FM demod for MT8212A/S332D
- Bias Tee for S332D
- T1 and E1 frequency measurement requested by customers.
- No command to set SPA impedance - Added serial command #116.
- Added a new button in MT8212A under SA Marker M1 to place a marker in a particular Channel.
- Added dBdsx display mode.
- In T1 mode, customers would like to have auto frame attempted when starting new measurement and unit is out of frame – ADDED.

BUG FIXED:

- Remote mode functions correctly, but the display gets messy - Fixed.
- Enable AM/FM demod so it's audible. Now go to measure menu and press ACPR (or any other measurement). AM/FM demod icon goes away, but demod is still audible. Back in the demod menu, On/Off indicates off. Need to turn off the actual demodulation - Fixed.
- Seems to be a lot of display redrawing during execution of serial commands. This is slowing down serial command processing time - Fixed.
- When recalling a marker with a single limit enabled and a reference level different from the runtime reference level, it draws the limit line in 2 different places - Fixed.
- When saturation error occurs on the last point, sweep complete byte is not sent - Fixed.
- Serial command #29 is not correctly returning RMS averaging, multiple limits or linear units correctly for SPA mode – Fixed.
- Serial command #29 is not returning zero status or value for power meter – Fixed.
- When the frequency range of the analyzer is changed via remote (regardless of current and new frequency value) the old trace remains on the screen – Fixed.
- If you use Recall Trace -> B when the B trace has an offset, The B trace's offset is not correctly applied until you power cycle the unit. A -> B seems to be okay – Fixed.
- Upload of max/min hold, linear units doesn't seem to work – Fixed.
- Capture a SPA trace, upload it, then capture the uploaded trace and re-upload it. The 2nd upload says it's successful but no trace is saved – Fixed.
- For small Span/RBW ratios, min sweep time doesn't work; the sweep is usually much faster – Fixed.
- Save a setup with RBW < 30 kHz. Now change the span to 0. Try to recall the saved setup. It will fail – Fixed.
- Serial command #20 is returning the wrong number of bytes for MS2711D. It returns 230 rather than 310 – Fixed.
- Serial echo status/trigger sweep does not work as documented or as it used to work – Fixed.
- Marker to Valley issue in RL mode: Factory Defaults, Choose Flex Cal - Choose Band = Cellular Downlink – calibrate - change F1 = 25, F2 = 4000MHz go marker to valley. Marker will go somewhere in band, not to the lowest valley – Fixed.
- 30kHz RBW filter is only about 28kHz wide. Solution: 30kHz RBW filter was designed assuming the 100kHz band pass was flat over its central 30kHz. It isn't. New filter assumes a more rounded top, and is thus wider so that the composite filter is about 30kHz wide.
- There is no zero span measurement for S21. Solution: Disabled zero span and made the min span to 10 Hz.
- In T1 mode, customers would like to have auto pattern sync attempted when starting new measurement and unit is out of pattern sync. Solution: Initiate auto pattern sync when measurement is started and unit is out of sync.
- Recall a Uploaded Field Strength Trace - Could not see the antenna name. Solution: Antenna name was not being displayed for a recall trace. Added antenna name to recalled display name.
- Spa Mode - When in Channel Power mode and after pressing "Measure", one cannot put in a value for Center Frequency without hanging up the box – Fixed.
- SA mode, scrolling a marker on an incomplete sweep, the data points which don't exist were displayed - Fixed.
- If you go into "recall display" mode and there aren't any displays, the bottom two soft keys can be pressed to switch "erase highlighted sweep" and "erase all sweeps". However, the soft keys don't get overwritten on the display - they still say whatever the previous menu says (e.g. if you were in "amplitude" and you switch into recall "display" mode, the bottom two soft keys will still say "units" and "ref level offset" but the function of those two key changes would be as described at the start of the paragraph – Fixed.
- Power meter mode "zero" should probably be unset when any frequency changes. The noise power changes when the frequencies we measure change - Fixed.
- Recall a spa trace with auto attenuation. Change the reference level. The attenuation changes too, but it should remain whatever it was when the measurement was made – Fixed.

- SPA mode - S332D, select GSM 1800 - Uplink or GSM 1800 - Downlink or GSM 1900 - Uplink or GSM 1900 - Downlink. Then press Select Channel and type a number which is OUT of the range say for ex the range of channel is Min = 512 and Max = 810, then enter a value less than 512 or greater than 810 and press enter, watch the bottom of the screen, the Channel value increase by one every time when you enter a invalid number. If you type a valid number, then it is incremented by ONE – Fixed.
- In SPA mode: Displaying an "A+B" trace. Selected "MAX HOLD". The "Max Hold" labels shows up on the left-hand side of the screen, but it doesn't appear to be doing anything. That there should either be an error condition that would not allow the user to select max hold while doing trace math or else we should attempt to do both (trace math and max hold) – Fixed.
- Maximum Reference Level does not change when Reference Level Offset changes, making the trace too high to be seen on the screen – Fixed.
- Reference Level does not move when Reference Level Offset changes – Fixed.
- Auto attenuation does not account for Reference Level Offset – Fixed.
- Reference Level Offset with linear units does not work – Fixed.
- Reference Level Offset does not adjust anything in Transmission Measurement mode – Fixed.
- If Reference Level Offset is on, Trace B keeps on getting adjusted again and again by the Reference Level Offset. This can cause a hang if trace math is on – Fixed.
- If you open an edit box, press up, and then press a number, hitting escape cannot get you back to the original number – Fixed.
- Recall a C/I trace, press Escape when done. Now try to save a trace. It is saved with a value in the linked trace field – Fixed.
- SPA noise floor at 30kHz RBW is sometimes too high on some boxes. Solution: Redesigned the 30 kHz RBW filter to work at a different sample rate
- The left vertical boundary line is missing in the SPA and S21 plots on the color display – Fixed.
- When editing a multiple limit, pressing any of the menu buttons causes the fields to change – Fixed.
- START CAL: Pressing F1 on the C models will skip the InstaCal check. This is handy for customers using 50-75 ohm transformers – Fixed.
- In RL mode. Recall a RL trace. Press BW/SWEEP and then TRACE MATH. Note that the menu changes to FREQ. Solution – Fixed.
- Serial command #17 and #28 don't send and receive correct gamma data – Fixed.
- In at least SPA mode, If trace math is on, recall display is goofy. e.g., If A-B->A is selected, the trace shows 0. I imagine this is not intentional? – Fixed.
- When instrument is turned off with MAX HOLD on, and then turned back on, the message area on the left side of the screen properly shows Max Hold, but the Max Hold soft key isn't shown as pressed – Fixed.
- If there is a C/I saved trace in the unit and you save a Channel Power trace. Then, if you recall the Channel power trace, it bring C/I trace with it. Before that it gives a error message. "Frequency range of stored sweep does not match current frequency range Please Enter to continue". This happens with other measurement like ACPR, Field Strength too. Getting a overlaid trace when recalled - Fixed.
- Capture a C/I trace from the Unit thru Software Tools. Now once you are done with capturing a trace. The box exit remote. But still the unit holds the C/I status as ON. Now if you do a Capture Current trace, it is holding one C/I trace data and second is the current spa data both are not related, they are two different trace. Not holding the original C/I trace data – Fixed.
- SPA, channel power: Choose a US Cellular CDMA downlink, channel 1. 4.92MHz Span. Channel Power: 1.23MHz Int BW. Push measure. bug #1: Now try to make the span 20MHz. Without warning message or beep, it makes my span 12.3MHz. bug #2: Push zoom one channel. The span stays the same; The Int BW stays the same, but the marker lines move. My channel power and density drop – Fixed.

- When entering a frequency using a dialog box, in spectrum analyzer or transmission measurement mode, after the data has been completed with a unit terminator, a black vertical line is written vertically across the center of the dialog box and markers are written before the dialog box is removed – Fixed.
- In transmission measurement, the first time the Average soft key was pressed, the average number is shown as zero instead of OFF – Fixed.
- In C/I measurement, averaging doesn't restart for the second half of the measurement. Ideally if averaging is on, the measurement wouldn't be taken until the number of averages entered by the user has been completed for both halves of the measurement – Fixed.
- In Power meter mode, when I press SYS button, The following menu buttons can be seen Options – Clock – Self Test – Status - <Blank> - Language. When pressing the Clock and get back from Clock menu, the current menu is from SPA mode, where I see the Impedance button – Fixed.
- While in Power meter mode. Press Freq/Span - Press SPAN - Press Min, Results in Warning Message that says "Min RBW for ZERO span is 30KHz, RBW has been adjusted." Note, this only happens the first time you enter the SPAN mode. or if the span edit dialog box is up and you press Min. Other soft keys work fine while the edit dialog box is up – Fixed.
- When setting the date/time, the display of the date and time disappears. If escape out of the change parameter box without changing one of the date values (month, day, year), the date will disappear. The time reappears after a second or so when the time changes, but the date does not come back. Tried again and it looks like the date will reappear if you wait to roll over to a new day – Fixed.
- When in single sweep mode the sweep time does not update properly. It keeps incrementing, not resetting. More details CF 1.25 GHz, span full. Atten, RBW and VBW all auto, detection is positive peak, Set Trace Average to 9, Single sweep Limit menu, single limit, turn on, sweep averaging on, Marker menu, M1 on, edit M1, enter, run/hold now it starts accumulating – Fixed.
- Recall a Power Meter Display. Note the words 'RECALL' do not appear anywhere on the screen. This is inconsistent with the SPA and RL traces. It would be nice if all recalled traces displayed the 'RECALL' indicator on the same location on the screen – Fixed.
- Power Meter trace, just above External Ref Freq button there is a "Change Date Format button", that is not active. S332D other button works, but this doesn't work – Fixed.
- Spa Mode - Vertical hash marks are created on the screen above the graph whenever OVER RANGE error is instantiated and then removed. This can happen in both the Spectrum Analyzer and S21 mode. I created this when I turned Preamp on with greater than -40dBm reaching the first mixer – Fixed.

8X0CV213.BIN for Site Master model S810C, S820C (V2.13)

What is new in v2.13?

BUG FIXED:

- Changed wording of DTF Aid to say "Press Enter To Continue" from "Continue"

2711B223.BIN for Site Master model MS2711B (V2.23)

What is new in v2.23?

ADDED: Full span sweeps see an increase in sweep time of 3 s.

BUG FIXED:

- The command to set the bias tee (0x62) did not correctly control the power of the circuit, resulting in incorrect readings – Fixed.
- No way to access C/I data in saved traces via the serial port – Fixed.
- C/I results were not correctly displayed if units were other than dBm - Fixed.

251CV220.BIN for Site Master model S251C (V2.20)

What is new in v2.20?

Internal Bug Fixed.

11XCV253.BIN for Site Master model S113C, S114C (V2.53)

What is new in v2.53?

BUG FIXED:

- Users were unable to disable InstaCal test if they wanted to. If the user connected a 75 ohm adapter the Site Master thought it was an InstaCal and the Site Master would not – Fixed.
- Users wanted to know how many more measurements they could store in memory – Fixed.

33XCV253.BIN for Site Master model S331C, S332C (V2.53)

What is new in v2.53?

BUG FIXED:

Users were unable to disable InstaCal test if they wanted to. If the user connected a 75 ohm adapter the Site Master thought it was an InstaCal and the Site Master would not – Fixed.

Users wanted to know how many more measurements they could store in memory – Fixed.

S4_MV620.BIN for Site Master model S810A/S818A/S820A (V6.20)

What is new in v6.20?

BUG FIXED:

- Wrong DTF distance and unit of measure displayed in list box when recalling DTF setup – Fixed.

V3.26

New Firmware files bundled

CM_V157.BIN for Cell Master model MT8212A(V1.57)

What is new in v1.57?

Internal bug fixed.

8X0CV212.BIN for Site Master model S810C, S820C (V2.12)

What is new in v2.12?

Internal bug fixed.

2711B221.BIN for Site Master model MS2711B (V2.21)

What is new in v2.21?

Added ability to escape out of saving C/I traces.

Correctly format C/I result units.

251CV219.BIN for Site Master model S251C (V2.19)

What is new in v2.19?

DTF mode doesn't measure correct fault distance – Bug fixed.

11XCV252.BIN for Site Master model S113C, S114C (V2.52)

What is new in v2.52?

Internal bug fixed.

33XCV252.BIN for Site Master model S331C, S332C (V2.52)

What is new in v2.52?

Internal bug fixed.

v3.25

New Firmware files bundled

CM_V156.BIN for Cell Master model MT8212A(V1.56)

8X0CV211.BIN for Site Master model S810C, S820C (V2.11)

What is new in v2.11?

Internal bug fixed.

2711B220.BIN for Site Master model MS2711B (V2.20)

What is new in v2.20?

Support for option 10 (bias tee) is now available.

New measurement, C/I is now available.

Changed antenna names to reflect the Anritsu part numbers rather than the manufacturer's part numbers.

Code Loader new features:

- Changed Site Master Code Loader name to Handheld Code Loader.
- Code Loader supports new Model MT8212A.
- Code Loader Bugs Fixed:
 - MS2711B does a clear memory automatically in V2.18, While Code Loader does clear
 - memory too, since this process is done twice, Code Loader popped an error message.(Fixed)

v3.24

New Firmware files bundled

2711B218.BIN for Site Master model MS2711B (V2.18)

What is new in v2.18?

"/" character that was allowed as part of trace names was

causing problems when the users would try to directly save the traces as files in SMST.

Replaced "/" with "+".

Added a linear scale where the user can display their measurements in either Watts or Volts.

Added RMS detection algorithm.

Users want to be able to artificially slow the sweep in order to measure intermittent signals.

Added "Samples/Freq" function so that the user can adjust the number of measurements taken at each frequency. The more measurements taken at each frequency, the slower the sweep. Default value is 1.

HP DeskJet 350 is obsolete. Added support for replacement, DJ 450.

Added display which will say how many more traces can be stored when the user attempts to store a trace - ex. "Memory space available for 20 more traces."

Added storage for date format in trace structure so different traces can be stored with different date formats.

Changed scale minimum to 1 dB/div from 2 dB/div.

Serial command #27 (Query Sweep Memory) was returning the percentage used rather than the percentage available. Adjusted the calculation to return the percentage available (firmware behavior now matches Programming Manual documentation).

Changing the start, stop or span frequencies with ACPR measurement enabled caused unpredictable results. Disable the measurement if one of those parameters is changed. ACPR measurement calculates a result immediately when it is enabled, before a sweep is performed with the correct parameters. This leads to the first result looking different from subsequent results,

Calculate immediately upon measurement start only if parameters are not changed.

Dynamic attenuation sometimes get to a state where it never stops adjusting parameters.

This is particularly noticeable when there are no obvious peaks in the measurement span (just noise floor),

We now stop attempting to adjust if nothing can be done.

When reading current channel power/ACPR measurement via the serial port, calculations were not performed, so correct values were sent only if the current menu of the box was the measurement menu or channel power menu, Calculate the channel power/ACPR before sending the value. Eliminated spur at 1425 MHz.

Eliminated anomaly visible at 2060 MHz with narrow span/RBW. When dynamic attenuation is enabled and modifies the RL/attenuation, limits are not erased from the display. This can lead to several limit lines, only one of which is valid.

Erase the limit lines every time something is adjusted. Redraw when the adjustments are done.

When demod type is SSB/CW, the button states are not updated properly,

Changed menu references to the current AM/FM demod menu rather than one specific menu. When dynamic attenuation is disabled, clear the "adjusting" hourglass. Trademark "TM" symbol added to Spectrum Master bitmap. Serial command 0x6F always returned "parameter error" when trying to enable dynamic attenuation, Fixed the command to correctly accept the parameter 0xFF (to enable dynamic atten).
Add battery current to self test display.
Added "Spectrum Master" to the opening screen.
Display the options (e.g. "/8/20") after the model number in the opening screen (e.g. "MODEL MS2711B/8/20").
When in single sweep mode, MARKER FREQ TO CENTER does not update the display correctly.
Update graph parameters, clear the graph (since data is no longer valid). User must press ENTER or SINGLE/CONT to get new data.

251CV218.BIN for Site Master model S251C (V2.18)

What is new in v2.18?

Added 6 new European cable in three standard cable folders.

Added HP DJ450 printer to printer list.

Continuous sweep in bias-tee mode (battery-powered).

Replaced "/" with "+" in trace name input menu to keep compatible with Windows Application.

11XCV251.BIN for Site Master model S113C, S114C (V2.51)

What is new in v2.51?

InstaCal alerted the user when 1 year had passed since factory calibration,

Removed the test from the function.

Added a function so that the Options 5, Option 10 are displayed on the splash screen.

Requesting ability to enter SPA frequency in Hz (many digits). Updated Digits from 4 to 10.

DTF cable name was truncated at space, Fixed the problem, now cable names are not chopped at the space in the cable name.

Requesting ability to Enter DTF Distances > 1000m. Updated values to 1500m.

DTF cables on list for S11xC are outside the frequency range for the S11xC, Fixed to not display the higher frequency tables.

In SPA mode when recalling a trace, you could hit the button, "Marker center to Frequency". This was bad because it would adjust the span outside the range of saved data. Disable that soft key.

When the SPA has an extremely narrow span, the markers can appear to roam over the screen.(Fixed).

When selecting cables in DTF mode, if you cancelled your change request, the cable was not reset properly.

Store a temporary copy of the current folder until you are sure it will be replaced.

HP DJ350 printer is going obsolete, So replaced it with HP DJ 450.

Eupen cables needed to be added to the DTF list

Cables and their parameters were added to the file.

33XCV251.BIN for Site Master model S331C, S332C (V2.51)

What is new in v2.51?

InstaCal alerted the user when 1 year had passed since factory calibration,

Removed the test from the function.

In SPA mode when recalling a trace, you could hit the button, "Marker center to Frequency".

This was bad because it would adjust the span outside the range of saved data. Disable that soft key.

When the SPA has an extremely narrow span, the markers can appear to roam over the screen.(Fixed)

When selecting cables in DTF mode, if you cancelled your change request, the cable was not reset properly. Store a temporary copy of the current folder until you are sure it will be replaced.

HP DJ350 is going obsolete. So, replaced it with HP DJ 450.
Eupen cables needed to be added to the DTF list, Cables and their parameters were added to the file.

8X0CV210.BIN for Site Master model S810C, S820C (V2.10)

What is new in v2.10?

Relocated "Calibrating above 18GHz", so that it will show whenever N calibration is being performed above 18GHz.

Added HP DeskJet 450 into mix of printers.

Changed file save capability by removing "/" from save selection and replacing it with "+".

Allowed change of CAL connector coefficients after a calibration.

Moved Six MHz DAC adjustment to Service Mode and moved Marki menu to Debug mode.

Changed frequency upper limit from 10 to 10.5GHz.

Fixed issue with self test display.

Fixed issue with inaccurate ADC readings for external voltage, PCB revision and RTC battery voltage.

Fixed issue with recalling trace during remote cal causing invalid cal.

MSAV146.BIN for Site Master model MS2711A (V1.46)

What is new in v1.46?

Spur visible at 1425 MHz. Modified segment end freq table to include spur avoidance for this spur.

At 2060 MHz (the band switch) an anomaly (looks like a negative spike) can be seen if the span is sufficiently narrow and the RBW is ≤ 100 kHz. Adjusting the VBW (to more narrow values) seem to make the anomaly disappear, Increase delay time for settling at the band switch.

When span is ≤ 2 kHz, marker or span edit results in "roaming" markers. That is, on every sweep the markers change points across the screen until they stop at a point that corresponds to a frequency step, Fix rounding errors, add special handling when increment step.

v3.23 Internal bug fixed

v3.22

New Firmware files bundled

S2AMV424.HEX for Site Master model S330A/S331A/S400A (V4.24)

What is new in v4.24?

Modified DTF code to improve distance accuracy on long cables.

S63MV153.BIN for Site Master model S113B/S113BQ/S114B/S114BQ (V1.53)

What is new in v1.53?

Modified DTF code to improve distance accuracy on long cables.

Added several cables to cable tables. Updated a few cable entries.

Fixed - In DTF default mode, default values were not reset when switching from a specific cable standard to "NONE" cable standard.

251CV217.BIN for Site Master model S251C (V2.17)

What is new in v2.17?

Modified DTF code to improve distance accuracy on long cables.

DTF cable names are truncated at the first space when displayed instead of displaying the entire cable name.

Establish which options are installed on a particular unit.

Fixed - Autoscale routine does not provide proper scaling in SWR mode when DUT has a very good match.

Fixed - Turn on single limit line in any measurement mode, then press "Recall Setup" select "Default", Single limit line is not cleared.

Cable attenuation factor for ANDREW cables has been changed.

Changed calibration temperature window from +/-15deg C to +/- 18deg C.
If you have a limit line set to 18 in a RL trace and saved in the unit and a limit line set to 20 in a DTF trace and saved in the unit. When tried to capture these two traces thru Software Tools, the limit line value 18 for RL traces that is correct, but for the DTF trace also get limit line value 18 instead of 20.
Added support for Option 10B.

11XCV248.BIN for Site Master model S113C, S114C (V2.48)

What is new in v2.48?

Modified DTF code to improve distance accuracy on long cables.

Fixed - Autoscale routine does not provide proper scaling in SWR mode when DUT has a very good match.

Added several cables to cable tables. Updated a few cable entries.

Fixed - When saving traces, a certain set of conditions causes RL limit line value to be saved instead of DTF limit line value.

33XCV248.BIN for Site Master model S331C, S332C (V2.48)

What is new in v2.48?

Modified DTF code to improve distance accuracy on long cables.

Fixed - Autoscale routine does not provide proper scaling in SWR mode when DUT has a very good match.

Added several cables to cable tables. Updated a few cable entries.

Fixed - When saving traces, a certain set of conditions causes RL limit line value to be saved instead of DTF limit line value.

S4_MV619.BIN for Site Master model S810A/S818A/S820A (V6.19)

What is new in v6.19?

Modified DTF code to improve distance accuracy on long cables.

S56MV159.BIN for Site Master model S251B (V1.59)

What is new in v1.59?

Modified DTF code to improve distance accuracy on long cables.

Added several cables to cable tables. Updated a few cable entries.

Fixed - In DTF default mode, default values were not reset when switching from a specific cable standard to "NONE" cable standard.

S62MV153.BIN for Site Master model S331B/S332B/MS2711 (V1.53)

What is new in v1.53?

Modified DTF code to improve distance accuracy on long cables.

Added several cables to cable tables. Updated a few cable entries.

Fixed - In DTF default mode, default values were not reset when switching from a specific cable standard to "NONE" cable standard.

2711B215.BIN for Site Master model MS2711B (V2.15)

What is new in v2.15?

Fixed - Option 5 (only) units with versions 2.11 to 2.14 will not be able to enter power monitor mode.

Removed a measurement anomaly at 2060 MHz when RBW <= 100 kHz.

Fixed - When dynamic attenuation is enabled and modifies the RL/attenuation, limits are not erased from the display. This can lead to several limit lines, only one of which is valid.

Fixed - When demod type is SSB/CW, the button states are not updated properly.

Fixed - When dynamic attenuation is disabled, clear the "adjusting" hourglass.

Fixed - Serial command 0x6F always returned "parameter error" when trying to enable dynamic attenuation.

Added - Display installed options on the startup screen after the model number.

Fixed - When in single sweep mode, MARKER FREQ TO CENTER does not update the display correctly.

Code Loader new features:

- Code Loader supports new Models S810C & S820C.
- Code Loader Bugs Fixed :
- Fixed Bug for S810A, S818A, S820A Blank screen issue after Code loading. By giving message box for all A models to do a Factory Default setting.

v3.21

New Firmware files bundled

S2AMV423.HEX for Site Master model S330A/S331A/S400A (V4.23)

What is new in v4.23?

Fixed manufacturing test

S3_MV312.HEX for Site Master model S112/S113/C751/C752 (V3.12)

What is new in v3.12?

Fixed manufacturing test

S5_MV508.BIN for Site Master model S120A/S235A/S250A (V5.08)

What is new in v5.08?

Fixed manufacturing test

S5PMV586.BIN for Site Master model S251A (V5.86)

What is new in v5.86?

Fixed manufacturing test

S63MV151.BIN for Site Master model S113B/S113BQ/S114B/S114BQ (V1.51)

What is new in v1.51?

Fixed occasional lock fail after pressing RUN/HOLD.

Fixed marker display value when using trace math

Fixed limit slew for very narrow scales (top - bottom < .35 dB)

Fixed bug when a SPA trace was recalled from RL/SWR modes (when in RUN/HOLD)

Fixed CW ON saved setup / sweep bug

MSAV145.BIN for Site Master model MS2711A (V1.45)

What is new in v1.45?

Fixed single sweep mode - didn't clear the graph when exiting remote.

Fixed serial command #1 didn't set HW on backlight.

Fixed <SYS><ON> needed to clean up limits.

Fixed fix power so that it's not so slow when saving display in single sweep mode.

Fixed "hanging graph" when <SAVE DISP> is pressed before a complete sweep.

Disabled trace B on change of RBW and detection algorithm.

Fixed erase/draw trace B in single sweep mode.

Display the hourglass during the measurement calculations.

Redraw graticules/re-calc markers at the end of single sweep.

Fix <ESCAPE> in limit segment edit.

Cleaned up trace B display/erase.

Fixed multiple limit redraw on zero span.

Fixed limit adjustment in single sweep mode.

Fixed terminator keys for Multi-limit edit.

Now we check for a valid sweep before saving channel power/acpr data with a sweep.

Added "ON/OFF" to "MEASURE" button in channel power/acpr menus.

Fixed remote self test battery voltage overflow problem.

251CV215.BIN for Site Master model S251C (V2.15)

What is new in v2.15?

Fixed a bug so the user can not change the resolution on recalled sweeps. (This would produce undesired results in the form of a corrupted display.)

11XCV247.BIN for Site Master model S113C, S114C (V2.47)

What is new in v2.47?

Added Reference Level Offset.

DTF cable. Previously if you selected NONE after having a cable, it didn't set your parameters to a known value. Now it sets them to a default value.

Field Strength Measurement according to Customers request units in V/m, not dBm/m.

InstaCal. Changes in the way ICN50 stores its error log and configuration data.

Segmented limit lines. In DTF mode there were some bugs where we would get overlapping segment errors even though it appeared that the segments did not overlap.

InstaCal. Changes in the way ICN50 baud rate is determined. This should eliminate the problems where the ICN50 error log and configuration data are corrupted.

Read ASCII Serial Number, Query Time.

33XCV247.BIN for Site Master model S331C, S332C (V2.47)

What is new in v2.47?

Added Reference Level Offset.

DTF cable - Previously if you selected NONE after having a cable, it didn't set your parameters to a known value. Now it sets them to a default value.

Field Strength Measurement according to Customers request units in V/m, not dBm/m.

InstaCal - Changes in the way ICN50 stores its error log and configuration data.

Segmented limit lines. In DTF mode there were some bugs where we would get overlapping segment errors even though it appeared that the segments did not overlap.

InstaCal - Changes in the way ICN50 baud rate is determined. This should eliminate the problems where the ICN50 error log and configuration data are corrupted.

Read ASCII Serial Number, Query Time.

S4_MV618.BIN for Site Master model S810A/S818A/S820A (V6.18)

What is new in v6.18?

Fixed slight OSL cal error

Fixed a variety of subtle UI inconsistencies

Added more manufacturing test modes

S56Mv158.BIN for Site Master model S251B (V1.58)

What is new in v1.58?

Fixed marker display value when using trace math.

Fixed status window redraw after ESCAPE from SAVE DISPLAY.

Corrected Fixed CW Status reporting.

S62MV151.BIN for Site Master model S331B/S332B/MS2711 (V1.51)

What is new in v1.51?

Eliminated first point lock fail when leaving HOLD mode.

Corrected Fixed CW Status reporting.

Fixed marker display value when using trace math.

Fixed limit_slew when $|\text{top scale} - \text{bottom scale}| < 0.35$

Fixed bug where recalling a SPA sweep while in HOLD in a SM mode resulted in a lockfail.

2711B210.BIN for Site Master model MS2711B (V2.10)

What is new in v2.10?

Fixed multiple limit bug when field strength measurement is enabled.

Added AM/FM demod center frequency step functionality.

Added mW readout.

Added standard antennas.

Compensate channel power for RL offset.

Compensate limit handler function for RL offset.

Fixed watt and volt "delta" displays.

Fixed segmented limit bug - segments outside the sweeping range were being used to determine limit beep.

Draw channel power bands when stepping the span.

Code loader new features:

- Code loader works with latest fixes in all C Models
- Code loader Bugs Fixed :
 - Timing issue fixed in SYS ON Command
 - In baud rate issue with 810A fixed

V3.20

New Firmware files bundled:

S2AMV423.HEX for Site Master model S330A/S331A/S400A (V4.23)
S3_MV312.HEX for Site Master model S112/S113/C751/C752 (V3.12)
S4_MV617.BIN for Site Master model S810A/S818A/S820A (V6.17)
S5_MV508.BIN for Site Master model S120A/S235A/S250A (V5.08)
S5PMV586.BIN for Site Master model S251A (V5.86)
S56Mv158.BIN for Site Master model S251B (V1.57)
S62MV150.BIN for Site Master model S331B/S332B/MS2711 (V1.50)
S63MV150.BIN for Site Master model S113B/S113BQ/S114B/S114BQ (V1.50)
MSAV145.BIN for Site Master model MS2711A (V1.45)
2711B200.BIN for Site Master model MS2711B (V2.00)
251CV212.BIN for Site Master model S251C (V2.12)
33XCV240.BIN for Site Master model S331C, S332C (V2.40)
11XCV240.BIN for Site Master model S113C, S114C (V2.40)

Code loader new features:

- New alert messages are added and SYS ON is done automatically by code loader, this process erase the Stored Traces and Setups automatically while code loading.
- The new Code loader automatically detects the maximum baud rate according to the Site Master Model.
- Comm. port is locked when Code loader is not in use.
- Added new labels which gives alert message for the user that his traces will be erase by doing SYS ON.

V3.11

New Firmware files bundled:

S2AMV423.HEX for Site Master model S330A/S331A/S400A (V4.23)
S3_MV312.HEX for Site Master model S112/S113/C751/C752 (V3.12)
S4_MV617.BIN for Site Master model S810A/S818A/S820A (V6.17)
S5_MV508.BIN for Site Master model S120A/S235A/S250A (V5.08)
S5PMV586.BIN for Site Master model S251A (V5.86)
S62MV148.BIN for Site Master model S331B/S332B/MS2711 (V1.48)
S63MV148.BIN for Site Master model S113B/S114B (V1.48)
MSAV135.BIN for Site Master model MS2711A (V1.35)

Code loader new features

- Redesigned the User Screen.
- Added Support MS2711A/MS2711/S332B.

Code loader Bugs Fixed:

- When you are downloading the firmware if you are Aborting in the middle of the process, the code loader program keeps the (.bin/.hex) file name in its memory and download it automatically.
- In my directory I have a file named S62MV148.bin. If I copied a file and renamed it to S62MV148A.bin. It will not download that file.
- The filename search is more selective right now.

V3.10

New Firmware files bundled:

S2AMV422.HEX for Site Master model S330A/S331A/S400A (V4.22)

S3_MV310.HEX for Site Master model S112/S113 (V3.10)
S4_MV612.BIN for Site Master model S810A/S818A/S820A (V6.12)
S5_MV507.BIN for Site Master model S120A/S235A (V5.07)
S5PMV585.BIN for Site Master model S251A (V5.85)
S62MV139.BIN for Site Master model S331B (V1.39)
S63MV139.BIN for Site Master model S113B (V1.39)

V3.00 32-bit version (unreleased)

V2.55

New Firmware files bundled:

S2AMV420.HEX for Site Master model S330A/S331A/S400A (V4.20)
S3_MV310.HEX for Site Master model S112/S113 (V3.10)
S4_MV611.HEX for Site Master model S810A/S818A (V6.11)
S5_MV507.HEX for Site Master model S120A/S235A (V5.07)
S5PMV585.HEX for Site Master model S251A (V5.85)

V2.50

New Firmware files bundled:

S2AMV420.HEX for Site Master model S330A/S331A/S400A (V4.20)
S3_MV310.HEX for Site Master model S112/S113 (V3.10)
S4_MV610.HEX for Site Master model S810A/S818A (V6.10)
S5_MV507.HEX for Site Master model S120A/S235A (V5.07)
S5PMV585.HEX for Site Master model S251A (V5.85)

V2.40

New Firmware files bundled:

S2AMV417.HEX for Site Master model S330A/S331A (V4.17)
S3_MV310.HEX for Site Master model S112/S113 (V3.10)
S4_MV606.HEX for Site Master model S810A/S818A (V6.06)
S5_MV507.HEX for Site Master model S120A/S235A (V5.07)
S5PMV582.HEX for Site Master model S251A (V5.82)

V2.30

New Firmware files bundled:

S2AMV416.HEX for Site Master model S330A/S331A (V4.16)
S3_MV309.HEX for Site Master model S112/S113 (V3.09)
S4_MV606.HEX for Site Master model S810A/S818A (V6.06)
S5_MV507.HEX for Site Master model S120A/S235A (V5.07)

V2.21

New Firmware files bundled:

S2AMV414.HEX for Site Master model S330A/S331A (V4.14)
S3_MV307.HEX for Site Master model S112/S113 (V3.07)
S4_MV604.HEX for Site Master model S810A/S818A (V6.04)
S5_MV505.HEX for Site Master model S120A/S235A (V5.05)

V2.20

New Firmware files bundled:

S2AMV413.HEX for Site Master model S330A/S331A (V4.13)
S3_MV305.HEX for Site Master model S112/S113 (V3.05)
S4_MV601.HEX for Site Master model S810A/S818A (V6.01)
S5_MV504.HEX for Site Master model S120A/S235A (V5.04)

V2.10

New Firmware files bundled:

S2AMV411.HEX for Site Master model S330A/S331A (V4.11)
S3_MV305.HEX for Site Master model S112/S113 (V3.05)