Added CMXV534.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D, MS2711D, and S412D

What is new in V5.34?

Feature: Improved RF immunity (CW Mode OFF) to provide more rejection of interfering signals, especially modulated signals out of band.

Problem Fixed: Going into NXDN Coverage with certain options enabled will no longer cause the software error message to come up.

Added CMXV532.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D, MS2711D, and S412D

What is new in V5.32?
Feature: Added NXDN TX Signal Analyzer mode for S412D.
Feature: Added NXDN Talk-Out Coverage mode for S412D.
Feature: Added limit lines with an alarm for P25 Talk-Out Coverage and NXDN Talk-Out Coverage modes.
Feature: Added remote commands to retrieve Received Power, BER, and GPS data in P25 Talk-Out Coverage Mode and NXDN Talk-Out Coverage Mode.
Feature: Added GPS tuning for Spectrum Analyzer, P25, and NXDN modes (requires corresponding hardware).

Problem Fixed: Changed IA RSSI, P25 Talk-out Coverage, and NXDN Talk-Out Coverage to use "-" instead of ":" in autosave file names. Fixes compatibility issue with MST.

Added CMXV529.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D, MS2711D, and S412D

What is new in V5.29?
Feature: Added ability to use Bias Tee in Return Loss, SWR, Cable Loss, DTF SWR, and DTF Return Loss.
Feature: Added a "Reset Sweep" button in IA - RSSI.
Feature: Added a "Last RSSI" measurement field at the bottom of the screen to display the current measured RSSI value.

Problem Fixed: Remote upload of P25 Talk-Out traces will no longer lock up the box during transfer.
Problem Fixed: Baud rate for the serial port will be set to the correct value in P25 Tx Signal Analyzer Mode after a reboot if the pattern is Control Channel.
Problem Fixed: Units (metric/English) are now saved for S21 mode after a reboot.
Problem Fixed: Remotely uploading a P25 Talk-Out trace will no longer corrupt the GPS data.
Problem Fixed: A remotely uploaded P25 Talk-Out trace will no longer show huge numbers in the measurement area when recalled in the unit.
Problem Fixed: Pressing the "RUN/HOLD" button in IA - RSSI will now stop the trace from updating.
Problem Fixed: In IA - RSSI, pressing the "RUN/HOLD" button will now resume the trace update if the previous trace was more than one screen in length.

Added CMXV528.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D, MS2711D, and S412D

What is new in V5.28?
Feature: P25 Tx Signal Analyzer enhancements - Added control channel for P25 Tx Signal Analyzer mode.
- Added "Voice" and "O.153" patterns.
Feature: P25 Talk-Out Coverage enhancements - Unit will now beep when an auto-log occurs.
- Unit will mark the auto-log location on the trace in green.
- Unit will mark the trace red when GPS is not in synch.
- Added ability to lock the front keypad.
- Added "Voice", "O.152", and "None" patterns.
- Changed "Sym Dev Error" to "Sym Dev" and "EVM" to "Mod Fid".
Feature: Transmission mode now saves Calibration with setups.
Feature: Changed the color of a depressed button to dark gray for better visibility.
Feature: Added a "Hold RF Off" button to turn off RF when VNA goes into hold.
Feature: Wavelength removed, IOR added for optical DTF.

Problem Fixed: Remote upload of setup now works for Spectrum Analyzer, Transmission Mode, and VNA (with the exception of Optical DTF).
Problem Fixed: Unit no longer displays garbage and locks up when pressing the following keys -
Signal Standard -> Select Standard -> Show Selected -> up arrow hard key.
Problem Fixed: GPS logging no longer has gaps during degree changes for P25 Talk-Out Coverage mode.
Problem Fixed: The status window now shows the correct valid frequencies after a Flexcal.
Problem Fixed: RSSI now scrolls from the right to the left on the initial sweep.
Problem Fixed: Dithering issue on the older hardware has been fixed.
Problem Fixed: VNA signal standard will now dash out the standard name if the frequencies are not correct.

Added CMXV527.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D, MS2711D, and S412D

What is new in V5.27?
Added P25 Talk-Out Coverage mode for S412D
Added P25 Tx Signal Analyzer mode for S412D.

Added CMXV524.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D and MS2711D

What is new in V5.24?
Updated the cable list for the VNA measurement modes.

Added CMXV523.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D and MS2711D

What is new in V5.23?
Problem Fixed: From V5.05, units pump out extra VNA power, which causes cable offset feature in power meter internal measurement mode to break down.
Problem Fixed: VNA calibration under single mode causes unit to reload application and failed.
Feature: Provides application support for Artisan sidelighter with optical DTF measurement mode.
Problem: Multiple limits frequency display are off by a factor 10.

Added CMXV516.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D and MS2711D

What is new in V5.16?
Problem Fixed: From V3.48, unit cannot turn off single sweep mode using remote command.
Problem Fixed: From V5.12, if F1 is equal to F2 in VNA measurement modes, the unit will hang with a change in amplitude reading.
Problem Fixed: If the battery cal is bad, the unit gets turn off right away because firmware thinks the battery power is very low even though it may be not be.

Added CMXV512.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D and MS2711D

What is new in V5.12?
Problem Fixed: In power meter (internal) mode, if RF In power is near -80 dBm and there is a offset, the power display
can toggle between -80 and -80 + offset dBm.
Problem Fixed: Unit hangs on the startup if the unit was turned off with bias t on.
Changed default Walsh code setting from 64 to 128 in EvDO measurement mode.
Problem Fixed: When holding onto a particular key UP or DOWN, autorepeat feature isn't there when cursor menu in spectrogram measurement mode in enabled by pressing "Cursor" softkey in spectrogram menu.
Problem Fixed: P-GSM 900 signal standard frequency is off by one channel. For example, channel 31 frequency is shown as channel 32.
Problem Fixed: In signal strength measurement mode in interference analyzer, the unit doesn't respond to serial control byte #69, enter remote mode.
Problem Fixed: Going to spectrogram from the RSSI in interference analyzer, the unit has too narrow of the RBW and VBW, causing the sweep to become very slow.
Problem Fixed: Signal standard 802.11b/g have frequency that are off by a factor of 10.
In high accuracy power meter measurement mode, provided support for a new inline power sensor MA24106A.

Problem Fixed: In channel scanner measurement mode, if user switches from uplink to downlink or vice versa on a signal standard, the start channel will automatically resets.

Added CMXV510.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D and MS2711D

What is new in V5.10?
Added iDEN measurement mode.
Added GPS Tester measurement mode.
Anritsu logo at the upper right-hand corner of display.
Updated some German translation for VNA measurement modes.
Display both Rho and Adjusted Rho numbers in display area where it only shows Rho value previously in CDMA.

Added CMXV503.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D and MS2711D

What is new in V5.03?

Problem Fixed: VNA Calibration gets invalidated when recalling a setup that previously was calibrated.
Problem Fixed: RBW gets set to 1MHz during dynamic atten. Set RBW according to the current setting.
Problem Fixed: Make sure T1/E1 board is powered before querying its board ID.

Added CMXV500.BIN for Site Master Model MT8212A, MT8212B, S331D, S332D, S325D, S311D, S312D and MS2711D

What is new in V5.00?

Bug Fixed:

Feature: Added PN Threshold Alarm feature to CDMA->OTA measurement
Feature: Added Limit Test feature to CDMA->OTA measurement
Feature: Gray out CDMA frequency error display when the instrument is not using external frequency reference.
Feature: Added Peak/Average ratio measurement in CDMA->RF measurement status area.
Problem Fixed: OSL calibration with remote command with BAUD rate > 9600 will lock up the instrument
Problem Fixed: Channel Scanner->meas/disp menu doesn't have language translation
Problem Fixed: No language translation for noise marker and the regular marker buttons.

Added CM_V348.BIN, CMBV348.BIN, CMCV348.BIN for Models S331D, S332D, S325D, MS2711D, MT8212A and MT8212B (V3.48)
Bug Fixed:
- Amplitude could be slightly off using FCN7095 for RBW < 30kHz, frequency > 7.9GHz.
- In CDMA Pilot Scan Display, "Pwr" text label should be "Ec/Io."
- In DTF VNA modes, cable loss value should be based on the center frequency instead of the start frequency.
- Added new measurement recall sweep trace (0x21) for EVDO measurement mode.
- In T1/E1, one clock source changed from "External" to "Recovered"
- In T1/E1 mode, changing the bit error rate won't become effective immediately. The instrument still continues
  to output old bit error rate. The soft key button's state is also out of sync.
- In Spectrum Analyzer, the reference level display in Watt isn't according what the user has entered.
  For example, if user enters 0.01 mW, the screen will display as 10 uW.
- In Transmission Measurement mode, if the measurement is un-calibrated, marker shows the value as dB instead of dBm.
- In Freq Return Loss mode, Sweep Data Echo On/Off - Control Byte #49 (31h) puts device in single sweep mode, but
  the Single Sweep button is not depressed, so the device looks like it is in Hold mode, not Single Sweep.
- Created a new serial control byte #243 (0xF3) that behaves exactly the same as control byte #33 (0x21) except
  that the command can download sweep traces whose indices are bigger than 255.
- Recall display can potentially corrupt various global and static variables.
- External Frequency becomes unlocked after the sweep when the instrument is in single sweep.
- Enter Remote Mode - Control Byte #69 (45h) does not seem to wait for the sweep to complete when in Power Meter (Internal) mode.
- When user moves the marker to one of the white color channels (2nd or 3rd?), the text below says "PRM Control" channel. There is no such thing as PRM channel in Ev-DO.
- Grid disappears during first sweep after remote mode. Returns at the end of the sweep.
- Changing VNA Start, Stop freq when cal is on remotely causes a warning message stating "Changing frequency
  will invalidate CAL. Press ESCAPE to abort." which user can only get rid of by manually pressing ESCAPE button.
- If calibrating using an instacal remotely, if the instacal data are not stored inside the instrument's EEPROM,
  a message will display which user has to press button manually to continue.
  Solution: Created a new serial control byte (0xF2) which user can issue to query if the instacal data exists
  inside the instrument's EEPROM. If not, user can issue the same command with different parameter to copy
  data into the EEPROM.
- Through remote serial interface, calculating a marker value can causes the instrument to freeze up because
  of some irregularities in type casting.
- Set Sweep Averaging - Control Byte #118 (76h) is not documented to work only in spectrum analyzer mode, and
  if sent while in Freq Return Loss mode responds with a return byte FFh Operation Complete.
  Solution: If the measurement mode is not Spectrum Analyzer, Interference Analysis or Transmission Measurement
  mode, issuing the serial control byte will be responded with the error byte (0xE0)

- The program doesn't check if an instacal module is attached to the RF Out prot if user issues a serial
  control byte 0x78, field instacal.
- In Power Meter (both internal and external), when pressing recall display, the screen looked messy before
  the file window shown up.
- Behavior inconsistency - Interference Analysis - spectrogram mode, when the unit is sweeping, changing the
  time cursor still seems to display the current trace being measured. When the user presses the Hold button and
  stops the sweep, changing the time cursor will display the spectrum under the spectrogram cursor correctly.
- In Freq - Cable Loss - One Port mode, continuous sweep. Sending Enter Remote Mode Control byte #69 (45h)
  does not cause the device to wait for the sweep to complete. It stops the sweep and enters remote mode immediately.
- Setting up data direction to UPLINK in non-CDMA/EVDO measurement mode will be reflected in CDMA/EVDO mode.
  But CDMA/EVDO only measures Downlink.
- When calculating the next channel while user is surfing signal standard's channel with UP/DOWN key and
  channel increment bigger than 1, the program will count the number of valid channel in between to decide
  the appropriate next channel. For example, says signal standard name is X, valid channels are 0-500 and 550-700,
  the channel increment is 50, and the current selected channel is 500. Then pressing UP key will select channel
  600 instead of 550 because the number of channel between 500 and 600 is 50 and between 500 and 550 is 0.
- In CDMA recall display state, user can recall a setup.
- In VNA measurement modes, saving display does not test for accuracy of data.
- In VNA measurement modes, limit doesn't always display when it should.
- In Spectrum Analyzer measurement modes, Max hold isn't cleared on change of detection.
- Issuing VNA single sweep (0x0B) command will return an error byte if the active measurement mode is not VNAs.
- In spectrum analyzer mode, in remote mode. Send Sweep Data Echo On/Off Control Byte #49 (31h).
  All combinations of bytes to follow result immediately in a 238 (EEh) Time-out Error return byte.
  The unit is not put into single sweep mode and sweep complete bytes are not sent to the serial port.
- In VNA Modes, with trace math enabled when enabling Trace Overlay, it takes 2 sweeps for the overlaid trace
  to show up correctly. This happens also on screen refreshes, example after closing an edit box when trace
  overlay is ON.
- VNA Mode - I press Top and entered a value bigger than the current bottom, now without pressing ENTER,
  I press the bottom, I get a message on the screen first sayng Top >=Bottom and the bottom edit box pops up.
  This is all good. Now after entering a valid bottom, I press ENTER, the edit box stays. I had to push the
  ENTER key twice for the edit box to go away and display the graph again
- Added in High Accuracy Power Meter measurement mode, pressing zero will show user info box about how to do
  zeroing properly.

- In IA measurement feature in spectrum analyzer measurement mode, if user set IA freq by pressing softkey
"IA Freq As Marker M1" and immediately followed it with "Measure" button press, then the freq will revert
back to the previous value upon measurement completion.
- Changed the display from "Parameters" to "Setup Name" in the title of setup list box.
- 'Ú' in "ÚNICO" isn't displayed properly since the firmware has no definition for the font.

Added CM_V330.BIN, CMBV330.BIN, CMCV330.BIN for Models S331D, S332D, MS2711D, MT8212A and MT8212B (V3.30)

What is new in V3.30?

Added:
- Updated signal standard list, antenna list, and cable list.
- 6 PN Offsets for CDMA and EVDO modes.
- Ability to name setups.
- Created option 19, High Accuracy Power Meter support.

Bug Fixed:
- When the instrument is set with MAX HOLD on and DYNAMIC ATTENUATION on, when an automatic calibration
occurs, a part of the measurement goes to the top of the screen.
- In SPA, display marker frequency readout in KHz if frequency drops below 1 MHz.
- Cable name string was not explicitly NULL terminated when getting it from the serial port.
- OSL Cal wasn't invalidated when user changed link direction at which calibration was performed.
- Single limit jumps ten times bigger if user held onto up or down key in VNA modes.
- Auto scale with a trace-math trace doesn't work in VNA modes.
- Took out CDP Scale button from amplitude menu in CDMA and EVDO modes if screen display is Text-Only,
Over-the-Air, or RF Measurement.
- Jump to next available signal standard channel if user is pressing up or down arrow and simple incrementing
of channel number won't work because the number isn't valid according to signal standard.
- Display center freq when display screen is either power vs. time frame or slot in GSM measurement mode.
- Created a simpler profile GSM mask for GSM 1900 signal standard.
- Provided "Select Channel" button to freq menu in CDMA, EVDO, and GSM modes.
- Current run-time-setup isn't restored if recalling store traces through serial interface.
- Current date and time are not refreshed when capturing current trace.
- Created narrower RBW filters in Zero span mode
- In SPA mode, if an over range conditions comes up in the middle of long sweep, hit recall display, then
hit escape, the error message is gone.
- Running averages for power meter mode.
- In transmission measurement mode, marker reads wrong values if trace math is turned on.
- In remote mode, antenna factor wasn't interpolated when span was first changed. It only gets interpolated

whenever previous and current span are different. For manual span setting, the program does interpolation
every time.
- Instacal_in_process was set for the field calibration, but it was never reset once the calibration is done.
- Issuing Enter Remote Mode (0x45) serial command made instrument to go into remote mode immediately instead
of waiting for the instrument to finish sweeping in CDMA.
- When commands A301h and A302h are sent to perform a transmission mode calibration or turn it off, the screen
is not cleared. The warning message that trans cal is off remains on the screen even though the cal is turned on.
- Spectrogram should have max hold on all the time, but it's only on if user presses "Spectrogram" measurement
from "Spectrum" measurement mode. And it doesn't remember the setup either.
- Recalling current CDMA OTA sweep trace doesn't return current time and date value.
- Sweep time isn't stable from one sweep to another.
- Command byte 0x75 read marker value returns junk value even though the marker is set to a reasonable value.
- Saved trace list gets corrupted after 170 traces of Return Loss mode with 517 resolution point in
Motherboard 61256 and older.
- Signal Standard list is empty when the instrument has FCN4760 module attached.
- Recalling saved traces when there are more than 155 saved traces stored in the instrument or after
certain amount of deleting single traces causes the instrument to hang.
- dBµV, dBm/m², dBV/ root Hz do not properly display when using Chinese or Japanese characters.
