



SERVICE BULLETIN - OPTIONAL

Part No.: MTP136D-000GN

Description: Mission Transceiver Panel Mount	
Service Manual: N/A	Service Bulletin No.: MTP136D-000GN-603-0004
ECO No.: ECO1262	Subject: Optional 1.10 Firmware Update

Prepared By:	Checked By:	Approved By:
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1. Planning Information

1.1. Applicability

This bulletin is applicable to all units.

Part Number	Unit Serial Number	Authorized Software Upgrade
MTP136D-000GN	125760 and up	Version 1.10 Installed at factory.
MTP136D-000GN	108104 – 125759	Optional field loadable upgrade.

1.2. Reason

Firmware update consisting of customer requested features and minor bug fixes. See Section 5 for a comprehensive list of version differences.

1.3. Description

MTP136D field loadable firmware upgrade to version 1.10.

1.4. Compliance

Optional: This service bulletin may be incorporated at the customer's discretion.

1.5. Approval

No change to existing approval.

1.6. Costing

Firmware includes minor improvements and is provided by AEM to customers free of charge for field loadable firmware installations.

1.6.1. Field Loadable Firmware

Installation of the firmware is to be accomplished by the customer through use of this bulletin. AEM Support may be contacted for assistance in the case of an issue.

1.6.2. Optional Factory Upgrade Parts and Labour

The customer may elect to have the factory perform the upgrade. Shipping cost to and from the factory and the associated labour for installation are **not** subject to warranty consideration and will incur a fee to be paid for by the customer.

One (1.0) hour estimated. Includes required test time.

If factory installation is desired, please contact support@aem-corp.com. AEM will respond with instructions, shipping information, and lead time on the upgrade. **Please do not ship** units until a Return Material Authorization (RMA) number and shipping information has been received.

1.7. Special Equipment Required

- Windows 10 or newer computer with internet access.
- USB C cable.
- USB C thumb drive.

1.8. Weight and Balance

Not affected.

1.9. Electrical Load Data

Not affected.

1.10. References

None.

1.11. Other Publications Affected

Operators Guide (MTP136D-000GN-813-0) and Installation Manual (MTP136D-000GN-815-0) have been revised to reflect 1.10 firmware.

2. Procedure Instructions

This section assumes operational familiarity with the MTP136D.

Updating to firmware version 1.10 will **erase** all options. To backup, follow the *Export Profile* procedure in the Operators Guide (MTP136D-813-0) or the Installation Manual (MTP136D-815-0) **before upgrading**. Profiles used on older firmware can be converted for use in 1.10 by following the Profile Conversion Procedure below.

**2.1. Upgrade Procedure**

#	Procedure	Completed
1.	Power on the MTP136D by rotating MAIN VOL clockwise past the detent.	
2.	MENU > More > System > Info.	
3.	Record original software version.	
4.	MENU > Back > MENU > More > System > Login.	
5.	Enter the admin password, <i>iac</i> , and press ENTER.	
6.	MENU > More > System > Prgm > System	
7.	MENU > Prgm	
8.	The MTP136D will enter USB Bootloader mode causing the screen to fade.	
9.	Connect a USB cable from the MTP136D's DATA port to a Windows computer.	
10.	Open a web browser and navigate to the AEM Radio Firmware Programmer located at www.aem-corp.com on the MTP136D product page under software.	
11.	Follow the instructions. Select firmware version 1.10 when prompted. Driver installation with administrator access is required for first time use.	
12.	Wait for the MTP136D to restart. It is normal for errors to be shown on screen during the first startup after programming a different firmware.	
13.	Clear all errors by pressing ENTER on each. If any errors persist past the first startup, contact AEM support.	

2.2. Verification Procedure


#	Procedure	Expected	Observed
1.	Restart the MTP136D by rotating MAIN VOL counterclockwise past the detent followed by clockwise past the detent.	No errors, settles on Home screen.	
2.	Navigate to the System Information screen by pressing MENU > More > System > Info and verify the <i>SW Ver</i> field.	1.10	
3.	Navigate to the System Information screen by pressing MENU > More > System > Info and verify the <i>CRC</i> field.	0x98DAEB17	

**2.3. Profile Conversion Procedure**

#	Procedure	Completed
1.	Open a web browser and navigate to the AEM Radio Profile Editor located at www.aem-corp.com on the MTP136D product page under software.	
2.	Select radio model MTP136D.	
3.	Select firmware version 1.10.	
4.	Open the profile you would like to convert.	
5.	Follow the prompts to convert the profile to 1.10.	
6.	Download the new profile onto a USB C thumb drive.	
7.	Follow the Import Profile procedure in the Installation Manual (MTP136D-815-0) or the Operators Guide (MTP136D-813-0) to load the converted profile into the MTP136D.	

2.4. Recovery Procedure

These steps restore the original firmware and are only required in the case of a programming error that results in a failed startup condition.

#	Procedure	Completed
1.	Power off the MTP136D by rotating MAIN VOL counterclockwise into the detent	
2.	Unfasten the MTP136D from the instrument panel and slide it out until the small opening on the left side of the chassis can be easily accessed.	
		
3.	Use a pin, pick, or small screwdriver to press and hold the button inside the opening.	
4.	While holding the button, power on the MTP136D by rotating MAIN VOL clockwise past the detent.	
5.	Release the button. The screen will be blank indicating the MTP136D is in USB Bootloader mode.	
6.	Open a web browser and navigate to the AEM Radio Firmware Programmer located at www.aem-corp.com on the MTP136D product page under software.	
7.	Follow the instructions. Select original firmware version (recorded in Section 2.1 Step 3) when prompted. Driver installation with administrator access is required for first time use.	
8.	Wait for the MTP136D to restart.	
9.	Retry the upgrade procedure.	

3. Material Information

No materials required.

4. Reference Documents

Operators Guide (MTP136D-813-0) is required to complete the optional profile conversion procedure.

5. Version Differences

This section details the differences between firmware versions 1.03 and 1.10. Each change mentions an issue code in the form of *MTP-xxxx* used for internal issue tracking.

5.1. New

Unlimited scan delete

Can now delete up to 5000 channels.

MTP-1506.

Configurable Admin password

The Admin password can now be changed using the new "Change Password" action menu item on the Login screen.

MTP-2163, MTP-2247.

Function menu

Dedicated customizable menu with various selectable functions such as preset channel, talkaround, new channel, TX tone quick edit, recall, and DTMF dial configurable on the User Options screen. The function menu can be opened on the Home screen using the new action menu item "8: Functions". A new option, "RCL Button", can be used to change the behavior of the recall faceplate button to toggle the function menu instead of performing recall.

MTP-2164, MTP-2231, MTP-2232, MTP-2234, MTP-2253, MTP-2254, MTP-2269, MTP-2277, MTP-2282, MTP-2284, MTP-2291, MTP-2292.

Mod status

Unit mod status is now indicated on a new Boot Info screen briefly shown on startup. ENTER can be pressed to pause the screen.

MTP-2165, MTP-2191, MTP-2200, MTP-2275, MTP-2194, MTP-2227.

Zone limit increase to 250

Maximum number of zones increased from 40 to 250.

MTP-2166.

**Copy channels between zones**

Channels can be copied between zones using the Channel Select screen action menu item “Copy” which opens a new submenu to select between “Here”, “To”, and “From”.

MTP-2168, MTP-2211, MTP-2221, MTP-2222, MTP-2223, MTP-2230, MTP-2270.

Talkaround

Talkaround temporarily modifies the TX portion of a channel to match the RX portion. It can be toggled on the Radio Options screen or function menu when assigned.

MTP-2169, MTP-2213, MTP-2233, MTP-2278, MTP-2293.

DTMF sequence dial

DTMF sequences can now be pre-dialed using the new DTMF Dial screen accessible from the Radio Options screen action menu, or function menu when configured. The DTMF dial screen allows a sequence to be entered which is dialed on the next transmit. Function menu items allow for a pre-recorded sequence to be entered.

MTP-2170, MTP-2244, MTP-2267, MTP-2268, MTP-2285.

Analog monitor mode

A new option that configures what the MON button does on analog channels. Configurable using the “Analog Monitor” option on the User Options screen.

MTP-2176, MTP-2273.

TX Follows RX

When enabled, and if RX matches TX, any changes made to RX will be applied to TX on the Agile Edit or Agile Edit All screens. Can be enabled or disabled using the “TX Follows RX” option on the User options screen.

MTP-2212.

Status bar transmit indicator

“TX” shown on the right side of the status bar when transmitting.

MTP-2241.

5.2. Changed

Improved GUI performance

Used instruction caching to improve CPU performance resulting in a noticeably higher GUI framerate.

MTP-1241.



Spurious save indicator

Fixed the save indicator incorrectly displaying when Go Home is performed with Agile Edit key uninstalled.

MTP-1534.

USB Connecting screen wording

Changed from “Waiting for USB Drive...” to “Please insert a USB drive into the DATA port.”

MTP-1772.

RCL, MON, MAIN/GUARD, and HI/LO always Go Home

These 4 faceplate buttons will now always navigate back to the Home screen when pressed. Consequently, the “Go Home” option has been removed. PTT behavior moved to a new option: “PTT Goes Home”.

MTP-1782, MTP-2274.

USB reliability improvements

Fixed a rare bug that caused a reboot on device removal.

MTP-1974, MTP-2296.

Typo in software version field name

Period added to the software version field name on the Info screen to indicate abbreviation.

MTP-2007.

Action menu item added to File Select screen

Action menu item “Import” added to File Select screen that imports the selected file.

MTP-2014.

Improved radio description while booting

Changed from “Not Installed” to “--”.

MTP-2059.

Incorrect channel data shown after reset edge case

Fixed a bug where old channel data could be shown in certain permissions related edge cases after a profile reset.

MTP-2113.

DTMF Dialing option moved and renamed

The Admin option “DTMF Dialing” has been renamed to “Live Dial” and changed to be a User option.

MTP-2170, MTP-2252.

**Import screen dismissible with ENTER**

After a successful import the screen can now be dismissed by pressing ENTER instead of using the action menu.

MTP-2172.

Filename display edge case

Fixed a bug where file names that contained “.json” but didn’t end with “.json” would be displayed incorrectly on the File Select screen.

MTP-2192.

Action menu width increase

Widened the action menu by ~25% to support names with a length of 10 characters. Used the additional space to expand and clarify a few items.

MTP-2203, MTP-2247, MTP-2294, MTP-1299.

Auto Simplex removed

The “Auto Simplex” option has been removed. RX-TX matching behavior has been moved to the new “TX Follows RX” option. The “simplex link bar” has been repurposed to indicate Talkaround. TX is no longer hidden on the Home screen in any condition.

MTP-2212.

List Insert changed to New

“Insert” on all List screens has been changed to “New” and its functionality modified to append a new item to the end of the list rather than inserting at current selection.

MTP-2228.

Title during New and Move

List screens title now changes to “Place *ItemType*...” when selecting where the new or moved item should end up in the list.

MTP-2229.

Skip type during tone edit

Editing a tone on the home screen will no longer navigate to the tone type first.

MTP-2235.

DTMF live dial limited to Home screen

The keypad performing live DTMF dialing now only occurs on the Home screen. On other screens, the keypad will function normally.

MTP-2240.



Primary Input option split

The “Primary Input” option has been split into "Knob Input": Channel/Radio and "Keypad Input": Channel/Radio/Dial.

MTP-2244.

Reset Home screen on Go Home

Performing Go Home on the Home screen now also resets any open menus or editors.

MTP-2245.

Copyright year

Updated copyright year to 2026 on the Splash screen.

MTP-2251.

Tone generation improvements

DTMF and test tones are now generated on demand resulting in a cleaner output signal.

MTP-2263, MTP-2286, MTP-2288, MTP-2290.

MIC bias default changed to ON

New units will be shipped with MIC bias ON by default.

MTP-2276.

Transmit indicator timing

Fixed the transmit indicator sometimes turning off slightly prematurely.

MTP-2283.

Spurious action menu latch

Fixed a bug where pressing menu within a few 10s of milliseconds of a screen transition can sometimes cause the action menu to latch open.

MTP-2289.

TGID Lists and NAC Lists order

Swapped the order of the “TGID Lists” and “NAC Lists” action menu items on the Home screen to match the product wide ordering of NAC, TGID.

MTP-2294.

End of Service Bulletin