Part No.: MTP136D-000GN

Service Manual: N/A Service Bulletin No.: MTP136D-000GN-603-0003

ECO No.: ECO1238 Subject: Optional 1.03 Firmware Update

Prepared By:	Checked By:	Approved By:

## 1. Planning Information

## 1.1. Applicability

This bulletin is applicable to all units with firmware version 1.01 or 1.02.

Part Number	Unit Serial Number	Authorized Software Upgrade
MTP136D-000GN	121620 and up	Version 1.03 Installed at factory.
MTP136D-000GN	108104 – 121619	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 1.03.

### 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 <u>not</u> 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 1.03 firmware.

### 2. Procedure Instructions

This section assumes operational familiarity with the MTP136D.

Updating to firmware version 1.03 will <u>erase</u> all options. To backup, follow the *Export Profile* procedure in the Operators Guide (MTP136D-813-0) or the Installation Manual (MTP136D-815-0) <u>before upgrading</u>. Profiles used on older firmware can be converted for use in 1.03 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 > MENU > Prgm	
7.	The MTP136D will enter USB Bootloader mode causing the screen to fade.	
8.	Connect a USB cable from the MTP136D's DATA port to a Windows computer.	
9.	Open a web browser and navigate to the AEM Radio Firmware Programmer located at <a href="https://www.aem-corp.com">www.aem-corp.com</a> on the MTP136D product page under software.	
10.	Follow the instructions. Select firmware version 1.03 when prompted. Driver installation with administrator access is required for first time use.	
11.	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.	
12.	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 SW Ver field.	1.03	
3.	Navigate to the System Information screen by pressing MENU > More > System > Info and verify the <i>CRC</i> field.	0x23786CED	



## 2.3. Profile Conversion Procedure

#	Procedure	Completed
1.	Open a web browser and navigate to the AEM Radio Profile Editor located at <a href="https://www.aem-corp.com">www.aem-corp.com</a> on the MTP136D product page under software.	
2.	Select radio model MTP136D.	
3.	Select firmware version 1.03.	
4.	Open the profile you would like to convert.	
5.	Follow the prompts to convert the profile to 1.03.	
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 <a href="https://www.aem-corp.com">www.aem-corp.com</a> 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 1.02 and 1.03. Each change mentions an issue code in the form of *MTP-xxxx* used for internal issue tracking.

## 5.1. New

### New channel shortcut

A new Action Menu item, "New", located on the Agile Edit All screen provides a quicker way to create a new channel. New channels are added to the end of the Zone and immediately selected for editing.

MTP-2123, MTP-2149.

### High TX power indicator highlighting option

A new user option, "Highlight HI Power", located on the User Options screen controls whether the TX Power indicator highlights when set to High.

MTP-2124, MTP-2145.

### **Partial import**

Allows importing only a portion of the profile while skipping the rest of the profile's contents. Can be chosen on the Import Screen's Action Menu with the following choices: All, Options, or Lists.

MTP-2128.

## 5.2. Changed

## Home screen edit menu simplification

The Home screen edit menu will no longer hide TX options when Active Channel is reduced by Auto Simplex. The menu will instead show all options all the time.

MTP-2122.

End of Service Bulletin