SOFTWARE RELEASE NOTE

Product: Commercial Series Radio Firmware (CM100 Series) Upgrade Kit

Release: R04.01.02 Date: 28-July-2009 Language: English

Supporting OS: Win 95, Win98, Win2000, WinNT, WinXP, VISTA

Purpose of this release / Supported features:

- Up-version a radio to software version R04.01.02 from previous released versions. Codeplug is updated to version R08.00
- The tuning data and the CPS programming data will be preserved
- Supported Software versions:
 Official radio software release versions and bands only.
 - R01.00.00
 - R02.00.00, R02.00.01, R02.00.02, R02.00.03, R02.00.04
 - B03.00.00, B03.00.01, B03.00.02, B03.00.03, B03.00.09
 - R03.00.00, R03.00.01, R03.00.02, R03.00.03, R03.00.04, R03.00.05
 - R03.01.00, R03.01.01
 - R03.02.00
 - R03.03.04
 - R04.00.02
 - R04.01.02

Supported EMEA model numbers:

| Modelnumber | Tanapa no. | Description |
|----------------|--------------|----------------------------------|
| MDM50JNC9AA2AN | PMUD1936AAE* | CM140 VHF (136-162)MHz; 25W 8CH |
| | PMUD1936BAE* | CM140 VHF (136-162)MHz; 25W 8CH |
| | PMUD1936CAE* | CM140 VHF (136-162)MHz; 25W 8CH |
| MDM50JNF9AA2AN | PMUD1940AAE* | CM160 VHF (136-162)MHz; 25W 64CH |
| | PMUD1940BAE* | CM160 VHF (136-162)MHz; 25W 64CH |
| | PMUD1940CAE* | CM160 VHF (136-162)MHz; 25W 64CH |
| MDM50JQF9AA2AN | PMUD1947AAE* | CM160 VHF (136-162)MHz; 45W 64CH |
| | PMUD1947BAE* | CM160 VHF (136-162)MHz; 45W 64CH |
| | PMUD1947CAE* | CM160 VHF (136-162)MHz; 45W 64CH |

| MDM50KNC9AA2AN | FUD1183AAE* | CM140 VHF (146-174)MHz; 25W 8CH |
|------------------|------------------------------|--|
| | FUD1183BAE* | CM140 VHF (146-174)MHz; 25W 8CH |
| | FUD1183CAE* | CM140 VHF (146-174)MHz; 25W 8CH |
| MDM50KNF9AA2AN | PMUD1874AAE* | CM160 VHF (146-174)MHz; 25W 64CH |
| | PMUD1874BAE* | CM160 VHF (146-174)MHz; 25W 64CH |
| | PMUD1874CAE* | CM160 VHF (146-174)MHz; 25W 64CH |
| MDM50KQC9AA2AN | PMUD1848AAE* | CM140 VHF (146-174)MHz; 45W 8CH |
| | PMUD1848BAE* | CM140 VHF (146-174)MHz; 45W 8CH |
| | PMUD1848CAE* | CM140 VHF (146-174)MHz; 45W 8CH |
| MDM50KQF9AA2AN | PMUD1894AAE* | CM160 VHF (146-174)MHz; 45W 64CH |
| | PMUD1894BAE* | CM160 VHF (146-174)MHz; 45W 64CH |
| | PMUD1894CAE* | CM160 VHF (146-174)MHz; 45W 64CH |
| AZM50NNF9AA2 | PMUD2045AAA | GM3688 (350-380)MHz; 25W 64CH |
| | PMUD2045BAA | GM3688 (350-380)MHz; 25W 64CH |
| | PMUD2045CAA | GM3688 (350-380)MHz; 25W 64CH |
| MDM50QNC9AA2AN | PMUE2002AAE* | CM140 UHF (403-440)MHz; 25W 8CH |
| | PMUE2002BAE* | CM140 UHF (403-440)MHz; 25W 8CH |
| | PMUE2002CAE* | CM140 UHF (403-440)MHz; 25W 8CH |
| MDM50QNF9AA2AN | PMUE2005AAE* | CM160 UHF (403-440)MHz; 25W 64CH |
| | PMUE2005BAE* | CM160 UHF (403-440)MHz; 25W 64CH |
| | PMUE2005CAE* | CM160 UHF (403-440)MHz; 25W 64CH |
| MDM50QPF9AA2AN | PMUE2160AAE* | CM160 UHF (403-440)MHz; 45W 64CH |
| | PMUE2160AAE* | CM160 UHF (403-440)MHz; 45W 64CH |
| MENTOPHICOAACAN | PMUE2160CAE* | CM160 UHF (403-440)MHz; 45W 64CH |
| MDM50RNC9AA2AN | FUE1021AAE* | CM140 UHF (438-470)MHz; 25W 8CH |
| | FUE1021BAE* | CM140 UHF (438-470)MHz; 25W 8CH |
| MDMEODNEOAAOAN | FUE1021CAE* | CM140 UHF (438-470)MHz; 25W 8CH CM160 UHF (438-470)MHz; 25W 64CH |
| MDM50RNF9AA2AN | PMUE1999AAE* PMUE1999BAE* | SERVICE CONTROL CONTRO |
| | PMUE1999BAE* | CM160 UHF (438-470)MHz; 25W 64CH |
| MDM50RPC9AA2AN | PMUE2008AAE* | CM160 UHF (438-470)MHz; 25W 64CH CM140 UHF (438-470)MHz; 40W 8CH |
| WIDWIJORFGJAAZAN | PMUE2008BAE* | CM140 UHF (438-470)MHz; 40W 8CH |
| | PMUE2008CAE* | CM140 UHF (438-470)MHz; 40W 8CH |
| MDM50RPF9AA2AN | PMUE2011AAE* | CM160 UHF (438-470)MHz; 40W 64CH |
| WIDWIGUITESAAZAN | PMUE2011BAE* | CM160 UHF (438-470)MHz; 40W 64CH |
| | PMUE2011CAE* | CM160 UHF (438-470)MHz; 40W 64CH |
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WARNING - PLEASE READ THE FOLLOWING INSTRUCTIONS

WARNING'S FOR ALL RADIO TYPES

- PLEASE SAVE YOUR EXISTING CODEPLUG AS AN ARCHIVE FILE. The codeplug programming information may be lost after the update process therefore, it is recommended to read the radio using the CPS, and save an archive of the radio's codeplug before starting the update process. After the update, this archive can then be used to recover the codeplug programming information by programming the archive back into the radio.
- Ensure the radio updating process is not interrupted. Interruption will cause the radio to NOT operate anymore and attempting to update the radio again will NOT be successful.
- Do NOT create a shortcut of the program (e.g. on your desktop), the program might not be able to find the data files in that case!
- Do not remove the programming cable or turn off the radio while the update is in progress.
- In case of failure during the updating, a message box will appear to guide the user to recover from the failure, if possible.
- The flashing rate can be changed only by restarting the program.
- You may not run more than one copy of the program at the same time.

How to install and run this software?

Installation of the software can be completed by double clicking the setup file 'Mobile_Firmware_Kit_R04.01.02_with_Codeplug_R08.00.exe'. This file will be in the downloaded up-version kit.

REQUIRED EQUIPMENT

For the usage of this software the following radio accessories are required: Connect all the items using one of the following sequences:

Rib-less Configuration

PC com port >> 9 to 25 pin converter >> Programming Cable (RKN4081) >> Flash Adapter (FKN8096) >> Radio.

Note: Ensure the Flash Adapter switch is in the 'CPS' position.

The following instructions detail the operations of the Firmware Kit:

(Note: These instructions must be followed in the exact order to work properly):

- 1. Power up the radio.

 If the ignition is on, turn off all other accessories to ensure the quietest possible environment. Do not run the engine during this procedure.
- 2. Start the Firmware Kit from the Start Menu >> Programs >> Motorola >> Commercial Series Radio Firmware Kit >> Mobile Firmware Kit R04.01.02 with Codeplug R08.00 >> Firmware Kit R04.01.02 with Codeplug R08.00
- 3. Once the upgrade screen appears, press the PROGRAM button.
- 4. For the first attempt of upgrade after the tool is launched, the flash baud rate selection dialog will appear. Select a baud rate and press OK button.
- A message box will appear with instructions to put the radio in bootstrap mode
 - Turn off the radio
 - Switch the flashing adapter into the 'Flash' mode.
 - Turn the radio on and make sure the radio doesn't boot up like normal.
- 6. After clicking Ok, upgrading should begin if properly put in bootstrap mode. A window will pop up initially saying 'Please Wait' then the window will read 'Progress' and give you a percentage of completion. Instructions in the window will give indications to each process of the update.
- 7. A window will pop up when the update is complete reading 'Radio Update is successful.'
- 8. Click 'OK', return the flashing switch to the 'CPS' position, and remove the programming & flashing cable. Power off and on the radio to complete the process and to get the radio out of the bootstrap mode.
- Connect another radio and repeat the process from Step 4. Remember, the baud rate selection is only configured the first time after starting up the program.

TROUBLESHOOTING

If Firmware Kit will not start

- 1. Make sure this is an original version of the kit and not copied off another computer
- 2. Make sure another copy is not running on your computer.

If an error is returned when you select program, check the following:

- On the Comm setting menu, make sure that the port selected is the one to which the radio is connected.

- Make sure the radio is on and properly connected to the computer.
- Make sure the HLN9742B adapter is in the OFF position.

If an error is returned immediately after the radio is put in bootstrap and OK is clicked put the adapter in the OFF position, put the radio off, on and try again.

Adjusting Transmit Buffer:

- 1. Press Start button.
- 2. Select Setting and click on Control Panel.
- 3. Double click on System.
- 4. Select the Device Manager tab and double click on the Communication Port (COM1).
- 5. Select the Port Settings tab and click on the Advanced button.
- 6. Adjust the Transmit Buffer to one step lower than the highest.

WARNING

Ensure radio flashing is not interrupted. Interruption will cause the radio not to operate anymore. Trying to flash the radio again will not work. The radio has to be returned to the depot for service.

END OF TEXT