VM1 Firmware Update Procedure (using Renesas FDT Basic Program)

Alert: *This firmware update procedure utilizes the Renesas FDT Basic Program Tool. This free Flash Development Toolkit can be downloaded from the Document Center on www. russound.com, under Source Equipment. Look for the FDT_V3.3. file.*

Note: *The same A/C power circuit should be used for the system and the PC. Otherwise a ground loop may affect proper data transfer. A battery-powered laptop can also be used.*

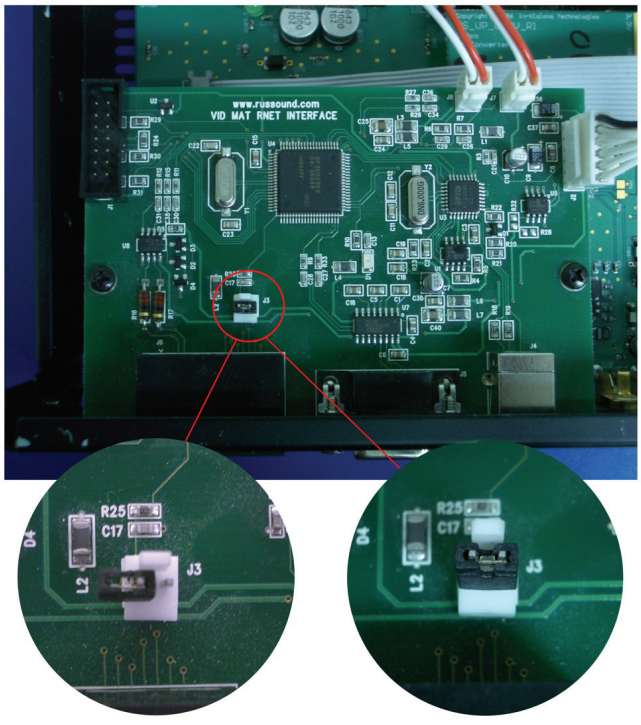
Requirements:

- PC computer running Windows 95, 98, ME, NT, 2000, XP operating system
- Available DB9 serial RS-232 data port (Com Port)
- Renesas Flash Development Toolkit Version 3.3 or higher.

Update Procedure:

1. Power off VM1 and remove cover.

2. On the VM1 circuit board, locate the OS update jumper. The OS update jumper is located near the front left corner of the unit. Set the jumper over both pins as shown in the photo.



"Run" position **"Update" position**

3. Connect a straight-through DB9 serial cable between the PC COM port and the DB9 port on the rear panel of the VM1.

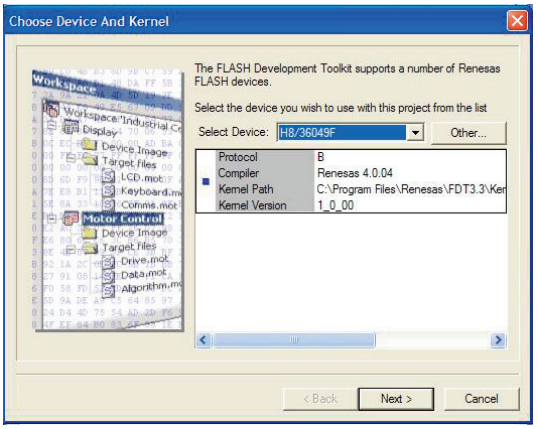
4. Install the Flash Development Toolkit (FDT) on the Windows PC.

5. Launch the FDT Basic program and see the FDT Simple Interface screen.

6. Click the "Options" menu, then click "New Settings" from the drop down menu.

7. The "Choose Device and Kernel" dialog box will open.

8. Click the button in the "Select Device:" window of the "Choose Device and Kernel" dialog box and from the pull down menu select "**H8/36049F**." Then click "Next >."



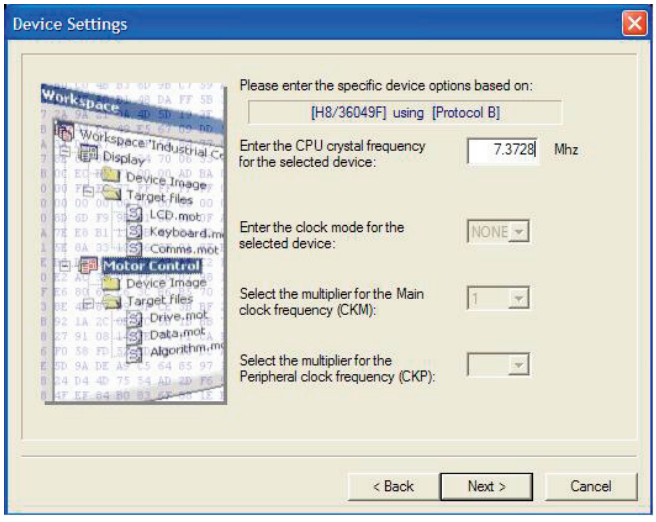
9. The "Communications Port" dialog box will open.

10. Click the button for the "Select Port:" window and select the communications port you are using from the pull down menu. Then click "Next>."

11. The "Device Settings" dialog box will appear.

12. Ensure the "Specific device options" window displays "[H8/36049F] using [Protocol B].

13. Set the "Enter the CPU crystal frequency" window to 7.3728 MHz and click "Next >."



14. The "Connection Type" dialog box will appear. Ensure "Boot Mode" is selected.

15. Click "Next >." The "Programming Options" dialog box will appear.

16. Ensure the "Automatic" and "Advanced" buttons are selected. Then Click "Finish."

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Contact Russound Technical Support for assistance if needed at 1-866-888-7466

VM1 Firmware Update Procedure (using Renesas FDT Basic Program) (continued)

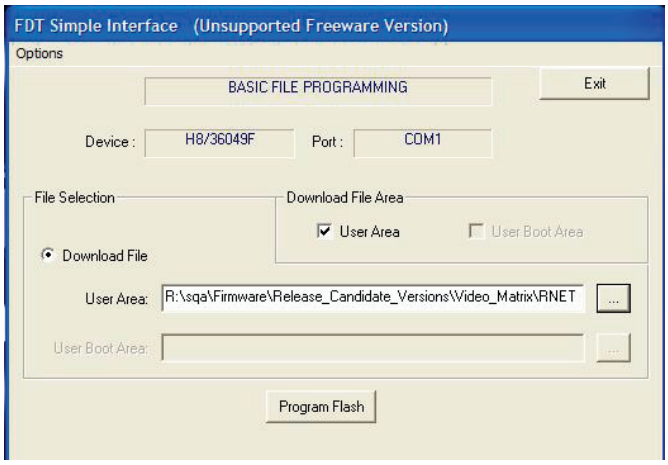
17. The "FDT Simple Interface" dialog box appears.

18. Under "Options" select "AutoDisconnect." This disconnects the program from the device when programming is done, and allows updating of multiple devices without having to select "Disconnect" between each device.

19. Under "Download File Area" click "User Area" to place a checkmark in its window. Click "…" and navigate to the directory where the current firmware of the VM1 is stored and select it in the "User Area:" window.

20. Power on the VM1.

21. On the "FDT Simple Interface" dialog box click the "Program Flash" box.



Technical Support: 8:30 AM ET to 7:00 PM ET 866.888.7466 (toll free in the USA) or 603.659.5170 www.russound.com

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