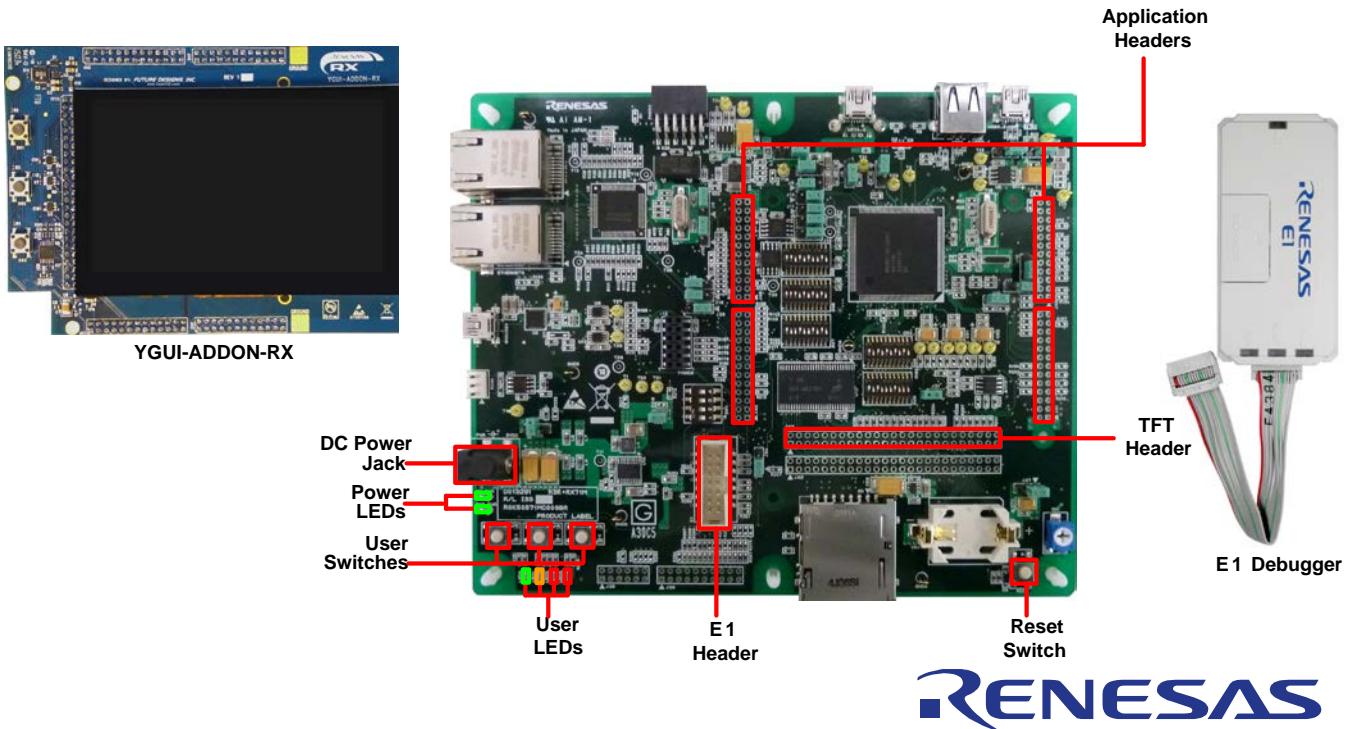


Quick Start for YDISPLAY-IT-RX71M Direct Drive LCD Demonstration



NOTE: This Quick Start Guide covers installation of the e² studio DVD.

1. Installation

Do not connect the E1 debugger module until the software support has been installed.

1. Insert the DVD into your computer's DVD-ROM drive. The DVD should run the installation program automatically. If the installer does not start, browse to the e2studio folder on the DVD and double-click 'setup.exe'.
2. Windows™ 8.1 / 8 / 7 / Vista users may see "User Account Control" dialog box. If applicable, enter the administrator password and click 'Yes'.
3. The installer welcome screen will open. Follow the on-screen instructions to install the YDISPLAY-IT-RX71M demo software. This process will take several minutes.

Note:

Please follow the on screen instructions.

When prompted to specify a different location for installing any of the tools, it is recommended that default entries are accepted.

The Windows™ driver signing dialog box may be displayed. Please accept the driver to continue.

2. Connection

4. Ensure the YGUI-ADDON-RX board is fitted onto the the RSK+.
5. Connect the E1 debugger module to the connector marked 'E1' on the RSK+ using the ribbon cable.
6. Connect the center positive +5V PSU to the PWR connector on the RSK+ and apply power.
7. Connect the E1 debugger module to a spare USB port of your PC. The green 'ACT' LED on the E1 debugger will flash.
8. The E1 debugger drivers will now be installed. Note that, this may take up to a minute and administrator privileges will be required.

Windows™ 7 / Vista

"Device driver software installed successfully" pop-up will appear in the Windows™ toolbar and installation will complete.



Windows™ 8.1 / 8

An icon will appear in the Windows™ toolbar and installation will complete.




9. The green 'ACT' LED on the E1 debugger will illuminate constantly.

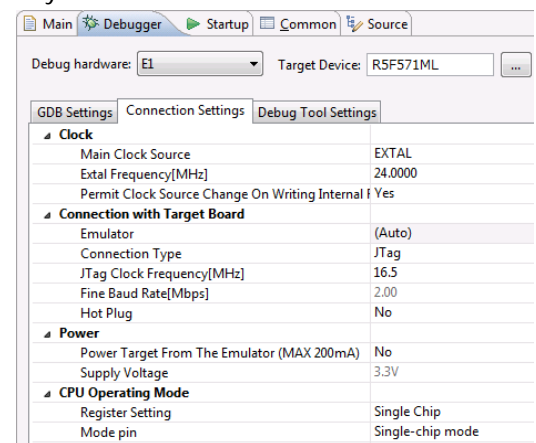
3. Importing Sample Code into e² studio

e² studio integrates various tools such as compiler, assembler, debugger and editor into a common graphical user interface.



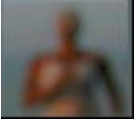
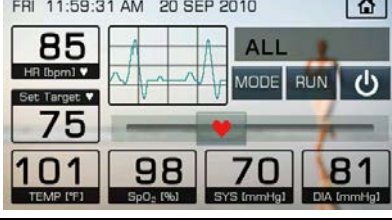




10. Start e² studio:
Windows™ 7 & Vista: Start Menu > All Programs > Renesas Electronics e2studio > e2 studio
Windows™ 8.1 & 8: From Apps View , click 'Renesas e2 studio' icon
11. In the 'Select a workspace' folder that appears, browse a suitable location and folder name to save your new workspace to. Click OK to continue.
12. In the 'Toolchain Registry' dialog select Renesas Toolchains and ensure that 'CC-RX v2.03.00' is selected. Click 'Register'. A dialog will appear "Selected Toolchains were successfully integrated with e2 studio". Click 'OK'.
13. In the 'Restart e2 studio' dialog click 'OK'. e² studio will be restarted due to first-time registration of the Code Generator COM component.
14. Once e² studio is restarted the 'Select a workspace' window appears again. Click 'OK'.
15. In the e² studio welcome screen, click the 'Go to workbench' arrow icon, on the far right. 
16. Right click in the project explorer window, and select 'Import'.
17. In the import source type, select General > Existing Projects into Workspace, and click 'Next'.
18. Click the 'Browse' button, and locate the following directory 'C:\Renesas\Workspace\YDISPLAY-IT-RX71M'.
19. Ensure the 'DirectLCD' project is selected.
20. Click on the 'Copy projects into workspace' option if it is not already ticked, then click 'Finish'. If prompted, select checkbox to trust certificates.
21. During the import process an information dialogue may report 'Toolchain path has been modified for the project...'. Click 'OK' if required.

4. Programming and Debug

22. Select the "DirectLCD" project by left clicking on it, then click the arrow next to build button (hammer icon), and select 'HardwareDebugRSKRX71M' from the drop down menu. 
23. e² studio will now build the project. Once this is complete, debugging can be started by clicking the arrow next to debug button (bug icon), and selecting 'Debug Configurations'. 
24. Click the symbol next to the entry 'Renesas GDB Hardware Debugging' to expand the list and click on 'DirectLCD HardwareDebugRSKRX71M'.
25. Click the 'Debugger' tab, then click on the 'Connection Settings' secondary tab as shown below. Review the settings listed in the screenshot below.
26. Click the 'Debug' button to download the code to the target, and begin debugging.
27. A firewall warning may be displayed for 'e2-server-gdb.exe'. Select the check-box for 'Private networks, such as my home or work network', and click 'Allow access'.
28. A User Account Control (UAC) dialog may be displayed. Enter the administrator password and click 'Yes'.
29. e² studio may ask you to change to the 'Renesas Debug Perspective', click 'Yes'.
30. Once the code has been downloaded, click the 'Resume' button to run the code up to the first line of the main function,  EventManagerInit().
Click 'Resume' again to run the target through the rest of the code.



31. Select a demo from the 4 options on the home screen. The four options demonstrate:

Demo	Description	Overview Screen
Thermostat 	Weather forecast with thermostat settings. Available buttons: <ul style="list-style-type: none"> • Days of the week. • + (plus) • - (minus) 	
Medical 	Implementation of a medical monitoring device. Available buttons: <ul style="list-style-type: none"> • Heart slider • Mode • Run • On/Off 	
Refrigerator 	Implements a water dispenser machine with a temperature controlled freezer and fridge. <ul style="list-style-type: none"> • Lock/Unlock • Off/On • Filter 	
Classic Home 	Contains various demonstrations which run through basic behaviour of buttons. Available demonstrations: <ul style="list-style-type: none"> • Countdown • Animate • GAPI_T Use • Writes • Frame Rate • UTF-8 • QWERTY 	

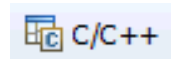
32. Click the 'Suspend' button. The program will stop and the source code will be opened at the current program counter.



33. To disconnect from the target board, click the 'Disconnect' button on the toolbar.



34. Select the C/C++ perspective (at the top right) to return to the editor view.



5. Next Step

After you have completed this quick start procedure, please review the Direct Drive LCD Demonstration Application Note (R20AN2877EU0100_RX_LCD) for more details of the demos.

The Hardware manual supplied with this RSK+ is current at the time of publication. Please check for any updates to the device manual from the Renesas internet site at <http://www.renesas.com/ydisplay-it-rx71m>
To learn more on how to use e² studio, open the program's help files by using Help > Help Contents.

6. Renesas RX Compiler

The version of the compiler provided with this demonstration is fully functional for 60 days and then code size limited to 128kbytes of Code and Data. This restriction can be removed by purchasing a licenced copy of the tools.

7. User Manuals

The user manuals for this product can be found at the following locations:

Windows™7 & Vista:

Start Menu > All Programs > Renesas Electronics Tools > YDISPLAY-IT-RX71M > Manuals

Windows™8.1 & 8:

From the Apps View (⬇️), all the manuals are located in "Renesas Electronics Tools".

8. Support

Online technical support and information is available at <http://www.renesas.com/ydisplay-it-rx71m>.

Technical Contact Details

America: techsupport.america@renesas.com

Europe: <http://www.renesas.eu/ibg-kitsupport>

Japan: csc@renesas.com

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