Radiocrafts
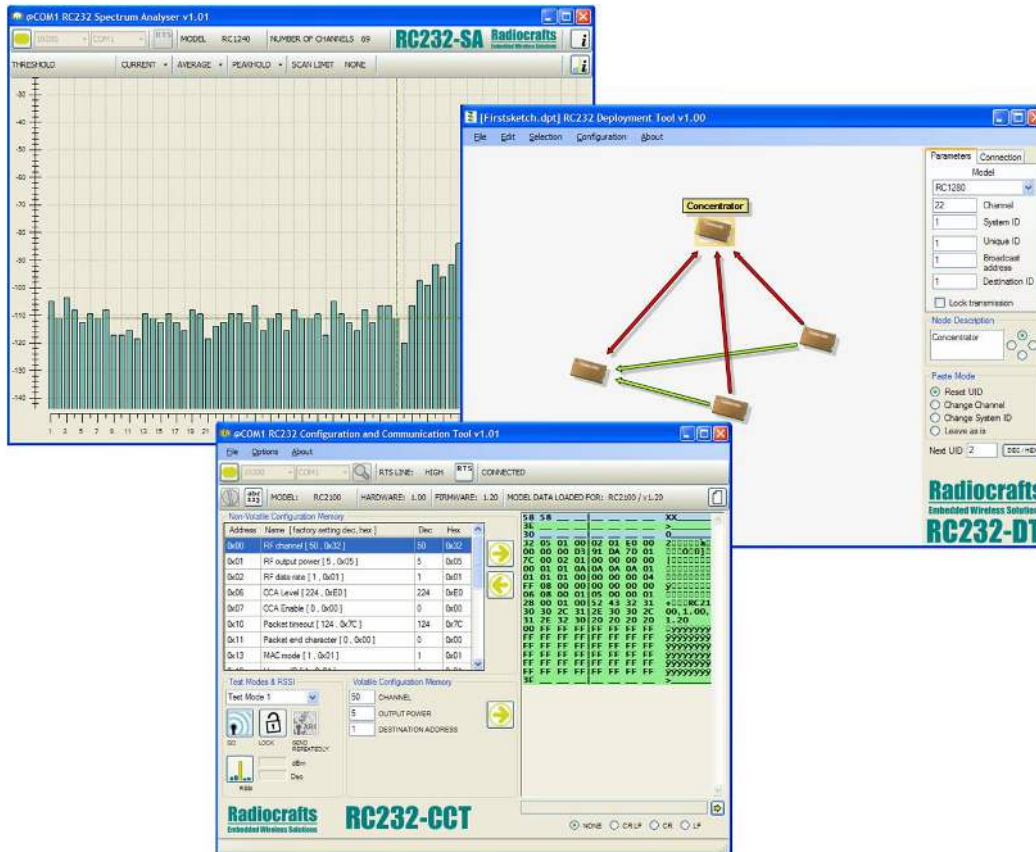## Embedded Wireless Solutions

RCTools

RCTools Installation guide

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RCTools

Introduction

RCTools is a powerful and easy to use PC suite that helps you during test, development and deployment of the Radiocrafts modules. The RCTools includes RC_CCT, RC_SA and RC_DT stand alone applications running under windows .Net Framework. The RCTools is free of charge and easily installed (including .NET and USB Driver) by running the setup file available in the download section on www.radiocrafts.com.

System requirements

RCTools will have the same system requirements as the .NET framework 2.0 and this is defined by Microsoft as:

- **Supported Operating Systems:** Windows 2000 Service Pack 3; Windows 98; Windows 98 Second Edition; Windows ME; Windows Server 2003; Windows XP Service Pack 2

- **Required Software:** IE 5.01 or later: You must also be running Microsoft Internet Explorer 5.01 or later for all installations of the .NET Framework.

- **Disk Space Requirements for .NET:** 280 MB

.NET will be installed automatically by the RCTools setup file but if you want to install it manually you can download it from:

http://www.microsoft.com/downloads/details.aspx?FamilyID=0856EACB-4362-4B0D-8EDD-AAB15C5E04F5&displaylang=en.

PC hardware requirements

The RCTools requires access to the modules UART via an available COM-port together with access to the modules CONFIG-pin. Typically UART-access is obtained via an UART-to-RS232 or UART-to-USB converter. The Demo Boards (DB) from Radiocrafts contains onboard converter for direct plug-in to a PC using either RS232 or USB port and further access to the related COM-port. For the USB version of the Demo boards a Virtual COM Port driver is used.

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Installation Guide for users with .NET installed

Download the RCTools setup file from Radiocrafts' website. When you run the setup file the installation will first start to extract files (Fig 1) and perform a system check on your PC. The Installer will not be able to continue if you are running windows 95 or XP without Service Pack 2 (SP2). If all the system requirements are OK, the installer will display the welcome screen (Fig. 2) where the user can select location for the RCTools. If an old version of RCTools is detected in your system it will be upgraded. The Default location is C:\Program files\RCTools. The installer will by default also add shortcuts to the start up menu (Program->RCTools) and on the desktop, but the user have the option to disable this in the welcome window. The installation of RCTools will start when the user select 'next' in the welcome window. A progress bar will then start and informs about the installation progress (Fig. 3). The installation of RCTools takes less than a minute to be completed and an installation completed window will be displayed when the installation is done (Fig 4).

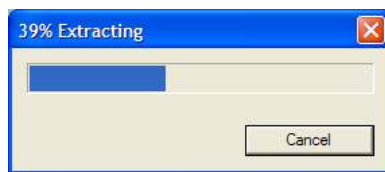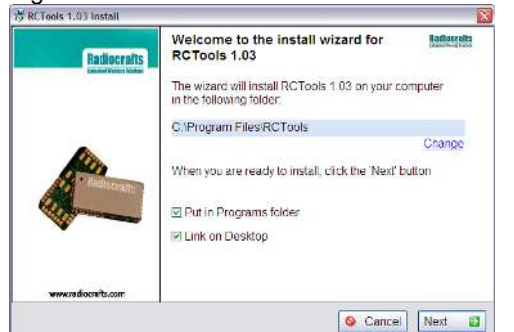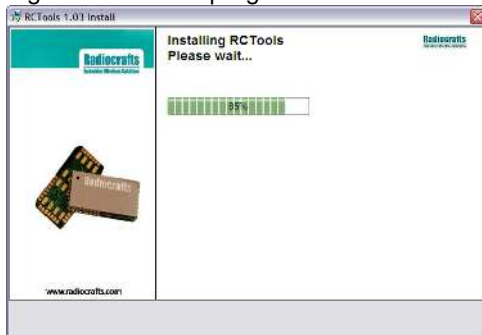|	
Fig. 1: Extracting and check system	Fig. 2: Installation welcome screen
Fig. 3: Installation progress info	Fig. 4: Installation completed

Installation Guide for users without .NET installed

Download and run the RCTools setup file from Radiocrafts' website. When you run the setup file the installation will first start to extract files as described above (Fig. 1) and perform a system check on your PC. The Installer will not be able to continue if you are running windows 95 or XP without SP2. If .NET is not detected in the system check you will be informed about this missing requirements (Fig 5). You now have the option to cancel installation (for manually installation of .NET) or you can select 'Download & Install' if you are connected to internet. The installer will in this case connect to the internet and download (Fig. 6) and Install (Fig. 7) .NET Framework 2.0. This will take about 8 minutes to download and install depending on your internet connection. When the .NET has been successfully installed you will be informed in a windows including a 'OK' button (Fig 8). When clicking on the OK button you will continue the installation of RCTools starting with the welcome screen as described in the previous chapter (Fig 2).
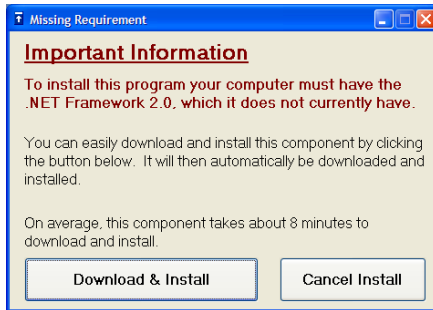
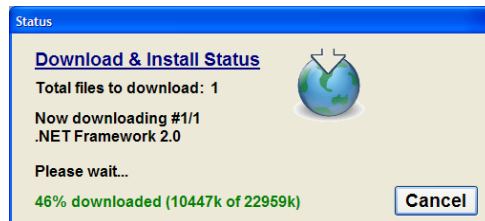| Fig. 5: .NET Framework not detected	Fig. 6: .NET Framework Downloading from Microsoft
Fig. 7: .NET Framework installing	Fig. 8: .NET Installation completed

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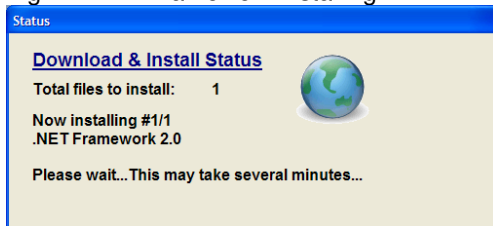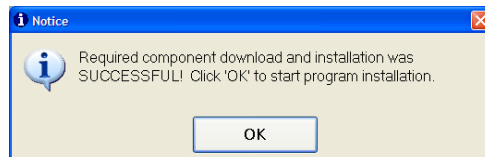
Components in your system after installation

After the RCTools installation is completed, and if you selected default settings during the installation, you will find the program in 'program files' (Fig. 9) and shortcuts in the Radiocrafts start menu folder (Fig. 10) and on the desktop (Fig. 11).

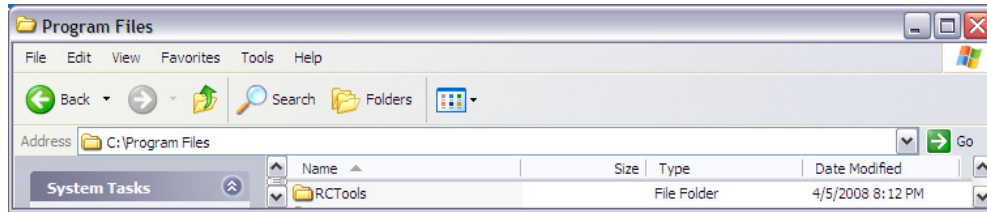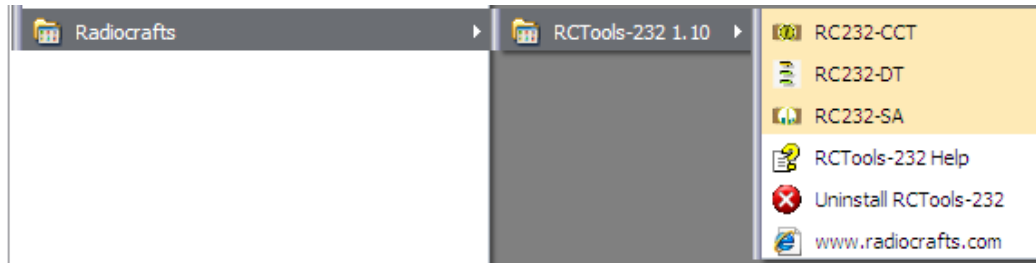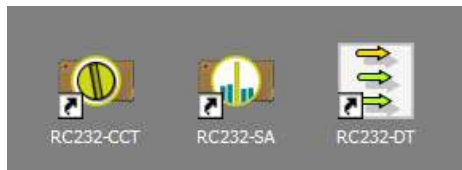| |
|---|
| Fig. 9: Program location
  |
| Fig. 10: Shortcuts in Start menu
  |
| Fig. 11: Shortcuts on Desktop
  |

For details about how to use the RCTools components RC_CCT, RC_SA and RC_DT, you can use the RCTools Helper in the Start menu or download User Manuals from our web-site. A link to Radiocrafts web-site is also located in the RCTools folder of the start menu (Fig 10).

USB to Serial COM Port

The new Demo Board from Radiocrafts Includes an USB to UART converter that is used to communicate with the PC. The Driver sets up a Virtual COM Port (VCP) when a Demo board is connected to your PC. The Driver is automatically installed during the RCTools installation. The first time you connect your Demo boar to the PC after the RCTools installation is completed, you will be informed that the PC found new hardware and recognise it to be a USB Serial Port (Fig 12). When the new hardware is installed to your system you will be informed that the new hardware is ready to be used (FIG 13). Each time this Demo board is connected to the PC the same virtual COM port will be used. Information on which COM port that has been assigned to your board is given in the Windows Device Manager. Open the Device Manager located in "Control Panel\System" then select the "Hardware" tab and click "Device Manger" or type "devmgmt.msc" in the Start->Run window (Fig 14). In The Device Manager expand the Ports (COM & LPT) tab to list up all COM ports in your system. The Demo Board device appears as a "USB Serial port" with an additional COM port number (Fig 15). This is the COM port to use with the RC Tools.

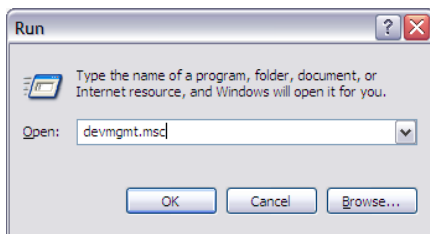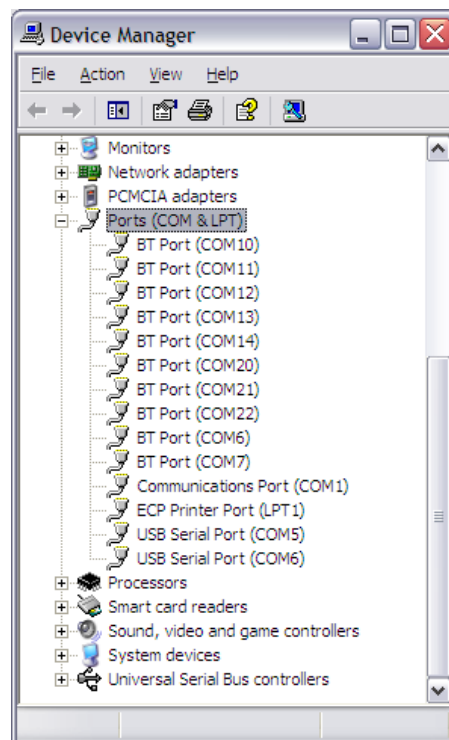|	
Fig 12: PC Found Radiocrafts Demo Boards	Fig 15: COM ports listed in Device Manager
Fig 13: The Demo board is ready to be used	
Fig 14: Open Device Manager	

Uninstall guide

To uninstall the RCTools you simply run the 'Uninstall RCTools' program located in the Start meny (Fig 10). You also have the option to run the default windows program 'Add/remove programs' located in the Control panel. You will be asked if you are sure about removing RCTools from your system (Fig 16) when you run the uninstaller. If you continue you will in addition be asked if you also want to remove some RCTools files and folders that the installer did not install (Fig. 17). This can be working files you have saved when working with the RCTools, and you may want to keep them for further use. The rest of the RCTools software will be removed even if you keep the working files. If you choose to Remove the files you will be asked to verify this (Fig 18). At the end of the uninstaller you will be informed that RCTools and all the shortcuts added by the installer was removed (Fig 19).
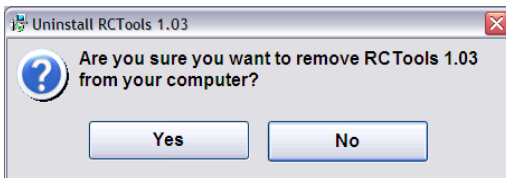
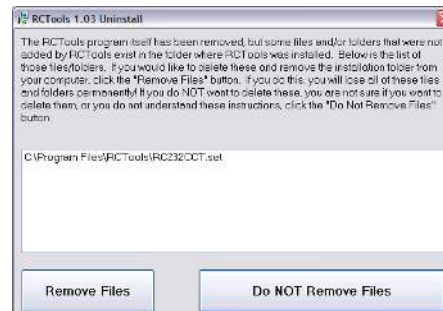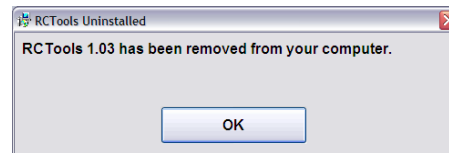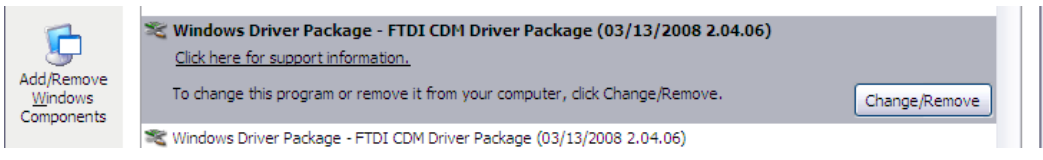| Fig. 16: Uninstall	Fig. 17: Remove files/folder option
Fig. 18: Confirm removing of files/folders	Fig. 19: un-installation completed
Fig 20: Manual un-installation if the USB Virtual COM Port driver	

Note that the .NET framework and the Virtual COM port driver is not removed by the RCTools uninstaller, as other applications in your system may use it. If you want to remove .NET Framework or the Virtual COM Port driver you can do this in the 'add/remove programs' in Control panel (Fig 20).

Document Revision History

Document Revision	Changes
1.0	New Revision
1.1	USB driver installation included

Disclaimer

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As far as possible, major changes of product specifications and functionality, will be stated in product specific Errata Notes published at the Radiocrafts website. Customers are encouraged to check regularly for the most recent updates on products and support tools.

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This Radiocrafts product is not designed for use in life support appliances, devices, or other systems where malfunction can reasonably be expected to result in significant personal injury to the user, or as a critical component in any life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness. Radiocrafts AS customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Radiocrafts AS for any damages resulting from any improper use or sale.

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