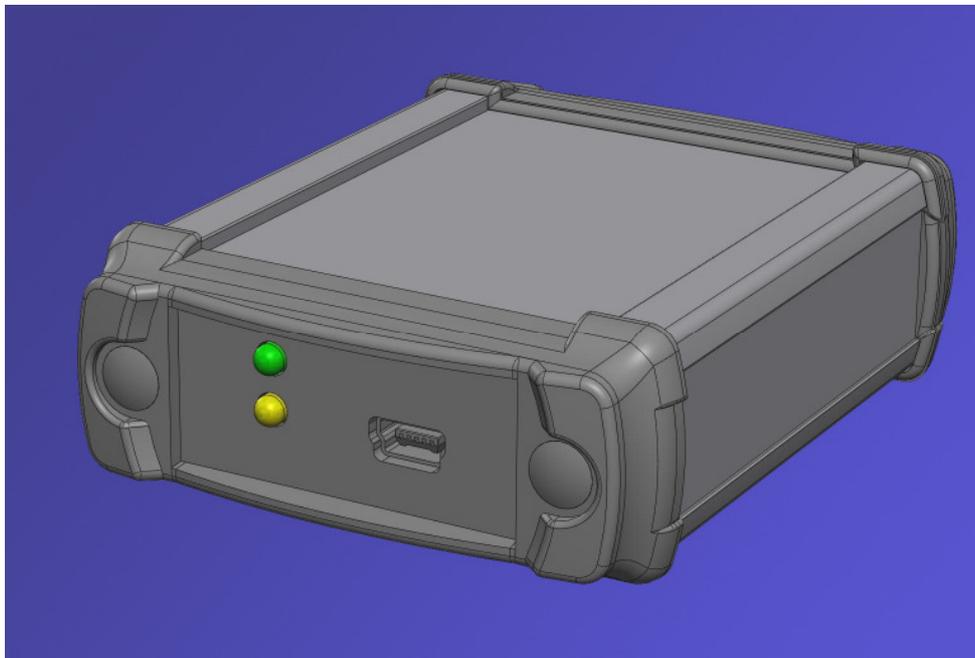


RD20Control

Operating Software for the
RDS FM Receiver RD20



User Manual

Dezember 2008

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1. Introduction

RD20Control is a PC software for the operating system MS Windows 2000/XP/Vista. It is used to control one or several RD20 RDS Receiver via an USB data connection.

Important

Please read the entire manual before you start to use the software. Keep this manual for future use. It contains important operating instructions.

This manual explains the operation of the Software "RD20Control" and does not replace the manual of the "RD20" device. For details of RD20 functions please consult the corresponding manual.

Explicit definitions

This software is developed for the use with the MS Windows operating system. Its usage is similar to MS Windows. Please see your MS Windows manual for details of windows operations. For necessary mouse operations please place the mouse pointer on the specified display area and execute one of the following corresponding actions.

Double-click	Quickly push left mouse button twice
Mouse-click	Single push on left mouse button
Right-click	Single push on right mouse button

Additional notes:

The model as shown on the cover may differ from the supplied model.

Configurations, functions and specifications are subject to change without notice.

2. Manufacturer

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3. Installation

This section explains how to install the software on the control PC.

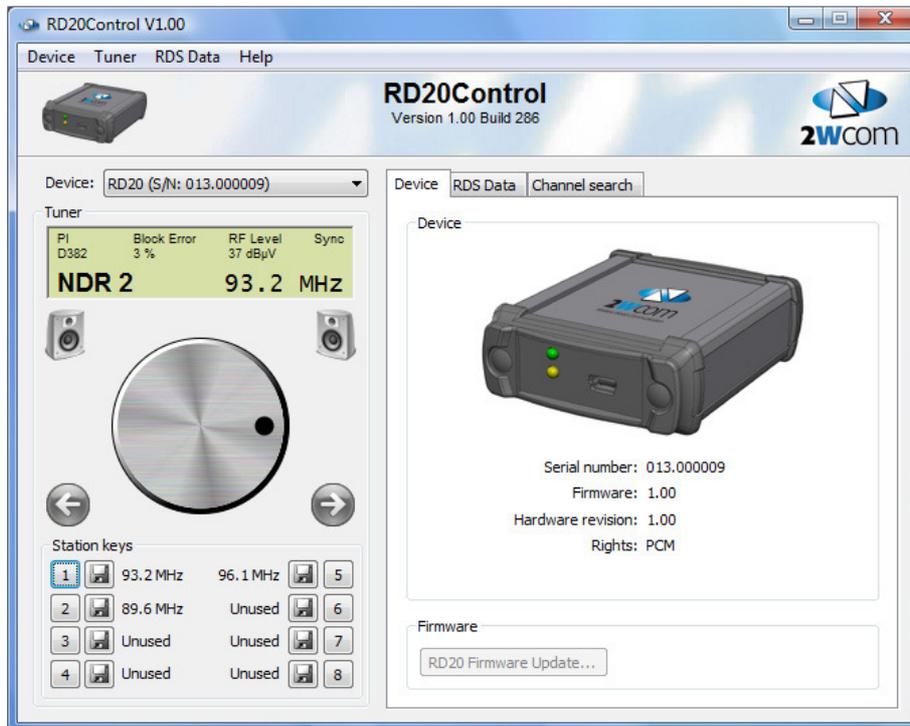
Installation of the program files

To install RD20Control open the file "Setup.exe" that can be found in the folder "RD20Control" of the delivered CD-ROM. Then follow the instructions on the screen.

4. General Operation

Starting the software

Simply double-click the file "RD20Control.exe" or click on the generated shortcut on the Windows desktop. The program window appears as shown below.



Structure of the program window

The program window has a structure of three different sections. The upper graphical section contains the program name, a detailed version information, as well as a status display that indicates background activity. Left to the 2wcom logo at the upper right corner an activity symbol is shown if a background operation is ongoing: (C)

The left-hand section of the window contains a drop down menu to select the RD20 device to be operated (if more than one RD20 is connected) and the tuner control elements.

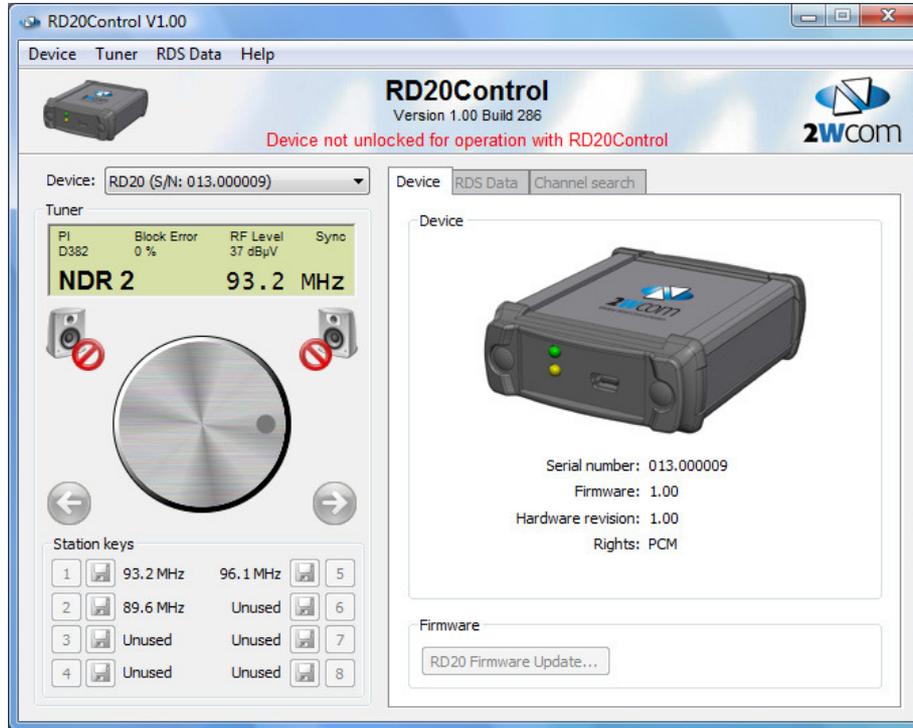
The right-hand section of the window can show different contents in tabs for the RD20 control.

Menu information and menu language

RD20Control has a menu that enables instant access to the main program functions. The menu enables you to select the displayed program language (English / German) at any time (menu entry [Help → Language]).

Device rights restrictions

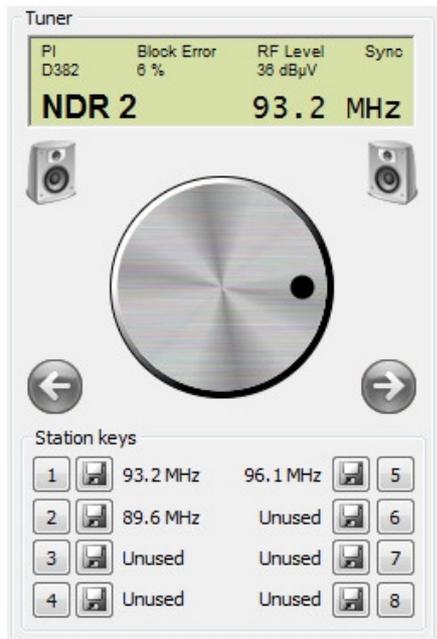
Not all RD20 devices can be controlled by RD20Control. An RD20 Basic **cannot** be used with RD20Control. Instead, the specific 2wcom Windows service software "RD20Usb2Tcp" is used to interface the device to an IP server. If you connect an RD20 without the device right for RD20Control, the program appears as shown below.



The device information is shown, but it is not possible to control the device.

5. Control functions

Tuner control



The virtual LCD screen permanently shows some general data: PI, RDS block error rate, RF level, RDS sync status ("Sync" is shown grey-colored instead of black-colored if RDS synchronization is lost), station name PS, as well as the tuner frequency.

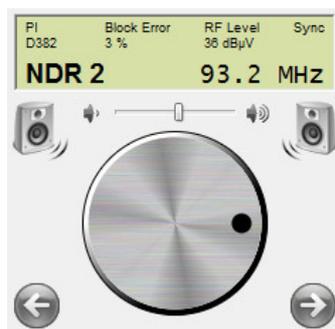
The big jogwheel can be used to tune the frequency. Tuned frequencies can be stored to the station button 1-8 (non-volatile memory) by a mouse-click on the corresponding floppy disk symbol [<].

The two arrow buttons can be used to perform a scan to the next (left=lower, right=higher) tuner frequency with a detectable station. The sensitivity of this scan (detect just strong stations or also weaker stations), can be determined in the tab [Channel search].

Audio signal output

A mouse-click on a speaker box symbol, just below the LCD screen, starts the output of the audio signal of the currently received FM radio station.

RD20Control reads the PCM audio data via the USB connection and outputs it via an installed audio device (sound card / sound-on-board).



To indicate the active audio output, the speaker box symbols are shown "active" when the audio link is established (see picture on the left hand side).

After buffering the first audio data, an audio volume slider is shown right above the jogwheel. The symbol at the left end of the slider is a button that can be used to mute/unmute the audio signal.

If the RD20Control device check result is that the connected RD20 has no audio output function, the speaker box symbols are marked accordingly (see picture on the right-hand side). This marking is also visible if RD20Control is not able to find an installed audio device on the computer.

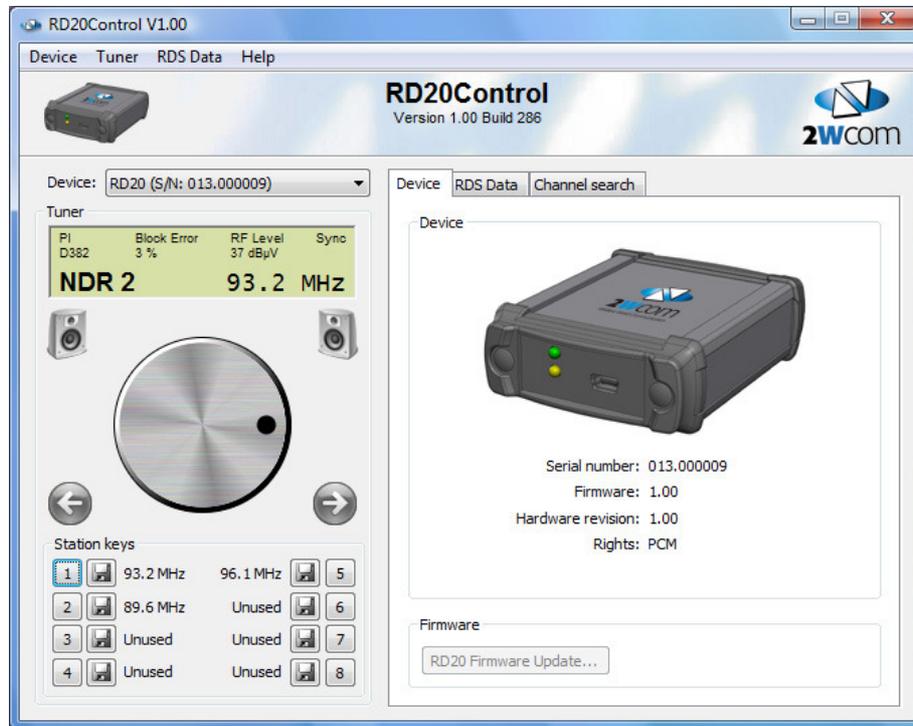
In both cases an information text with the cause is shown if the mouse pointer is placed at the speaker box symbols.

Note: If used with Windows 2000, the audio output function can only be used if just one RD20 is connected.



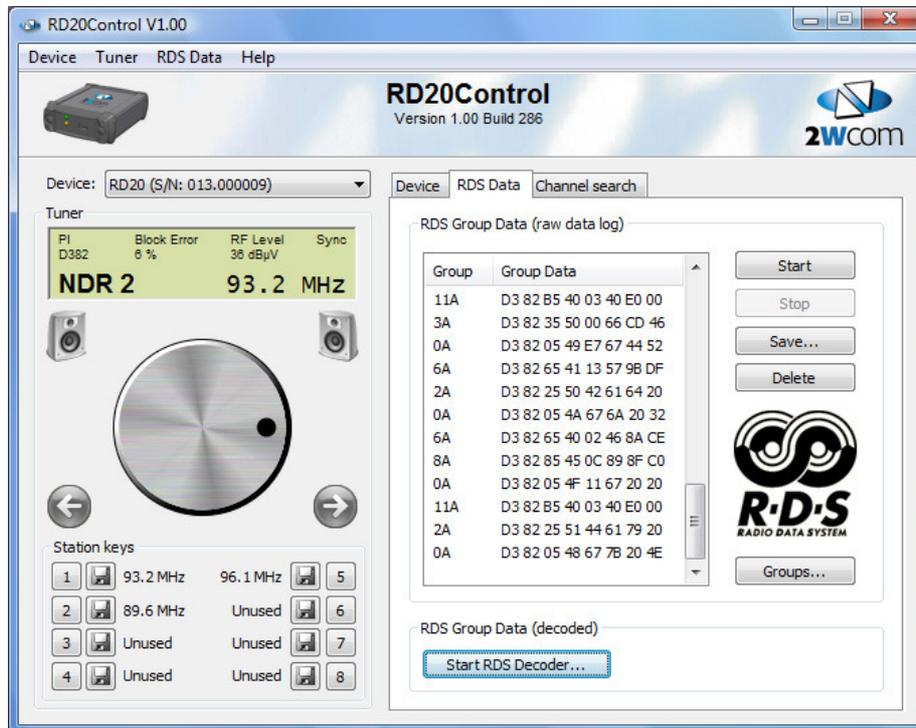
Tab [Device]

The tab [Device] contains the serial number, the hardware and the firmware version, as well as the device rights of the connected device.



Tab [RDS Data]

The tab [RDS Data] can be used to view the RDS group data as raw RDS hex data or, with the external 2wcom RDS decoder software, as decoded readable text.



The [Groups...] button opens the "Selection of groups" window. Here the RDS groups to be considered for the group data recording can be selected.

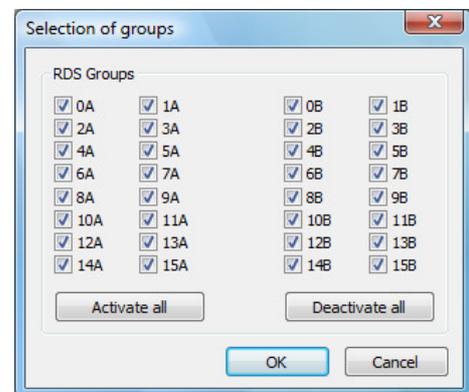
The button [Start Recording] can be used to start the RDS group recording and the display of the hexadecimal group data in a list.

The button [Stop recording] stops the RDS group recording.

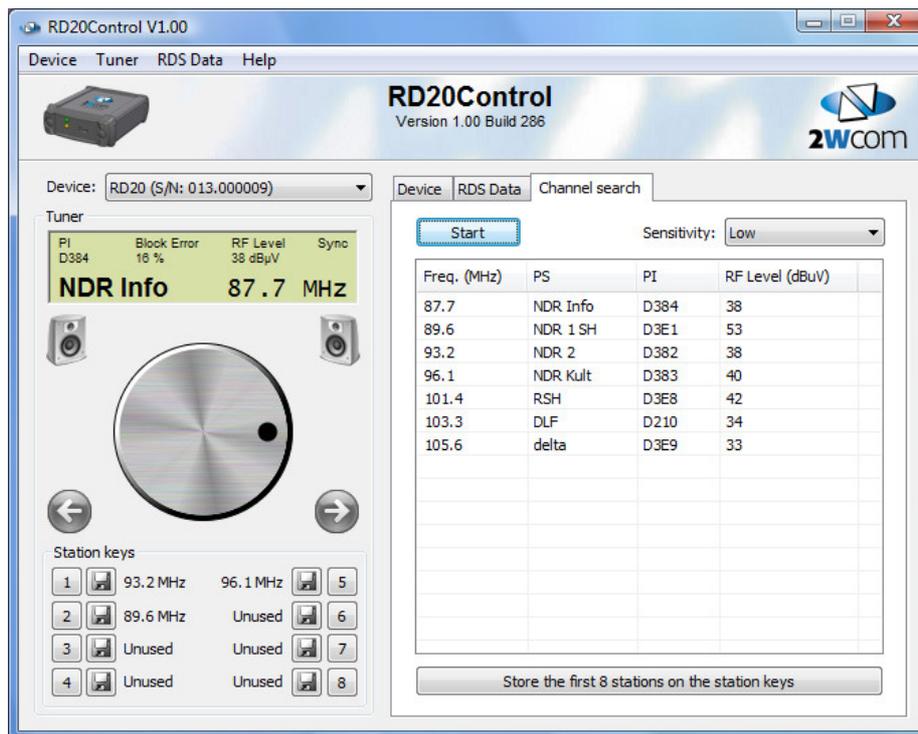
If the recording is stopped and the RDS group data list contains data, the button [Save...] can be used to save the recorded data as a "*.Log_Player" file that is compatible with the 2wcom software "Log Player" (RDS Logger) or as an ASCII text file (*.txt). The file type can be selected in the 'save' dialog at "files of type".

To delete the recorded data, the button [Delete] can be used.

The button [Start RDS Decoder] can be used to start the external 2wcom RDS decoder software application. The RDS decoder software shows the decoded RDS content like PI, PS, PTY, RT, RT+, TMC etc. (please see separate documentation). If the RD20 contains the option "RDS Lab", the enhanced 2wcom decoder software RDS Lab is started. Otherwise the "RDS Softdecoder" standard software is started. If you are interested in purchasing the RD20 option "RDS Lab" for your RD20 please contact us (see page 3 for contact details).



Tab [Channel search]



The tab [Channel search] can be used to perform an automatic station scan over the entire tuning range.

The found stations are added to the shown list. The station entries contain the frequency, the PI and PS (if the RF signal level is sufficient), as well as the detected RF signal level. At the end of the station scan, it is possible to sort the list by the frequency (ascending order), PS/PI (ascending order), or the RF signal level (descending order; this means that stronger stations are at the top of the list).

Additionally it is possible to sort the list entries manually by drag and drop (click on an entry and move the mouse up/down while keeping the mouse button pushed until the new place is reached).

By the lower button, the first eight entries can be copied to the station memory buttons.

The "Sensitivity" drop-down menu next to the "Start" button can be used to determine the level sensitivity of the station scan (Low, Medium, High). This sensitivity level is also used for the "←Tune down"/"→Tune up" buttons of the tuner control.