ReceiverSystem

DR Box 1

Digital Radio and Data Receiver

English Manual

Version: 03.01.02

CE Declaration

We:

TerraTec Electronic GmbH, Herrenpfad 38, D-41334 Nettetal, Germany

hereby declare that the product:

DR Box 1

to which this declaration refers is in compliance with the following standards or standardizing documents:

1. EN 55022 Class B

2. EN 55024

The following are the stipulated operating and environmental conditions necessary for compliance:

Residential, business and commercial environments and small-company environments.

This declaration is based on:

Test report(s) of the EMC testing laboratory

Contents

Setup and Connection

Front view

Power: On/Off switch

🎧:   3.5 mm stereo jack headphones connection

Bank: Selection of four memory banks, each with 6 program memory locations

1-6:   Selection of program memory location 1 through 6

Cursor buttons: Menu operation, initial state:

      ▲ ▼ Program selection within an ensemble

      ◄ ► Headphone volume control

Rear view

Antenna: BNC connector for antenna band III and L band (1.4 GHz)

USB: USB port for PC connection

Digital Out: Digital SPDIF connection for stereo equipment

Line Out: Analog connection (cinch jack) for stereo equipment

Power: 12 V/500 mA stabilized, + on internal conductor

Unpacking and getting started Quick starting guide

Are you the type of customer who first examines everything with curiosity, intuitively connects the parts, and consults the manual only after reaching a state of helplessness? We recommend the following steps for a quick start:

- Connect the headphones to the headphone jack.

- Place the antenna with magnetic base on the unit and connect it to the rear of the unit.

- Connect the power supply to the 12 V socket at the rear of the unit and to supply voltage.

- Turn it on! ("Power")

Four red LEDs next to the "Bank" switch should light up and, except for one, extinguish again. Next, start the station search by pressing the menu button three times within 3 seconds, followed by ◄ for "Band III" receiving range or ► for "L band" receiving range. The unit starts to play automatically and displays the name of the station chain as well as the current program. The ◄ and ► buttons are used to adjust the headphones volume and ▲ ▼ to scroll through the programs.

Reception problems?

If reception is poor, only a channel number (number and letter, such as 12D) is displayed at the end. The unit remains silent since there is no noise in Digital Radio. In this case, you should find a better location for your antenna by first placing it near a window. If the reception was previously poor but present, the unit should play. Otherwise, the station search must be repeated. The search is started as described above by pressing the menu button three times within 3 seconds, followed by ◄ for "Band III" receiving range or ► for "L band" receiving range. If you still do not have reception, please check to see if your region is serviced by Digital Radio. If your dealer does not have any information about the reception in your region, you can check online (in English) at http://www.worlddab.org (menu item "DAB worldwide") and, in particular for Germany, at http://www.digitalradio-info.de/verbreitung/, how far the expansion of stations in your area has advanced and which programs are available.

Whether an adequately strong signal was received for decoding purposes, can be checked using the information page (press menu once): The first value in the second row indicates the reception quality:

```
192k  TM1  12D  A01
Q2 ▌▌▌▌▌▌·  7  D319
```
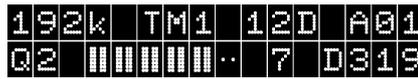
Q1-Q2   should allow for perfect reception.

Q3-Q4   indicates weak reception, which may cause sound interferences.
However, it is possible to have perfect reception with Q3.

Q5-Q6   indicates that a signal is present, but that it is not sufficiently strong for decoding purposes.

Q7   indicates absolutely no reception.

The bars to the right of the quality number also show the reception quality – the more, the better. These bars can be used to align the antenna more easily than using the Q value. Adjustment by ear is not possible with Digital Radio since it operates practically interference-free at a certain threshold – like all digital systems – and not at all below that threshold. A Q3 reception quality with indoor antenna may, therefore, lead to intermittent disruptions while walking back and forth in front of the antenna. Placing the antenna at a higher location – such as on a closet – may solve this problem.

Operation on the road

Because the DR Box 1, antenna and magnetic base are so compact, you can always take the unit with you on a trip. Please connect only the unit's power supply. Damages from operation with unsuitable power supplies are not covered under warranty. It is possible to operate the unit using the 12 V car supply voltage via the cigarette lighter; the unit is protected against overvoltages that may occur in the car supply network.

On principle, Digital Radio is well-suited for reception in moving vehicles. Within a service area, all stations utilize the same frequency so that it is possible to drive from, for example, Sheffield to Hull without having to set up a new station. But if you are traveling from Yorkshire to Lancashire, or if you want to select a local city program, you must first perform a station search. The unit does not recognize new stations by itself.

To avoid surprises – e,g, the unit "starts blaring" or remains silent – the headphones volume is always preset to a medium value (42 of 60) when the unit is switched on. Use the ◀ and ▶ buttons to adjust the headphones volume.

Program selection and station buttons

After the station search, you can use the ▲ and ▼ buttons to scan the located stations. Each station chain ("ensemble") usually contains five to eight stations. A good service with several ensembles can easily comprise 30+ stations; some of them may be more suitable to your taste of music or need for information than others. 4 x 6 program memory locations are avaliable for this purpose. Press **Bank** to select one of the four groups; the unit switches over only if you also press a program button – until then, however, only the corresponding **Bank** LED is flashing.

`Stored!`
`Rock Antenne`

To store a current station search, press and hold the corresponding program button (2–5 seconds) until `Stored!` appears on the display.

If you are listening to a stored program, it is indicated on the display during subsequent scanning; for example, instead of showing `P07`, the unit displays the bank (A through D) and the memory location, e.g. `A02`

`Bayern          P01`
`Rock Antenne`

Program 01 of the ensemble, but not stored.

`Bayern          A01`
`Rock Antenne`

Program stored at Bank A and memory location 01.

If you are able to receive several program packages at one location ("ensembles"), you can call them up sequentially using station search and then scan the stations in the package using ▲ and ▼. If the station search in the respective band (III or L) displays the same package again as the one at the start, you have discovered all stations. If you store at least one program from an ensemble, you can later switch more easily between program packages instead of using the station search function.

A detailed view of the menus

To toggle between the three menus of the unit, press the Menu button at brief intervals. The unit returns to the default setting if no buttons are pressed for approximately ten seconds, with the exception of menu item 1, the information page.

Default setting

After switching the unit on, it automatically activates the default setting: The first display row shows the name of the program package ("ensemble") on the left and the memory location of the currently selected station on the right. The second row shows the name of the selected station.

`Bayern`
`Rock Antenne`

Information page (first menu level)

The information page first shows a confusing number of values, but it is a great help for insufficient reception quality. It displays values such as
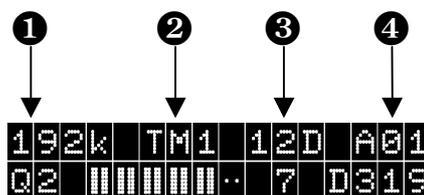
❶ bit rate, ❷ transmission type, ❸ reception channel, ❹ memory channel

The values in the first row are:

`192k` is the bit rate at which the current program is transmitted. In this example, the bit rate is 192 kilobit per second – a relatively high value for Digital Radio which guarantees HiFi stereo reception. Discriminating music is transmitted at this rate. As a rule of thumb: the higher the bit rate, the higher the sound quality.

`TM1` is the transmission mode (1). TM1 through TM4 are available and distinguished through the internal coding of the signal. Here, the lower mode numbers are located in Band III and are more immune to interference, while the highest value TM4 does away with interference immunity the most and, therefore, is used only for satellite and cable reception.

`12D` is the current reception channel. In VHF television band III, each television channel was divided into four Digital Radio channels, which explains the channel designations 5A – 5D, 6A – 6D through 12A – 12D. Only the last channel (13) features 6 subchannels which include 13E and 13F. In the L band, the unit counts LA through LM.

`A01` is the previously selected memory channel. If the station was not saved anywhere, this field may show Po2 for the second program in the currently selected ensemble.
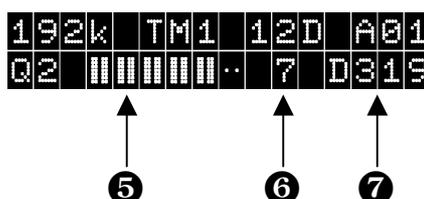
❺ reception quality, ❻ status indicator, ❼ station identification

The values in the second row are:

`Q2` - The Q number represents reception quality with values from 1 to 7:

Q1 and Q2 should always allow for flawless reception: everything should be perfect

Q3 and Q4 indicate weak reception, which may cause sound interferences. Q3 should allow for flawless reception that may, however, lead to intermittent disruptions during movement in the room. For this reason, it is recommended experimenting with the placement of the antenna.

Q5–Q6 indicate that a signal is present (station is located), but that it is not sufficiently strong for decoding purposes.

Q7 indicates absolutely no reception, that is, a faulty antenna connection, location in an underground parking garage or simply no Digital Radio service in the area in which you are currently located. This may still be the case in remote and rural areas. In mountainous areas, however, Digital Radio shows significantly better results than regular FM reception since multipath reception due to reflections from mountain ranges does not cause any interferences.

The bars to the right of the quality number also show the reception quality – the more, the better. These bars can be used to align the antenna more easily than using the Q value. Each Q value corresponds to two bars, from all bars for Q1 to no bars for Q7. Unfortunately, adjustment by ear is not possible with Digital Radio since it operates practically interference-free at a certain threshold – like all digital systems – and not at all below that threshold. A Q3 reception quality with indoor antenna may, therefore, lead to intermittent disruptions while walking back and forth in front of the antenna. Placing the antenna at a higher location – such as on a closet – may solve this problem.

7 - A single 7 represents a proper synchronized reception – a different value should normally not appear here.

D319 – is the station identification, which is coordinated throughout Europe. For example, the Bayern 1 program (which is presently not transmitted on Digital Radio) is D311, Bayern 2 is D312 up to Bayern 5 which is D315. The special Digital Radio program of the "Bayrische Rundfunk Bayern digital" is D316 and the "Rock-Antenne" as the second program of "Antenne Bayern" is D319. The regular program of "Antenne Bayern" is D318 and was even broadcast on DAB during the initial phase of Bavarian Digital Radio.

Memory menu (second menu level)

```
Browse Banks            ▲  P+ M=Exit P-  ▼
       Select ▶     ──→  ◀  Swap   L-Band ▶
```
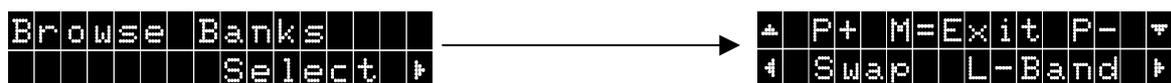
Pressing "Menu" again on the information page (first menu level) and pressing ▶ once displays the memory menu.

Using ▲ and ▼, you can call up all of the 24 stored stations with their names.

To change the assignment, use **Swap** to have two stations swap their memory locations.

To do so, press ◀ for the first one, use ▲ and ▼ to search for the station to be swapped, and press ◀ again.

Example:

You would like to swap the memory locations A01 and A02.

To do so, press the Menu button 3 times. Choose `Se-lect` by pressing ▶.	`Browse Banks` `Select ▶`
Press ◀ to select `Swap`.	`▲ P+ M=Exit P- ▼` `◀ Swap    Tune ▶`
You can now use ▲ and ▼ to select the first program to be swapped. The example shows `Station 1` at location 1 of memory bank A (`A01`). Confirm the selection with ◀.	`10A    X001 A01` `Station 1`
The following display shows information about the next steps.	`Swap With...` `Choose▲▼, ◀Swap!`
Use ▲ and ▼ again to select the program which will take on the memory location of the first one. The example shows `Station 2` at location 2 of memory bank A (`A02`). Confirm the selection again with ◀.	`10A    X002 A02` `Station 2`
The memory locations have now been swapped. `Station 1` – `A02` `Station 2` – `A01`	`10A    X001 A02` `Station 1` `10A    X002 A01` `Station 2`

Press ▶ to display the current memory location, and press "Menu" to leave the menu and return to normal operation.

The unit will also automatically return to normal operation after a certain period of time from this level and all other levels.

Station search (third menu level)

`Scan` `Select ▶` ⟶ `Scan=◀▶  Enter=▲` `◀ Band3 L-Band ▶`

Pressing Menu 3 times, followed by ▶, brings up the station search menu.

Press ◀ to start a station search in band III, press ▶ to do the same in the L band.

Press ▲ to manually enter a receiving channel.

Here, ▲ is used to toggle between band III and L band, ◀ and ▶ to select the desired channel, such as 12D (in band III) or LB (in the L band), and ▼ to switch the receiver to this channel. This allows for specific selection of channels that were not recognized by the station search.

Equalizer (fourth menu level)

`Equalizer` `Select ▶` → `Bass` `◀ ▐▌▐▌▐▌·····  ▶` / `Mid` `◀ ▐▌▐▌▐▌·····  ▶` / `Treble` `◀ ▐▌▐▌▐▌·····  ▶`
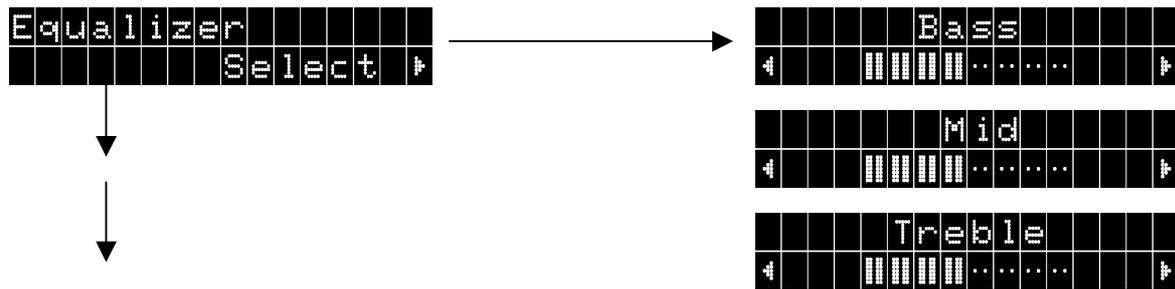
After pressing ▶ once and then using ◀ and ▶, this option allows for adjusting individual settings for:

`Bass` (low-frequency range),

`Mid` (mid-frequency range), and

`Treble` (high-frequency range).

Press "Menu" to advance. Press ▼ to reset the respective level to its original setting.

Fifth menu level: Settings

`Settings` `Select ▶` → `Digital Output` `◀✳Audio    RDI ▶` / `LCD contrast` `4  ▐▌▐▌▐▌····` / `DR Box 1 V1.15ST`
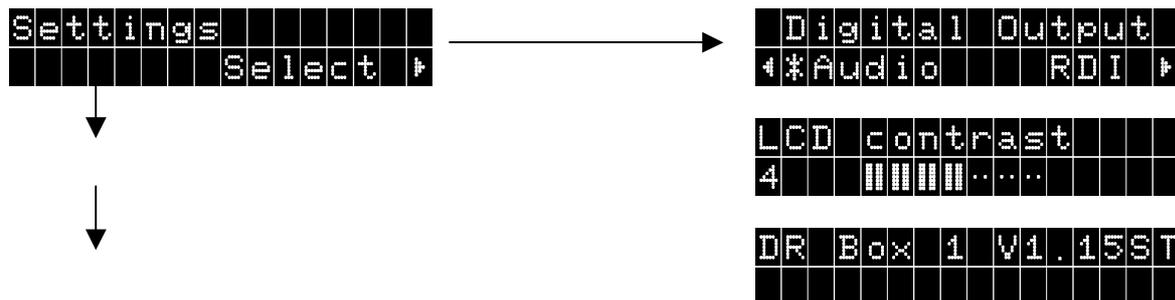
Pressing ▶ once displays the settings of the unit. Press "Menu" to jump to the different settings.

`Digital Output`: ◀ and ▶ can be used here to select the type of data to be furnished by the digital output:

    `Audio` pure audio data for the stereo equipment, or

    `RDI` the complete digital data for optional add-on equipment

`LCD contrast`: Press ◀ and ▶ to adjust the contrast for the display of your DR Box 1.

The third item shows the version number of DR Box 1 for PC-independent operation.

Operation with stereo equipment

Listening to Digital Radio over DR Box 1 with headphones while traveling is already pure enjoyment. But things become a lot more interesting if DR Box 1 is connected to stereo equipment. Even a compact stereo system provides sufficient space for the small unit, and DR Box 1 can be connected at the rear analog via common cinch connectors, or digitally with 48 kHz scan rate via an optical SPDIF fiber optics connection. The latter variant eliminates all interferences such as hum interferences, and even potential channel crossings (left/right). Unfortunately, today's common amplifiers do not distribute the digital signal to connected equipment. Hence, if you decide to record a Digital Radio broadcast on cassette or MD, an additional analog connection is required; otherwise, either amplifier or recording device will provide no data. Before recording directly from Digital Radio using an MD or CD recorder, the recorder must be able to change its scanning frequency: while MD and CD use a scanning frequency of 44.1 kHz, Digital Radio uses 48 kHz. This applies to all contemporary devices.

Operating DR Box 1 with stereo equipment is identical to operating it while traveling – with one exception: The volume control is without function – it merely operates on the headphone output, which may be used independently from the connected equipment.

Operation with the PC

A PC enables the full potentials of DR Box 1: Digital Radio offers unheard of possibilities!

To do so, DR Box 1 only needs to be connected via USB. Not only does the device become completely "remote-controlled," but even audio data is now sent digitally via USB interface – headphones, cinch or S/PDIF do not have to be connected with the PC or the sound card. This also offers the opportunity of listening to a program while recording another program from the same ensemble.

Installation and deinstallation of drivers and software

Driver installation under Windows 98 SE

Please close all applications running in the background and insert the enclosed installation CD in your CD-ROM drive. If autoplay starts, close it.

To install the drivers, connect DR Box 1 with your PC and switch the box on. Windows reports that it found a new hardware device.

Click "Next ›" and the following window displays:

Select "Search for the best driver for your device (Recommended)."

Select the "CD-ROM drive" option in this window and click "Next ›".

Confirm the next window by clicking "Next ›".

Conclude the driver installation by clicking "Finish."

If this message appears, insert the Windows 98 SE – Installation CD in your CD-ROM drive and click "OK".

Finally, verify the driver installation. For more information, see chapter "Verifying driver installation under Windows 98 SE / ME"

Driver installation under Windows ME

Insert the supplied installation CD in your CD-ROM drive. If autoplay starts, close it.

To install the drivers, connect DR Box 1 with your PC. Windows reports that it found a new hardware device.

Select "Automatic search for a better driver (Recommended)".

Conclude the driver installation by clicking "Finish".

Verifying driver installation under Windows 98 SE / ME

Verify the installation by opening the device manager. To do so, click **"Start"** / **"Settings"** / **"Control Panel"** / **"System"**.
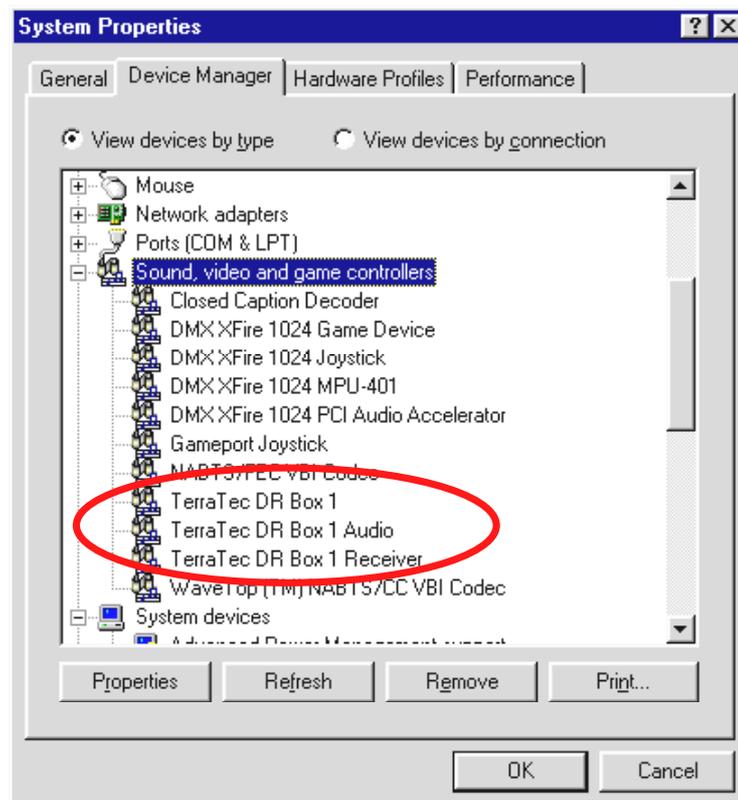
DR Box can be found under "Sound, video and game controllers".

Driver installation under Windows 2000

Please close all applications running in the background and insert the supplied installation CD in your CD-ROM drive. If autoplay starts, close it.

To install the drivers, connect DR Box 1 with your PC and switch the box on. Windows reports that it found a new hardware device.

Click "Next".

Select "Search for a suitable driver for my device (Recommended)".
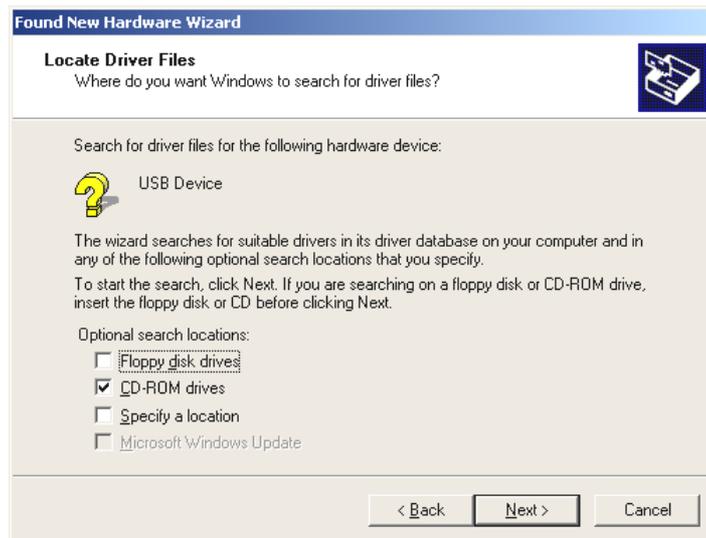
Select only "CD-ROM drives" as the source.
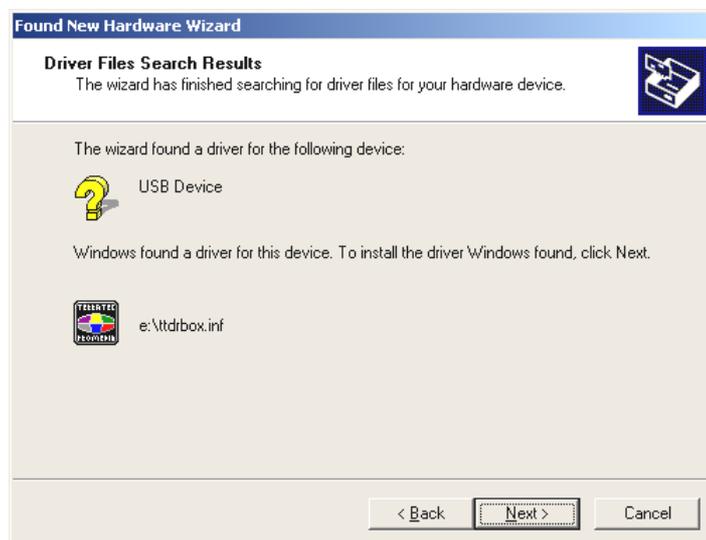
Confirm this window by clicking "Next ›".

Windows 2000 reports that it could not locate a digital signature. A missing digital signature has no effect on the operation of your DR Box. Confirm the next question on whether to continue the installation with "Yes".

Click "Finish".

You are once again informed about a missing digital signature. Confirm the question on whether to continue the driver installation with **"Yes"**.
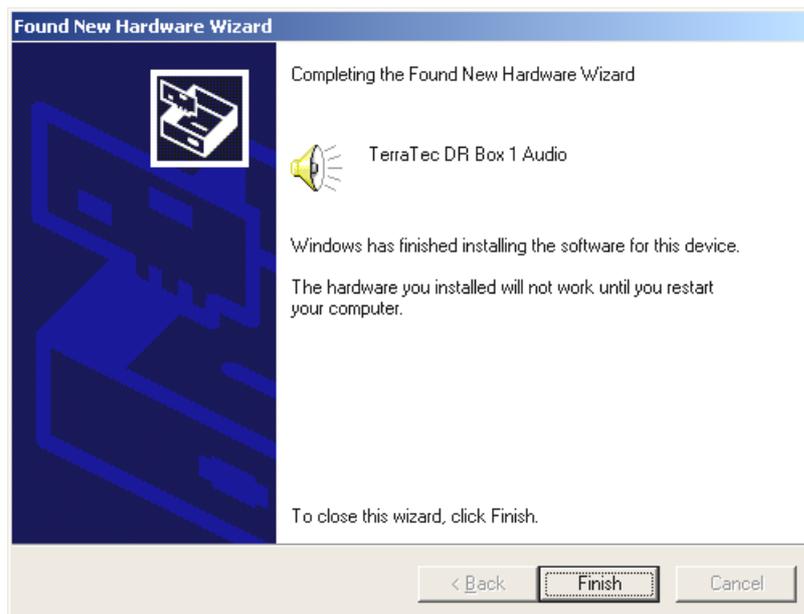
Confirm this window by clicking "Finish".

After successful installation, Windows must be restarted. Click "Yes".

Verifying driver installation under Windows 2000

Verify the installation by opening the device manager. To do so, click "Start" / "Settings" / "Control Panel" / "System".
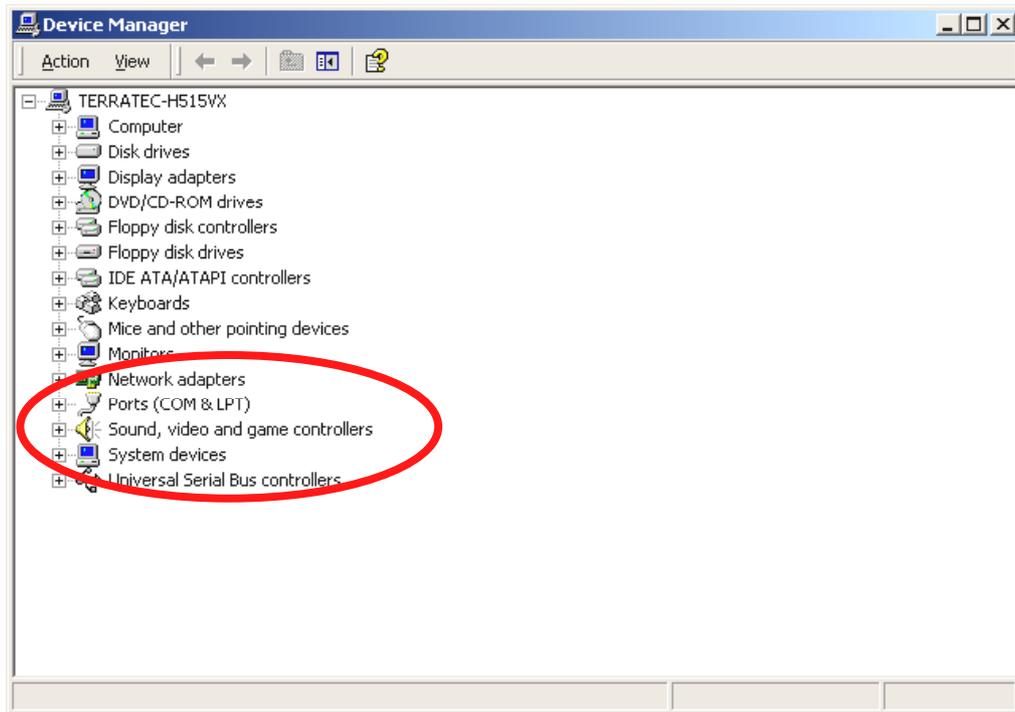
DR Box can be found under "Sound, video and game controllers".

Installing the DR Box application

After inserting the corresponding software CD in your CD-ROM drive, the autoplay function starts which offers the installation of individual programs.

If autoplay does not start automatically, it may be called up manually. To do so, open Windows Explorer, select the CD-ROM drive and double-click the "autorun.exe" file.

The applications to be installed can now be selected individually. Please remember to install DirectX first. This allows your system to be updated which is essential for flawless operation of DR Box 1.

Deinstalling the DR Box application

To deinstall the DR Box 1 application and additional program titles obtained with the purchase of DR Box 1, the following steps should be followed:

Click "Start" / "Settings" / "Control Panel" / "Software".

The software titles for deinstallation are listed here. Select the corresponding title and click "Add/Remove...", which automatically removes the program.

Starting the program

To listen to Digital Radio via computer, it must be turned on and connected to DR Box 1 via USB cable. In this case, the display of DR Box 1 changes and shows only the preset head-phones volume. The software can be started using the "DR Box" icon on the desktop or click-ing "Start", "Programs" and "DR Box".

After starting the software, DR Box 1 shows once again the usual display. Please note that not all functions of DR Box are available for operation with the PC.

Sound reproduction via PC

The headphone connection of DR Box 1 remains functional during operation via PC – you could also connect your sound card here. But the additional cabling is unnecessary. DR Box can receive the sound signal directly and in digital form via USB connection, which also al-lows it to be recorded on the PC. To do so, simply select the "Settings" menu (the two gear-wheels icon) and change the audio device from the name of your sound card to Direct Sound and the name of your sound card. Emulated Direct Sound functions (indicated as "emulated") should, however, not be used since they are not powerful enough and could slow down the system.

User interface
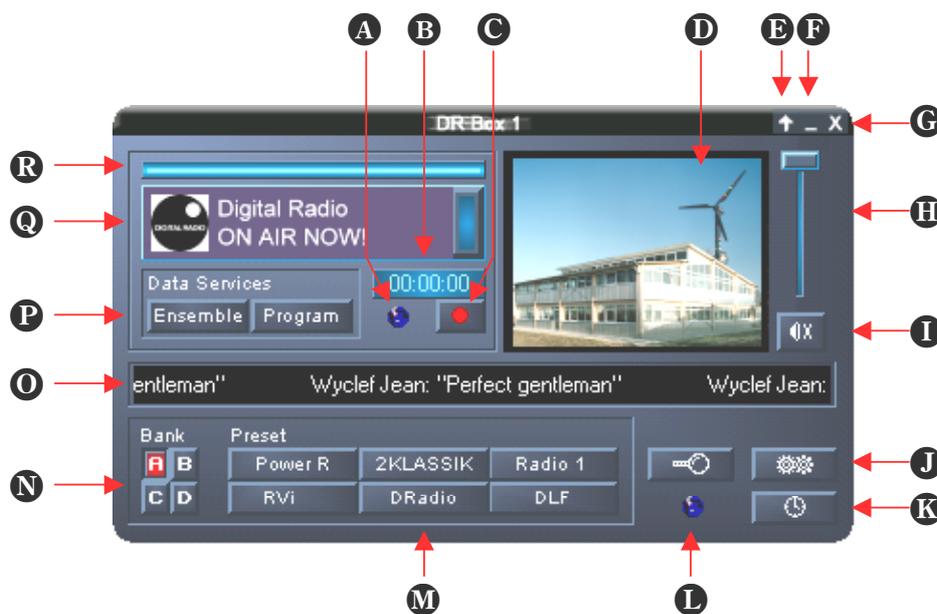
A Recording indicator	**J** Station search settings
B Recording display	**K** Timer
C Recording button	**L** Timer display
D Slide show	**M** Station memory
E Reduce window size	**N** Bank selection
F Minimize window	**O** Dynamic Label
G Close program	**P** Data services
H Volume control	**Q** Station selector
I Sound on/off	**R** Receiving signal strength

The software appears as a small window which occupies very little desktop space. Hence, it can also be set to "Always On Top" under **Settings** so that it will not be covered by any active window. Using the up arrow (reduce window size) in the top right corner allows the window to be minimized further.

The volume control on the right and the "Sound on/off" button below apply only to the sound received via USB and sound card, not to the playback at the outputs (headphones, cinch and digital output) of DR Box 1.

Even if the unit successfully received stations on its own, the PC software does not have this information. Hence, a station search is automatically started at the initial start of the program. This search can also be started manually at a later time using the magnifying glass icon (**Station search**), e.g. after changing the position of the antenna. In comparison to the station

search in PC-independent operation, the software station search is automatically performed on bands III and L and, depending on the number of active stations on these bands, may take several minutes since every signal received is examined in detail to establish whether it is a Digital Radio signal or, for example, an analog TV signal.

Upon reception, quality is symbolically represented by the blue bar (**receiving signal strength**) above the station selection. The station selection, as known from the unit itself, contains ensemble name and station name. Clicking on the bar to the right of the station display toggles between stations of an ensemble.

The "Slideshow" window next to the volume control displays frames delivered by the Digital Radio station. For traffic stations, these are typically reports of traffic congestions, where pure music stations deliver views inside the studio or covers of albums or CDs. Additional program-accompanying information, such as the title of the song being played, pass along in the "Dynamic Label" text field in the middle of the window. After changing a program, the display is not updated until new information is received.

"Ensemble" can be used to select the program-accompanying information on all stations of a search chain by means of a browser interface, whereby the left column shows the specific data information of the complete ensemble and the right column the program-accompanying brief information of all programs.
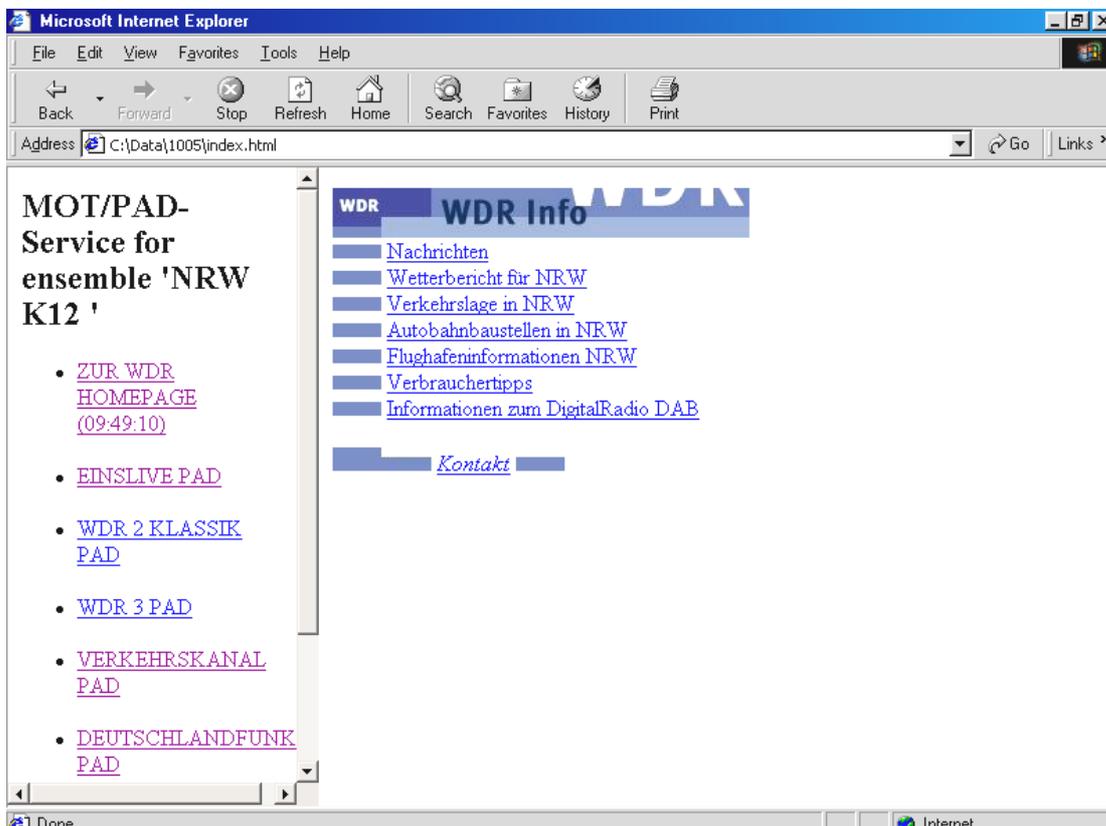
"Station" displays only the program-accompanying information transmitted last and the current frame of the running program in full size.
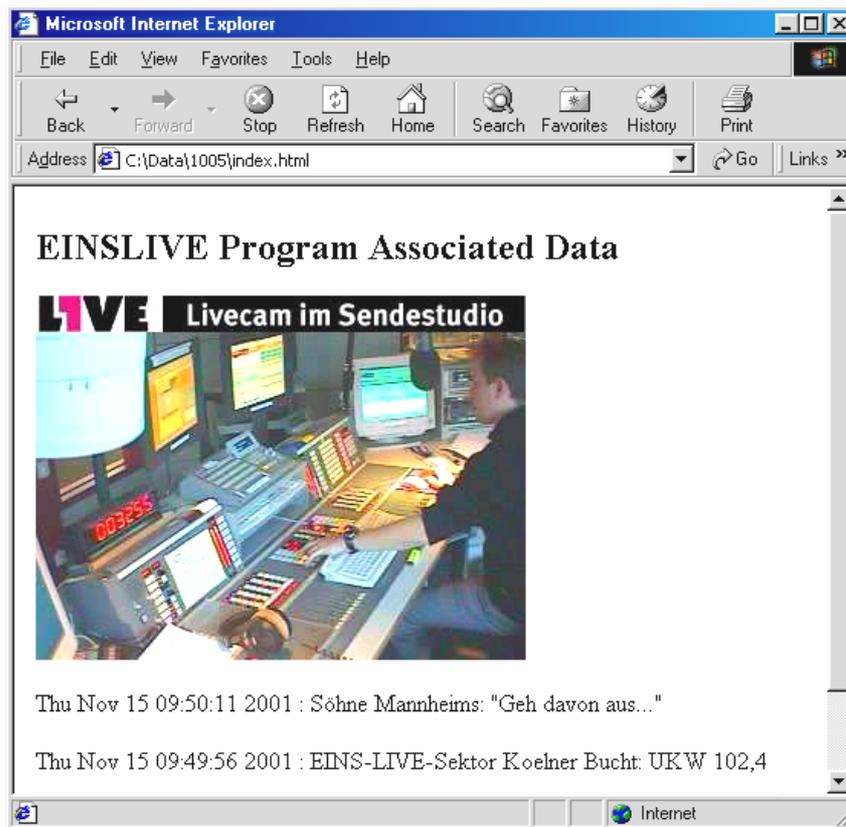
The four memory banks A through D with six storable stations each correspond to the 4 x 6 memory locations of the operation without PC. To store the current station, right-click a free station button using the mouse. Its name then replaces the three dashes. If the station button already contains a station, it will be overwritten.

Digital recordings with DR Box 1

Since Digital Radio enters the computer in a computer format using the USB connection, it can be recorded without loss of quality. To do so, the recording format must first be specified in the "Settings" menu:

PCM (WAV)   uncompressed audio format (16 bit, 48 kHz)

MPEG Audio Layer (MP2)   the Digital Radio format (can be played, e.g. using the enclosed MusicMatch Jukebox)

Alternative format   allows you to select alternative formats for recording.
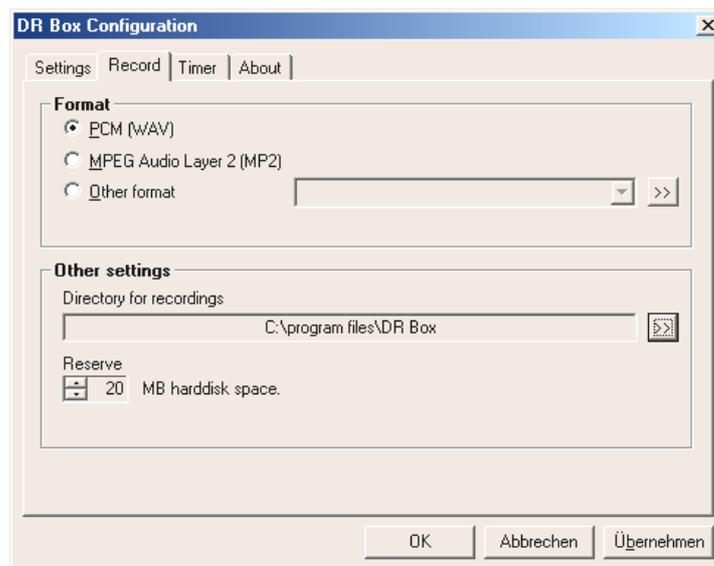
Next, you should specify where you would like to save the recordings so that you can locate them after the recording is finished. The default directory is "Record" in the program directory of DR Box 1. Clicking [»] allows you to create another directory.
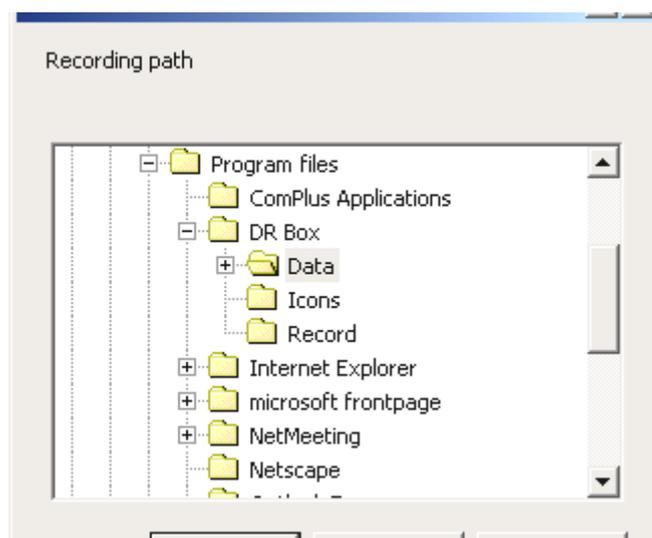
Finally, you can specify the time buffered before the recording so that the final seconds prior to recording are also stored on the hard disk. This feature is usually only part of expensive MD recorders. Its advantage is: If a song that you sought for a long time suddenly plays without

prior announcement and you start a recording, the first seconds are usually missing before you recognize the title and react. DR Box 1 allows access to the past – thus, the song is on the disk starting at the beginning. This function is the reason why the hard disk remains active after starting the DR Box 1 software – the specified number of seconds of music is always buffered to be available if the need arises.

The recording is started using the red recording button below the recording display. The display shows how long you have been recording and the recording indicator flashes red as a reminder that a recording is in progress. There is no need to remain silent as it is the case in a recording studio, but you should not forget to stop the recording at the end of the piece of music or radio broadcast by pressing the recording button a second time. And do not forget that you can always listen to another station within the same ensemble during the recording. The DR Box is not affected and continues recording the station where you started.

Would you like to record a different station without missing anything from the current broadcast? If you right-click the recording button with the mouse, the following menu displays:

Simply select the desired station under Stations and the recording starts immediately. The station you are currently listening to always shows the check mark as the default selection.

The other options are:

Open last recording	This option plays the last recording. It uses the program which is intended for the file format of the recording. For example, for MP2 files, the program MusicMatch Jukebox is used.
Open recording directory	This option opens the directory in which your recordings are stored.
Recording options	Allows you to vary the recording settings.
WAV **MP2** **Alternative format**	If you only want to set a different recording format, you do not have to change to the recording options. The format can directly be selected here.

Timer-controlled recordings

DR Box 1 offers much more than a radio recorder: It also features a timer function which can be accessed directly via "Settings" or via "Timer" icon.
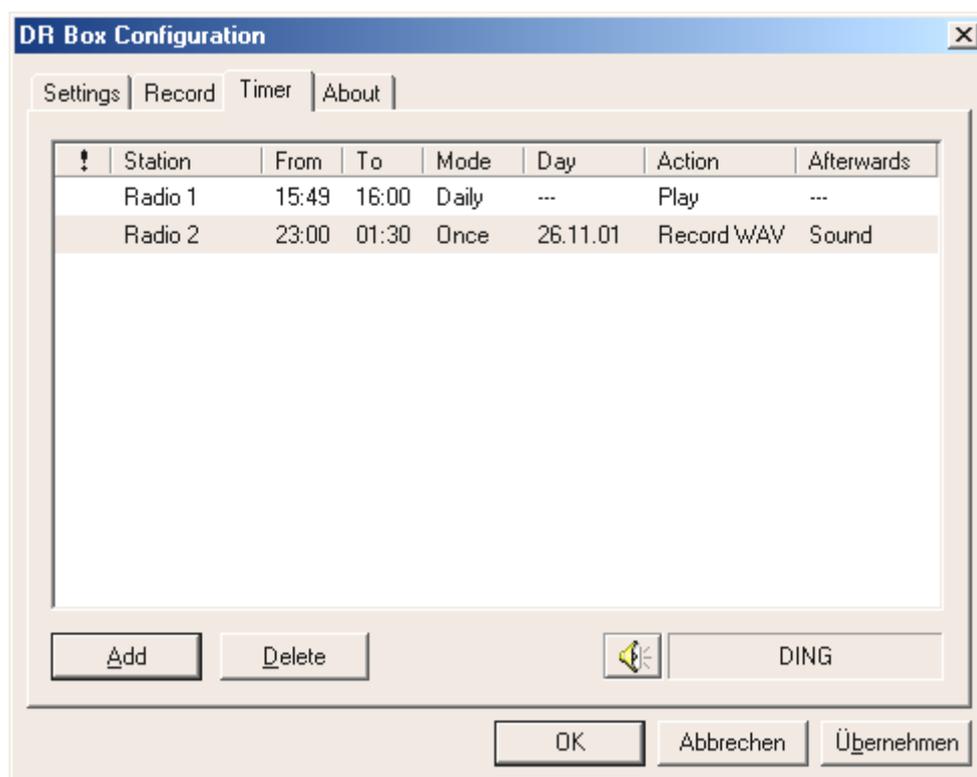
The selected recordings can be entered here – optionally once, daily or weekly – just like a VCR – but much more convenient. You must enter the desired station, start and end time, desired action – it is also possible to set the unit to playback only, instead of recording, like a radio alarm – and what should be done after the action concludes: DR Box 1 can also shutdown the computer and turn it off, if necessary!

To create a timer entry, click "Add", to remove a highlighted entry, click "Delete".

If the end time entered is earlier than the start time – for example, 23:00 to 01:30 – the software automatically sets it to the desired time – switch-off at 01:30 on the next day.

Explanation of individual settings

!	Station	From	To	Mode	Day	Action	Afterwards

! A check mark below the exclamation mark indicates an active timer entry. If you list features entries that are out-of-date or invalid (e.g. if you selected yesterday for a recording), a cross is displayed.

Station Here you select the station to which the following timer settings apply.

From Enter the start time here.

To Enter the end time here.

Mode Select the mode for the recording – either Once, Daily or Weekly.

Day This option tells the software the date or day and time for the upcoming action.

Action You can now select from the list what the DR Box software is supposed to do at the specified time. You can select among various recording options or simply specify playback, for example, if you intend to listen to the news of a specific station.

After-wards Finally, enter the action to be taken following the timer action. You can play a sound, close the DR Box software or even shut down the PC. If you select ---, no action will be taken.

Listening to a program while recording

Just like a VCR, the recording of DR Box 1 is independent of the program currently being played: If you select a different program in the current ensemble during a recording, the recording continues without interference with the previously specified program. You can check your current recording session by right-clicking the recording button with the mouse. Even a timer recording does not interrupt the running program, as long as it is part of the same ensemble as the recording program. However, programs from two different ensembles, such as the state-wide ensemble "Bayern digital" in band III and the local ensemble "München" in the L band, cannot be received simultaneously – the receiving section is switched over when the ensemble is changed. Whether the hardware output, i.e. headphones, cinch and digital outputs – should follow the program change in the software or remain independent, can be specified in the settings by activating the option "Hardware audio output follows software".
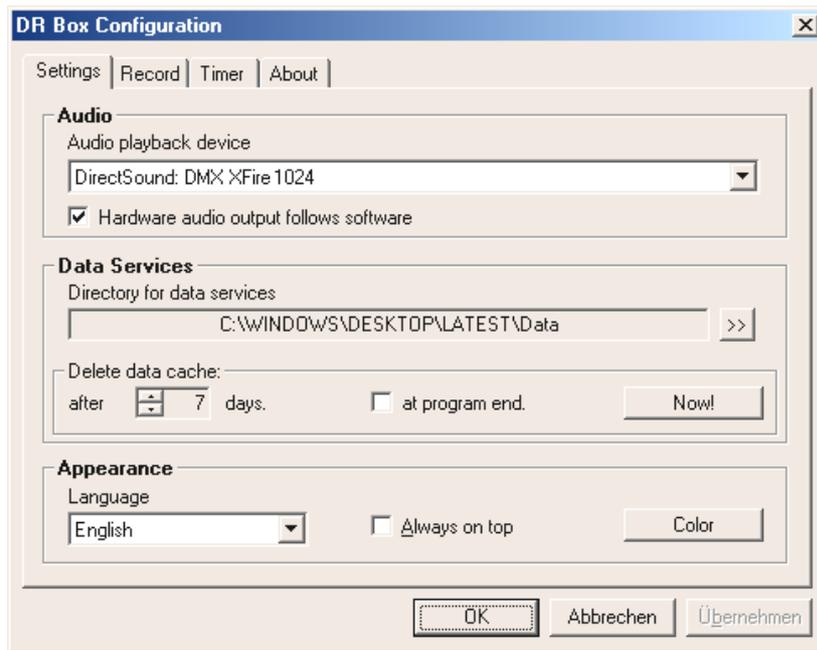
"Color Settings" dialog box

The color of the user interface and the control buttons can be changed, if necessary, using the color button on the settings tab:

On the left side ("Color Settings"), you can select the colors, e.g. for text and background. The right side ("Demo Controls") shows the corresponding result. If the new color settings find your approval, confirm them with "OK"; to return to the existing settings, click "Cancel".

Version query

The final tab "About" under settings shows the version of the software.
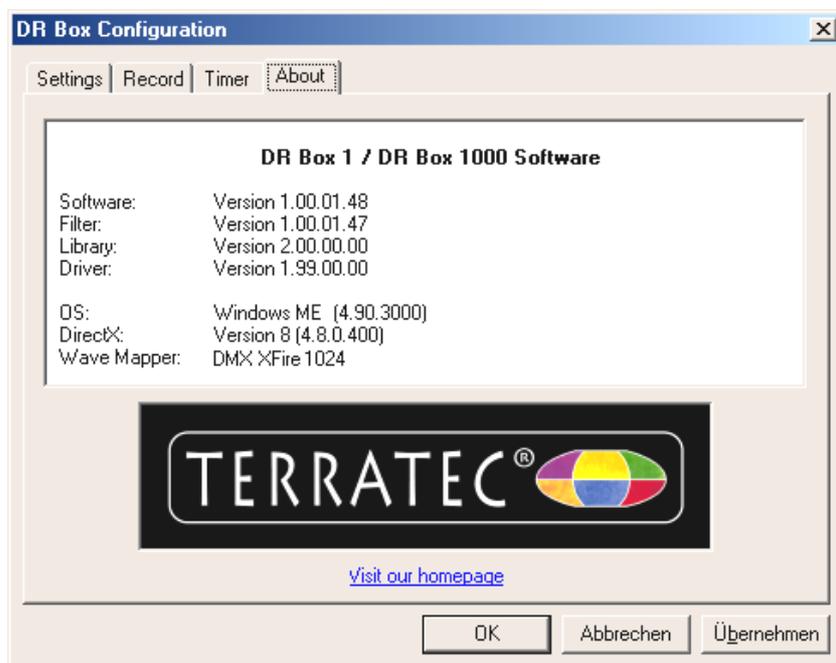
Audio recordings with standard software

Besides recording Digital Radio using the DR Box application, you can also use other re-cording programs for this purpose. DR Box is supplied with two programs for this purpose. But since the programs to not directly communicate with DR Box, it is necessary to start the DR Box application after system start and select an ensemble. It is, therefore, recommended to leave the DR Box application open; otherwise you will not be able to listen to the station to be recorded.

Even if you are familiar with making recordings on the PC, it is recommended that you read the following lines since you are not using your sound card for recording purposes but, in-stead, receive the signal via USB connection.

1. WaveLab Lite

   This allows you to record Digital Radio as WAV file. The WAV format is an uncom-pressed audio format that requires a large amount of hard disk capacity, but it leaves open the possibility of processing the recording without any loss.

   Next, you can burn the recording onto a CD, for example, or convert to an MP3 file (for which you use MusicMatch Jukebox).

2. MusicMatch Jukebox

   MusicMatch Jukebox allows you to convert WAV files to MP3 format, as described above, as well as perform direct recording of Digital Radio to MP3 format which is recommended due to its small file size (at a factor of 1:11 for CD-comparative quality in comparison to WAV format) and the possibility to play the files on portable MP3 players.

Since you may already have a sound card in your computer, it is important that you inform the programs that you are recording the sound of DR Box 1 and nothing else.

Two options are available which are determined by the program.

1. Programs which offer the existing equipment for selection. For example, this includes WaveLab Lite.

2. Programs that assume that only one device is available for recording, such as MusicMatch Jukebox. These types of programs must be tricked, but more about that later.

Recording with WaveLab Lite

After installing DR Box 1, WaveLab Lite can be found in the program group with the same name. Start the program. Next, click the Preferences menu item on the Options menu.
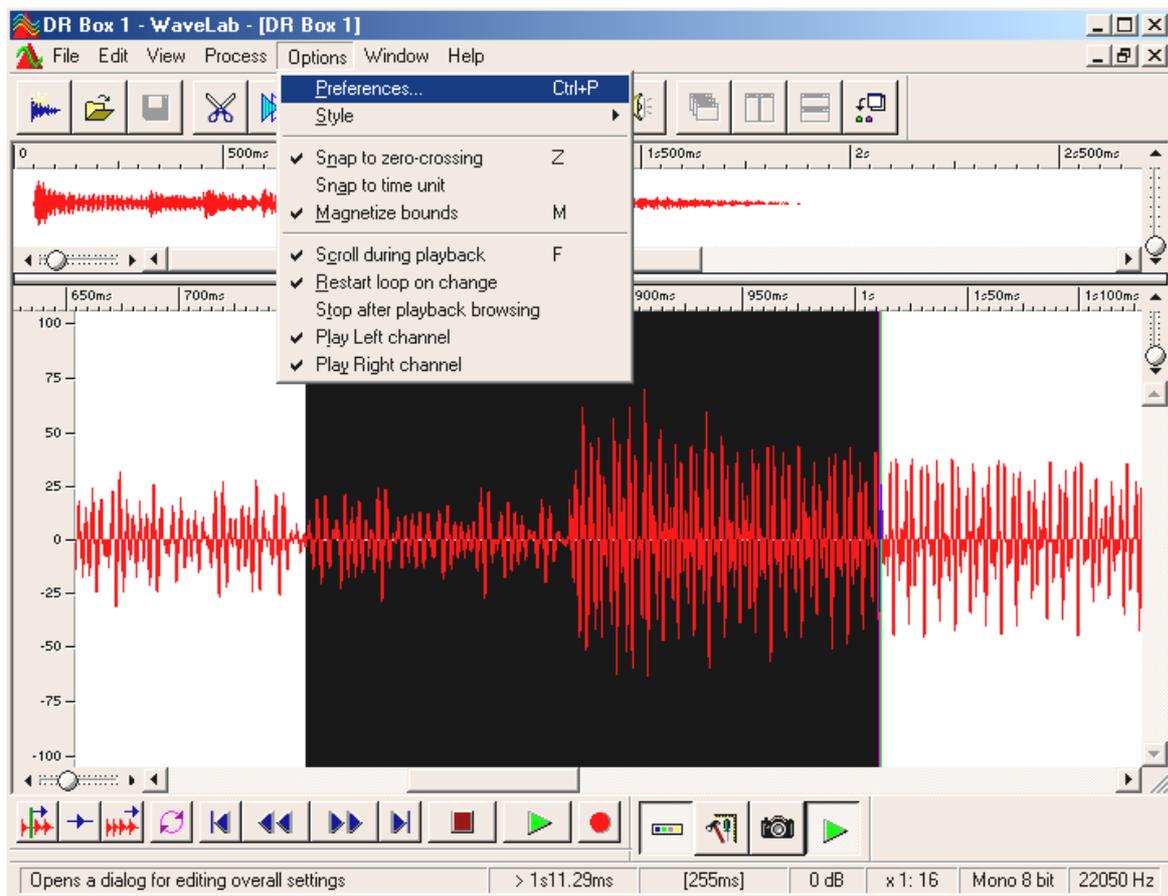
The following window display:
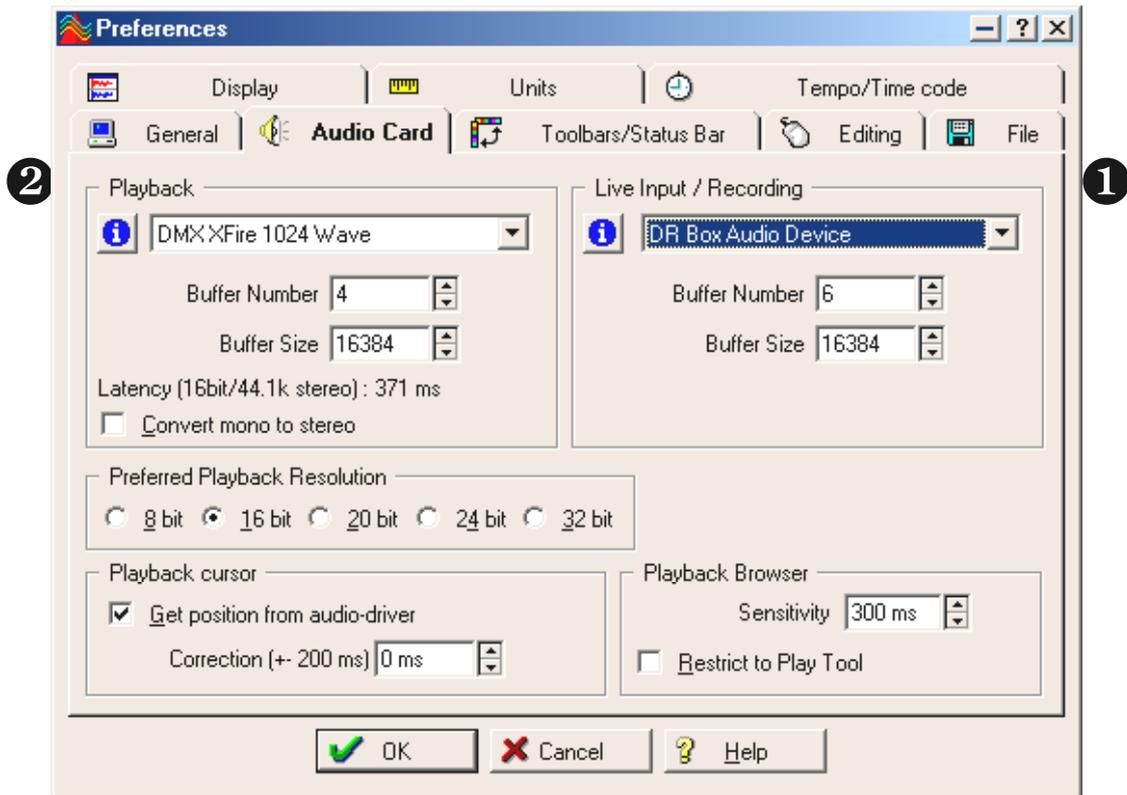
Under the item "Live input / Recording" at point 1 select the USB audio driver of your DR Box (DR Box Audio Device). Point 2 should normally show the installation of the playback driver of your sound card. Depending on your sound card, you may find a different entry than the one shown in the illustration. The other options are not of interest at this time and should remain unchanged. The corresponding explanations can be found in the WaveLab Lite online help.

Next, open the recording window by clicking the recording button in WaveLab Lite (the button with the red dot). The following window display:
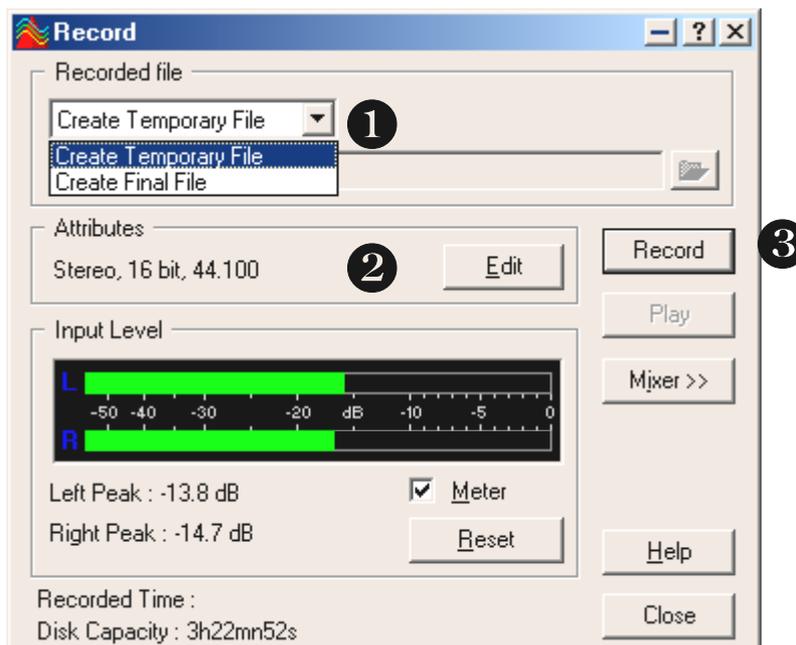
If you intend to perform long recordings, select the option "Create Final File" under ❶ since this will write the recording file directly to your hard disk. For shorter recordings (e.g. one or several songs), you can also select "Create Temporary File". The recording is performed as usual, but the data remains in the working memory of the computer until the recording is saved.

Set the properties of the file to be created under ❷. Useful values are:

Stereo, 16 bit and 44.1kHz – For recordings which will be burnt onto a CD after processing. In this case, the audio signal is modified during the recording, but it is later available in the required CD audio format.

Stereo, 16 bit and 48kHz – For all recordings not intended for CD. In this case, the signal is not modified.

Now you can start the recording ❸.

Recording with MusicMatch Jukebox

Preparation:

MusicMatch Jukebox is an application where the audio device must be assigned for Windows prior to the start of the software.

Windows 98 SE

For this purpose, click "Start" / "Settings" / "Control Panel" / "Multimedia".
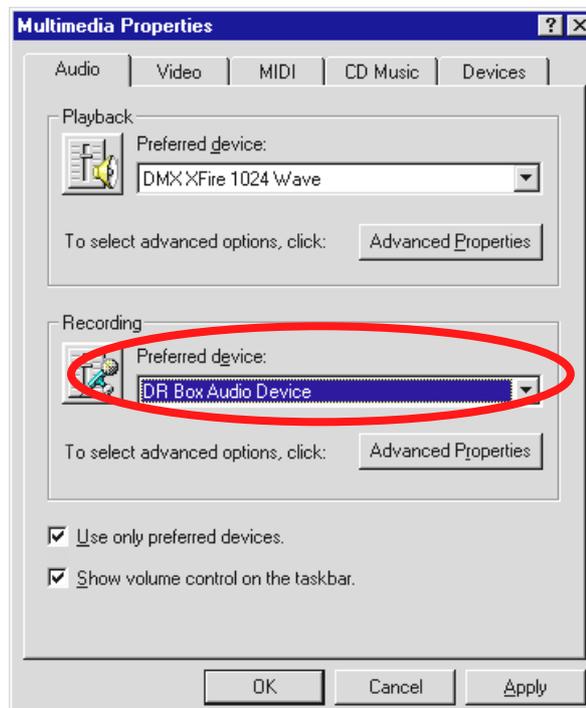
Windows 98 SE

Windows ME & Windows 2000

Click "Start" / "Settings" / "Control Panel" / "Sounds and multimedia".
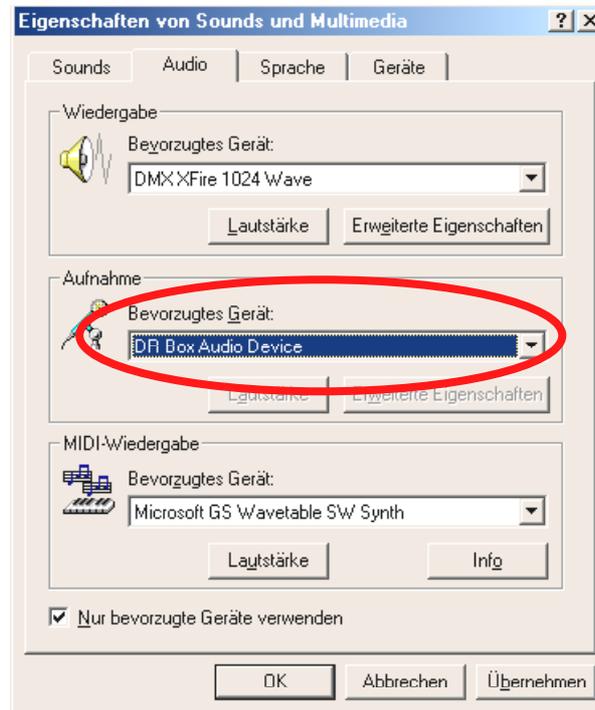
Windows ME
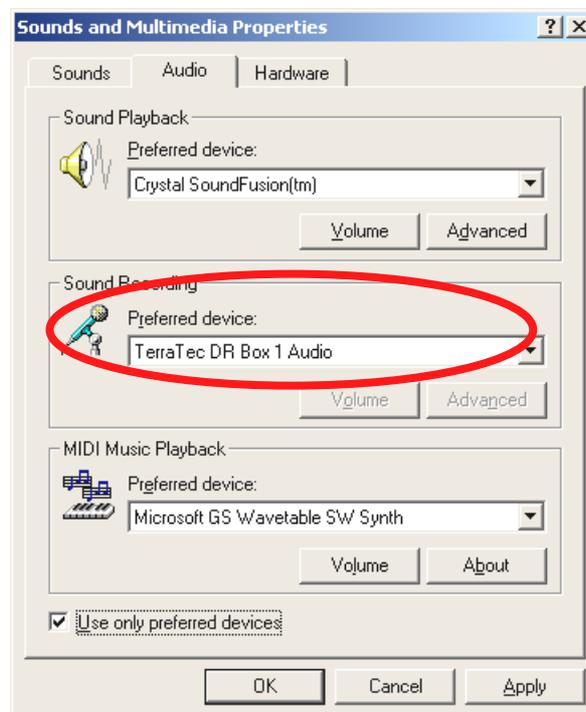
Windows 2000

Next, set up "DR Box Audio Device" as the preferred device for the recording and activate the option "Use only preferred devices".

Start the Jukebox in the MusicMatch program group.
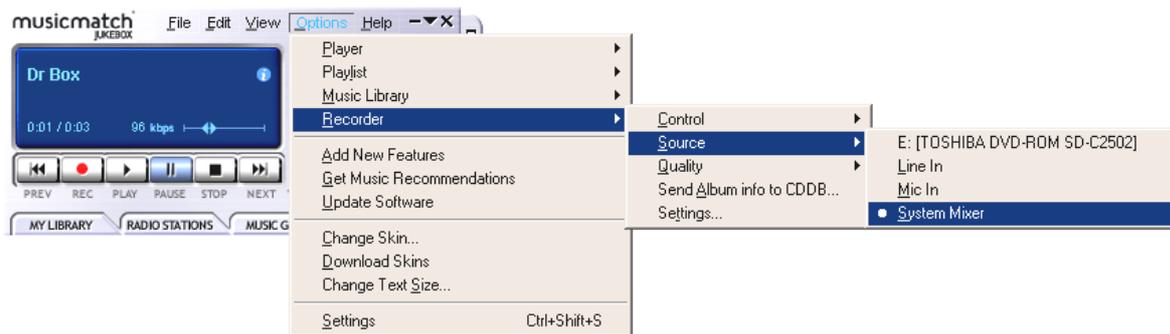
Select the option "Recorder", "Source" and "System Mixer".

Click the recording button (red dot) to open the Recorder window.
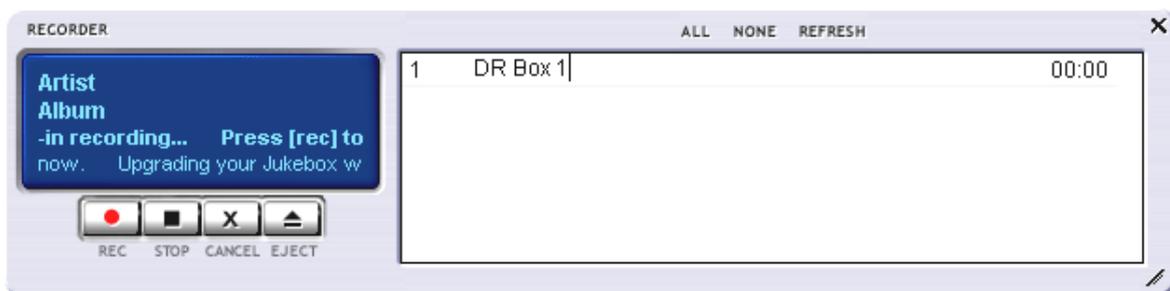
In the right part of the window, assign a name for the recording ❶ and start the recording by clicking the recording button in the recording window ❷.

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"Rien ne va plus – no more bets" can happen to the best systems. In such a case, the TerraTec-Team is always ready to provide service and support.

Hotline, Mailbox, Internet.

In case of a serious problem – where you can neither solve the problem on your own nor with the guided help found in this manual, nor with the help of your dealer – please contact us directly.

The first way should be the Internet: under **http://www.terratec.net/** you will always find current answers to frequently asked questions (FAQ) and the latest drivers. All of that is also accessible via our mailbox system.

To call us: **+49- (0)2157-8179-24** (analog) and **+49- (0)2157-8179-42** (ISDN).

If these options do not provide the necessary help, please contact our phone hotline. You can also reach us online. To do so, visit us under **http://www.terratec.net/support.htm**. In both cases, please have the following information handy:

- Your registration number,

- this documentation,

- a printout of your configuration files,

- the manual of your motherboard, and

- a screen shot of your BIOS configuration.

In addition, it would be helpful to our technicians if you are at your computer during the phone call to directly carry out tips and tricks. Please do not forget to write down the name of the respective support technician if you contact our Support Team.

You will need this name if of a defect is present and your card needs to be mailed to us.