

**Manual
Fitting to****RDS Radio Basic Set**
113-010-03-100-23**1. Welcome**

Thank you for buying this quality WHD product. Please read this manual carefully, especially the safety and security information.

Please check that you have the correct manual for your product. To do this, please compare the product code number shown above with the product code number displayed on your product.

**2. Contents Check List**

- RDS Radio Basic
- KEL 55
- PT screws 3x16
- Silicone tube (length: 250 mm)
- cardboard distance rings
- IR Remote Control
- Battery for IR Remote Control
- Manual

3. Safety & Security**General Information**

In addition to this guidance please adhere to your own country-specific safety & security regulations.

3.1. How to use this guide:

Read these instructions carefully before use and use this product only in accordance with the instructions listed here.

3.2. Signs & symbols used

This sign warns of danger of injury and property damage.



This sign warns of injury from electricity.



This sign warns of injury and/or explosion.



This symbol refers to additional information.

3.3. Signal words and their meaning

Danger: Potential severe physical damage and acute danger.

Warning: Potential electrical shock physical damage and severe property damage.

Caution: Potential fire hazard physical damage or property damage as a result of.

Attention: Advisory notes only.



Warning

The 230V line must be connected only by a professional electrician.

The Electrical supply must be disconnected before working on the device.

Improper handling may void warranty.

4. Product Scope

Single room audio solution.

5. Intended use

Indoors, flush mounted.



6. Improper use

The device is not suitable for outdoor operation.

The ambient temperature should not exceed 30 ° C.

7.1. Specifications RDS-Radio

Supply Voltage	230 V AC, 50 Hz
Output	1 x 1,2 watt
Speaker Impedance	1 x 4 ohms
Line-In (rear)	Terminal (screws)
Impedance Line-Out	470 ohms
Output Voltage Line-Out	0,2 V AC (depends on mobile device)
THD	Typ: 0,5 % @ 1 kHz
Frequency range	30 Hz ~ 20 kHz / -3 dB
SNR	speakers: 70 dB Line-Out: 70 dB
AC Power (StandBy)	< 0,5 VA
Protection class	II
Dimesnions	55×55×36 mm
Depth	36 mm
Weight	100 g
Operating Temperature	+5°C bis +45°C

7.2. KEL 55 Specifications

Rated-/Music power	3 / 4 W
Impedance	4 Ohms
Sound pressure level	1W/1m: 82 dB
Frequency range (-3dB)	170-20.000 Hz

8. Preparatory work before installation



Install the power cable for 230 VAC and the RCA cable (for the music center AUX) in accordance with installation guidelines, and your desired port scenario.

Note:

To get a proper installation please pull out some cable length out of the wall and flush mounting box to connect the terminals without obstruction. Draw back the cable in the wall or the flush mounting box again before fixing the device with the screw. Have enough space available in your instructive tube and your flush mounting box.

Note on the structure of the RDS Radio

The device consists of three parts:

- 1 - Control panel (pluggable)
- 2 - Housing with mounting plate (assembly unit)



Attention

Switch off 230V power supply when unplug the control unit.

9. Installing the device

9.1. General

Mount the flush box at the decided location.

Note:

The unit has a mounting depth of 37 mm. For flush mounting box has a minimum depth of 40 mm requirement for a professional installation. The flush-mounting box is not supplied.

Disconnect the cables necessary for connection of something out of the box and plug in the device.

Plug the control tower on the mounting unit.

9.2. Connections

9.2.1. Connecting antenna

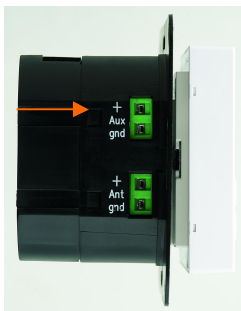


Connecting antenna cable:

Connect the outer screen at (-) and the inner conductor at (+) and screw it firmly with the screws on the front.

If there is no external antenna cable then slide the included antenna into the installation pipe and fix the one end of the cable at Ant (+).

9.2.2. Connecting external audio source (AUX)



Connect the external audio source, e.g. the Musicport MP 55 BTL or the Bluetooth-Receiver BTR 55 MK2:

Use a screened RCA cable. Connect the screen at (-), inner conductor at (+) and screw it firmly with the screws on the front.

The AUX Line-In is in Mono. The Line-Out of the external source has also to be switched to Mono.

9.2.3. Connecting speakers



Connect the speaker cable: Plug the cable into the terminal and screw it firmly with the screws on the front.

RDS-Radio	KEL 55-4 Music
Mono	
+	+ 4 Ohm
-	-

Note:

The speakers must be connected with separate wires. Never use the same wires. The speaker impedance must be **a minimum of 4 ohms** (means: you can connect one 4ohms speaker or two 8ohms speaker parallel). Observe the correct polarity.

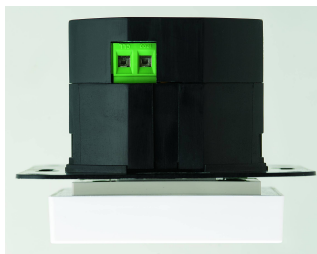
9.2.4. Connecting external amplifier (Line Out)



Use a screened RCA cable. Connect the screen at (-), inner conductor at (+) and screw it firmly with the screws on the front.

The AUX Line-Out is in Mono.

9.2.5. Connecting power supply



Connecting the 230 VAC cable: Plug the cable into the terminal and screw it firmly with the screws on the front.

Note

To protect the device against electromagnetic interference there is the silicone tube. Cut it into 2 pieces and run the wires (L) and (N) of the 230V cable through the tubes before connecting them on the terminal.

Push the silicone tube as far as possible to the terminal.



Attention:

When connecting the supply voltage (230V ~ / 50Hz), the electrical system must be voltage free. The supply line must be protected with circuit breaker (max. 16A).

9.3. Flush mounting the device

Run the device with the cables connected and the appropriate equipment frame carefully into the flush mounting box. Make sure that the cables are not kinked or clamped.

Screw the unit with the screws in the flush-mounting box set.

With the KEL 55-4 Music make sure that you press the two plastic pins so in the appropriate holes, the front grill plate is fixed.

! Adopt the distance between the mounting plate and the control unit with the designated cardboard templates.

Replace the cover frame of the installation program and then use the cover on the control and press firmly.

Note:

The device context is not supplied but must be obtained directly from the manufacturer of the switch program. Suitable are frames with an outburst of 55 x 55 mm.

10. Operation

10.1. Getting started

When 230V power supply is up, the device is ready for operation.

Note:

In case of power supply the green LED flashes approximately every 5 seconds briefly to display status "StandBy" / "Power ON".

10.2. Features of the RDS Radio

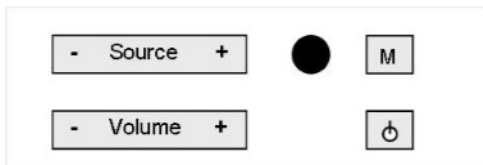
Radio playback with RDS function

Number of station presets: 9

Playback of music stored on up to max. two external sources

Display screen for special functions (Sleep / Time) and source information

10.3. Operation




Buttons of the control panel

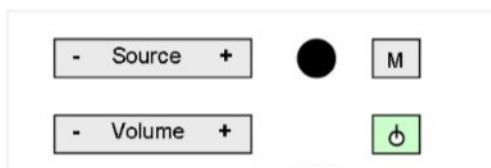
Button 1 ... Source +/- (Ring counter: Ant, AUX, ...)

Button 2 ... Volume +/-

Button 3 ... M (Menu)

On/Off ... Symbol  ... activating the RDS Radio

10.4. Setup



Press the **ON/OFF** button on the right side of the control panel. The device is activated now.

Note:

With the button **Source** -/+ the device can also be activated.

10.5. Display (Operation Mode)



There are 2 display lines

Upper line: TIME

Lower line: Source / RDS-Information

11. Configuration

11.1. Configuration menu - Basics

On/Off:

Pressing the 'On/Off' button shortly switches on the RDS Radio

Pressing the 'On/Off' button longer than 2 sec. starts "Sleep Mode" within operation menu. The "Sleep Mode" can be switched off again by shortly pressing button the 'On/Off' button again.

M (Menu)

Pressing the 'M' button starts configuration menu or next configuration step (ring counter).

Pressing the 'M' button for 3 sec to go into the ** Frequency ** menu (manual scan on RDS radio with the buttons "Vol (- / +)")

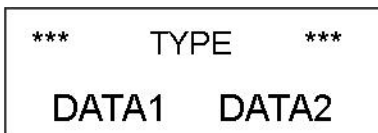
Pressing the 'M' button again to go into the menu ** AutoScan ** (the radio stations 1-9 are automatically saved).

With any new found station the display shows an '?': the radio station is no saved yet and can be assigned to station 1-9 with the Source (-/+) buttons.

Configuration menu will be closed after 5 seconds without active changes being made.

Submitted configuration data will be stored automatically when leaving the menu.

11.2. Configuration menu



Display control unit (Configuration mode)

The unit display consists of two display lines.

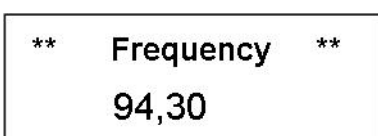
Upper line: Parameter

Lower line: Settings

Note:

The RDS-Radio can be programmed with the keypad as well as with the IR remote control (see chapter 12.).

Configuration menu steps



Menu A1 (configure radio stations)

Press then the button „M“ between 2 and 4 seconds to start this configuration item.

Display as shown:

Line 1: Frequency

Line 2: Frequency in MHz

Press button „Volume -“ shortly: - 50 kHz
 Press button „Volume +“ shortly: + 50 kHz
 Press button „Volume -“ for 1 sec.: Scan down
 Press button „Volume +“ for 1 sec.: Scan up

If frequency settings are changed select your memory setting key with the „**Source +/-**“ button to save configuration settings.

Pressing the ‘**M**’ button starts configuration menu or next configuration step (ring counter).

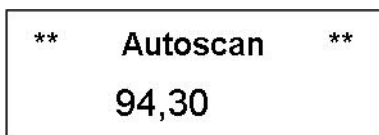
Pressing the ‘**M**’ button for 3 sec to go into the ** Frequency ** menu (manual scan on RDS radio with the buttons "Vol (- / +)")

Pressing the ‘**M**’ button again to go into the menu ** AutoScan ** (the radio stations 1-9 are automatically saved).

With any new found station the display shows an ‘?’: the radio station is no saved yet and can be assigned to station 1-9 with the Source (-/+) buttons.

Configuration menu will be closed after 5 seconds without active changes being made.

Submitted configuration data will be stored automatically when leaving the menu.



Menu A2 (Autoscan)

Display as shown:

Line 1: Frequency
 Line 2: Frequency in MHz

Press button „**Volume +**“: Scanstart
 “Autoscan” seeks out the first 9 radio stations and saves them on the buttons 1...9 for station settings.
 If there is no radio station found, the startup frequency (87,5 MHz) is set.



Menu B (Device time)

Press then the button „**M**“ approximately 5 seconds to start this configuration item.

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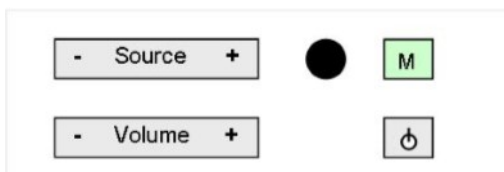
113-010-03-100-23



Display as shown:

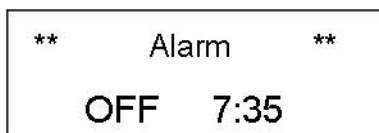
Line 1: Time
Line 2: HRS : MIN Hours:Minutes

Set the time on your current time zone.
Press button „Volume -“ ... + 1 hour
Press button „Volume +“ ... + 1 minute



Menu C

To start the configuration mode, press the button „M“.



Menu C1: ALARM

Display as shown:

Line 1: Alarm
Line 2: On/Off Hours: Minutes

Note:

Alarm setting is stored but must be activated manually when needed.



Menu C2: SLEEPTIME

(1 ... 99 minutes)

Display as shown:

Zeile 1: Sleeptime
Zeile 2: On/Off ... Minutes

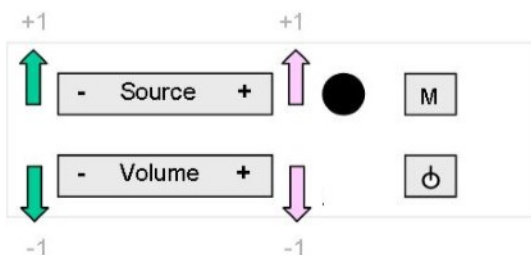


Menu C3: DIM

Display brightness in **Operation** / **Standby**.

Standby: 5 steps (OFF/Step1/Step2/Step3/MAX)

Operation: 4 steps (Step1/Step2/Step3/MAX)



Setting brightness:

Touching the buttons
Source +/- (one step up)
Volume +/- (one step down)

Note:

When Display Brightness in Standby mode is OFF the radio also turns off after 30 seconds. Time and/or tuner settings are slightly visible on the display.

Configuration Examples

Example: Set alarm at 7:30 am

Press the 'M' button

Press the 'Source +' button

ALARM is activated now. Display line 2 switches to ON.

Now press the 'Volume -' button 7 times.

Display line 2 switches to '7:00'.

Now press the 'Volume +' button 30 times.

Display line 2 switches to '7:30'.

Confirm your settings by pressing the 'M' button.

The settings are now stored.

The next function menu step will be displayed automatically.

If you want to leave the configuration menu completely press the 'M' button again or wait 5 seconds until the device switches automatically back into operation mode.

Example: Set sleep time up to 15 minutes

A.) From operation mode: press the 'M' button two times.

B.) From configuration mode:

Press the 'Source +' button.

SLEEPTIME is activated now. Display line 2 switches to ON.

Press the 'Volume +' button 15 times.

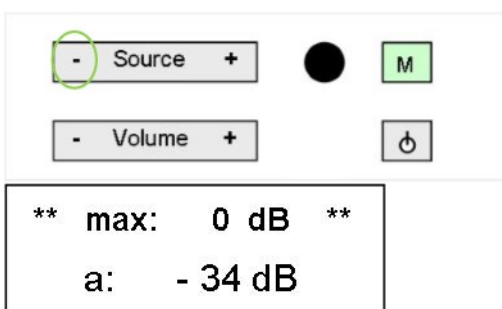
Display line 2 switches to „15“.

Confirm your settings by pressing on the 'M' button.

Now the settings are stored.

You'll get automatically to the next function menu step.

If you want to leave the configuration menu completely press the 'M' button again or wait 5 seconds until the device switches automatically back into operation mode.



Menu D1 (Maximum Volume)

Press the „Source -“ button and the „M“ button at the same time up to max. 2 sec. to get to start this configuration item.

Display as shown:

Line 1: max. 0 dB (max. volume)

Line 2: a: < ... dB (used max. volume)

Configure your „max. volume“ setting.

Press button „Volume -“ ... - 1 dB

Press button „Volume +“ ... + 1 dB

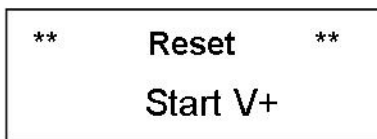


Menu D2 (Menu Blocking)

Display as shown:

Line 1: Access
Line 2: free / locked

Press button „**Volume -**“ ... free (menu enabled)
Press button „**Volume +**“ ... locked (menu disabled)



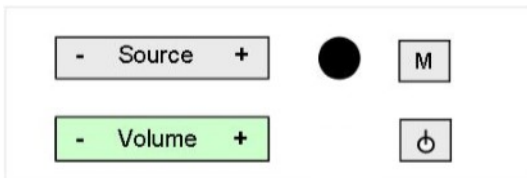
Menu D3 (Reset)

Display as shown:

Line 1: Reset
Line 2: Start V+

Press the „**Volume +**“ button to start “Reset”.

11.3. Volume Display whilst setting



Pressing the button „Volume“ (+ / -)

The actual volume is visible by the arrows in the display.

Note:

The arrows disappear after 5 seconds if no further change in setting is done.



12. IR Remote Control

12.1. Features of the Remote Control

The RDS Radio can be controlled and configured with the buttons of the IR remote control.

12.2. Buttons of the remote control



AUX ... switches to the external audio sources 1, 2
 FM ... switches to tuner function
 VOL +/- ... volume
 buttons 1 - 9 ... radio station/frequency settings
 button 0 ... go to frequency settings
 Freq ... manual frequency setting
 Scan ... automatic frequency scanning
 Mem ... save settings
 On/Off ... Power On/off

Turning ON the device:

1. Button „ON/OFF“: last active audio source
2. Buttons (1-9): radio station selection

Note:

Volume setting will be stored automatically when pressing the button „ON/OFF“.

12.3. Frequency setting of radio stations

Radio station frequency settings via tuning (SCAN)

Press the button „SCAN“

The scan begins at 87,5 MHz and stops automatically at the first found active radio station frequency. The scan can be continued by pressing the button „SCAN“ again.

Adding the found frequency to your selected radio stations press the button „MEM“, then chose your memory space button (1-9).

Manual radio station frequency setting (Frequenz)

Press the button „FREQ“

Tap in your preferred frequency by pressing the buttons (1-9), e.g. 97,8

Confirm your setting by pressing the button „FREQ“

Adding the frequency to your selected radio stations press the button „MEM“, then chose your memory space button (1-9 / e.g. # 2).

Automatic assignment of the channel positions

The radio channels 1-9 can be assigned automatically.

Press the button „MEM“ and then the button „SCAN“

Note:

The scan may take a few minutes. Be patient.

Parameters are saved automatically

The station selection and volume settings are saved automatically every 10 seconds.

12.4. Changing battery



- Gently pull and slide the battery compartment tray as shown
- Remove old battery making note of the polarity positions
- Insert NEW replacement battery
- Close battery insert

Attention:

Only use suitable batteries of type
Lithium 3V CR 2025

13. Trouble-Shooting

Noise

Check your installation and cabling carefully on electromagnetically influences (EMC Installation Guidelines!).

No radio station receives with the included antenna

Connect an external antenna (home antenna, indoor antenna, ...)

14. Disposal



WHD are members of the INTERSEROH association.

We participate in the dual system as well as some industry-specific solutions therefore the plastic, metal and electronic parts can all be recycled.

15. Declaration of Conformity



This product supports all CE criteria.
The certificate can be requested at WHD

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16. Name and address of the manufacturer

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