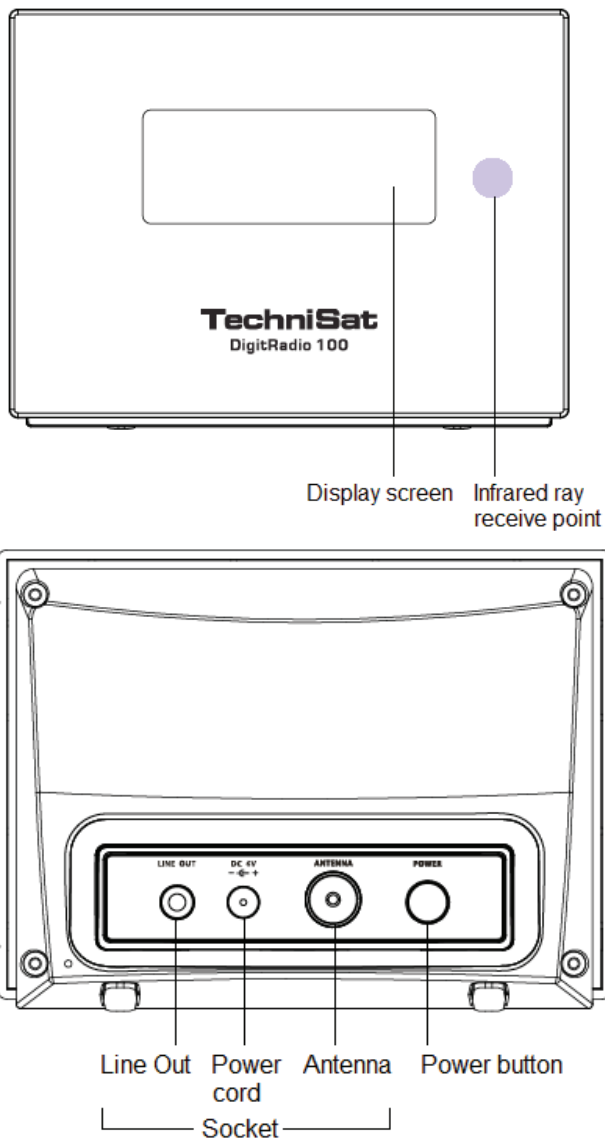# TechniSat

Manual
DigitRadio 100

Digitalradio Adapter for DAB/DAB+

Contents

Pictures

Display screen Infrared ray receive point

Line Out Power cord Antenna Power button

Socket

Line out socket:	It is for inserting 3.5mm earphone.
Power cord	Connect to DC adaptor.
Socket:	*Please use the power adaptor provided by manufacturer only.*
Antenna socket:	Connect to the provided antenna.
Power button	Press to turn on radio, press again to standby mode.

Control	All mode	Overview
⏻	Press to turn on radio, press again to enter standby mode **When alarm sounds**, press to turn alarm off	
SNOOZE	When alarm is sounding, press to postpone alarm	
ALARM 1, ALARM 2	Press to enter Alarm 1 or Alarm 2 setting	
SLEEP	Press to enter sleep time setting	
CLOCK	Press to set time and date	
DRC	**DAB mode**: press to set DRC level	
DIMMER	Press to adjust backlight	
◄◄ ►❙❙ ►►❙	**Bluetooth mode**: press ◄◄ to previous track, press ►►❙ to next track, press ►❙❙ to play/pause	
MENU	Press to enter menu	
SCAN	Press to scan DAB/FM stations	
INFO	Press to browse station information.	
SELECT	Press to confirm selection	
▲ ◄ ► ▼	α. Press ▲ or ▼ to browse items up/down β. Press ◄ or ► to browse items backwards/ forwards χ. **FM mode**: Press to manually adjust frequency by 0.05MHz per step	
MODE	Press to convert among DAB, FM and Bluetooth mode	
MUTE	Press to confirm mute, and press again to break mute.	
VOL.	Press to adjust volume level	
PRESETS 1-12	Press and hold one of presets button to store preset stations; Press one of presets button to load preset stations.	

Safety of the appliance

Please read all the safety instructions carefully and save this manual for future reference. Always follow all warnings and instructions in this manual and on the back of the device.

Security

- The device should be connected only through the AC adapter to a mains voltage of 230 V, 50 Hz power. Never attempt to operate the unit with a different voltage.
- If the power supply of the device is defective or if the device has other damage, it should not be put into operation.
- Do not touch the AC adapter with wet hands, an electric shock can cause!
- Never allow unsupervised children to use this unit.
- To avoid fire hazard and the risk of electric shock, do not expose the unit to rain or moisture.
- Do not use the appliance near a bathtub, etc. or splash water during operation.
- If you move the unit from a cold to a warm location, moisture may condense inside the unit. You should wait in this case, for about an hour before you take operate it again.
- Should any solid object or liquid fall into the unit, unplug the AC adapter from the outlet. Have the unit checked by qualified personnel before you use it again. Otherwise there is a risk of electric shock.
- Never attempt to repair a defective product yourself.
- Do not open the housing. Otherwise there is a risk of electric shock.
- Do not insert any foreign objects inside the machine.
- The device remains connected to the mains even when switched off (standby).
- Unplug the AC adapter from the wall outlet when not using the unit for an extended period of time.
- Do not touch the terminals on the rear panel with metal objects.
- High volume, especially when using headphones can cause hearing loss.

Setting up the device

- Set the equipment on a solid, secure and horizontal ground
- Ensure good ventilation.
- Place the unit on a soft surfaces like carpets, blankets, or near curtains, draperies.
- The device should not be concealed by curtains, blankets or newspapers
- Do not install the unit near heat sources such as radiators. Avoid direct sunlight and places with excessive dust.
- Do not place heavy objects on the device.
- Do not place the unit near devices that generate strong magnetic fields.

Disposal

Risk of suffocation
• Risk of suffocation due to the Packaging and its parts for children.

Disposal of packaging
• The packaging of your device consists entirely of recyclable materials. Please follow these sorted according to the "Dual System".

• About current means of disposal contact your dealer or at your community waste facility.

Disposal of the appliance
• Old appliances are not worthless rubbish. By recycling valuable raw materials can be recovered. Check with your municipal or local government options for environmentally - friendly disposal of the device.

• This appliance is marked according to the Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).
• This product may not, at the end of his life be disposed via the normal household waste, but should be taken to a collection point for recycling of electrical and electronic equipment.
• The symbol on the product, user manual or packaging indicates the recycling of the product. The materials are recyclable according to their labeling. With the reuse, recycling or other forms of utilizing old devices, you are making an important contribution to protecting our environment.

Guidelines and standards

- This product meets guidelines and standards
- the Low Voltage Directive (2006/95/EC),
- the EMC Directive (2004/108/EC) and the
- CE Mark Directive. Your unit carries the CE mark and complies with all relevant EU standards.

$C\epsilon$

Package Contents Please make sure that all items shown below are available :
- DAB / DAB FM Clock Radio with wire antenna,
- Power Supply, 6V, 500 mA,
- Manual.

Properties of the device

The DAB + digital radio is a new digital format, through which you can hear crystal clear sound in CD quality.
The radio receives on FM frequencies 87.5-108 MHz (analogue) 174.9 to 239.2 MHz and DAB (digital).
You can save 10 station on favorite program places the DAB or FM mode.
The display has a light. This can be activated at different stages (see display illumination).

Preparing the device for operation

Connect the device with the supplied AC adapter to the mains (230 V ~ / 50 Hz).

>To bring power to the device, the cable of the AC adapter needs first be connected into the DC 6V (page 5 # 5) on the unit and then plug the power adapter into the socket 230 V ~ / 50 Hz plug.
>After the initial installation of the network connection temporarily " Welcome to digital radio " appears.
Please unplug the AC adapter from the outlet when not in use, prolonged absence or thunderstorms.

Improve antenna reception

The number and quality of received stations depends on the reception conditions at the installation site. With the wired antenna an excellent reception can be achieved. This antenna must be aligned in full to get the best reception. Use the small loop at

the end of the wired antenna to fix this in the required position for a better reception.

Usage of headphones

Using headphones may damage your hearing!
Do not listen to the radio at high volume through headphones. This can lead to permanent hearing damage. Before using headphones adjust the sound volume to the minimum level if you (not supplied) to connect a pair of headphones, the internal speaker is muted.

>Use only headphones with 3.5mm stereo plug.
>Plug the headphones into the headphone jack (page 5 # 6) of the device. The sound reproduction is now done exclusively through the headphones.
>If you want to listen through the speakers again, unplug the headphones from the headphone jack of the device.

The way of replace batteries:

1. Open the battery compartment cover by using your thumb downward push the bulge of the back of your remote control.
2. Install 2 new batteries which are non-rechargeable.
Note: do not reverse any battery and do not mix battery types, also do not mix old and new batteries. When discard your old battery, please considering eco-friendly.
3. Fit 2 batteries, referring to the markings direction inside the battery compartment.
4. Cover the battery compartment door.

DAB mode

What is DAB?

DAB is a new digital format, through which you can hear crystal clear sound in CD quality. DAB Broadcast a high-speed data stream in the radio channel. In difference to conventional analog radio DAB transmits multiple channels on the same transmitter. This is called ensemble or multiplexes. An ensemble consists of the radio station as well as several service components or data services, which are sent individually by the radio stations. Learn e.g. under www.digitalradio.de or www.digitalradio.ch.

Data compression
Digital radio uses the of advantages of human hearing. The human ear does not perceive sounds that are below a certain minimum level. Data which are under the so-called threshold in quiet can be filtered out. This is possible because in a digital data stream for each information unit, the corresponding relative volume is also saved for other units. In addition in a sound signal, the quieter portions are overlapped by the louder for a given threshold. All the sound information in a piece of music that are

below the so-called hearing threshold can be filtered out of the signal to be transmitted. This leads to a reduction of the transmitted data stream, without any noticeable difference in sound to the listener (MUSICAM) process.

Audio Stream
Audio streams are continuous data flows, MPEG 1 Audio Layer 2 frames contain and thus represent acoustic information in digital radio. Thus, familiar radio programs can be transferred and listen at the receiver side. For Digital radio the MUSICAM format is used, which provides two MPEG compliant PADs. This is referred to as PAD data services. Digital Radio brings you not only radio wit for additional data. The excellent Digital radio does not only offer perfect sound quality but also additional information. This may relate to the current program (e.g. title, artist) or might be independent (e.g., news, weather, traffic tips).

DAB Mode
Turn on
4. Connect your antenna to ANTENNA socket on the back of radio.

5. Connect to your radio power adapter, your radio will be in standby mode. Press 🔘 to switch on radio.

6. To switch the radio off, remove the adapter from you radio.

7. For initial use, it will carry out a full scan and store stations list in memory.

```
🔊ıııı  12:00  ᴰᴬᴮ

Suchlauf...        19
■■■■■■■■■■
```

8. Once the scanning is completed, the DAB/DAB+ stations will be displayed in alphanumeric order. The first station in the list will be selected.

☐ *Note: if no DAB/DAB+ signal is found in your area, it may be necessary to relocate your radio to a stronger signal area.*

9. Radio default language is German, to change to other language :

Press **MENU**, then press ▲ or ▼ to '**Sprache**', confirm and browse for your preferred language. Here, we select English for example.

Shift to another DAB/DAB+ Station
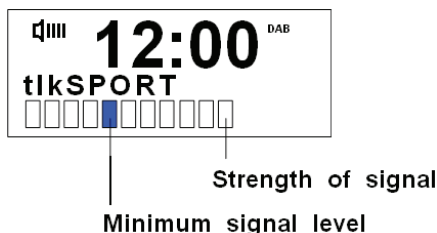While a program is playing, press ▲ or ▼ to cycle through available stations, press

SELECT to confirm and then your radio will connect the selected station.

Update Stations List
Simply press **SCAN**, or, press **MENU,** then press ▲ or ▼ to '**Full scan**', press **SELECT** to confirm.

To Show the Signal Strength
During playing a DAB/DAB+ program, repeatedly press **INFO** until the LCD screen display shows a signal bar with the strength of the current station.

Strength of signal

Minimum signal level

The indicator on the signal bar shows the minimum acceptable signal level.

☐ **Note:** *Stations with signal strength below the minimum signal level may not provide a steady stream of audio.*

Manual tune
1. Press **MENU** → press ▲ or ▼ to < **Manual tune** >, press **SELECT** to confirm.

2. Press ▲ or ▼ to browse channels and press **SELECT** to select the current channel.

   Note: If there is a multiplex corresponding to this channel and frequency, the display will show a tuning meter with the signal strength and the multiplex name after a few seconds.

3. Press **SELECT** again to exit this order.

The way to Prune
To remove all currently inactive stations, please follow:

1. Press **MENU** → press ▲ or ▼ to < **Prune** >, press **SELECT** to confirm.

2. Press ▲ or ▼ to '**Yes**', and then press **SELECT** to confirm.
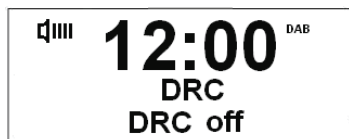
DRC (Dynamic Range Control) value
You can set the compression level of stations to eliminate the differences in dynamic range or sound level between radio stations.

   Note: *Set DRC to **off** indicates no compression;*

   *Set DRC to **low** indicates little compression;*

   *Set DRC to **high** shows maximum compression.*

Press **DRC** button repeatedly, and press **SELECT** to confirm while your preferred option is appeared.

```
◁Ⅲ   12:00 ᴰᴬᴮ
         DRC
      DRC off
```

View Station Information

It is possible to view the information that is displayed on the second line of the display when listening to a DAB/DAB+ or FM program by pressing **INFO** repeatedly.

FM Mode

Tune in FM Mode

1. Press **MODE** buttons to enter FM mode.

2. For initial use, it will start at the beginning of the FM frequency range (87.50MHz). Otherwise, the last listened FM station will be selected.

```
◁Ⅲ   12:00 ꜰᴍ
87.50MHz
[No RadioText]
```

3. To manually change FM frequency, while frequency is showing up, press ▲ or ▼ to increase/decrease it by 0.05MHz per step.

4. To auto-searching, simply press **SCAN**, the display will show the frequency changing until it reaches the active station.

Scan setting

By default, FM scans stop at any available station. This may result in a poor signal-to-noise ratio (hiss) from weak stations.

To change the scan settings to stop only at stations with good signal strength, 2 steps:

1. Press **MENU**, it will show: '**Scan setting**', press **SELECT** to confirm.

2. Press ▲ or ▼ to '**Strong stations only**', and press **SELECT** to confirm.

Audio Settings

By default, all stereo stations are reproduced in stereo. For weak stations, this may result in a poor signal-to-noise ratio (hiss).

To play weak stations in mono, 2 steps:

1. Press **MENU**→ press ▲ or ▼ to '**Audio setting**', press **SELECT** to confirm.

2. Press ▲ or ▼ to '**Forced mono**', press **SELECT** to confirm.

Station Presets (for DAB/DAB+ and FM mode)
Note: Your radio can store 12 DAB/DAB+ and 12 FM stations preset.

While playing your favourite station, press and hold one of **PRESETS button 1- 12** to store current station, then radio will shows "Preset # stored"

Preset Recall (for DAB/DAB+ and FM mode)
To select a stored station, press one of **PRESETS button 1- 12**, then radio will go directly to relative preset station.

Bluetooth Mode
Shift to Bluetooth mode

Press **MODE** buttons until <**Bluetooth mode**> is showing up.

> *Note: while enter Bluetooth mode, an ⌷ icon showing up and blinking slowly, it means radio is waiting for pairing with a new Bluetooth device or connecting to a paired Bluetooth device.*

Pairing with Bluetooth devices
Pairing occurs when two Bluetooth devices communicate with each other and establish a connection. A record of information about this connection is then stored in the memory of each device. Once you pair a device with the radio, you should not have to pair it again.

To perform pairing with a Bluetooth device
1. Turn on your Bluetooth device.

2. Set your Bluetooth device to "discover" the radio, then check the Bluetooth device list.

3. From the Bluetooth device list, select the device named "DigitRadio 100".

4. If your device asks for a passkey, enter digits 0000 (four zeros) and press OK. Some devices also ask you to accept the connection.

Your Bluetooth device indicates when pairing is complete. The radio indicates pairing is complete when an ▶ icon remains steadily on.

To pair additional devices
Follow "**To perform pairing with a Bluetooth device**" steps 1-4.

Clearing memory
The radio memory can hold up to eight paired devices. When the memory is full with

eight devices and an additional device is paired, the earliest paired device is deleted from memory.

Do factory reset will clear Bluetooth memory.

General Settings

Set Sleep

1. Press **MENU** → press ▲ or ▼ to < **Sleep** >, then press **SELECT** to confirm.

2. Press ▲ or ▼ to define the sleep period: off/15/30/45/60/90 minutes.

3. When your selecting period is appeared, simply stop pressing, and it is done.

    Note: At this step, and sleep icon shows up, as well as shows how long it will be expired.

4. Select < **Sleep** > option again and then press **SELECT** to check how long the sleep time can be reached.

5. Radio will automatically enter to standby mode once the set time has elapsed.

6. To continue enjoying your program, press ⏻.

Set Time

It can be activated by pressing **MENU** → < **Time >**, press **SELECT** to enter a range of time settings:

☐ Set Time/Date: Manually set-up both Time and Date
☐ Auto update: 'Update from DAB' and 'No update'
☐ Set 12/24 hour: 'Set 24 hour' and 'Set 12 hour'
☐ Set date format: 'DD-MM-YYYY' and 'MM-DD-YYYY'

Set Alarm

☐ *Note: Setting Alarm, make sure setting time at first.*

Press ALARM 1, it will shows "Alarm 1 Setup", also press ALARM 2 access to "Alarm 2 Setup", meanwhile, relevant alarm icon twinkling.

Take set alarm 1 as example, while it shows: **"Alarm 1 Setup**", press **SELECT** to confirm.

Now, follow your radio instruction, configure the following parameters:

☐ **Alarm states**: On or Off

☑ **On Time**: 00:00 (**alarm sound time**)
☑ **Duration Time**: 15/30/45/60/90 mintues
> *Note: The alarm will sound until the selected duration time is finished if nobody stop it..*

☑ **Source**: DAB, FM and Buzzer
☑ **Set Days**: Daily, Once, Weekends or Weekdays
☑ **Volume level**: remember don't have your radio volume level to zero (Mute), otherwise, when alarm is coming, it won't be heard.

Postpone Alarm:

When alarm is coming, press **SNOOZE** to postpone alarm for 5 minutes.

While in SNOOZE function, your radio goes into standby mode and shows how long

snooze will be elapsed, during this time, you can also press ⏻ to put the alarm off and

press ⏻ again to have your radio play.

After reach SNOOZE time, it will sound again.

Turn off Alarm:

When alarm is sounding, press ⏻ or **Alarm 1** to turn off it.

To cancel the Alarm:

Refer to above steps1-3, set '**Alarm states'** to '**Off** ', and then follow your radio's instructions, until it shows '**Alarm saved**'.

Set Language

1. It can be activated by pressing **MENU** → < **Language** >, then press **SELECT** to confirm.

2. Press ▲ or ▼ to your selecting one, and then press **SELECT** to confirm.

SW Version

> *Note: The helpdesk may ask you for the software version of your product.*

It can be activated by pressing **MENU** → < **SW version** >. Press **SELECT** to confirm.

Factory Reset

> *Note: A factory reset resets all user settings to default values, so time/date, alarm settings, presets and Bluetooth memory are lost*

1. it can be activated by pressing **MENU** → < **Factory Reset** >. Press **SELECT** to confirm.

2. Press ▲ or ▼ to '**Yes**', and then press **SELECT** to confirm.

Specification

Specifications:	DAB/DAB+, FM Digital radio
Frequency Ranges:	FM: 87.5-108MHz DAB+: 174.928 – 239.200MHz
LCD Display:	High resolution display
Power Supply:	AC Power Input: 100-240VAC, 50-60Hz Output: 6VDC, 500mA
Dimension (L x W x H):	130mm x 42mm x 95mm

Notes

Your device bears the CE symbol and complies with all requisite EU standards.
Subject to change for amendments and pushing errors Version 2013
Duplication and reproduction only with the publisher's approval
TechniSat and DigitRadio are registered trademarks of
TechniSat Digital AG Postfach 560
D-54541 Daun
Germany
www.technisat.com
Technical Hotline
+49 (0) 180/5 00 59 07
Mon. - Fri. 8am - 7pm
(0.14 Euro/min from German landlines, other tariffs apply for calls from abroad or from mobile networks)