DEGEN
DIGITAL RADIO DAB
MULTIBAND RADIO FM / MW / SW

DAB DAB+
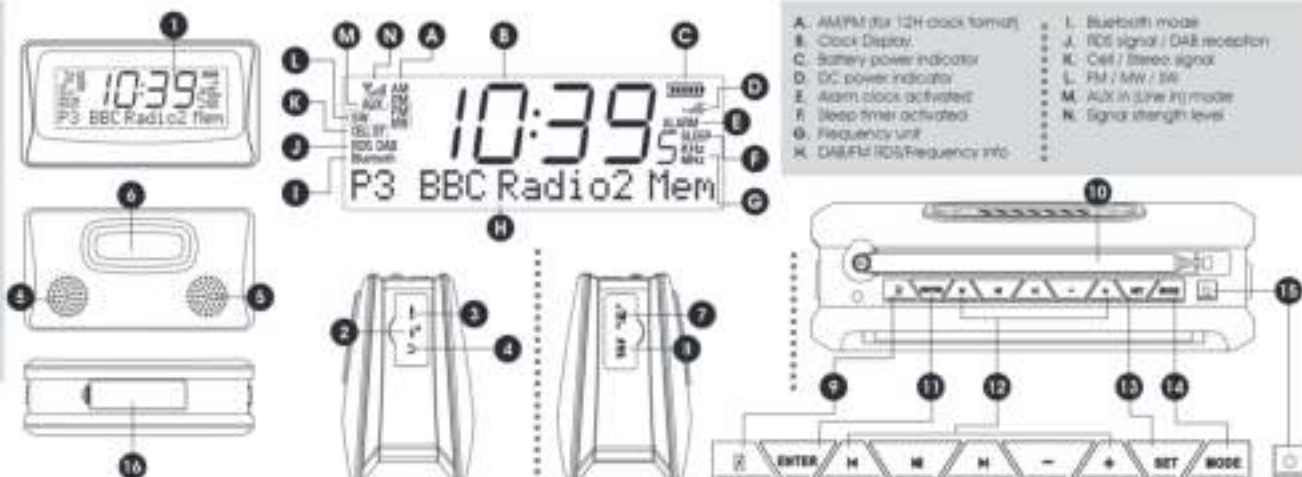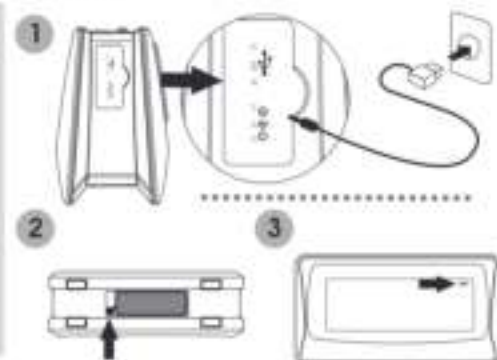**RDS**

1. Display
2. External antenna jack (3.5mm) for DAB / FM / SW
3. Line IN (AUDIO jack (3.9mm)
4. Stereo headphones jack (3.5mm)
5. Speakers
6. Passive bass radiator
7. USB (type-A) charging output
8. DC IN jack (9V)
9. Initiate charging output
10. Antenna for DAB / FM / SW
11. Confirmation button
12. Multifunctional buttons
13. System settings
14. Mode selection: DAB / FM / MW / SW / BT / AUX
15. Power button
16. Battery compartment

A. AM/FM (for 12H clock format)
B. Clock Display
C. Battery power indicator
D. DC power indicator
E. Alarm clock activated
F. Sleep timer activated
G. Frequency unit
H. DAB/FM RDS/Frequency info
I. Bluetooth mode
J. RDS signal / DAB reception
K. Cell / Stereo signal
L. FM / MW / SW
M. AUX in (Line in) mode
N. Signal strength level

P3 BBC Radio2 Mem

Powering the Unit & Charging the Battery

1) Connect the provided AC adaptor to the DC-IN jack to power the unit.

2) To use the unit on battery power, insert a 3.7V rechargeable lithium battery and connect the plug of the battery to the connector inside the compartment.

3) To charge the battery, connect the AC adaptor. The battery indicator progresses while charging and stops once the battery is full.

1. Listening to DAB/DAB+ Stations

Press the power button < ⏻ > to turn the unit on and then press the < **MODE** > button repeatedly to select the DAB. When using the radio for the first time DAB auto scan will automatically search for all available stations. The full list of stations is then stored making it unnecessary to do a full scan when turning on the radio the next time. The stations are stored in alphabetical order.

Auto scan: If changing the listening location, redoing a full scan may be necessary.

To scan the entire DAB frequency range again.

1) Press < **SET** > to select "Auto scan".
2) Press < **ENTER** > to initiate the scan

> Select DAB ▶ **SET** ▶ "Auto Scan" ▶ **ENTER**

Manual scan: If DAB auto scan results are poor, try manual scan instead.

1) Press < **SET** > and then use the < **+** > / < **−** > buttons to select "Manual tune".
2) Press < **ENTER** > and then use the < **+** > / < **−** > buttons to select a DAB channel.
3) Press < **ENTER** > to scan the selected channel for receivable stations.

> Select DAB ▶ **SET** ▶ "Manual tune" ▶ **ENTER**
> **ENTER** ◀ Select DA CH

2. Listening to FM, Medium Wave (MW) and Shortwave (SW) Stations

Press the power button < ⏻ > to turn on the unit and then press the < **MODE** > button repeatedly to select the FM, MW or SW frequency band.

Auto tune: Press and hold < I◀ > / < ▶I > to automatically tune into the next available station.

Manual tuning: Press < I◀ > / < ▶I > to tune into your desired frequency.

Tip: Shortwave tuning goes by meter band. To change the SW meter band press < **ENTER** > repeatedly. Please refer to the "Specifications" for an overview of the available meter bands.

3. Memory Mode: Storing and Recalling Stations

Auto Tuning Storage (ATS): Auto tune the entire frequency band and store all available stations into the unit.

1) Tune into your desired FM / MW / SW station and then press < **SET** >.
2) "ATS" is shown on the display. Press < **ENTER** > to initiate Auto Tuning Storage.

> Select FM / MW / SW ▶ **SET** ▶ "ATS" ▶ **ENTER**

Manual Storage (DAB / FM / MW / SW): Assign a frequency to a preset location.

1) Tune into your desired station and then press < **SET** >.
2) Use < **+** > / < **−** > to select "Preset" and then press < **ENTER** >.
3) Use < **+** > / < **−** > to assign a preset location (e.g. P30) and then press < **ENTER** > to confirm.

> Select DAB/FM/MW/SW ▶ **SET** ▶ "Preset"
> **ENTER** ◀ Assign location ◀ **ENTER**

Recalling Stored Stations: Listening to an assigned station.

1) Select the frequency band.
2) Press < ▶I > to enter the memory mode ("Mem" is shown on the display).
3) Use < I◀ > / < ▶I > to select a stored station.

> Select DAB/FM/MW/SW ▶ ▶I ▶ "Mem"
> I◀ or ▶I to select station

Tip: Press [▶I] to exit the memory and resume tuning of the frequency band.

Bluetooth speaker mode

Use this unit to play music from a Bluetooth enabled device, for example a smartphone or tablet.

1) Press the power button < ⏻ > and then press the < **MODE** > button repeatedly to select "BT".
2) On the Bluetooth enabled audio device, search for "DAB119x" and pair in the usual way.

Tips:
1) While connected, use the < I◀ >, < ▶I >, < + > and < − > buttons to control music playback.
2) When turning on Bluetooth, the unit will automatically reestablish the last pairing. Disconnect from "DAB119x" on the Bluetooth enabled device if required.

AUX IN: Listening to audio from an external device

This unit can function as an external speaker for other devices (e.g. computer, MP3 player). Use a stereo audio cable with a 3.5 mm (1/8 inch) plug to connect the < **LINE** > socket of this unit to the audio output

socket of the audio source.

Emergency phone charging

This unit is able to charge a smartphone enough to make a phone call in case of an emergency.

1) Turn off the unit.
2) Connect your smartphone to the USB output jack < ⌁ > of the unit.
3) Press the < 🔋 > button to initiate charging.

Setting the clock

1) With the unit turned off, press < **SET** > to enter the settings menu.
2) The display indicates "Clock adjust". Press < **ENTER** > to start making adjustments.
3) With the hour indicator flashing, use < + > / < − > to adjust and press < **ENTER** > to confirm.
4) With the minutes indicator flashing, use < + > / < − > to adjust and press < **ENTER** > to confirm.
5) Use < + > to select a 12-hour or 24-hour clock format.
6) Press < **ENTER** > to confirm and exit the clock setting

> Unit OFF ▶ **SET** ▶ "Clock adjust" ▶ **ENTER**
> Adjust minutes ◀ **ENTER** ◀ Adjust hours
> **ENTER** ▶ Select 12H / 24H format
> **ENTER**

Setting the calendar format

1) With the unit turned off, press < **SET** > to enter the settings menu.
2) Use < + > to move through the settings menu and select "Date display". Press < **ENTER** > to start making adjustments.
3) Use < + > to select your preferred date format and then press < **ENTER** > to confirm.

> Unit OFF ▶ **SET** ▶ "Date display" ▶ **ENTER**
> **ENTER** ◀ Select date format

Setting the day, month and year
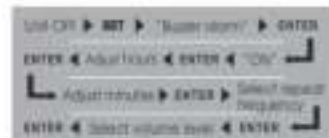
1) With the unit turned off, press < **SET** > to enter the settings menu.
2) Use < + > to select "Date adjust" from the settings menu, and then press < **ENTER** >.
3) With the year flashing, use < + > / < − > to adjust and press < **ENTER** > to confirm.
4) With the month flashing, use < + > / < − > to adjust and press < **ENTER** > to confirm.
5) With the day flashing, use < + > / < − > to adjust and press < **ENTER** > to confirm.
6) Press < **ENTER** > to confirm and exit the date setting

> Unit OFF ▶ **SET** ▶ "Date adjust" ▶ **ENTER**
> Adjust month ◀ **ENTER** ◀ Adjust year
> **ENTER** ▶ Adjust day ▶ **ENTER**

Setting the alarm by buzzer

1) With the unit turned off, press < **SET** >.
2) Press < **+** > repeatedly to select "Buzzer alarm", and then press < **ENTER** >.
3) Press < **+** > to select "ON" or "OFF", and then press < **ENTER** > to adjust the alarm time.
4) With the hour indicator flashing, use < **+** > / < **−** > to adjust the setting and press < **ENTER** > to confirm.
5) With the minute indicator flashing, use < **+** > / < **−** > to adjust the setting and press < **ENTER** > to confirm.
6) Choose how often to repeat the alarm. Press the < **+** > / < **−** > to repeat once, daily, every weekday, or only during the weekend. Press < **ENTER** > to confirm.
7) Select the alarm volume level (1 to 15) by using the < **+** > / < **−** > buttons. Press < **ENTER** > to confirm.

Unit OFF ▶ **SET** ▶ "Buzzer alarm" ▶ **ENTER**

ENTER ◀ Adjust hours ◀ **ENTER** ◀ "ON"

Adjust minutes ▶ **ENTER** ▶ Select repeat frequency

ENTER ◀ Select volume level ◀ **ENTER**

Setting the Alarm by Radio (DAB / FM)

Tip: Make sure to store your preferred radio station before setting the alarm.

1) With the unit turned off, press < **SET** >.
2) Press < **+** > repeatedly to select "Radio alarm", and then press < **ENTER** >.
3) Press < **+** > to select "ON", and then press < **ENTER** > to adjust the alarm time.
4) With the hour indicator flashing, use < **+** > / < **−** > to adjust the setting and press < **ENTER** > to confirm.
5) With the minute indicator flashing, use < **+** > / < **−** > to adjust the setting and press < **ENTER** > to confirm.

6) Choose how often to repeat the alarm. Press the < **+** > / < **−** > to repeat once, daily, every weekday, or only during the weekend. Press < **ENTER** > to confirm.
7) Press < **+** > to select for an FM or DAB alarm station. Press < **ENTER** > to confirm.
8) Press < **+** > / < **−** > to select a preset station. Press < **ENTER** > to confirm.
9) Select the alarm volume level (1 to 15) by using the < **+** > / < **−** > buttons. Press < **ENTER** > to confirm.

Unit OFF ▶ **SET** ▶ **ENTER** ▶ "ON" ▶ **ENTER**

Adjust minutes ◀ **ENTER** ◀ Adjust hours

ENTER ▶ Select repeat frequency ▶ **ENTER**

Select FS-FM ◀ **ENTER** ◀ "DAB" or "FM"

ENTER ▶ Select volume level ▶ **ENTER**

Turning the alarm off

When the alarm goes off, press the power button < **⏻** > to deactivate it.

Alarm snooze function

When the alarm goes off, press any button (except < **⏻** >) to temporarily turn off the alarm. The alarm will go off again after 9 minutes. To disable this feature while still snoozing, press the power < **⏻** > button.

Sleep timer

Use this feature to listen to the radio, or audio through a Bluetooth or Line in connection, and let the unit automatically power off after a specified time.

1) While listening, press < **SET** > and then use the < **+** > button to select "Sleep".
2) Press < **ENTER** > and use the < **+** > button to select a power off timer of 0 – 120 minutes, or select "OFF" to deactivate the sleep timer.
3) Press the < **ENTER** > button to confirm.

SET ▶ "Sleep" ▶ **ENTER** ▶ Select power-off timer duration

ENTER

EQ settings

Use this feature to adjust the treble and bass tone settings.

1) While listening, press < **SET** > and then use the < **+** > button to select "EQ".
2) Press < **ENTER** >, and then use the < **+** > button to adjust the bass level 1 - 5.
3) Press < **ENTER** >, and then use the < **+** > button to adjust the treble level 1 - 5.
4) Press < **ENTER** > to confirm the settings.

SET ▶ "Select EQ" ▶ **ENTER** ▶ Select Bass 1-5

ENTER ◀ Select Treble 1-5 ◀ **ENTER**

Display backlight adjustment

Backlight intensity in OFF mode:

1) With the device off, press < **SET** > and then use the < **+** > button to select "BackLight".
2) Press < **ENTER** >, and then use the < **+** > button to select "ON" or "OFF".
3) Press the < **ENTER** > button to confirm.

Unit OFF ▶ **SET** ▶ "Backlight" ▶ **ENTER**

ENTER ◀ "ON" or "OFF"

Backlight intensity in ON mode:

1) With the device on, press < **SET** > and then use the < **+** > button to select "BackLight".
2) Press < **ENTER** >, and then use the < **+** > button to select "Low", "Medium" or "High".
3) Press the < **ENTER** > button to confirm.

Unit OFF ▶ **SET** ▶ "Backlight" ▶ **ENTER**

ENTER ◀ "Low", "Medium" or "High"

Tip: When using the unit on battery power, turn off the backlight to extend battery life.

Dynamic Range Compression (DRC)

When listening to DAB, enabling DRC can amplify the quiet sections and quieten the loud ones. It can help to make quieter sounds easier to hear in noisy environments or make quiet sections of broadcast programs more audible. For this feature to work, it is necessary for the broadcaster to add DAB DRC data to its transmission.

1) Press < **SET** > and then use the < **+** > button to select "DRC".
2) Press < **ENTER** > and use the < **+** > button to select the DRC strength to "OFF", "HALF" or "FULL".
3) Press the < **ENTER** > button to confirm.

▶ **SET** ▶ " " ▶ **ENTER**

Factory reset

Use this feature to restore the unit to its original manufacturer settings.

1) With the unit turned off, press < **SET** > to enter the settings menu.
2) Use < **+** > to move through the settings menu and select "Factory reset".
3) Press < **ENTER** >.
4) Use < **+** > to select "Yes".
5) Press < **ENTER** > to confirm.

Unit OFF ▶ **SET** ▶ "Factory reset"

ENTER ◀ "Yes" ◀ **ENTER**

About RDS features

This unit displays information transmitted through the Radio Data System (RDS) that is available when listening to FM broadcasts. The availability of RDS data varies depending on the area, the FM station, and the signal strength. If the FM station being received is not transmitting RDS data (in your location), or if the signal being received is too weak, then no RDS information is displayed.

Improving radio reception

When tuning for radio broadcasts it is always best to place the unit near a window and away from sources that can interfere with the signal reception. Common sources of (electro-magnetic) interference are computers, tv's, mobile phones and microwaves. Further methods to improve signal reception depend on the frequency band.

DAB / FM / Shortwave (SW). Extend the antenna and adjust its length and direction. To further enhance the signal, connect an external antenna to the 3.5mm antenna jack.

Medium wave (MW). This radio uses an internal antenna to receive MW broadcasts. Because MW signals are directional, reception quality can be enhanced by changing the position and direction of the unit.

Troubleshooting

Unable to turn on the unit when using battery power.
- Make sure that the plug of the battery is connected to the input socket.
- The battery may need to be charged.
- The battery has aged and requires replacement.

Battery life is very short.
- Turn off the backlight when not using the unit.
- The battery may be aging and requires replacement.
- Use the AC adapter instead.

Unable to use the auto tune feature.
- Auto tune is only available for FM / MW / SW.
- You may still be in the memory mode of FM / MW / SW. Press (**M**) to exit the memory mode and then try again.

Unit displays "No service".
- The selected DAB station is currently not broadcasting, try again later.
- Signal reception for this DAB station is difficult at this location. Adjust the direction of the antenna, try a different location within the building, and place the unit near a window.

The reception is weak, interrupted and generally unsatisfactory.
- Review the section on "Improving Radio Reception".

FM reception is not in stereo.
- The broadcast may not be transmitted in stereo.
- The signal is too weak. Adjust the direction of the antenna, try a different location within the building, and place the unit near a window.
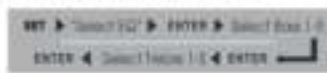
Precautions

- Operate the unit only with the supplied AC adaptor or battery. Do not use any other type of AC adaptor, which may have a different polarity and could damage the unit. If the battery requires replacement, then do so with a similar type as specified in the "Specifications" section.

- Keep it dry. Rain, humidity and other types of liquids or moisture can contain minerals that may cause corrosion to components. If the device does accidentally get wet, disconnect the AC adaptor and remove the battery and wait for the radio to dry completely before trying to use the unit again or have it checked by a qualified technician.

- Avoid exposure to temperature extremes. Do not place or store the device in environments above +40 C. High temperatures can shorten the life span of certain components. Do not place or store the device in cold environments below 0 C. Otherwise, once the

surrounding temperature rises, internal condensation may develop and damage the circuit board and LCD display.

- Do not drop, hit, or smash the device.

- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device. Use a clean, soft, dry cloth to clean the screen.

- Do not attempt to disassemble the device to adjust internal parameters.

- Dispose of the battery properly. Do not short-circuit or disassemble the battery. If the battery is seriously infested, please do not continue to use it.

- If not using for an extended period of time, remove the battery and store it in a safe manner. Please use non-conductive material to wrap the battery in order to avoid direct contact with metal. You can avoid performance loss by keeping the battery in a cool dry place.

Specifications

Memory preset locations

DAB	40
FM	40
MW	20
SW	60

Frequency range

DAB (band-III)	174.928 – 239.200 MHz
FM	87.5-108 MHz
MW	522-1619 kHz
SW	2.300-26.100 kHz

Power adaptor: 9v DC 2A

Battery: Li-ion 7.4V / 2000mAh

Dimensions: Approx. 195 x 65 x 105 mm

Weight (incl. battery): Approx. 710 gram

DAB (Band-III) frequency table (MHZ)

Channel	Frequency	Channel	Frequency
5A	174.928	10A	209.936
5B	176.640	10B	211.648
5C	178.352	10C	213.360
5D	180.064	10D	215.072
6A	181.936	11A	216.928
6B	183.648	11B	218.640
6C	185.360	11C	220.352
6D	187.072	11D	222.064
7A	188.928	12A	223.936
7B	190.640	12B	225.648
7C	192.352	12C	227.360
7D	194.064	12D	229.072
8A	195.936	13A	230.784
8B	197.648	13B	232.496
8C	199.360	13C	234.208
8D	201.072	13D	235.776
9A	202.928	13E	237.488
9B	204.640	13F	239.200
9C	206.352		
9D	208.064		

SW meter band range table

Meter Band	Range (kHz)
120m	2300 - 2600
90m	3200 - 3400
75m	3800 - 4000
60m	4600 - 5100
49m	5600 - 6400
41m	6800 - 7400
31m	9100 - 9900
25m	11500 - 12400
22m	13500 - 14400
19m	15000 - 15900
16m	17100 - 18000
15m	18800 - 19100
13m	21000 - 21900
11m	25600 - 26100