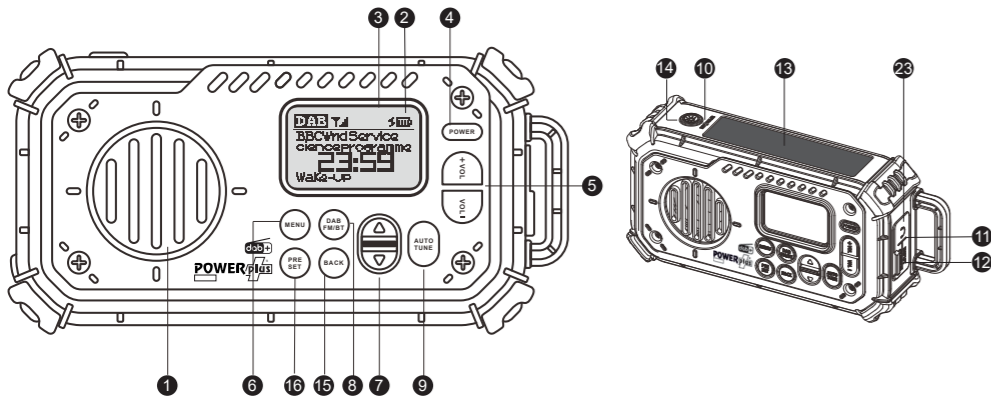
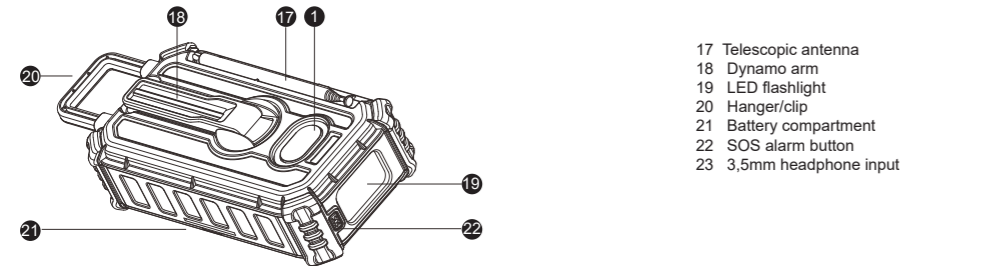




Solar | Dynamo | USB powered DAB+/FM radio
Powerbank | Bluetooth Speaker | Flashlight | SOS Alarm | Clock



- 1 Speaker
- 2 Battery status indicator
- 3 LCD Display screen
- 4 ON/OFF | Standby switch
- 5 Volume
- 6 Menu button
- 7 Previous / Next button
- 8 Function button
- 9 Auto tune button
- 10 Charging indicator
- 11 USB Type C input
- 12 USB output
- 13 Solar cell
- 14 Flashlight ON/OFF switch
- 15 Back button
- 16 Preset button



- 17 Telescopic antenna
- 18 Dynamo arm
- 19 LED flashlight
- 20 Hanger/clip
- 21 Battery compartment
- 22 SOS alarm button
- 23 3.5mm headphone input

Activate the battery

This radio uses an 18650 rechargeable Li-Ion battery (3.7V | 2.600 mAh). To activate the battery, release the battery door from the backside battery compartment (21) and set the orange switch in the battery compartment at the ON-position.

When the radio is not used for a long time, take out the battery. When you replace the battery please ensure you replace with a battery with the same specifications. Beware of placing the battery with the right polarity when replacing.

Make sure to charge the radio at least once a month to maintain the battery. In case the 18650 battery is running flat and remaining voltage becomes below a critical voltage, the battery may be damaged.

Charge the radio immediately by USB, solar or dynamo when the battery status symbol shows that the battery is empty (battery status indicator (2) showing empty battery flashing).

Charging the device

1) By USB

Lift up the rubber cap to access the charging in port. Connect the supplied Type C USB charging cable to the type C USB charging input (11). Connect the other end of the USB charging cable to an USB charger, powerbank or USB interface of your computer (not included). During charging, the charging indicator near the type C input (11) will illuminate red color and the battery status indicator will move indicating the device is charging. When the battery is fully charged, the indicator will show a full battery (not moving anymore) and charging indicator near type C input (11) will illuminate green color.

Remark:
1. Make sure the orange switch in the battery compartment at the ON-position when charging.

2. If you put 3pcs AAA batteries with 18650 rechargeable Li-Ion battery, the charging indicator near the type C input (11) will illuminate, but the battery status indicator will not be displayed when charging.

It takes around 3-4 hours for fully charge the battery.

When the battery indicator (2) is not moving anymore during USB charging, this means the battery is fully loaded and the battery will not further be charged by the built-in overcharge protection. Disconnect the charging cable after the battery is fully charged.

Receipt of the DAB+ signal can be affected by USB charging. Digital signals of DAB+ are very sensitive and charging by USB generates a small electro-magnetic field with can affect the sensitive signal, depending on the signalstrength of the DAB+ station. In case of non-receipt or signal disturbance during USB charging, select another DAB+ station or find the required station in FM mode.

2) By dynamo manual power generation

Take out the dynamo arm (18) and rotate the arm at an even speed of around 2.5-3 revolutions per second (150-180 revolutions per minute). This will charge the Li-Ion battery with the highest efficiency at charging current of around 400mA. You can charge in both directions.

Over high rotation speed will not increase the power generation. Do not over high rotate, as it may damage the device. During charging, the charging indicator (10) will illuminate to indicate the device is charging.

When battery is fully charged, the dynamo cranking feel loose. This is a built-in protection to prevent overcharging. Stop cranking when the battery is fully charged.

3) By solar power

Place the solar panel (13) towards the sun. The charging indicator (10) will illuminate during charging.

Charging by solar power is the most efficient in full sun condition. During cloudy weather the solar panel only can provide a limited charge. To charge battery from empty to full takes around 50 hours of solar charging in full sun conditions.

Discharge protection

When the battery is overloaded or short-circuited, the product functions will stop automatically. When the battery power is lower than 2.75V, the product functions will also stop automatically.

Radio function

Switching on and off

Press the ON/OFF button (4) to switch on the radio. The display (3) will show the last selected mode (DAB+/FM/Bluetooth speaker). By pressing the function button (8) you can switch between DAB+ , FM and Bluetooth speaker mode.

To switch the device to standby mode, press the ON/OFF button (4). The display (3) will show 'Standby'.

The actual time and date and battery status indicator will appear on the display. To switch to radio, press the ON/OFF button (4) to switch to radio function again. To switch the device off, press and hold the ON/OFF button (4) in Standby mode until display shows 'Bye Bye'.

DAB mode

Take out the telescopic antenna (17) to optimise the receipt of the radio signals.

Switch the device on and select DAB mode by using the function button (8).

The selected mode (DAB / FM / Bluetooth) will appear in the display (3).

Press the autotune button to scan for all available DAB+ stations in your region. During this scan, please leave this to complete the scanning process. After the scan is completed, you can use the previous/next button (7) by checking the available scanned DAB+ radio stations by moving up and down in the alphabetical sequence radio station list. Move to the requested station and select this station by pressing the previous/next button (7). When the display shows the radio station list and you want to go back to the main display screen, simply press the back button (15).

In case you want to rescan the DAB+ radio stations, press the autotune button (7) to make a new scan for available DAB+ stations.

FM mode

Press the function button (8) until FM appears in the display (3).

Press the autotune button to scan for all available FM stations in your region. During this scan, please leave this to complete the scanning process. After the scan is completed, press the preset button (16) to show the alphabetical frequency list. You can use the previous/next button (7) to go through the frequency list and select the required frequency of your radio station. Press the previous/next button to select the radio station.

Memory preset radio stations

You can store up to 40 radiostations in the memory in both DAB+ and FM mode. A stored memory station can be erased by storing another radiostation under this preset number. Tune to the desired radiostation in DAB+ or FM mode. Long press the preset button (16) and select the required preset number you want to use for this radiostation by moving up and down with the previous/next button (7). Press the previous/next button (7) to store the radiostation at the requested preset number.

To find a preset memory station, press the preset button (16) once and you will find the preset number list. Move through the preset numbers list with the previous/next button (7) and confirm the required station by pressing the previous/next button (7).

Please note that when you are using the radio in a different region, the radio frequencies will not be the same.

System settings

In DAB mode

Press the menu button (6) to show the system settings under DAB+ mode: Use the previous/next button (7) to skip between the options and press the previous/next button (7) to select the options: You can choose the following options:

- Full scan
- Manual tune
- DRC Off | Low | High Dynamic Range Compression: reduces the volume of louder sounds and boosts the volume of quieter sounds
- Prune No | Yes deletes stations that are either no longer transmitting or have moved frequency
- Announcement Off | On | No TA | Only TA TA: Traffic Announcement
- System
 - Sleep Off | 15 minutes | 30 minutes | 45 minutes | 60 minutes | 90 minutes
 - Wake-up Timer Enable | Disable
 - Equalizer Normal | Classic | Pop | Jazz | Rock | Country | Bass
 - Time Set Time / Date | Auto update | Set 12/24 hour | Set date format
 - Backlight Timeout | On level | Dim level gradations in each option
 - Constrast 0 - 30
 - Factory reset No | Yes
 - SW Version showing the software version

You can go to the higher menu level by using the back button (15)

In FM mode

Press the menu button (6) to show the system settings under FM mode: Use the previous/next button (7) to skip between the options and press the previous/next button (7) to select the options: You can choose the following options:

- Tuning Increment 0.05MHZ | 0.1MHZ
- Scan setting All stations | Strong stations only
- Audio setting Stereo allowed | Forced mono
- System
 - Sleep Off | 15 minutes | 30 minutes | 45 minutes | 60 minutes | 90 minutes
 - Wake-up Timer Enable | Disable
 - Equalizer Normal | Classic | Pop | Jazz | Rock | Country | Bass
 - Time Set Time / Date | Auto update | Set 12/24 hour | Set date format
 - Backlight Timeout | On level | Dim level gradations in each option
 - Constrast 0 - 30
 - Factory reset No | Yes
 - SW Version showing the software version

In Bluetooth mode

- System Off | 15 minutes | 30 minutes | 45 minutes | 60 minutes | 90 minutes
- Sleep Enable | Disable
- Wake-up Timer
- Equalizer Normal | Classic | Pop | Jazz | Rock | Country | Bass
- Time Set Time / Date | Auto update | Set 12/24 hour | Set date format
- Backlight Timeout | On level | Dim level gradations in each option
- Constrast 0 - 30
- Factory reset No | Yes
- SW Version showing the software version

Switching on | off | standby

When you are in DAB , FM or Bluetooth mode, press the ON/OFF | Standby button (4) once to enter in standby mode. Display will show 'Standby' shortly and time and date will appear on the LCD screen. To switch the device completely off, press and hold the ON/OFF | Standby button. 'Bye Bye' will appear on the display and display will go off after 2 seconds.

Adjust the volume

Use the volume down and up buttons (5) to decrease or increase the volume.

Flashlight

Press the flashlight ON/OFF button (14) to activate the 3 different flashlight modes

SOS alarm

Press the SOS button (22) to activate the buzzer alarm with flashing red LED flashlight. Press again to stop the SOS alarm.

Bluetooth speaker function

Switch the device on and select Bluetooth mode by using the function button (8). Search on your Bluetooth device (f.e. mobile phone) under Bluetooth for 'POWERplus Bison'. Connect with 'POWERplus Bison' and the speaker will say 'connected' when the Bison is successfully connected with your Bluetooth device. No you can play your favorite music using the Bison as the speaker.

Powerbank function

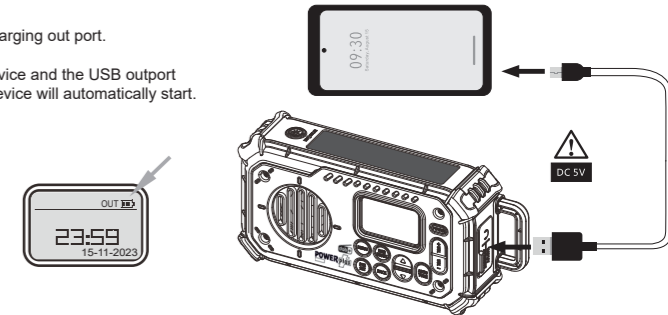
Lift up the rubber cap to access the USB charging out port.

Connect the USB charging cable to your device and the USB output of the Bison. The charging of your mobile device will automatically start.

The battery status indicator (2) shows the remaining battery capacity and the word 'OUT' will appear on the LCD display.

Disconnect the USB charging cable once your mobile device is fully charged.

The Bison comes with a 2.600 mAh battery, so the charging capacity is limited.



PRECAUTIONS:

1. Do not expose the unit to extreme temperature nor high humidity to ensure normal functioning for a long lifetime. For instances, never place the unit in bathing areas nor around stoves and radiators.
2. If you find the unit is not working properly, please take it to your nearest services center. Do not attempt to repair by yourself.

WARNING:

To prevent fire or shock hazard, do not expose the unit to rain or moisture. To avoid electrical shock, do not open the cabinet, refer to service agent or qualified engineer only.

Trouble shooting

- No radio signal
Be sure the antenna is out and be sure that you are in a position where radio-signals can be received. If you are in a building with steel frames, signal receipt reception can be poor or even none.
- Radio stops playing
Battery level is low. Recharge the battery.
Be sure that the battery is placed in the right polarity.
- Buttons are not working or do different function
Turn the radio off and turn it on again to check if functions are recovered.
- Powerbank does not work
Be sure that your device is USB 5V DC rechargeable.
Some charging protocols (like Apple devices) are very special, which may lead that they will not accept charger for different sources.

Battery replacement

This radio is equipped with a rechargeable Li-Ion battery type 18650 (consumerversion). After lifetime of the battery, the battery can simply be replaced by a new battery. After lifetime of the battery and/or product, please deliver to a recycling point for recycling.

Product recycling

After lifetime of the product, bring the product to a collection point for recycling.

Technical details

Frequency range	DAB+: 174.928-239.200 Mhz FM: 76 - 108 Mhz	
Speaker	45mm 5W	
Lithium-Ion battery	18650 3.7V 2.600 mAh	<ul style="list-style-type: none"> • Radio time: 15 hours • Bluetooth time: 10 hours • Flashlight time (double): 4 hours
Charging in	USB Type C input, 2A max.	
Dynamo charger	400 mA max.	
Solar charging	55mA max.	
Powerbank output	2A max.	
Operating time solar	1 hour of solar charging in full sun conditions:	<ul style="list-style-type: none"> • 16 minutes radio • 2 minutes bluetooth speaker • 16 minutes of flashlight (double LED)
Operating time dynamo	1 minute of cranking	<ul style="list-style-type: none"> • 3 minutes radio • 1 minute bluetooth speaker • 3 minutes of flashlight (double LED)
Siren loudness	80dB from a distance of a metre	
Solar cell	0.275W	

