

DYNAMO DIGITAL DISPLAY RADIO FM/MW/SW

SB-5020/FM & AM tuning Radio

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WORKING PRINCIPLE

This product adopts the high quality radio circuit with high-sensitive 10 band FM/MW/SW radio, with digital display, more sensitive, built-in dual speakers, LCD display and timing power on function. It can catch every wonderful electric wave anywhere and anytime. The built-in battery can be charged in two ways: by hand crank and by outside power. It can also charge for mobile phone via connection cable.

FUNCTIONS

1. Cranking for power generation
2. Charged by external adapter(optional)
3. Digital display of frequency, 10 band: FM/MW/SW 1-8
4. Digital clock, timing power on
5. Charge digital devices, mobile phone, etc.
6. LED Lighting function

FEATURES

1. Cranking for power, no external batteries are needed, store energy by built-in rechargeable battery; green, environmental friendly, economy, safety, (the common battery will leak easily), reuse limitlessly.
2. Low noise but high efficiency; Low power consumption; Long working time.
3. Digital display, convenient to handle, more accurate frequency.
4. Extra long antenna enhance the reception ability.
5. Simple outline and delicate appearance.

MAIN TECHNICAL PARAMETERS

1) Radio:

Sensitivity of the FM	Better than 10 uV
Sensitivity of the MW	Better than 1.5 mV/m
Sensitivity of the SW	Better than 10uV
Reception scope of the FM	87(+0-1)-108(-0+1) MHz
Reception scope of the MW	520(+0-10)-1620(-0+30) KHz
Reception scope of the SW	5.9-21.85 MHz
SW1	49m 5.95 – 6.20 MHz
SW2	41m 7.10 – 7.30 MHz
SW3	31m 9.50 – 9.90 MHz
SW4	25m 11.65 – 12.05 MHz
SW5	22m 13.60 – 13.80MHz
SW6	19m 15.10 – 15.60 MHz
SW7	16m 17.55 – 17.90 MHz
SW8	13m 21.45 – 21.85 MHz

The audio frequency output power	100 mW
Radio working time after 1 minute cranking (2.5 - 3 circles/s) 1	18 - 27 minutes
Lighting time after 1 minute cranking (2.5 - 3 circles/s)	27 – 36 minutes
Speaking time after 3 minutes cranking for charging mobile phone (2.5 - 3 circles/s)	4 – 15 minutes
Radio working time after being charged fully	7 – 9 hours
Lighting time after being charged fully	4 – 6 hours
Max. Luminous flux	11 – 14LM

2) Charged by outside power

1. Input voltage	5 - 5.2V
2. Charging interface	DC plug $\Phi 3.5 \times \Phi 1.3$
3. Fully charged time	6 - 8 hours

3) Main parts life-span

Switch	5000 times
The whole unit	5 years
The plastic part	5 years

4) Size and Weight

Antenna length (external part)	About 37mm
Product size	About 156*76*58mm
Product weight	About 203g

5) Others

Specification of built-in battery	300mAh, 3.6v
Diameter of built-in speaker	$\Phi 36$ mm (two)
Generator power	5W

OPERATION METHOD

1. Cranking for power:

Unlock the handle and crank it at the speed of 2.5 to 3 circles per second. The faster you crank, the higher efficiency to charge. (It's better to crank it for no more than 4 circles per second.)

2. Charged by outside power:

Connect with the 5V adapter to charge the internal battery, and about 6~8hours later it will be fully charged.

3. Charge for digital devices, mobile phone, etc.

Connect this product with other digital devices via connection cable, unlock the handle, and crank it at the speed of 2.5 to 3 circles per second. Illumination of charging indicator indicates that charge is working.

4. Reception of radio:

A. Operation of the power switch and volume adjusting: First make sure the power switch is at "ON" position.

Turn the volume knob clockwise to increase the volume. Contrariwise, turn the volume switch anticlockwise to decrease the volume gradually, a "crack" sound will be heard to show power off.

B. Wave band shifting: Push the wave band button to choose FM, MW, SW (1 - 8).

C. Station Search: Observe the display screen while tuning and select the radio program you needed. Tune the knob to an optimal position in which the reception effect is the best.

D. Use of antenna:

a). This product adopts telescoping antenna to receive signal for FM or SW. When the signal is weak, you can extend the antenna or change the direction of the antenna to find the optimal position, thus can improve the reception effect. Whereas, shrink the antenna when the signal is strong.

b). It adopts built-in magnetic antenna to receive signal for MW. You can change the position of the product properly when the signal is weak.

Note:

a. It is advised to turn the volume to the optimal position (be comfortable) when you listen to it.

b. Avoid places like high building, basement, etc as possible as you can, such places will badly influence the effect of the reception. Leave far away from the induction cooker, fluorescent lamp, car generator, motor, computer or such electrical equipment that may disturb the signal easily.

5. Time setting

1) Local time setting

Press and hold the "Time set" button, then press the hour adjust button and minute adjust button to adjust time, after adjusting the time, release the button, the system will recognize automatically.

2) Timing power on setting

Press and hold the "Alarm set" button, then press the hour adjust button and minute adjust button to adjust time, after adjusting the power on time, press the "Alarm ON/OFF" button to confirm it.

Tips:

To turn on or turn off the timing power on, press the "Alarm ON/OFF" button.

6. Use of Background light

When at night, press the background light button for lighting. Lasts for 10 seconds.

7. Earphone:

Plug the earphone into the earphone jack, the speaker will be off automatically at this time. Be cautious of the things below when using the earphone:

- A. Adjusting the volume to proper position when listen, too loud or listen for a long time will affect your hearing.
- B. Please turn the radio off before sleep to avoid listening for a long time when you have fallen asleep.
- C. When driving or walking, in order to avoid potential dangers, please do not use earphone.

CAUTIONS

1. Pay attention to the holding gesture when cranking which can protect your finger and nail from hurting. Keep rotating steadily.

2. In order to assure the using life of the battery and mechanical parts, please pay attention to the things below:

- a) Do not crank it for more than 5 minutes when the power of the battery is enough (working normally) and less than 15 minutes when it runs out of power.
- b) When the light is dim or the radio is soundless, it means the battery is lack of power badly, please turn off the light and radio or crank it for a while.
- c) Cranking it as even as possible (keep rotating steadily, 2.5 or 3 circles per second is best). Avoid cranking too violently and quickly or changing the cranking direction abruptly. Too slowly cranking would make current weak and influence the charging efficiency and too violently cranking will possibly damage the driving system.
- d) Do not crank it for a long time or too violently.
- e) In order to prolong the lifespan of the battery, you should crank it for at least one minute once a month.

3. Do not drop or hit this product.

4. Avoid using corrosive liquid or hard cloth to cleanse.

5. Turn off the light when charging to enhance the efficiency of charging.

6. The product will be a little hot if cranking for a long time.

7. We do not give notice again if the parameter of this product changed.

8. We reserve the final right to interpret this product.

PRODUCT ACCESSORIES

User's manual, Certification, Connection cable(DC 1.3 Male to DC 1.1 Male), Connection cable (USB Male A to DC 1.3 Male)

