WR-15 / WR-15BT
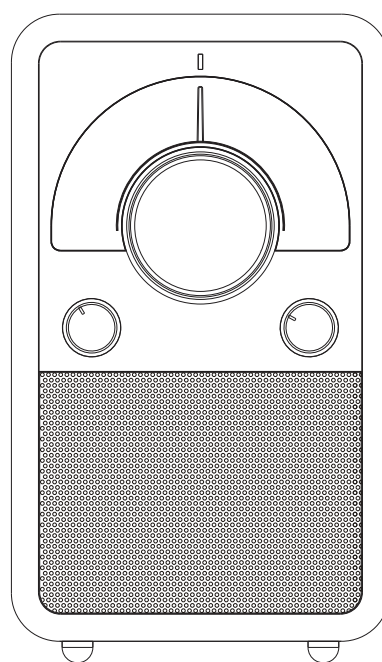
Version 1

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IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet. consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged. liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. To Reduce the Risk of Fire or Electric Shock, Do not Expose This Appliance To Rain or Moisture.

16. The Shock Hazard Marking and Associated Graphical Symbol is provided on the bottom panel of unit.

17. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, shall not be placed on the apparatus.

18. Excessive sound pressure on ear-and headphones could impair the hearing ability. Higher setting that idle on the equalizer leads to higher signal voltages on the output for ear and headphones.
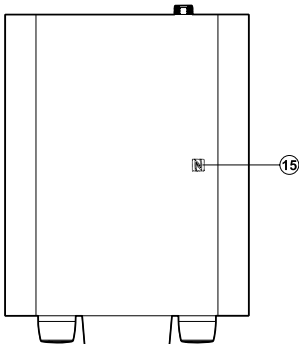
IMPORTANT NOTE:

To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.
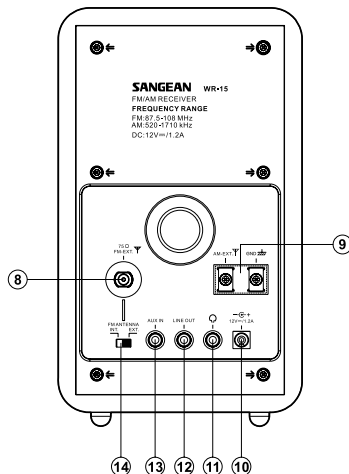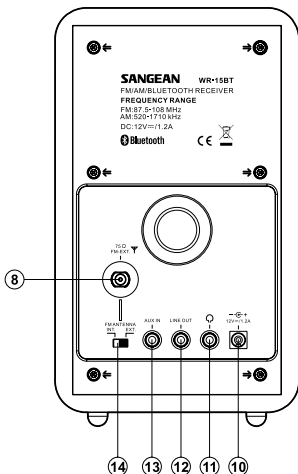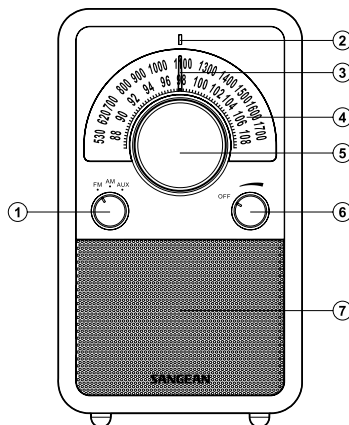
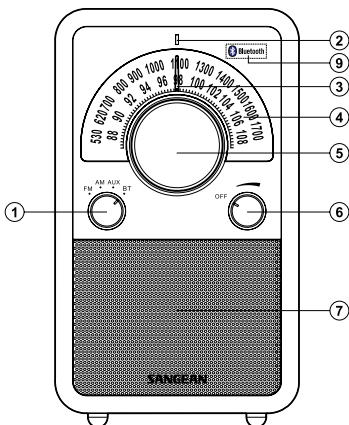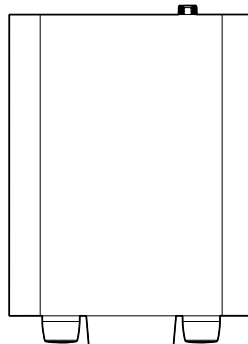### CAUTION:

To reduce the risk of the electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to so.

WR-15BT

WR-15

SANGEAN
WR•15BT
FM/AM/BLUETOOTH RECEIVER
FREQUENCY RANGE
FM:87.5-108 MHz
AM:520-1710 kHz
DC:12V⎓/1.2A

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WR•15
FM/AM RECEIVER
FREQUENCY RANGE
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Controls

① AM/FM/Aux in/Bluetooth band selecting rotary (Bluetooth band is only available in WR-15BT)

② Tuning LED indicator

③ Dial indicator

④ Dial scale

⑤ Tuning Control

⑥ Volume control/Power knob

⑦ Speaker

⑧ F-type external antenna terminal

⑨ WR-15: AM external antenna terminal
   WR-15BT: Bluetooth status indicator

⑩ 12VDC socket

⑪ Headphone socket

⑫ Line out socket

⑬ Aux in socket

⑭ External/Internal antenna switch

⑮ NFC detection area (WR-15BT only)

Power your radio

The AC power adaptor required for this unit should be 12 volts DC at 1.2A center pin positive. Insert the adaptor plug into the DC socket on the rear of the radio. Plug the adaptor into a standard manis socket outlet.

Important:
The mains plug or an appliance coupler is used as the means of connecting the radio to the mains supply. The mains plug or an appliance coupler used for the radio must remain accessible during normal use. In order to disconnect the radio from the mains completely, the mains plug should be removed from the mains outlet completely.

Operating your radio FM

1. Connect the Antenna
   The radio comes with built-in AM/FM antenna. To improve FM reception, insert the end of the supplied FM wire antenna into the F-type antenna terminal and adjust the wire for best reception. A 75 ohm coaxial cable of outdoor antenna may also be attached to the terminal. Be sure to switch external/internal antenna switch to external position while using the supplied wire antenna or connect the outdoor antenna. In some of the European countries, you may have to connect the supplied antenna terminal adaptor to connect with the outdoor antenna.

2. Turn on your radio by switching the Power knob to volume position. Then rotate the Band selecting rotary to FM position.

3. Rotate the Tuning Control to select the desired station. On FM, the tuning scale is marked in MHz (Megahertz). The tuning LED indicator will appear brightest when best tuning has been achieved.

4. Adjust the Volume Control for comfortable listening.

5. To switch off the radio, turn the Power knob to OFF position.

Operating your radio AM

1. Connecting the antenna
   The radio comes with built-in AM antenna which should be enough
   for normal listening. To improve the AM reception, you may connect
   the outdoor AM antenna with AM antenna terminal (USA version
   only).

2. Turn on your radio by switching the Power knob to volume position.
   Then rotate the Band selecting rotary to AM position.

3. Rotate the Tuning Control to select the desired station. On AM,
   the tuning scale is marked in kHz (Kilohertz). The tuning LED will
   appear brightest when best tuning has been achieved.

4. Rotate your radio for best reception.

5. Adjust the Volume Control for comfortable listening.

6. To switch off your radio, turn the power knob to OFF position.

Note:
When your radio has any interference in AM band by its adaptor,
please move your radio away from its AC adaptor over 30 cm.

Listening to music via Bluetooth streaming (available only in WR-15BT)

You need to pair your Bluetooth device with your radio before you
can auto-link to play/stream Bluetooth music through your radio.
Paring creates a `bond' so two devices can recognize each other.

Pairing your Bluetooth device for the first time

1. Rotate the Band selecting rotary to select Bluetooth function. The Bluetooth icon on the panel will flash.

2. Activate Bluetooth on your device according to the device's user manual to link to your radio. With some mobiles which are equipped with earlier versions than BT2.1 Bluetooth device, you may need to input the pass code "0000".

3. Once connected, there will be a beep sound and the Bluetooth icon will remain illuminated. You can now play the music in your Bluetooth-enabled device via your radio.

Note:
1) If 2 Bluetooth devices, pairing for the first time, both search for your radio, it will show its availability on both devices. However, if one device links with this unit first, then the other Bluetooth device won't find it on the list.

2) If you take your source device out of range, the connection will be temporarily disconnected to your radio. Your radio will automatically reconnect if the source device is brought back in range. Be aware that during the period of disconnection, no other Bluetooth device can pair or link with your radio.

3) If `SANGEAN WR-15BT' shows in your Bluetooth device list but your device cannot connect with it, please delete the item from your list and pair the device with the radio again following the steps described previously.

4) The effective operation range between the system and the paired device is approximately 10 meters (30 feet).Any obstacle between the system and the device can reduce the operational range.

5) Bluetooth/NFC connectivity performance may vary depending on the connected Bluetooth devices. Please refer to the Bluetooth capabilities of your device before connecting to your radio. All features may not be supported on some paired Bluetooth devices.

Pair with your Bluetooth device before

If your Bluetooth device already paired with WR-15BT previously, the unit will memorize your Bluetooth device, but it does not support the automatic reconnection, reconnect with this product following the steps above.

WR-15BT can memorize up to 2 sets of Bluetooth device, when the memory exceed this amount, the earliest paired device will be overwritten from the radio.

Disconnecting your Bluetooth device

Rotate the Band selecting rotary to any bands other than Bluetooth band or disconnect the Bluetooth-enabled device. The LED light for Bluetooth icon will then start to flash indicating your radio is discoverable again for pairing.

Pairing and playing your device via NFC

WR-15BT(only available in WR-15BT) is equipped with wireless NFC (Near Field Communication) feature, allowing playing NFC-enabled devices to pair and play the music. For non-NFC devices, please refer to the above sections for standard Bluetooth pairing.

1. Rotate the Band selecting rotary to select Bluetooth function. The Bluetooth icon on the panel will flash.

2. Turn on your NFC feature on your device.

3. Touch the NFC area of your playing device against the NFC area marked on top of your radio. The unit will turn on and enter automatic pairing mode. If you pair with WR-15BT for the first time, your NFC-enabled device will be asked the permission to link with the radio. Once paired with a device, there will be a beep sound and the Bluetooth icon will remain illuminated.

4. Use the controls on your device to play/pause and navigate tracks.

Note:
1. If you would like to link another Bluetooth device via NFC, disconnect the existing linked Bluetooth device first.

2. The location of the NFC detection area is not the same on all devices. When connecting with other Bluetooth device via NFC, refer to the User guide of the other device for more information.

3. Some of metallic case or cover for mobile phones may reduce the sensitivity of NFC. Make sure you remove it, before activating the NFC.

Disconnecting your NFC-enabled device

To disconnect your device, simply touch it again on the top of the unit. The LED light for Bluetooth icon will then start to flash indicating your radio is discoverable again for pairing.

Headphone use

Headphone use with this radio should be fitted with a 3.5 mm jack plug. Insert the headphones plug into the socket marked ⌒ on the rear of the radio. When the headphones are plugged in, the loudspeaker is automatically disconnected.

IMPORTANT:
Excessive sound pressure from earphones and headphones can cause hearing loss.

AUX IN socket

A 3.5mm Auxiliary Input socket is provided on the rear of your radio to permit an audio signal to be fed into the unit from an external audio device such as iPod, MP3 or CD player.

1. Rotate the Band selecting rotary to select "AUX".

2. Connect an external audio source (for example, iPod, MP3 or CD player) to the Auxiliary Input socket.

3. Adjust the volume setting on your iPod, MP3 or CD player to ensure an adequate signal level from the player, and then rotate the Volume control on the radio as needed for comfortable listening.

Line out socket (3.5mm Jack)

A 3.5mm Line Out socket located on the rear of your radio is provided for connecting the audio signal to an external amplifier. Inserting an audio cable into this socket will not mute the internal loudspeaker. Set the volume control on the radio to minimum if desired.

Specifications

Frequency Coverage:
FM 87.50-108 MHz
AM 520-1710 kHz

Mains power supply
AC IN 120V, DC out 12V/1.2A (USA version)
AC IN 230V, DC out 12V/1.2 A (European version)
(Actual power requirement please refer to the print on the rear panel)

Internal Antenna System:
AM Built-in ferrite aerial
FM Built-in wire aerial

External antenna terminal:
AM antenna terminal (USA version only)
FM F-type antenna terminal

Output Power: 6.5 W 10% T.H.D. @ 100 Hz

Headphones socket:
3.5 mm dia. Stereo jack monaural output

Output: 5 mW + 5 mW

Aux in socket:
3.5 mm dia. Stereo jack.

Input sensitivity: IN 300mV Output 6.5 W @ 100 Hz

Input impedance: 47 Kohm

REC OUT: output impedance: 2.2 Kohm

DC IN: 12 V/1.2 A center pin positive
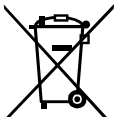
External diameter: 5.5 mm

Internal diameter: 2.0 mm

Accessories:
FM F-terminal antenna wire
F to PAL terminal adapter (European version only)

The company reserves the right to amend the specification without notice. Different model names are applied according to various market areas.

If at any time in the future you should need to dispose of this product please note that: Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. (Waste Electrical and Electronic Equipment Directive)