



sangean MMR-99 Multi-Powered Digital Emergency Radio User Manual

[Home](#) » [Sangean](#) » sangean MMR-99 Multi-Powered Digital Emergency Radio User Manual 

Contents

- [1 sangean MMR-99 Multi-Powered Digital Emergency Radio](#)
- [2 Important safety instructions](#)
- [3 Controls](#)
- [4 Charging the radio](#)
- [5 Using Dynamo power](#)
- [6 Tuning the radio](#)
- [7 Pairing and playing your Bluetooth device for the first time](#)
- [8 Key lock](#)
- [9 Specifications](#)
- [10 Documents / Resources](#)
- [11 Related Posts](#)

SANGEAN

sangean MMR-99 Multi-Powered Digital Emergency Radio



Operating instruction

Important safety instructions

1. Please read these instructions carefully.
2. Please keep these instructions for future
3. Heed all
4. Follow all
5. Do not use this apparatus near
6. Clean only with dry cloth.
7. Do not block any ventilation. 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
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
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. 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 a long period 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.

1. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the
2. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or
3. The battery shall not be exposed to excessive heat such as sunshine, fire or the like.
4. **CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
5. To prevent possible hearing damage, do not listen at high volume levels for long
6. This apparatus is provided with protection against splashing water and dust ingress (IP55).
7. The battery should be used or stored at an air pressure above 11.6 kPa, otherwise it may cause the battery to explode or leak flammable liquids and gases.

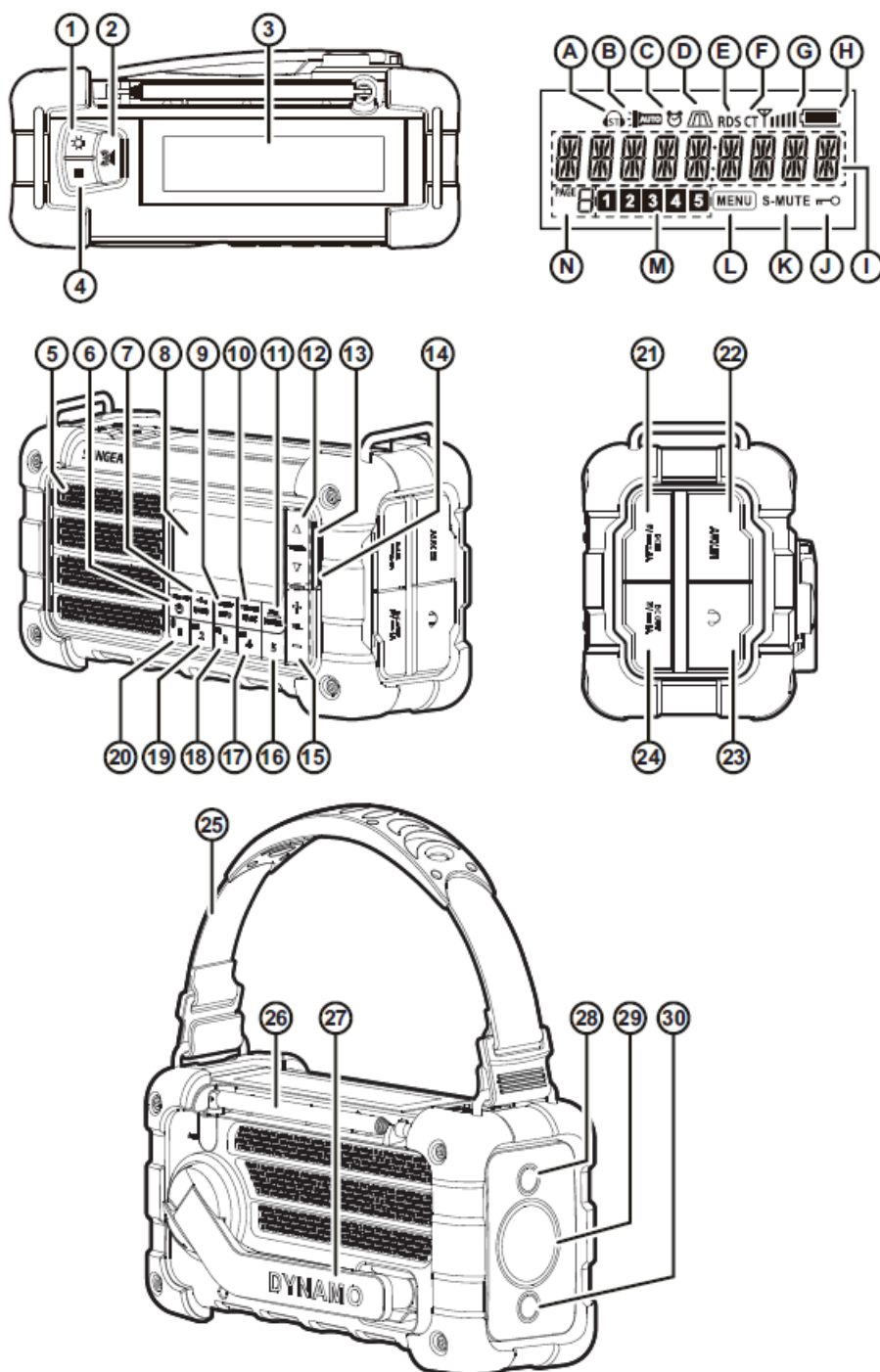
CAUTION:

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 do so.

Controls

1. LED Flashlight button / Emergency light button
2. Emergency siren button
3. Solar charging panel
4. Illumination mode button of LED flashlight
5. Speaker
6. Power / Auto off button
7. Band / Lock button
8. LCD display
9. Info / Menu button
10. Page / Alarm button
11. Enter / Seek button
12. Tuning up / down button
13. Bluetooth LED indicator
14. Charging LED indicator
15. Volume up / down button
16. Preset 5 button
17. Preset 4 / Next track / Fast forward button
18. Preset 3 / Play / Pause button
19. Preset 2 / Previous track / Rewind button
20. Preset 1 / Bluetooth pairing button
21. DC IN socket
22. Auxiliary input socket
23. 3.5mm headphone socket

24. USB charging socket for mobile phones or MP3 players
25. Hand Strap
26. Telescopic antenna
27. Dynamo power hand crank
28. Low beam (red)
29. High beam (white)
30. Low beam (white)



Charging the radio

The MMR-99 is powered by a 2600mAh built-in Lithium-ion battery. Before operating the radio for the first time, ensure that you fully charge the supplied battery.

Please use one of the following methods to charge your radio.

1. Using the supplied USB A Type to USB C Type cable simply plug the USB A Type end into a USB socket on a computer, tablet or any USB power supply. Then plug the USB C Type end into the DC IN socket on the right hand side of the radio.
2. Using an AC adapter (not supplied) with a USB C Type connector plug the AC adapter into a standard AC outlet. Then plug the USB C Type end into the DC IN socket on the right hand side of the radio.

The battery power icon will cycle on the display when the battery is charging. The charging LED indicator will also be on at the same time during the charging process.

NOTE

The charging time will take approx.3 hours to be fully charged. The battery power icon will disappear on the display when the radio is fully charged. Reduced power, distortion, stuttering sounds or when the empty battery icon flashes on the display are all signs that the battery needs to be recharged. The radio can play approx. 24 hours when the battery is fully charged.

Using Dynamo power

1. Make sure the telescopic antenna is in the rest position before rotating the dynamo handle.
2. Take the Dynamo power handle from its rest position.
3. Rotate the Dynamo power handle approx.100 rotations per minute, either clockwise or counterclockwise until the charging LED indicator appears
4. Under normal listening conditions, one minute of charging from Dynamo power will allow you to listen to the radio for approx.10 minutes.
5. Make sure the handle is in its rest position after charging is completed.

NOTE:

When using the Dynamo hand crank, do not use excessive force. This will prevent damage to your radio.

Using solar power

The radio does not need to be switched on in order for the solar panel to operate.

In order to recharge your MMR-99 battery using solar power, position the radio so that the solar panel receives direct sunlight. The more direct sunlight that shines on the solar panel, the more electricity it can generate to power the radio.

NOTE

The best performance of the solar panel will be achieved when the sun is directly overhead, and the sunlight is unobstructed by clouds, foliage, curtains etc. In certain situations and poor light conditions, the solar panel may not be effective and should not be relied upon as the primary energy source for standard usage. The solar panel is designed as a supplementary energy source which under suitable light conditions is able to contribute up to 100% of the radio energy requirements.

The solar panel will charge the battery only under natural sunlight. It will not deliver a charge in artificial light.

DO NOT attempt to charge the battery by placing the solar panel directly under any kind of sun-lamp, this will cause irreversible damage to the radio and may damage the casing. (Doing so will void all warranties.)

Tuning the radio

1. Press the Power button to turn on the
2. Select the FM / AM radio mode by repeatedly pressing the Band
3. Press and release the Seek button, the radio will seek for the next active Your radio will stop scanning when it finds a station of sufficient strength. After a few seconds, the display will update. The display will show the frequency of the signal found. If RDS information is available, the RDS icon will be shown on the display and the radio will display the station name.
4. You can also press and hold the Tuning up or Tuning down button. The radio will seek in an upwards or downwards direction and stop automatically when it finds a station of sufficient strength.
5. Press and release the Tuning up or Tuning down button to fine-tune the frequency if
6. Press the Volume up / down button to adjust for desired sound

NOTE

When the volume is adjusted to 15, the radio will beep and “VOL WARN” will appear on the display to indicate that the current volume is too high. This volume warning only appears once every 12 hours.

NOTE:

Extend the telescopic antenna fully and rotate it for the best FM reception. There is a built-in directional bar antenna for the AM band reception. To achieve the best AM reception, it may be necessary to move the radio to achieve proper reception.

Preset memory stations

The radio has 20 memory presets each for AM and FM bands. The preset stations can be stored into 4 memory pages and 5 presets in each memory page for both the AM and FM bands.

1. Tune to your desired station.
2. Press and release the Page button and cycle through the memory page 1-4 to select the required memory page you'd like to store the station in.
3. Press and hold the desired preset button (1-5) until display memory digit stops flashing and a beep is heard. The radio station is stored into the selected memory preset. The Display will appear with the memory page and preset number.

Repeat this procedure as needed for the remaining presets. The preset stations can not be deleted but can be overwritten.

Recall memory station

To recall stations already programmed into the memory presets.

1. Turn your radio on and select the required frequency band.
2. Select the memory preset page by pressing the Page button and cycling through until you find the page you want.
3. Press the desired preset button (1-5) to recall required preset station.

Emergency Siren

The Emergency Siren will work when either the radio is switched on or off. Pressing and releasing the Emergency siren button will activate the siren until it's switched off by pressing the Emergency Siren button or the Power button.

LED Flashlight

Press and release the LED flashlight button repeatedly to select the following modes:

Low beam (white), High beam (white), Low beam (red) and Off.

Press and release the Illumination mode button repeatedly to select different flashlight illumination modes:

High brightness, Low brightness, SOS (Morse Code Distress Signal, three short flashes, three long flashes, three short flashes) and Blinking.

Emergency light

To enable or disable the Emergency light, press and hold the Emergency light button for 2-3 seconds until the Emergency light icon appears or disappears on the display.

Using the menu

Some functions in the menu can be set when the radio is turned on or off. Follow the steps below to access the menu settings:

1. Press the Power button to turn on the
2. Press and hold the Info / Menu button for 2-3 seconds until "MENU" is shown on the display to enter the menu setting for the current mode.

Press the Tuning up / down button to scroll through the following options in the menu. Press the Enter button to confirm the setting. To exit the menu mode, press the Menu button.

The menu offers the following options:

- **[TIME SET]:** Select this option to set the clock manually. When the hour flashes on the display, press the Tuning up / down button to select the correct hour. Then press the Enter button to confirm the setting. The minute will then flash. Press the tuning up / down button to select the correct minute. Then press the Enter button to confirm the
- **[RDS CT or MANUAL]:** With "RDS CT" selected, the radio will synchronize its clock time whenever it tunes to

a radio station using RDS with CT The “CT” will appear on the display indicating the radio time is RDS clock time. Select the “MANUAL” option to set the clock manually and ignore RDS CT. Press the Tuning up / down button to select the option. Then press the Enter button to confirm the setting.

NOTE

- **If the clock time from your local RDS station is not correct, you should consider disabling the RDS CT**
- **Please note that at times the RDS signal may broadcast the wrong time, this is the fault of the radio station, not your**
- **[CLOCK 12H or 24H]:** After selecting this option, press the Tuning up / down to select 12 or 24 format. Press the Enter button to confirm your choice.
- **[ALARM OFF or ON]:** After setting the clock time, the alarm settings will appear in the menu options. When the “OFF” or “ON” flashes on the display, press the Tuning up / down button to select “ALARM OFF” or “ALARM ON”. Press the Enter button to confirm your choice. Select “ALARM OFF” to disable the alarm function. With “ALARM ON” selected, the alarm icon will appear on the display and the hour setting of alarm will begin to flash. Press the tuning up / down button to set the desired hour. Then press the Enter button to confirm your setting. The alarm minute will then flash, press the tuning up / down button to set the desired minute. Then press the Enter button to confirm your setting. The buzzer volume will appear on the display. Press the tuning up / down button to set the desired volume. Then press the Enter button to complete the setting. To quickly change the OFF or ON state of the alarm, press and hold the Alarm button for 2-3 seconds until the alarm icon disappears or appears on the display. When the alarm sounds, press the Power button to cancel a sounding alarm. Pressing any button other than the Power button will silence the alarm for 5 minutes. “Z” will appear on the display. To cancel the snooze timer while the alarm is suspended, press the Power button.
 - **[LOUD ON or OFF]:** This option is available when the radio is turned on. After selecting this option, press the Tuning up / down button to select “LOUD ON” or “LOUD OFF” to enable or disable the radio’s loudness feature. Then press the Enter button to confirm the

[RADIO]: This option is available when the radio is turned on and in FM and AM modes. After selecting this option, press the Tuning up / down button to scroll through the following subsequent options and then press the Enter button to confirm your selection

1. **[FM AUTO or MONO]:** This option is only available in FM. If the FM radio station being listened to has a weak signal, some hiss may be audible. It is possible to reduce this hiss by forcing the radio to play the station in mono rather than auto. Press the Tuning up / down button to select the options between “FM MONO” and “FM AUTO”. Then press the Enter button to confirm your selection.
2. **[SOFTMUTE]:** Softmute can reduce background hiss / noise of fading FM / AM signals. Press the Tuning up / down button to select the following options and then press the Enter button to confirm your selection.

MUTE ON: FM / AM softmute enabled. **MUTE OFF:** FM / AM softmute disabled.

1. **[A.T.S]:** The radio features an Auto Tuning System (ATS) that will automatically store radio stations into the memory presets on the FM and AM band upon the signal strength of the incoming stations. ATS can be

operated only when the radio is on. Press the Tuning up / down button to select the following options and then press the Enter button to confirm your selection

EL OFF: After selecting this option, using the Tuning up / down button to select “EL ON” or “EL OFF” to enable or disable the Emergency light. Press the Enter button to confirm the setting.

- **[FACTORY]:** After selecting this option, press the Tuning up / down button to scroll through the following subsequent options and then press the Enter button to confirm your
 - 1. **FM 87-108:** This setting can be used to configure the FM range, based on the country that you are currently in. Set the FM range to 87-108, 76-90, 76-108 or 64-108 MHz.
 - 2. **FM 100K:** Select this option to set FM tuning step to 50K or
 - 3. **AM 10K:** Select this option to set AM tuning step to 9K or

NOTE

Change in the AM tuning step setting will result in the removal of all AM presets stored in the radio.

1. **DCOUT OFF:** This option is available when the radio is off and only using battery power. When “DCOUT OFF” is selected, the USB charging socket that displays DC OUT on the radio cannot charge external devices (such as mobile phones). When “DCOUT ON” is selected, the DC OUT socket can charge external

NOTE

To charge your mobile phone, MP3 player and related devices, please turn off the radio.

1. **RESET:** Select this option to reset the radio to the default factory settings. After confirmation, all user settings and preset stations will be erased. Select “RESET YES” to perform a factory reset. Select “RESET NO” to not perform a factory reset.
2. **VER XXX:** This setting displays

Setting the Auto off timer

The Auto off timer allows you to set the radio to automatically turn off after a preset time has elapsed. It can be set from 15 to 120 minutes by pressing and holding the Power / Auto off button and then releasing this button when the desired auto off time is reached. Radio will remain on for selected length of time.

Pressing and releasing the Power button will manually turn off the radio and cancel the Auto off timer function.

Display information

When the radio is on, press and release the Info button repeatedly to cycle through the different display options.

If RDS information is available, your radio can display the following in FM mode:

Program service (e.g. station name), Program type, Radio text, Clock time, Auto off timer time (if Auto off timer is enabled) and Frequency.

Clock time and Auto off timer time (if Auto off timer is enabled) can also be displayed in AM / BLUETOOTH / AUX IN mode.

NOTE:

The display will revert to a conventional time display 10 seconds after the last button press except when displaying scrolling text

Pairing and playing your Bluetooth device for the first time

1. With your radio switched on, press the Band button to select Bluetooth function. The Bluetooth LED indicator on the radio will flash a fast blue to show the radio is
2. Activate Bluetooth on your device according to the device's user manual to link to the radio. Locate the Bluetooth device list and select the device named "MMR-99" (With some Smartphone's that are equipped with earlier versions than BT 2.1 Bluetooth device, you may need to input the pass code "0000").
3. Once connected, there will be a confirmation tone sound and the Bluetooth LED indicator will turn a solid blue. You can simply select and play any music from your source device. The volume control can be adjusted from your source device, or directly from the
4. Use the controls on your Bluetooth-enabled device or on the radio to play / pause and navigate tracks.

NOTE:

- **If 2 Bluetooth devices are pairing for the first time, both must 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**
- **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**
- **If "MMR-99" 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.**

Playing audio files in Bluetooth mode

When you have successfully connected your radio with the chosen Bluetooth source device you can start to play your music using the controls on your connected Bluetooth device.

1. Once playing has started, adjust the volume to the required setting using the Volume control on your radio or on your enabled Bluetooth source device.
2. Use the controls on your Bluetooth source device to play / pause and navigate tracks. Alternatively, control the playback using Play / Pause, Next track, Previous track buttons on your radio.
3. Press and hold the Fast-forward / Rewind button to move through the current Release the button when the desired point is reached.

NOTE:

Not all player applications or devices may respond to all of these controls.

Playing a previously paired Bluetooth source device

The radio can memorize up to 6 sets of paired Bluetooth source devices. When the memory exceeds this amount, the earliest pairing device will be overwritten from the device.

If your Bluetooth source device already paired with the radio previously, the unit will memorize your Bluetooth source device and it attempts to reconnect with a Bluetooth source device in memory which is last connected.

Key lock

The key lock function is used to prevent unintentional operation of the radio.

1. Press the Power button to switch on your
2. Repeatedly press and release the Band button until "AUX IN" is displayed.
3. Connect an external audio source (for example, iPod, MP3 or CD player) to the Auxiliary Input socket.

Adjust the volume setting on your iPod, MP3 or CD player to ensure an adequate signal level from the player, and then use the Volume control on the radio as needed for comfortablePress and hold the Lock button for 2-3 seconds until appears on the display. Except for the three buttons on the top of the radio, all other buttons will be disabled.

To release the lock, press and hold the Lock button for 2-3 seconds until disappears from the display.

Listening with Headphones

Plug the headphones into the headphone socket for private listening. This will disconnect the external speaker.

IMPORTANT:

Excessive volume levels from earphones and headphones may cause damage to your hearing.

Auxiliary input socket


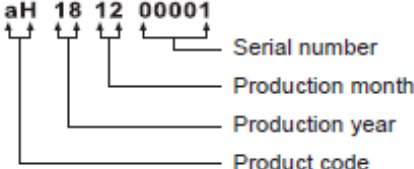
A 3.5mm stereo Auxiliary Input socket is provided on the rear of your radio to permit an audio signal to be fed into the unit from an external audio device such as iPod, MP3 or CD player.

Specifications

Power Supply	2600mAh rechargeable built-in Lithium-ion battery
	Dynamo - charging to rechargeable built-in Lithium battery.
	Solar panel - charging to rechargeable built-in Lithium battery.
	DC IN (5V / 2.4A) USB C Type Socket for Charging the MMR-99.
	USB A Type to USB C Type Cable & Hand strap included.
Frequency Coverage	
FM	87.5-108 MHz
AM	520-1710 kHz (10kHz tuning step) 522-1710 kHz (9kHz tuning step)
Bluetooth	
Bluetooth Specification	Bluetooth® 5.0 +EDR
Profile Support	A2DP, AVRCP
Bluetooth Audio Codec	SBC

Transmitting Power	Power Class 2
Line of Sight Range	10meters / 30feet
The Frequency And Maximum Transmitted Power	2402MHz ~ 2480MHz: 1.65dBm (Bluetooth EDR & LE)
Antenna	
Telescopic Antenna	FM
Built-In Ferrite Rod Antenna	AM
Socket	
DC Socket	DC IN USB Type C, 5V / 2.4A ■■■■ This symbol indicates DC voltage.
	DC OUT USB Type A, 5V / 1A
Earphones Jack	3.5mm diameter, Stereo Output, 32ohm Impedance
Auxiliary Socket	3.5mm diameter, Stereo Input
Speaker	
	2.25", 4Ohm, 5Watts
Output Power	
	1.5Watts
Operating Temperature Range	
	5°C to 35°C

※ The barcode label on the product is defined as below:

	
-------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------



[sangean MMR-99 Multi-Powered Digital Emergency Radio](#) [pdf] User Manual
MMR-99, Multi-Powered Emergency Radio, Digital Emergency Radio

Manuals+.