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(POWER SOURCES

OPERATING ON BATTERY



BATTERY INSTALLATION

- 1. Slide the battery lid.
- 2. Insert three AA batteries with correct polarity as shown in the compartment.





 Disconnect external power source before operating on battery power.

BATTERY REPLACEMENT

- When the sound becomes weak and distorted, and battery power indicates
 □, replace batteries immediately, otherwise
 □ will turn to
 □, then the unit will shut off automatically.
- 2. All memories (station presets) are permanently stored. However, when the batteries are removed, the clock reverts to the default setting of 12:00, and the last beep setting is cancelled. They need to be reset.

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- Do not try to recharge dry batteries.
- Do not mixold batteries with new ones.
- Remove the batteries if the unit will not be used for a long period of time.

- When the unit is not being used for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.
- If battery leakage occurs, wipe the battery compartment with a softcloth before inserting new batteries.

OPERATING ON AC ADAPTOR



- 1. Plug the adaptor into an 220V AC power outlet.
- 2. Insert the adaptor s small connector plug into the DC JACK 29, A appears in the display.
- 3. Turnon the unit.

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- If the AC adaptor is connected, the unit automatically switches to the AC adaptor power, and installed batteries are no longer in use.
- If the adaptor is connected while the backlight is illuminated, the illumination will remain on.
- Remove the batteries if you want to use AC adaptor for a long period of time.

POWER INDICATION

The battery power is divided into 4 levels.

- Exhausted, auto shut off **E** Lower
- Medium



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- When battery power indicates from riangler to riangler , the unit will shut off automatically.
- While the unit is on, if is appears in the display when using rechargeable batteries, batteries need to be charged.

BATTERY CHARGE

- 1. Install three AA rechargeable batteries with correct polarity.
- 2. Plug the adaptor into an 220V AC power outlet, connect the other side securely to DC Jack 🕲.
- 3. With the radio turned off, press the CHARGE button **③**, the power indicator **ﷺ** will flash for 4 seconds. Press number button 1..9 to select charging hours according to battery capacity in flashing time, otherwise the unit will exit from charge mode.
- 4. The charging time indicates in the display. When charging has been completed, the unit stops charging automatically.
- 8
 - If charge time is not been set, the unit will exit from the charge mode.
 - Keep the unit off when charging.
 - Battery charge will be terminated once the unit turns on.

- The unit will adjust the current speed automatically during charging.
- Use NiMH batteries, and do not charge them for more than seven hours.
- When using new rechargeable batteries or those which have not been used for a long time, charge them fully, then use them until they have completely run down. Repeat this cycle two more times, then those batteries can be used normally.
- Do not leave fully charged batteries unused for a long time.

CLOCK FUNCTION

The unit has two clock modes (12H/24H) for user to select.

SET THE CLOCK

The default time of the unit is 12:00. Set the clock to the current time.

- 1. If the unit is turned on, press POWER button to turn it off.
- 2. Press ENTER button **(3)** twice, indicator **(4)** flashes for six seconds.
- 3. While is flashing, press number button to set current time.



CHECK CURRENT TIME

- 1. When the unit is off, current time indicates in the display.
- 2. When the unit is on, hold down EXIT button about 0.5 second to display current time 3 seconds.

SELECT TIME MODE

- 1. Disconnect the AC adaptor, remove the batteries, till nothing appears in the display.
- About 30 seconds later, connect the AC adaptor or insert batteries: "SET" appears in the display.
- 3. Quickly press ENTER button twice, "12-24" appears in the display for 3 seconds. (Please see below).
- 4. Press number button 1 or 2 to select 12H or 24H time mode.



(MW STEP 9K/10K SELECTION

To meet your listening requirement in different countries, MW step can be selected.

North and South America: 10KHz

Other Countries : 9KHz

- 1. Disconnect the AC adaptor, remove the batteries, till nothing appears in the display.
- 2. About 30 seconds later, connect the AC adaptor or insert batteries, "SET" appears in the display.



- 3. Press ENTER button, *9-10* appears in the display for three seconds, 9 indicates the medium wave AM channel spacing is 9KHz, while 10 means it is 10KHz.
- 4. Press number 1 to select 9K step, press number 2 to select 10K step.

TURN ON / OFF THE RADIO

Press POWER button ① to turn on the unit manually, the unit will receive the last channel you ever heard. After listening, press POWER button again to turn it off.

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- If AUTO TURN ON FUNCTION is activated, the unit will automatically turn on at presetting time.
- You can set SLEEP time after setting auto turn on time or turning on the unit. The unit will automatically turn off when the set time reaches.

DIGITAL VOLUME CONTROL

Increase



Decrease

Volume is controlled by press VOL+ or VOLbutton. Volume indicator indicates the volume level.

BAND SELECTION

FM, MW, SW band can be select by pressing corresponding band button.

Press FM button () to select FM band; Press MW button () to select MW band. Press SW button () to select SW band.

METER BAND

Press METER BAND button ^(C) repeatedly to select your desired meter band.



LOCAL / DX SWITCH

In SW or FM band, setLOCAL/DX switch 𝔁 to a proper position can increase reception.

In general, set the switch in DX position unless there is a strong interference or when you are listening to local stations.

PAGE

There are total 10 pages for you to store stations. Each page can store 19 stations. Stations can be random stored on page 1-6. Page 7-9 are assigned to different band. Page 0 is edit page.

Select Page

- 2. Press your desired page number while P is flashing.

TUNING INTO A STATION

Manual Tuning



- 1. Press POWER button to turn on the unit.
- 2. Select desired band.
- 3. Set scan method to STEP by press SCAN button **9** till "STEP" appears in the display.
- 4. Press SCAN+ or SCAN- button repeatedly to tune into the desired station.

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The frequency changes in the channel steps shown below each time the button is pressed.

Page	Band	Step
0 - 6	FM SW MW	50K 5K 9K / 10K
7	FM	10K
8	MW	1K
9	SW	1K

Manual scan is suitable for weak signal stations.

Auto Scan Tuning



- 1. Press POWER button to turn on the unit.
- 2. Select desired band, select page from 1-6.
- 3. Set scan method to STEP by press SCAN button (9) till "STEP" appears in the display.

4. Hold down SCAN+ or SCAN-button for about 1 second, release when the frequency changes, the unit starts to tune into the stations automatically. When a station is tuned in, scanning stops and the tuned station is heard. Repeat above to go on scan.

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- Auto scan tuning on page 1-6, the frequency step is 100K for FM, 9K/10K for MW, and 5K for SW.
- Page 7、8、9 do not support auto scantuning.
- If the scanned station is not you want, repeatabove operation to skip the station and scan again.
- Press any button will stop scantuning.
- Scan tuning is more suitable for strong signal broadcasting, it may not stop if broadcast signals are weak.
- If tuning become slowly in a frequency range, trymanual tuning to see if there are some weak stations.

SPEED CHANGE TUNING



- 1. Press POWER button to turn on the unit.
- 2. Turn to Page 9.
- 3. Set scan method to STEP by press SCAN button **9** till "STEP" appears in the display.
- 4. Hold down SCAN+ or SCAN- button, frequency changes in the step of 1K, the scan speed is changed from slow to fast, when a strong signal is searched, signal strength indicator appears, the scan speed decrease, then the speed will increase again to continue auto scan.

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- Speed change tuning only can be used on page 9.
- Speed change tuning not only will increase the scan speed, but also will not miss the weak stations.

Direct Frequency Entry

Direct frequency entry makes it extremely easy to tune into a station that you knows its exact frequency.



- 1. Press POWER button to turn on the unit.
- 2. Select the desired band.
- 3. Press ENTER button $\, \mathbf{G} \,$, the frequency disappears

from the display for 6 seconds.

4. Press the number button with complete frequency, the unit will tune into the entered frequency.

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- You must go to next step in 6 seconds, otherwise the unit will exit direct entry mode.
- If the lastfrequency number is 0, you can press ENTER button to supersede input 0.

Example 1: Toenter FM89.80MKz,

Example 2: To enter SW6.255MHz,



- If a wrong number is entered, press EXIT button to clearit.
- If an invalid frequency is entered, "ERR" will flash in the display.
- Press EXIT button can exit from frequency entry immediately.

Quickly Input

Before manual scanor auto scan, you can use quickly input function to quickly go to a frequency range.

Example: The frequency range of FM is 70.00-108.00MHz, if you enter 100MHz, you can:

- 1. Select FM band.
- 2. Press ENTER button.
- 3. Press number 1, then pressENTER button, 100.00MHz will display.

Memory Scan Tuning



- 1. Set the scan method to MEM by press **()** till "MEM" appears in the display.
- 2. Press SCAN+ or SCAN- repeatedly to display the desired preset number.

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- If you remember the preset page and preset number clearly, you can press them directly to tune into the station.
- After the highestpreset number has been scanned, the unit will return to the smallestpreset number and scan again.
- The unit will circulated scan between page 1-6.

PRESET STATIONS

There are total 10 pages (Page 0-9) for you to preset stations. Up to 19 stations can be preset on each page. All preset stations are permanent store. Each page is assigned as:

Page 1 to 6: Random preset, no band limited

- Page 7 : For FM band only.
- Page 8: For MW band only.
- Page 9: For SW band only.
- Page 0: For ATS function, random preset.

Random Preset (On Page 1-6)



- 1. Turn on the unit.
- 2. Tune into a desired station by manual tuning, scan tuning or direct entry.
- 3. Press Page button (G), page indicator P will flash for 3 seconds, page number disappears for you to enter.

- 4. Press the desired number from 1-6 while P is flashing.
- 5. Press M/LOCK button (2), M flashes for 5 seconds.
- 6. Press a preset number from 1-19 to memorize the station. The corresponding number constant indicates in the display.

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• If a station is already stored, the new frequency with same preset number replaces the old one.

Double-digit Number Input

When you want to input a double digit number, press number 0 first, 1- appears in the display, then press the last number.



Band Preset (On Page 7-9)

Page 7、8、9 is assigned to different band. Page 7 is assigned to FM stations, page 8 for MW stations, and page 9 for SW stations.



- 1. Turn on the unit.
- 2. Press Page button **③**, page indicator P flashes 3 seconds, page number disappears for you to enter.
- 3. Press corresponding page number of each band.
- 4. Tune into a desired station by manual tuning, scan tuning or direct entry.
- 6. Press M/LOCK button **1**, indicator M flashes for 5 seconds, the preset number disappears for you to enter.
- 7. Press a preset number from 1-19 to memorize the station. The indicator M constantly display.

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ATS
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ATS Preset (On Page O)



- 1. Turn on the unit.
- 2. Press page button **(3)**, then press number 0 goes to page 0.
- 3. Select desired band.
- 4. Press SCAN button (9) till "STEP" appears in the display.
- 5. If you don't want to start scan from current frequency, press Enter button to input start frequency.
- 6. Check if there is already a preset number, press SCAN+ or SCAN- button to clear it, the scanned stations will be stored from no. 1, otherwise, the scanned stations will be preset after that number.
- 7. Hold down SCAN+ or SCAN- button for 1 second, ATS function runs. The unit begins to scan in ascending or descending order from current frequency. When tuning into a station, It will store on page 0 automatically. When 19 memories are full or scan back to beginning frequency, scan stops.

Repeat ATS

After a ATS operation, if the preset number is not full or some scanned stations are unnecessary, you can delete some stations, and repeat ATS operation.

- 1. Set the scan method to MEMO by press SCAN button till "MEM" appears in the display.
- 2. Delete the unnecessary stations by memory scan. After deleting, the unit will adjust the preset number automatically.
- 3. Press SCAN+/- to find the highest preset number.
- 4. Set the scan method to STEP by press SCAN button till "STEP" appears in the display.
- 5. Hold down SCAN+ or SCAN- to repeat ATS operation, till all stored stations are satisfied to you.

COPY FUNCTION

All stored stations on Page 0 can be copied to other page. If copy to page 7-9, please note the band must be constant.



- 1. Turn to Page 0, make sure there are stations stored.
- Press button P G , P will flash 3 seconds, page number "0" disappears.
- 3. While P is flashing, press number 0, 0 will flash for 3 seconds.
- 4. While 0 is flashing, press the page number you want to copy to.
- 5. Copy succeed.
- New stations copied from Page 0 will cover the old ones which preset on that page before.

DELET STATIONS



Delete Single Station

- 1. Turn on the unit.
- 2. Set the scan method to MEM by press SCAN button till "MEM" appears in the display.
- 3. Press SCAN+/ to select unnecessary stations.
- 4. Press DEL button (3), "DEL" appears in the display, and preset number flashes for 3 seconds.
- 5. Press DEL button again while the preset number is flashing, the stored station is deleted.

Delete Whole Page

- 1. Turn on the unit.
- 2. Press Pbutton and page number you want to delete.
- 3. Hold down DEL button for 1 second, "DEL" appears in the display, and page number flashes for 3 seconds.
- 4. Press DEL button again while page number is flashing, all the stations on this page will be delete.

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- On page 0, the preset number order will be adjusted automatically when a preset station is deleted.
- If a preset station on page1~9 is deleted, the deleted preset number is blank. It can be used on next preset.

RECEIVING SSB & CW



- 1. Turn on the unit.
- 2. Press P button **(3)**, P flashes for 3 seconds.
- 3. Press number 9 goes to page 9 while P is flashing.
- 4. Press W/N button (3), set it to N.
- 5. Press SSB button 20, SSB appears in the display.
- 6. Press SCAN button ${\ensuremath{\textcircled{0}}}$, set the scan method to STEP.
- 7. Press SCAN+ or SCAN- button to search for SSB signal.
- 8. Tune the SSB FINE Knob 20 slowly to have the best reception.

SET ALARM BY BEEP

When alarm indicator π constantly displays, alarm function runs. The unit will beep when the preset time reaches.

Set Beep Time



- 1. With the unit turned off, press ENTER button () thrice, the last setting time appears in the display. (If the beep time has not been set before, --:-- appears), A will flash for 6 seconds.
- Press number button to enter the desired beep time while *f* is flashing.
- 3. After setting, A constantly appears in the display, the unit returns to clock mode.
- 4. When the setting time reaches, the beeper will keep on beep for 60 seconds unless you press any button to stop it.

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- You have to go to the next step in 6 seconds, or the unit will exit from the beep setting and return to clock mode.
- The beep volume is not controlled by digit volume button.
- If the presettime is not changed or cancelled, the beeper beeps at the preset time everyday.
- If power is too weak, beep function does not work.
- The beep sound will cover the broadcast if the unit is on at beep time.
- If beep and auto turn on time is set as the same, the unit will turn on after beep.
- If the power source is disconnected, the preset beep time will be cancelled.
- If the earphone is connect with the unit, the beep function does not work.

Check Beep Time

When the unit is off, hold down EXIT button (2) about 0.5s,

flashes and the last preset beeptime displays, 3 seconds later, the unit returns to clock mode.

Cancel Beep Setting

In power off mode, press ENTER button O thrice, \clubsuit flashes, press EXIT button O while \clubsuit is flashing, beep setting is cancelled with \clubsuit disappears, the unit returns to clock mode.

AUTO TURN ON / OFF THE UNIT

Total three groups of different auto turn on / off time can be set in 24 hours. The band, frequency and volume are also can be set.

Set Auto Turn On Time



- 1. With the unit turned off, press ENTER button (3), "SET" displays for 2 seconds.
- 2. A. Press first setting button **(**), indicator **(**) flashes, and the last preset time appears.
 - B. Press second setting button (1), indicator (1) flashes, and the last preset time appears.
 - C. Press the third setting button **(**), indicator **(**) flashes, and the last preset time appears.

Press number button to input the desired auto turn on time, then the unit goes into frequency preset.

- 3. Press number button to input the desired frequency. (Press ENTER button to confirm the last preset frequency.), Then the unit goes into volume control mode.
- 4. Press VOLUME + or button to adjust the desired volume.
- 5. Press ENTER button, the unit enters to sleep time setting and
 is flashing. Press desired sleep time directly from 1 to 99 minutes.
- After above setting, the auto turn on indicator constantly displays, the unit will turn on at the preset time, frequency and volume, it will turn off when preset sleep time reaches.

Check Auto Turn On Time

With the unit turned off, press q (q or q) button, the preset time is displayed for 3 seconds.

Cancel Auto Turn On Time

With the unit turned off, press $\mathbf{4}$ ($\mathbf{4}$ or $\mathbf{4}$), $\mathbf{4}$ ($\mathbf{4}$ or $\mathbf{4}$) flashes, while it is flashing, press EXIT button, $\mathbf{4}$ ($\mathbf{4}$ or $\mathbf{4}$) is cleared from the display, the setting has been cancelled.

● The cancelled autoturn on time can be resumed by press ◀ (◀ or ◀) and ENTER button.

SET SLEEP TIME

User can set the sleep time from 1~99 minutes. The default setting is 99 minutes.

- 1. Press POWER button to turn on the unit.
 - a. Set sleep time: while the unit is on, default sleep time 99 and 😐 flashes for 2 seconds.
 - b. Reset the sleep time: afterturn on the unit, hold down EXIT button for 0.5 second, clock indicator & flashes, while it is flashing, press enter button to go into sleep set mode.
- 2. While 🛥 isflashing,
 - a. Press EXIT button will cancel the sleep function, 🛏 disappears.
 - b. Press ENTER button, -- appears.
- 3. Quickly press number button to set the desired sleep time from 1 to 99 minutes

For example: if your desired sleep time is 60 minutes, direct press number button 6 & 0, the unit will shut off 60 minutes later.



- When sleep time setting is over, 😐 constantly displays. The rest sleep time indicates in FM or MW band.
- If there is no further action to next step in 6 seconds, the unit will exit the sleep time setting, and default 99 minutes as sleep time.

LOCK FUNCTION

The lock function can be used to avoid any accidental operation when the unit is being carried or used. Hold down LOCK button **(P**) for 2 seconds till **--**⁰ appears in the display, lock function is activated, all buttons except LOCK button become inoperative.

Hold down LOCK button for 1 second to cancel lock function. -•• disappears from the display.



BACKLIGHT FUNCTION

There are 3 kinds of back light mode to select: normal, always-on and backlight off.

- 1. Normally, press any button in dark place will start up the backlight of the display and buttons. The backlight will turn off automatically if no further operation in 8 seconds.
- 2. When the backlight is illuminated, connect the AC adaptor will remain the illumination. Disconnect the AC adaptor, the backlight will off and return to normal mode.

Backlight consumes little battery power.

WIDE / NARROW BAND

Press AM: W/N button repeatedly to select wide band or narrow band when listening MW or SW broadcasting.

Wide band has a better tone reception than narrow band, but it is noisier than narrow band reception.

STEREO / MONO / BASS

- Stereo/ Mono: stereo is suitable for strong signal music broadcast, mono is suitable for weak signal and voice program.
- News / Music: push the switch to corresponding position when listen news or music.
- Bass: it is more suitable for strong signal stereo music broadcast. If you listening radio with speaker, keep the BASS function off.

AUTO RESET

If the unitoperates erratically, just remove the batteries or disconnect the AC adaptor for about 30 seconds, then insert the batteries or connect the AC adaptor, the unit will resume to normal operation.

Reset function will not erase all of the memories except the clock time and beep setting.

SIGNAL STRENGTH / FM STEREO

The unit has signal strength and FM stereo indicator. In MW and SW band, light 1.2.3. 4 on or off to indicate received signal strength. In FM band, light 1.2.3 indicates signal strength, light 4 indicates FM stereo



AUDIO OUTPUT

You can output the radio broadcasting by connecting the unit to external appliance with a connecting cable inserted into LINE OUT jack.

Adjusting the VOLUME+ or - on the radio, and news/music selection will effect the audio output.



LISTENING WITH EARPHONES

When listening to stereo reception, normally use earphone and setMONO/STEREO button to STEREO.

Speaker has MONO effect only.

Notes On Earphones

- Avoid using earphones at high volume, if you experience a ringing in your ears, reduce volume or stop using it.
- Shut down the radio before sleeping.
- Do not use earphones while driving or cycling, it can also be potentially dangerous to play your earphones at high volume while walking, especially at pedestrian crossing.

USING ANTENNA

FM Reception

Telescopic antenna functions as FM antenna, keep it extended and change its length and direction to find the position which gives the best reception.



MW Reception

Ferrite antenna inside the unit functions as MW antenna, it is strongly effected by the reception direction.

When listening to MW broadcast, rotate the unit to find the position which gives the best reception.



USING FOLDING STAND

Pull out the folding stand in rear panel, extending the telescopicantenna straight upward.



∢ 30 ▶

∢ 31 ▶

SW Reception

Telescopicantenna functions as SW antenna. Extending the antenna straight upward to get the best reception.



External Antenna



If FM or SW reception is too weak, switch Local /DX 29 to DX, then use a external antenna to improve reception.

Do not use external antenna during a thunder storm.

CAUTIONS

- Avoid exposure to temperature extremes, direct sunlight, moisture, sand, dust or mechanical shock.
- Should anything gowrong with the radio, please remove the batteries and have the unit checked by qualified personnel before operating it any further.
- Use only power sources specified in this manual.
- When the unit is not being used for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.
- The LCD displaymay become hard to see or slow down when using the unit at high temperatures (above 40°C) or at low temperatures (below 0°C). At room temperature, the display will return to its normal operating condition.

SPECIFICATIONS

1. Frequ	1. Frequency Range						
FM	7	0.00 - 108.0	о мн	Z			
MW	52	20 - 1710 KI	Hz				
0.11							
SW	SW 3.000 - 29.995 MHz						
90m	3.160 - 3.455	MHz	25m	11.510 - 12.155 MHz			
75m	3.860 - 4.055	MHz	22m	13.510 - 13.905 MHz			
60m	4.710 - 5.105	MHz	19m	15.010 - 15.705 MHz			
49m	5.910 - 6.255	MHz	16m	17.260 - 18.105 MHz			
41m	7.010 - 7.405	MHz	13m	21.410 - 21.955 MHz			
31m	9.170 - 9.995	MHz	11m	25.610 - 26.100 MHz			
3. Noise LimitSensitivity FM ≤ 10 ⊭V							
MW		nv/m					
SW) ⊬ ∨					
4.SWS	election V	Vide band 🍃	≥ 20d	B Narrow band ≥ 80dB			
5. Power Supply: Battery: 3 AA batteries External power: DC in 6V 300mA Recharing Time: 1-9 Hours							
6. Speaker: D66mm 7. External Earphone: D3.5mm							
8. Dimensions:Approx.143 X 88 X 28.5mm9. Mass:Approx.280g (excl. Battery)							