

# DRM Digital Receiver DR111

## Owner's Manual



NewsService  
*Journaline*<sup>®</sup>



**NewStar Electronics**

**[www.cdNSE.com](http://www.cdNSE.com)**

# TABLE OF CONTENTS

<b>IMPORTANT SAFETY INSTRUCTIONS</b> .....	1
<b>Getting Started</b> .....	3
Turn on Your Radio.....	5
Turn off Your Radio.....	5
Set .....	5
Clock.....	8
<b>Listening to Your Radio</b> .....	9
Switching between DRM, FM, AM and MUSIC.....	9
Manual Tuning – Tuning Knob.....	10
Manual Tuning – with Specific Frequency.....	10
Auto Tuning.....	11
Adjust Volume.....	11
Preset (Save Stations).....	11
Preset (Using Saved Stations).....	12
Display Additional Information (FM RDS).....	12
AM Bandwidth Adjusting.....	13
<b>DRM Functions</b> .....	14
DRM Additional Service (Journaline).....	14
DRM Programme Recording.....	15
DRM Service Information (Expert Mode).....	16
DRM Reception Logging.....	16
DRM AFS (Alternative Frequency Switching).....	17
<b>Music Playback</b> .....	19
<b>Specifications</b> .....	21
<b>Warranty</b> .....	23



Thank you for choosing our product. Please read this manual carefully before operating the unit and keep it for future reference.

## ***IMPORTANT SAFETY INSTRUCTIONS***

No flame sources should be placed on either the AC adaptor or the unit.

Do not use the unit immediately after moving it from a cold to a warm place, as condensation problems may result. Use of the unit in moderate climates is recommended.

Do not cover the product vents. Ensure a minimum distance of 5cm around the unit for sufficient ventilation.

Do not use the unit near water. Do not expose the unit to dripping or splashing water. Do not place objects filled with liquids on the unit.

Under the effect of static electricity, the product may malfunction and require the user to reset it by disconnecting the power.

Unplug the power adaptor from the wall socket if it will not be used for any extended period of time.

## **WARNING**

The AC adaptor is used as the disconnect device. It shall remain readily operable and should not be obstructed during intended use.

Never use an AC adaptor that is damaged and route the power lead in a safe manner. Be certain it is not subjected to pulling or pinching.

Damage to hearing can occur with long-term exposure to high volume when using headphones.

## **CLEANING**

Before cleaning, disconnect the unit from the main power supply. Do not use any solvents that may damage plastic. Use a clean soft and dust free cloth.

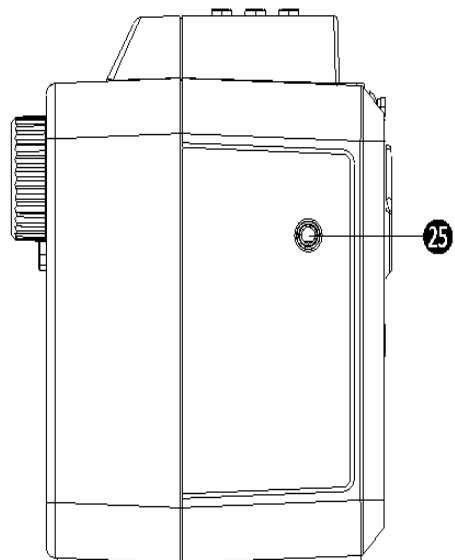
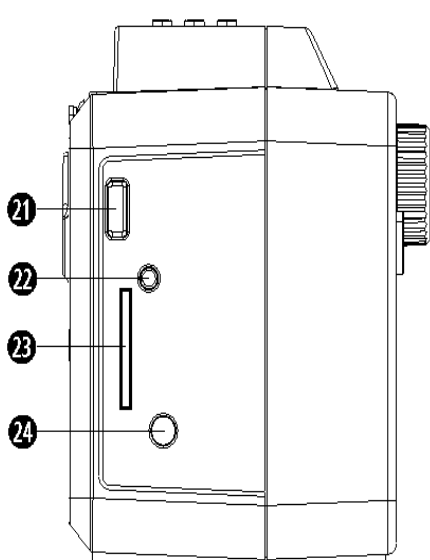
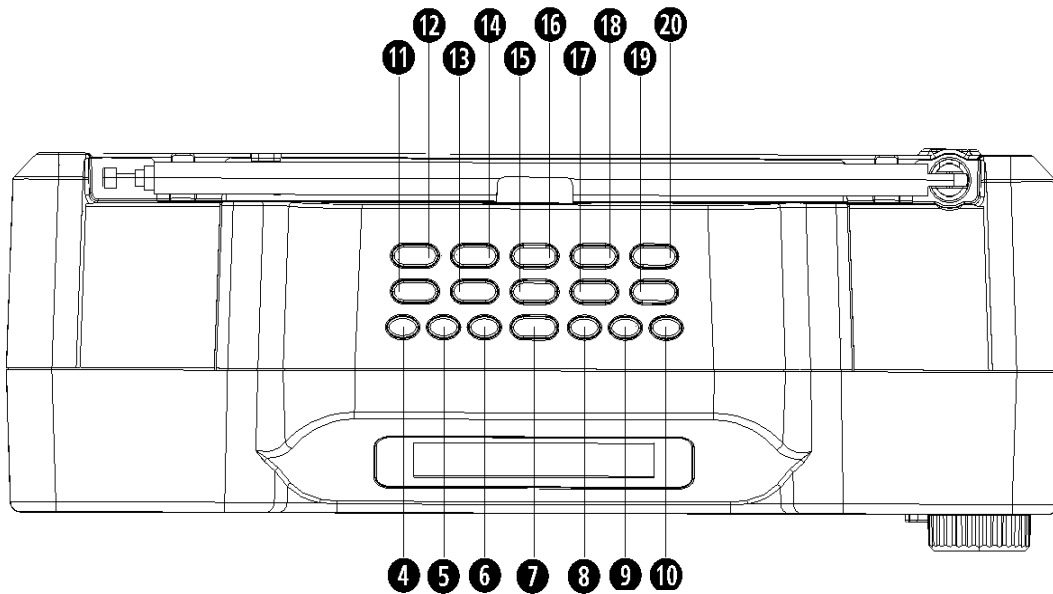
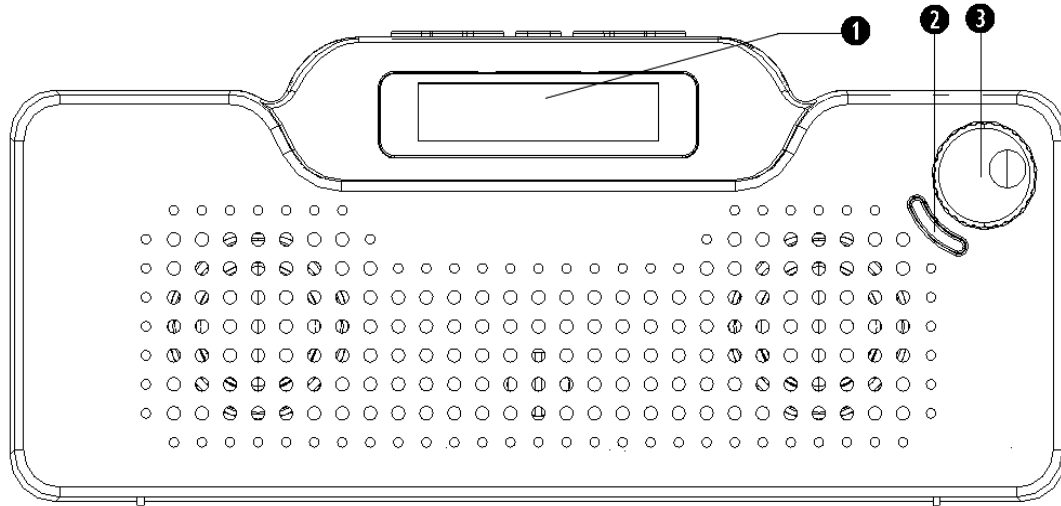
## **UNPACKING YOUR UNIT**

When unpacking your new radio, be sure to remove all the accessories and documentation. The items below are included with your radio.

- Radio Receiver
- AC to DC Adaptor
- Users Manual

# Getting Started

## Location of Controls



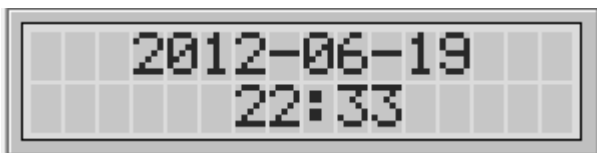
1. Display
2. Fast/Slow Tuning & AFS
3. Volume/Tuning Knob
4. Preset Station 1
5. Preset Station 2
6. Preset Station 3
7. Down Arrow
8. Preset Station 4
9. Preset Station 5
10. Preset Station 6
11. Set
12. StdBy (Standby)
13. Left Arrow (Auto Down)
14. DRM
15. Info (Information)
16. Up Arrow
17. Right Arrow (Auto UP)
18. AM/FM
19. Clock
20. Music
21. USB Port
22. Earphone Jack
23. SD Card
24. DC Power Jack
25. External Antenna Jack

## Turn on Your Radio

- Use the provided adaptor ONLY. Use of other adaptors may result in unit damage or performance degradation. The adaptor is for 200-240V ONLY. (110V for USA model)
- Plug adaptor into the wall socket and connect the DC jack to the socket on the left side of unit. The radio will turn on and tune to the station previous monitored.

## Turn off Your Radio

Pressing the StdBy button will place the radio into standby mode, turn off the LCD back-light and display the clock and date. Pressing StdBy again will turn the unit back on.



- When the unit is not going to be used for long time, disconnect the AC adaptor from the wall outlet.

## Set (Date, Time, Alarm, Back Light, Sleep Timer, MW Step, Factory Setting, Language, Version)

When the radio is turned on, press the SET button.

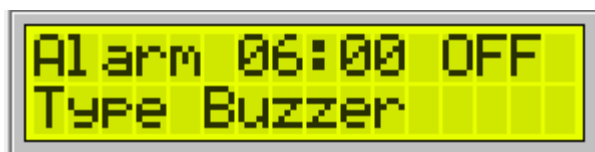


The display will switch menu settings in this order:  
Date > Time > Alarm > Sleep Timer > Backlight > MW  
Step > Factory Reset > Language >  
Software/Hardware version

- Date: Use |<< and >>| to select, ▲ and ▼ to set date



- Time: use |<< and >>| to select field, ▲ and ▼ to adjust time
- Alarm: use |<< and >>| to select field, ▲ and ▼ to change alarm time
- Alarm Type: use ▲ and ▼ to set Buzzer or Radio.
  - Buzzer – Press any key to turn off, or it will turn off in 3 minutes automatically.
  - Radio – It will start with last radio station. Press Stdbby to turn it off. Or radio will turn off in 30 minutes.



- Backlight time-out: Press ▲ or ▼ button to select the desired time-out duration for the LCD backlight. Options are Always OFF, 30 seconds, 1 minute, 3 minutes and Always ON.



- Sleep Timer: use |<< and >>| to select field, press ▲ and ▼ to turn Sleep Timer on or off. If Sleep Timer is turned on, the radio will be turned off in specified time.



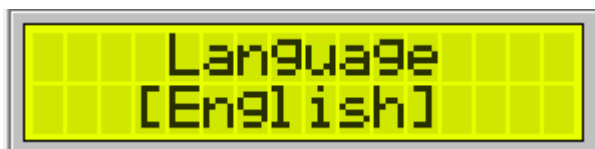
- Medium Wave Step: use ▲ and ▼ to change: 9 or 10 KHz



- Factory Setting: use ▲ and ▼ to change, set the option to [ON]. This will delete all the custom settings and presets, and will restore the receiver to its original factory condition.



- Language: use ▲ and ▼ to switch between English and Mongolian.

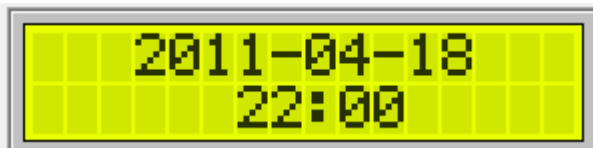


- Version: Show firmware and hardware version.



## **Clock**

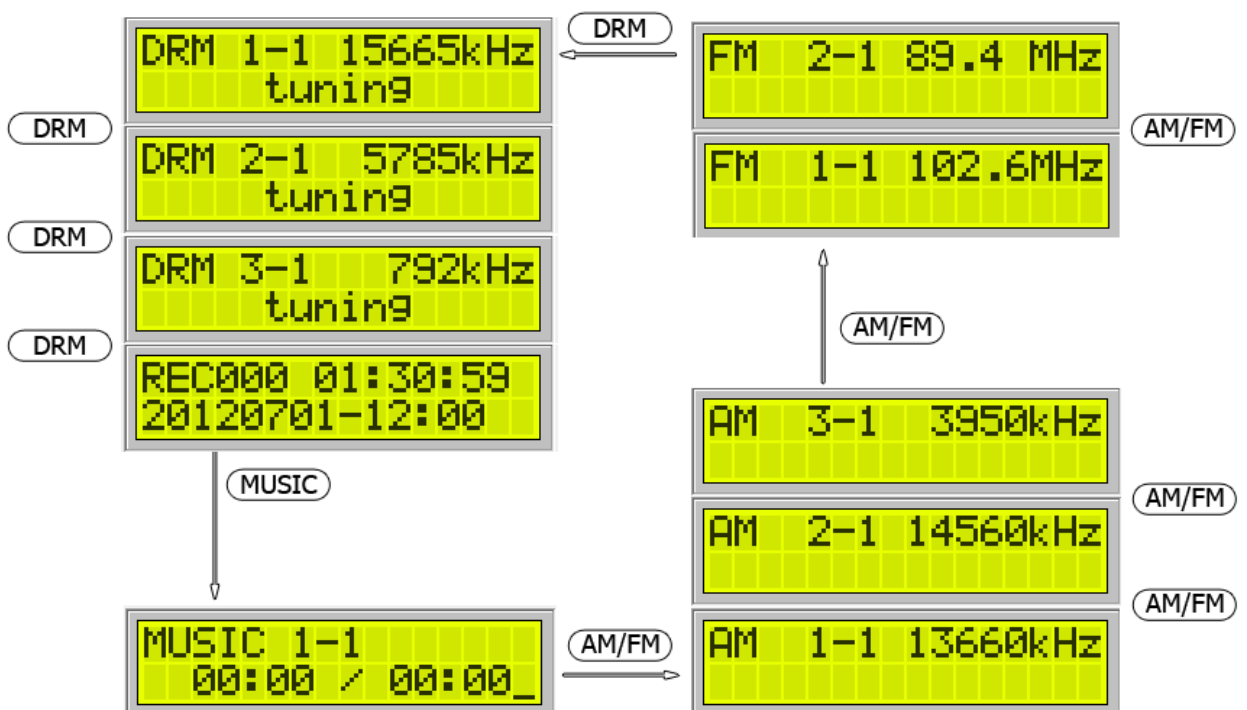
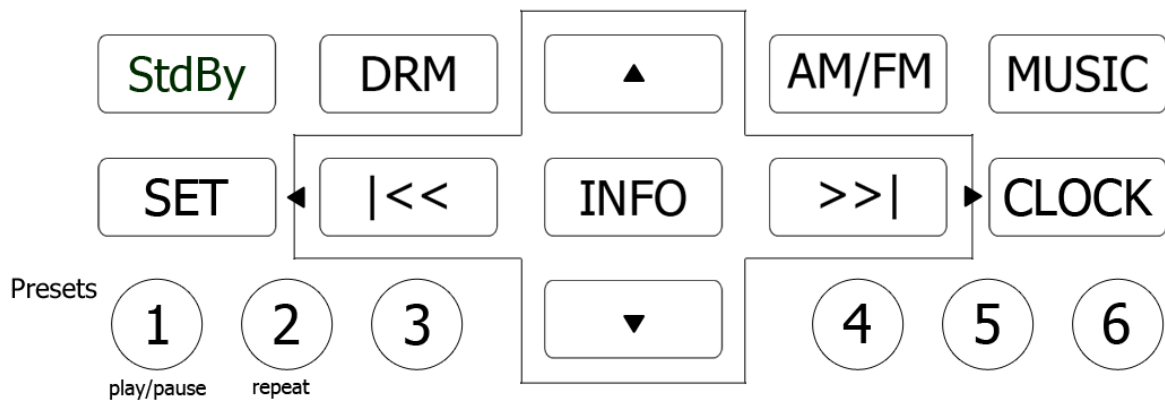
Press CLOCK button, the clock will display and last for 2 seconds, then it will revert to the previous mode.



# Listening to Your Radio

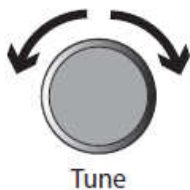
## Switching between DRM, FM, AM and MUSIC

Press one of the following mode buttons to activate the following modes : DRM, FM/AM and MUSIC.



## Manual Tuning – Tuning Knob

- Select the desired mode by pressing DRM, or AM/FM.
- Press the Rotary Knob. Turn it clockwise to increase the frequency or turn it counterclockwise to decrease the frequency.
- Press (AFS) FAST/SLOW button to switch between fast and slow tuning modes.
- Press the knob again to leave the manual tuning mode.



```
DRM Tune [fast]
( 15665kHz )
```

```
DRM 1-1 15665kHz
tuning
```

## Manual Tuning – with Specific Frequency

Select the desired mode by pressing DRM, or AM/FM.  
Press the Rotary Knob.

```
DRM Tune [slow]
13000 kHz
```

To enter the tuning mode, press the INFO button. The cursor will blink, indicating the focused digit range.

```
DRM Tune [slow]
13000 kHz
```

## Manually Input Frequency:

Turn the Rotary Knob to change to desired frequency  
OR Press |<< and >>| to move the cursor to the  
desired  
frequency range, then ▲ or ▼ to change the  
frequency .



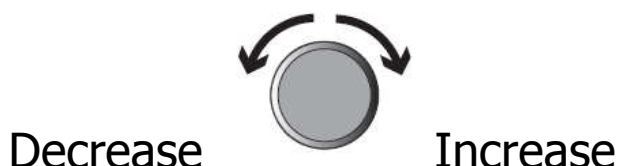
Tuning: Press INFO button or Rotary Knob when  
finished.



## Auto Tuning

- Press |<< and hold for 1.5 seconds for auto scan  
Down.
- Press >>| and hold for 1.5 seconds for auto scan  
Up.

## Adjust Volume



## Preset (Save Stations)

- Supports 48 saved stations: DRM & AM have 3

preset groups; FM has 2 preset groups. Each group has 6 presets.

- Save Presets: Tune to desired station then press & hold preset button for 2 seconds to assign the current frequency to that preset.
- Show Presets: press the INFO key



## **Preset (Using Saved Stations)**

- Select Desired Band: press DRM, or FM/AM
  - Select Presets: press button 1- 6

## **Display Additional Information (FM RDS)**

Some FM signals carry additional Radio Data System (RDS) info. In FM mode, press the INFO button, your radio will switch between three displays:

Main-->Frequency Information-->RDS-->Radio Text

If the RDS is not available on the current FM frequency, only the frequency information screen will be displayed.



## AM Bandwidth Adjusting

- In AM Mode, press CLOCK for 2 seconds



- Then you can use ▲ or ▼ to adjust AM bandwidth
- After done, press CLOCK to confirm



# DRM Functions

## DRM Additional Services (Journaline)

The DR111 is capable of receiving both Audio and Journaline service. In DRM mode, press the INFO button. This will switch between the following three screens:

Main-->Station Information-->Additional Services list

FRI Sport Report  
Text Message..

DRM 2-4 5415kHz  
T\_■■■

>PRG2:BBC Music  
PRG3:Journaline

DRM 2-4 5415kHz  
T\_■■■

Press the INFO button, then you can use ▲ or ▼ button to select the additional services list if it is available.

>PRG2:BBC Music  
PRG3:Journaline

PRG2:BBC Music  
>PRG3:Journaline

A right angle bracket (cursor) indicates the current selected item, press >>| button to enter the selected item, and in Journaline press |<< going back to the previous level.

For example, move the cursor to the PRG2:BBC Music in figure 20 and press >>| this will activate and switch to the additional audio program, to go back to the primary service, simply press INFO two times and select from an additional services list.

To view Journaline information, move the cursor to Journaline, and press >>| button to select it. Use ▲ or ▼, >>| and |<< buttons to navigate in the Journaline reader. Depending on the menu depth, press |<< button several times or press INFO button to exit from Journaline reader.



\*BBC Journaline\*  
>Sports

**\*\*\* Journaline technology is licensed by Fraunhofer IIS**

## **DRM Programme Recording**

In DRM mode, insert the SD card into the radio, then press and hold the CLOCK button for 1.5 seconds to start DRM program recording.



[R]Sky Radio  
txt ms9...

To stop recording, press and hold the CLOCK button again for 1.5 seconds .

By pressing the DRM button, you can switch between DRM presets and DRM recordings. The DRM recordings will display after the DRM preset groups.

Use |<< and >>| to jump to the previous or next recording.



Notes:

- The maximum recording time is limited only by SD card capacity.
- The DRM recordings can be found on your SD card in the DRM\_Record folder.
- [R] means recording in progress and [P] means playback.
- **Before pulling out the SD card, you must stop recording by pressing StdBy button, otherwise the SD card might be damaged.**

## DRM Service Information(Expert Mode)

In DRM mode, press and hold the INFO button for 1.5 seconds,



then use ▲ or ▼ to scroll between DRM service information such as SNR, MER, channel parameter and the service component of DRM multiplex. Press

the INFO key again to exit the Service Information mode.

## DRM Reception Logging

The DRM reception logging function can record important technical data during DRM reception. To enable it, create a folder with name "drm\_log" (without quotes) on the root directory of the SD card, the receiver will create reception logs into this folder automatically. Reception logs can be viewed with DRM log utilities such as "DRM-Log Plotter" or "DRMCalc".

## DRM AFS (Alternative Frequency Switching)

In DRM mode, if the DRM signal is too weak or no longer available:

- AFS Automatic begins to check the next available frequency. If the next frequency is available, the DR111 will automatically switch to that frequency. If that frequency is unavailable within 20 seconds, the DR111 will check for frequency #2 and so on.



1 DRM 13000kHz  
checking



2 DRM 13000kHz  
checking

- AFS Manual Change: in AFS mode, you can manual select the designed AFS frequency by pressing the

AFS button. (This is the same button as FAST/SLOW Tuning located on the lower left side of VOLUME tuning knob)



# Music Playback

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Insert an SD card or USB drive into the radio, and press the MUSIC button. This will start music playback.



Music1-1 01'39  
HeyJude.mp3

In the music mode, press the INFO button. This will switch between the following three displays:

Main-->artist/title    Information-->album/year/genre information



TITLE  
ARTIST



ALBUM  
GENRE                      YEAR

Press preset button 1 to play or pause the music,



Music1-1 01'39  
Paused

Press preset button 2 to switch between repeat modes (off, one, all and folder). The message will disappear after two seconds.



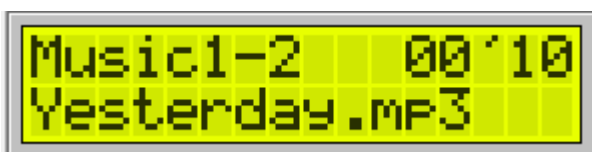
Music1-1 01'39  
Repeat Folder

Next or Previous Song: In music mode, press |<< or >>| button to jump to the previous or next song.



Music1-2 00'00  
Yesterday.MP3

Fast Forward or Backward: Press and hold |<< or >>| button while a song is playing to reverse or forward a track in 10 second intervals.



Music1-2 00'10  
Yesterday.MP3

Press ▲ or ▼ button to switch between folders on the SD card or USB drive.



Music2-3 01'17  
YouMustLoveMe.MP

# ***Specifications***

## **RADIO FUNCTIONS**

- DRM / AM / FM Stereo
- DRM Journaline Service
- DRM Recording
- DRM Logging and Expert Mode
- DRM Text Message
- DRM Alternative Frequency Switching (AFS)
- FM Radio Data System (RDS)
- Auto Tuning

## **DISPLAY**

- LCD
- Display Area (mm / inch): 64 x 15 / 2.52 x 0.6
- Display Type: 16 Characters \* 2 Lines
- Green LED Back Light

## **FEATURE**

- Memory Presets: 48
- Stereo: Speakers with headphone output
- Music Playback from USB Flash Drive and SD Card
- Mutiple Menu Languages

## **TUNER**

- FM Frequencies: 87.5 MHz - 108 MHz
- DRM Frequencies: SW: 2.3-27 MHz; MW: 522-1720 kHz; LW: 150-288 kHz
- AM Frequencies: SW: 2.3-27 MHz; MW: 522-1720 kHz; LW: 150-288 kHz
- Adjustable Tuning Speed
- Adjustable MW Step (9/10kHz)



- Adjustable AM bandwidth settings

## CLOCK

- Real Time
- Radio Alarm
- Buzzer Alarm
- Sleep Timer

## OUTPUT DEVICES

- Speaker Size ( mm / inch ): 50 / 1.96
- Impedance: 8 ohms

## OUTPUT POWER (TYPICAL)

- AC / DC (Speaker): 0.5W
- Headphones: 5+5 mW

## POWER REQUIRED

- DC in: 5V DC 1000mA

## PERIPHERALS

- DC in
- 3.5mm Headphone Jack
- USB
- SD Card ( support SDHC cards up to 32GB capacity)
- 1/8<sup>th</sup> inch External Antenna Jack (50 ohm)

## ACCESSORIES

- 110/220V AC Adapter

## DIMENSIONS

- Width (mm/inch): 277 / 10.9
- Height (mm/inch): 119 / 4.69
- Depth (mm/inch): 89 / 3.5
- Weight (g & lb. oz): 850 / 29.9oz

# ***Warranty***

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Please keep your receipt as proof of purchase. NewStar Electronics warrants the end user that this product will be free from defects in materials or workmanship in the course of normal use for one year from the original date of purchase. This guarantee covers defects due to manufacturing or design faults. The warranty DOES NOT apply to accidental damage, negligence, excessive voltage (including lightning, static electricity or power surges) or any modifications or repairs not authorized by us or that the case has been removed, or general wear & tear.

**Warranty Registration:** Conditions of a valid warranty are that you MUST register your purchase either through postal mail to us within three months of purchase, or via online registration [www.cdnse.com/register](http://www.cdnse.com/register).

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Chengdu, China 611731

If you have further questions or need technical support, please contact us via email: [infoquery@cdnse.com](mailto:infoquery@cdnse.com)