R-Box User's Guide

R·BOX PEARL



1. Safety Information

Please read and understand all instructions before using this product. If the damage is caused by failure to follow the instructions, your warranty does not apply.

1.1 Warning

To reduce the risk of electric shock, DO NOT remove the cover (or back).

DO NOT attempt to repair the product – doing so could lead to the risk of injury, damage to the product. To reduce the risk of fire or electric shock, keep this product away from exposed direct sunlight, naked flames or heat, large amounts of moisture, dust, and sand.

FCC Note (for U.S.A)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on.

You are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.
- This class B digital product meets all requirements of the Canadian Interference-Causing Equipment Regulations.

1.2 Precautions

Important Safety Instructions - Read these operating instructions carefully before using the unit. Follow all the safety instructions listed below. Keep these operating instructions handy for future reference.

- 1.2.1 Read these instructions.
- 1.2.2 Keep these instructions.

- 1.2.3 Heed all warnings.
- 1.2.4 Follow all instructions.
- 1.2.5 DO NOT use this apparatus near water.
- 1.2.6 DO NOT clean with any chemical detergent. Clean only with a dry cloth.
- 1.2.7 DO NOT block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 1.2.8 DO NOT install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- 1.2.9 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where it exits the apparatus.
- 1.2.10 Only use attachments/accessories specified by the manufacturer.
- 1.2.11 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.
- 1.2.12 Plug this device into a power strip or UPS with built-in surge protection to avoid damage during lightning storms.
- 1.2.13 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the 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.

1.3 Handling Cautions

- 1.3.1 DO NOT expose this apparatus to dripping or splashing. Do not put objects filled with liquids, such as vases on the apparatus.
- 1.3.2 To turn this apparatus off completely, you must pull the power plug out of the wall socket. Consequently, the power plug must be easily and readily accessible at all times.
- 1.3.3 DO NOT plug multiple electric devices into the same wall socket. Overloading a socket can cause it to overheat, resulting in a fire.
- 1.3.4 Before connecting other components to this player, be sure to turn them off.
- 1.3.5 If the product makes an abnormal noise or produces a burning smell or smoke, turn off the power switch immediately and disconnect the power plug from the wall outlet. Then, contact the nearest customer service center for technical assistance. Do not use the product. Using the product as it is may cause a fire or an electric shock.

2. Introduction

2.1 Package Contents

R-Box (white)

User's Guide

HDMI Cable

IR Remote Controller (IR RC)

Optional Remote Controller

2.4G wireless Remote Controller

USB wire/wireless Mouse & Keyboard

Power Adapter, Input: AC100 ~ 240V, 50/60Hz, Output: 5V, 2A

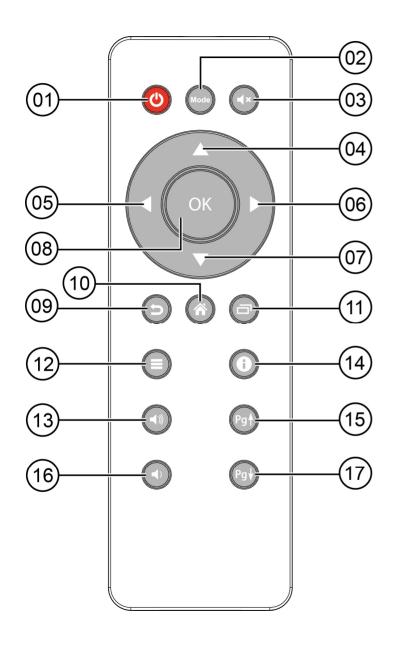
2.2 R-Box Features

- Quad Core A53, 2.0GHz, 1GB RAM, 8GB EMMC ROM
- Powered by Android 5.1 OS
- Built in browser and support virtual private network access
- RJ45 10/100M Ethernet interface
- Supports 4k2k video local media playback from SD card or USB HDD
- Built in 802.11b/g/n AC Wi-Fi with interior antenna inside
- Wi-Fi frequency range is 2400-2497GHz
- Rj45 wired internet connection
- HDMI video output, connect to HDTV for HD video playback
- 2 external USB ports, supports external USB devices
- Supports USB mouse and keyboard operation
- Supports simple IR remote control with mouse function
- Supports Micro SD card
- Supports Google Chrome browser
- App Installer for application installation from USB/SD card and Google Play Store

2.3 Exterior Features



2.4 Remote Controller



- [01] Power
- [02] Mode
- [03] Mute
- [04] Up
- [05] Left
- [06] Right
- [15] Page up
- [07] Down
- [16] Volume -
- [08] Enter
- [17] Page down
- [09] Exit
- [10] Home
- [11] Switch
- [12] Menu
- [13] Volume +
- [14] Notification

2.5 Initial Setup and Connections

Place your R-Box on a flat platform and make the following connections:

- Use the AV cable to connect to your stereo amplifier.
- If using Ethernet network connectivity, plug the R-Box via Ethernet cable into your network router/modem, or alternately you may use Wi-Fi connectivity.
- To configure the settings, connect your R-Box to a monitor and a USB mouse is recommended as well to expedite the configuration.
- Plug into electrical power outlet. When you plug it in, the device will turn on and you will see the following boot-time logo screen and subsequent splash video:





R-Box Pearl Splash Screen

When the boot video finishes and the operating system initializes, the following screen will appear:

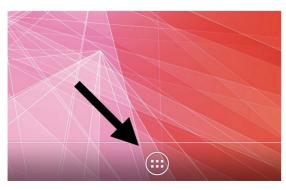


2.6 Basic Navigation

To navigate on the R-Box, you can use the remote control device, or a USB mouse.

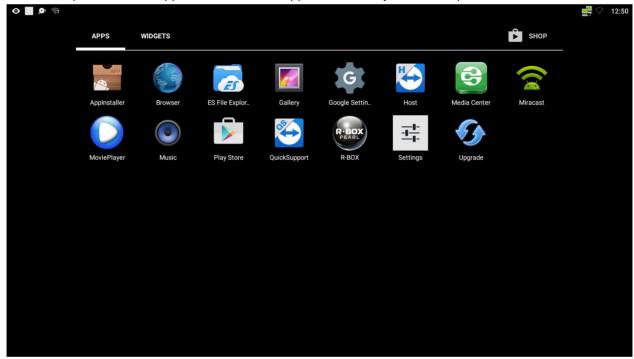
With the remote control, use the navigation arrows (4 directions), OK, EXIT, and Menu keys to select the options. The option selected will be highlighted and confirmed by pressing the OK key. The EXIT key is the backwards looping arrow button on the bottom left side of the navigation arrow control.

With a mouse, left-click on something to go into an option, then right-click to exit the option. Now click on the small icon at the bottom of the Splash Screen to proceed to the Desktop Screen:



2.7 Desktop Screen

The desktop screen then appears with various application and system icons present:



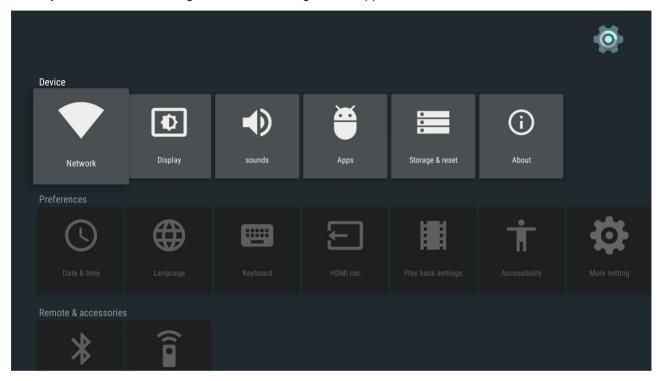
Configure Essential Settings

This User's Guide documents the essential functions you will typically need to utilize the R-Box to play music. To configure your settings, click on the Settings Icon:



3. Settings Screen & Systems Configuration

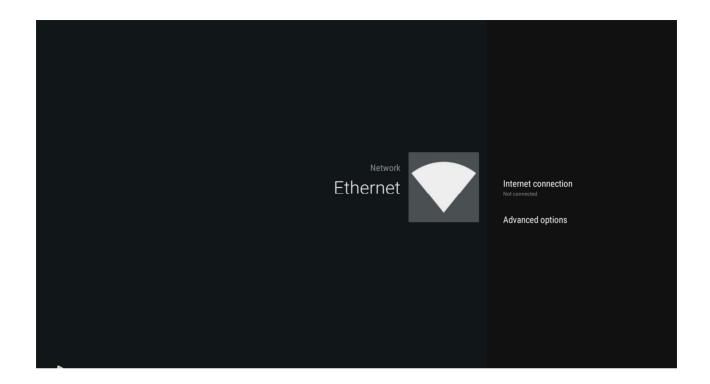
When you first click the Settings icon, the following screen appears:



3.1 Ethernet Configuration

Connect R-Box and your network router or modem by RJ45 network cable.

Click on the Network icon (from the previous picture), then click Ethernet, then click on Ethernet Device, then "ON" and the R-Box will connect to the network automatically using DHCP if your network supports DHCP. Or alternately you can configure a static IP number and other related network settings.



3.2 WiFi Configuration

As an alternate to using Ethernet connectivity, you can use the wireless Wi-Fi option. The R-Box automatically scans for available Wi-Fi hotspot connections when you select "ON".

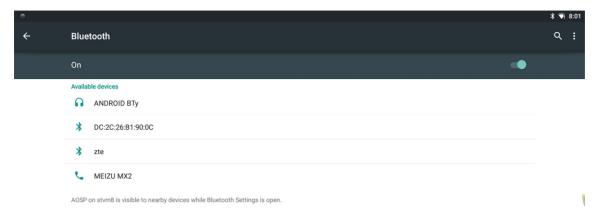
From the available list of Wi-Fi hotspots, click on one. If you connect to a secured Wi-Fi network, enter the necessary security password and then it will establish a connection.

Note that if you perform a factory reset, you will need to re-enter your Wi-Fi password to connect again.

3.3 Bluetooth

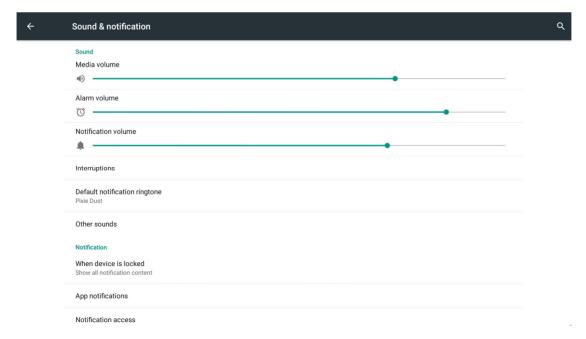
To have your R-Box connect to a wireless speaker system, from Desktop Screen go into Settings, then click "More Settings" twice. Then click the Bluetooth option and turn it on by sliding the toggle switch in the screen's

upper-right corner to the right position. After doing this, the R-Box will be visible to nearby devices that support Bluetooth connectivity.



3.4 Sound & notification

To configure the volume and other sound-related settings, from the Desktop screen click on Settings, then "More Settings" twice, then click on "Sound & Notifications". The following screen appears, wherein you can configure the media volume settings.



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4. R-Box App

To commence playing music, from the desktop click on the R-Box Pearl icon:



The R-Box app will open up to its Main Screen.

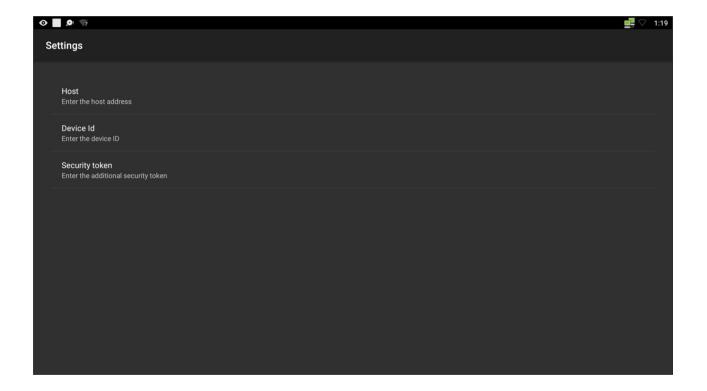
R-Box Main Screen



4.1 R-Box App Settings

Before you can commence playing music, you must configure your User Account at the www.RadioSparx.com web site to set the Device ID that is assigned to your R-Box. You can find your R-Box's Device ID in two different ways, by either looking at the sticker on the bottom of your R-Box, or by looking at the Settings for the R-Box app.

To access the settings, click on the three dots in the upper-right corner and then click Settings. The Settings Screen will appear as follows:



4.2 Device ID Configuration

Click on the Device ID field. If there is a value entered there, then surf to the RadioSparx web site, login to your account, which will take you to the Account screen. From there, go into the Player Settings option.

On the Player Settings screen for your User Account, change the Player Type field to "R-Box" and in the Device ID field, enter the Device ID from your R-Box.

4.3 Optional Security Token

If you wish to have additional security, you can also click on the Security Token option to "Get New" and it will assign a new 4-character security token. If you do this, make sure to also enter the assigned security token on the R-Box Settings Screen's Security Token option. If you have a security token configured for your user account, you must also make sure to configure it in the R-Box. Failure to do so will cause the R-Box to not authenticate properly and you will not be able to play music until you either enter the Security Token into the R-Box settings, or alternately clear the Security Token from the Player Settings screen in your User Account's Player Settings screen at the RadioSparx site.

4.4 Music Playback

After configuring the Device ID from the R-Box into your RadioSparx User Account's Player Settings screen, you are now ready to commence music playback. Exit the Settings Screen to arrive back at the R-Box App's Main Screen.

Click the PLAY button and the R-Box app will connect to the RadioSparx web server system and commence playing the Pop Vocal station by default.

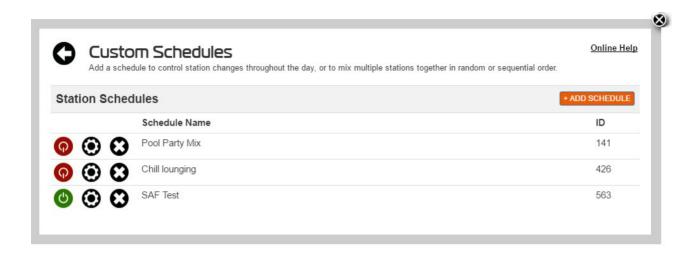
You can control what music the R-Box will play entirely by configuring a Custom Schedule for your User account at the RadioSparx website. The next chapter explains how to configure a Custom Schedule.

5. Custom Schedule Configuration

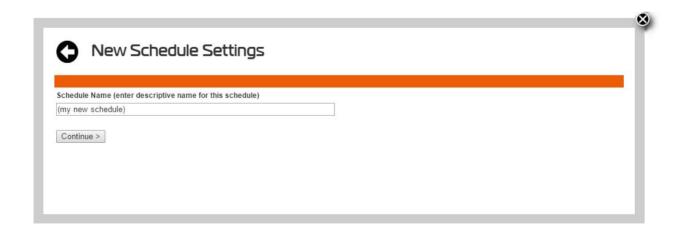
The R-Box Pearl supports both of the modes that a Custom Schedule can operate in:

- Streaming in Real-Time
- Store-and-Forward Mode

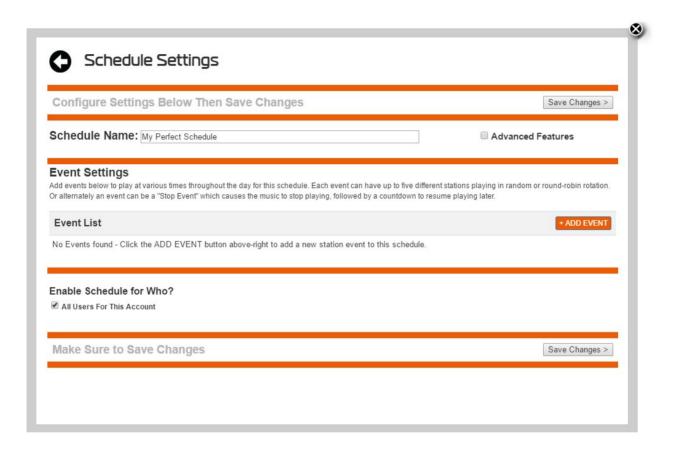
To access the Custom Schedules feature, click on ACCOUNT on the top menu of the RadioSparx site, then click on CUSTOM SCHEDULES. A list of any custom schedules that exist for your User Account will appear:



To add a new schedule, click the ADD SCHEDULE button at the top right of the table. The following screen appears:



Enter a descriptive name for the custom schedule and click CONTINUE. Then the Custom Schedule Settings screen appears:

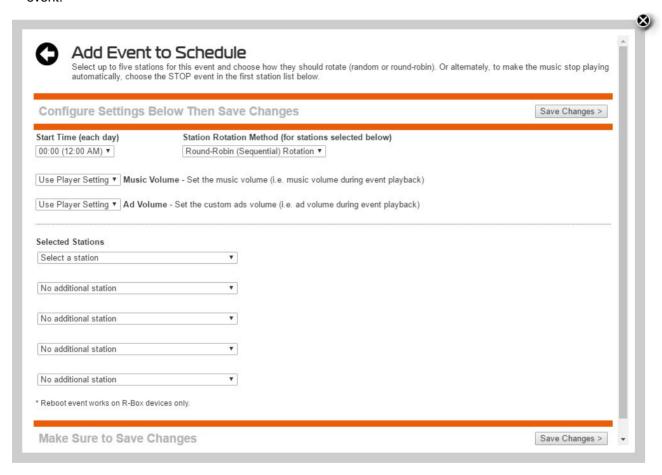


5.1 Streaming in Real-Time is the Default Mode

By default, a newly added schedule will play in live-streaming mode, meaning that as each new track plays on the R-Box, it is actually being downloaded from the RadioSparx server in real-time. The Store-and-Forward mode is an advanced configuration which will be covered in more detail below.

5.2 Events Control What Music Will Play

To configure exactly which music will play, click on the +ADD EVENT button. This will bring up a new screen, the "Add Event to Schedule" screen where you can configure the stations that will play for the event:



For each event you add to a custom schedule, you can configure the following settings:

- 1. Start Time What time each day the event starts
- 2. Station Rotation Method For the stations you add to the event, this controls whether they play in random order, or round-robin order (sequentially)

- 3. Music Volume Set the music volume for this event this lets you configure the music to play softer during quitter times of day (e.g. morning time) and louder during busier times of day (e.g. noon to five p.m.)
- 4. Ad Volume This lets you adjust the volume of ads relative to the music volume, in case you want the ads to play louder or softer than the music.
- 5. Selected Stations You can add up to five different stations to each event. From the five different listboxes, pick one or more stations that you want to play during this scheduled event.

Note that in lieu of configuring stations, you can also configure either a "Stop event" or a "Reboot event".

Stop Event - The stop event will cause music to stop playing at the configured time and countdown to the next event that has stations configured for it. This is convenient to configure to occur at the end of the night if you don't want music to play overnight. At the appointed time, the R-Box will stop playing and go into a sleep-mode countdown until the next event arrives.

Reboot Event – The reboot event causes the R-Box to reboot at the designated time. This can be convenient to configure to run at night time after the end of the day, before a Stop Event causes a countdown. Or alternately you can have the reboot trigger in the morning after the end of a countdown, or at any time in the middle of the night, to keep the R-Box's operations "refreshed" each night.

After configuring the settings for this event, click SAVE CHANGES and you will be returned to the Schedule Settings screen.

5.3 Add Multiple Events to One Schedule

Feel free to add more than one event if you want the music to change throughout the day to play different stations or sets of stations at different times throughout the day. It's not uncommon to configure mellow-ish music for the morning. A few great stations for this are the following:

- Easy Listening
- Classical Lite
- Oxygen
- Classical + Jazz
- Pop Easy Listening
- Chillout

Then a bit later in the day, coming up on lunch time, you can pick up the pace with stations such as these:

- Pop Vocals
- Pop Up-Tempo
- Motown
- Indy Pop Vocals
- Retail Cool Mix
- Shopping Moods
- International Jet Set

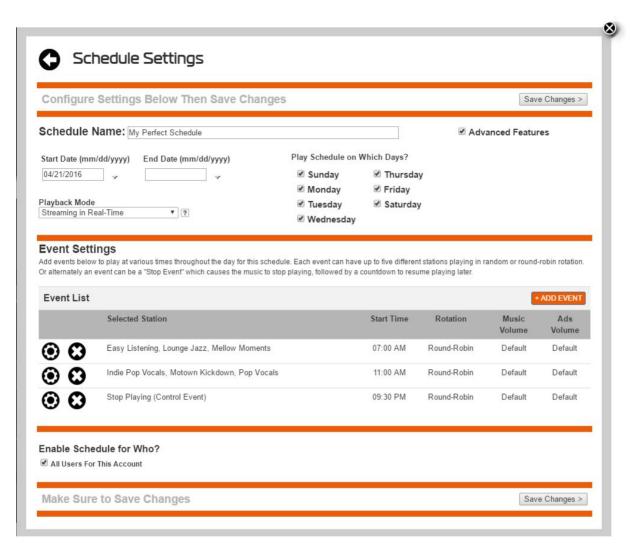
There's over 160 stations to choose from, so have fun, explore the diverse music options!!

5.4 Who Will This Schedule Play For?

Look at the bottom of the screen, in the "Enable Schedule for Who?" section. By default, the schedule will be enabled for your account. If your account was a master account for a multi-user account, you would see multiple different users there that you could activate this schedule for. In this case, select either the "All Users for This Account" option, or otherwise select the various different users you wish for this current schedule to play for.

6. Store-and-Forward Configuration

On the Schedule Settings screen, to the right of the Schedule Name field, you will see an Advanced Features checkbox. When you check that, the screen expands and various new advanced options display giving you additional control over when and how the schedule operates:



The

Advanced Features settings include the following:

- Start Date This field lets you configure an automatic start date for when this schedule should take
 effect. There's a corresponding End Date field.
- Play Schedule on Which Days These settings let you configure to have this schedule play only on certain days of the week. With this control you can create two schedules that are active

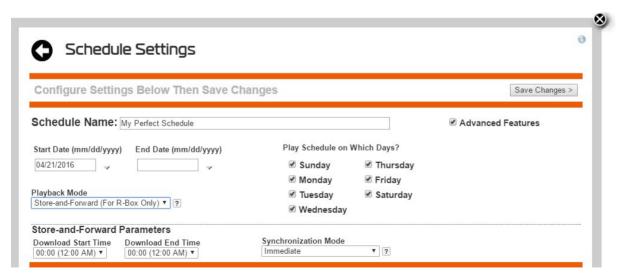
simultaneously which can play on different days of the week, alternating days for example, or have distinct weekday and weekend schedules.

Playback Mode – This option lets you choose either Streaming in Real-Time or Store-and-Forward.

Streaming in Real-Time – This mode causes the R-Box device to download and play each new track from the web server in real time. This mode works great as long as you have plenty of spare network bandwidth and a reliable internet connection that is up during the daytime without fail.

Store-and-Forward – This mode causes the R-Box device to download tracks in batch mode in the background, store them on the local Flash-RAM based hard drive inside the R-Box, and playback the tracks directly from the locally stored file set. This has the advantage that you can configure it to download the tracks at nighttime for example, and playback during the day without having to download tracks during the daytime. This helps to ensure maximum uptime during the daytime and any Internet outage will not disrupt the music playback.

When you select the Playback Mode field to be Store-and-Forward, the screen expands again and a few more new fields are displayed:



The new parameters are these:

- Download Start Time and End Time During each day, this controls when the background music file downloading should start. If you leave this at the default setting (midnight), then the music files can download at any time during the day. If you have plenty of network bandwidth, then it is recommended to leave this at default values. Otherwise configure a window in the middle of the night where there is little or no other activity happening, so the download happens at nighttime and frees up your full Internet bandwidth for normal business use during the daytime.
- Synchronization Mode If this is set to Immediate, then when the schedule is first activated, on the first day, the tracks will start downloading immediately so that there will be music files present on the R-Box's internal storage available for the player to playback starting immediately. Alternately, if you want the music to strictly download only during the Download Start Time-End Time range, including on the very first day (i.e. right now) then set it to "During Download Time Range" and then the first download to the R-Box will only commence once the Download Start Time arrives.

Make sure to click SAVE CHANGES if you make any changes on the Schedule Settings screen to lock in your changes.

By default, the R-Box plays in live-streaming mode (i.e. Streaming in Real-Time) and will play the Pop Vocal station until you configure some events for your custom schedule and change its settings to operate in Store-and-Forward mode.

7. Trouble Shooting/FAQ

7.1 No Picture

Refer to your monitor's user's manual for how to select the correct video input channel.

7.2 USB Content cannot be read

- . The format of USB storage device is not supported
- . The supported memory size is 32G maximum.
- . Make sure that this player supports these files.

7.3 Remote Controller does not respond to button presses

Make sure that batteries have enough power.

7.4 The firmware updating is not complete after a long time

If you update the firmware over the online service, it may take a long time to download the firmware update files from the server. To save your time, update the firmware through the SD card.

8. Repairs

If you contact us to repair your R-Box Pearl, we will first attempt to remote control the device to troubleshoot any common problems. If that is not successful, or the device won't boot up, or we cannot remote control it successfully, you will generally need to ship the device back to us for closer review.

Depending on what the problem is, you may be charged a repair fee, or a replacement fee, or we may repair or replace it at our own cost. It really depends on what is wrong, and whose fault the problem is, as to whether you will be charged or we will handle the resolution at our own cost.

If your R-Box experiences problems, please contact our Tech Support Group via the CONTACT option at the top of the RadioSparx website and we will work with you to try to restore music service at the soonest possible time.

9. Specifications

CPU Quad Core ARM Cortex-A53 CPU up to @ 2.0GHz
GPU Mali 450 GPU @ 750MHz+(DVFS)

RAM 1GB DDR3
ROM 8GB EMMC
OS Android 5.1 OS
USB USB2.0 x2

HDMI V2.0

DC Input 5.0V-2A
SD Slot Max: 32G
Video Output HDMI/CVBS
Audio Output HDMI/RCA

IR receiver

LAN RJ45 10/100M Ethernet interface

WiFi IEEE 802.11 B/G/N AC 2.4G (5.8G Optional)

Bluetooth

Audio Decoder Low power Media CPU with DSP audio processing

Supports MP3,AAC,WMA,RM,FLAC,Ogg and programmable with7.1/5.1

down-mixing

Video/Picture H.265 HEVC MP-10@L5.0 up to 4K X 2K@60fps

Decoder H.264 AVC HP@L5.1 up to 4K X 2K@60fps

H.264 MVC up to 1080P@60fps

MPEG-1 MP/HL up to 1080P@60fps MPEG-2 MP/HL up to 1080P@60fps MPEG-4 ASP@L5 up to 1080P@60fps WMV/VC-1 SP/MP/AP up to 1080P@60fps

RealVideo 8/9/10 up to 1080P@60fps

Multiple language and multiple format sub-title video support

MJPEG and JPEG unlimited pixel resolution decoding

Supports .mkv/.wmv/.mpg/.mpeg/.dat/.avi/.mov/.iso/.mp4/.rm/.jpg files formats

Size 82X 82X 19mm

Net Weight 159g

10. Trademark Notices



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