RXT Series

Wall Mount
RXT-4WM • RXT-8WM • RXT-10WM

Desktop
RXT-8D • RXT-10D

VESA Mount
RXT-10VS • RXT-15VS • RXT-21VS

ReAX™ Control Touchscreen Servers

TABLE OF CONTENTS

Technology Overview

Introduction to RXT

The RXT Series is a stand-alone touchscreen control system built on the ReAX™ operating system. This Linux and Android based OS has been engineered from the ground up to provide a robust and flexible control system platform, based on Aurora's years of experience in the control industry.

As with all Aurora control systems, the RXT is a web-based control system. Custom programming and GUIs can be created with our free ReAX™ Core Studio AI software. With the RXT Series built-in web server, it allows virtually any device with a web browser to display the GUI and control the system. Examples include PC browsers, dedicated touch panels like the Aurora RXT series tablets, smart phones and more.

The flexible architecture allow the RXT to be used as a full standalone controller, an expansion controller, or a hybrid of the two. This allows for a distributed control network – place control ports right where they are needed in your system rather than long cable runs from a central location.

RXT wall mount versions have a full complement of LAN, RS-232, relay, I/O, and IR ports for controlling external devices. In addition to network control and access to the GUI and configuration web pages, the LAN port is also capable of power over Ethernet (PoE), eliminating the need for an additional power supply.

Quick Start

1) Power unit using PoE (802.3af min) Ethernet switch or injector.
2) Note the **[IP Address]** of the unit from the kiosk screen.
3) In a web browser, navigate to http://[IP Address]/setup.
4) Log into the device using Username: **admin** and Password: **last 8 digits of the serial number.**
5) Set up the device as needed using the GUI, including setting the IP address to fit your needs.
6) Use Aurora's Core Studio to design a custom interface for your application.

Features

	RXT-4WM	RXT-8WM	RXT-10WM	RXT-8D	RXT-10D	RXT-10-VS	RXT-15-VS	RXT-21-VS
Diagonal Dim	4" (102mm)	8" (203mm)	10.1" (257mm)	8" (203mm)	10" (254mm)	10.1" (257mm)	15.6" (396mm)	21.5" (546mm)
Resolution	480x480	1280x800	1280x800	1280x800	1280x800	1280x800	1920x1080	1920x1080
Processor	Dual Core w/ Linux™			Six Core Cortex 1.8GHz w/ Linux		Six Core Cortex 1.8GHz w/ Linux		
RAM	1GB DDR3			2GB		4GB DDR3		
Storage/Flash	8GB			16G		32GB eMMC Flash		
SD Slot	-	-	-	✓	✓	✓	✓	✓
Engine	ReAX Core on Android 10			ReAX Core on Android 10		ReAX Core on Android 10		
Audio Decode	MP3/WMA/AAC			MP3/WMA/AAC		MP3/WMA/AAC		
Microphone	Stereo Digital			-	-			
Speaker	1 Watt					2 Watt (2)	3 Watt (2)	3 Watt (2)
Audio Out	3.5mm TRS			✓	✓	✓	✓	✓
Dante Audio	✓	✓	✓	-	-	-	-	-
Video Decode	1080p MPEG-1/2/4, H.263, H.264, H.265			4K MPEG-1/2/4, H.263, H.264, H.265		H.265, VP8, RV, WMV, AVS, H.263. MPEG4, etc.		
HDMI Out	-	-	-	✓	✓	✓	✓	✓
Camera	-	-	-	5M/P Front Camera		-	-	-
NFC	✓	✓	✓	✓	✓	-	-	-
USB	USB Type-C	USB Type-C	USB Type-C	USB OTG, USB 2.0, USB Serial		USB Type-C, USB 3.0		
Serial	(2) RS-232	(2) RS-232	(2) RS-232	-	-	-	-	-
Digital I/O	(2)	(2)	(2)	-	-	-	-	-
Relay	(2)	(2)	(2)	-	-	-	-	-
Proximity Sense	✓	✓	✓	-	-	-	-	-
Ambient Light Sense	✓	✓	✓					
Ambient LED	RGB	RGB	RGB	-	-	-	-	-
LAN	(1) 1G			(1) 1G		(1) 1G		
Wi-Fi	-	-	-	802.11b/g/n		2.4GHz, 5GHz		
PoE	15.4W (PoE)			15.4W (PoE)		15.4W (PoE)	15.4W (PoE+)	32W (PoE++)
Power Adapter	-	-	-	12VDC Included		12VDC Optional		
Mounting	Wall	Wall	Wall	Desktop	Desktop	VESA	VESA	VESA

Hardware

Safety Instructions

Please review the following safety precautions. If this is the first time using this model, then read this manual before installing or using the product. If the product is not functioning properly, please contact your local dealer or Aurora for further instructions.

The lightning symbol in the triangle is used to alert you to the presence of dangerous voltage inside the product that may be sufficient to constitute a risk of electric shock to anyone opening the case. It is also used to indicate improper installation or handling of the product that could damage the electrical system in the product or in other equipment attached to the product.

The exclamation point in the triangle is used to alert you to important operating and maintenance instructions. Failure to follow these instructions could result in injury to you or damage to the product.

Be careful with electricity:

- **Power Outlet:** To prevent electric shock, be sure the electrical plug used on the product power cord matches the electrical outlet used to supply power to the Aurora product. Use the power adapter and power connection cables designed for this unit.
- **Power Cord:** Be sure the power cord is routed so that it will not be stepped on or pinched by heavy items.
- **Lightning:** For protection from lightning or when the product is left unattended for an extended period, disconnect it from the power source.

Also follow these precautions:

- **Ventilation:** Do not block ventilation slots, if applicable, on the product, or place any heavy object on top of it. Blocking airflow could cause damage. Arrange components so that air can flow freely. Ensure that there is adequate ventilation if the product is placed in a stand or cabinet. Put the product in a properly ventilated area, away from direct sunlight or any source of heat.
- **Overheating:** Avoid stacking the Aurora product on top of a hot component, such as a power amplifier.
- **Risk of Fire:** Do not place unit on top of any easily combustible material, such as carpet or fabric.
- **Proper Connections:** Be sure all cables and equipment are connected to the unit as described in this manual.
- **Object Entry:** To avoid electric shock, never stick anything in the slots on the case, or remove the cover.
- **Water Exposure:** To reduce the risk of fire or electric shock, do not expose to rain or moisture.
- **Cleaning:** Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- **ESD:** Handle this unit with proper ESC care. Failure to do so can result in failure.

FCC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two (2) conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

Trademarks

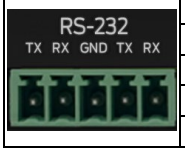
All trademarks in this document are the properties of their respective owners.

RXT-4WM Rear Panel Features

① **LAN** – 10/100/1000 Mbps Ethernet control interface. PoE (802.3at Type 1) interface for powering unit.

② **USB Type-C** – Supports HID and storage devices

③ **RS-232** – RS-232 serial connection which can be configured and addressed via a ReAX control program.



Signal Label	Signal
TX	CH1 Transmit
RX	CH1 Receive
GND	Signal Ground
TX	CH2 Transmit
RX	CH2 Receive

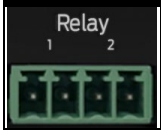
④ **IR** – Ports for IR control which can be configured and addressed via a ReAX control program.

Signal Label	Signal
1	CH1
GND	Signal Ground
2	CH2

⑤ **Digital I/O** – General Purpose I/O. The function of the GPIO pins can be configured in the Digital I/O Settings section of the RXT Setup menus.

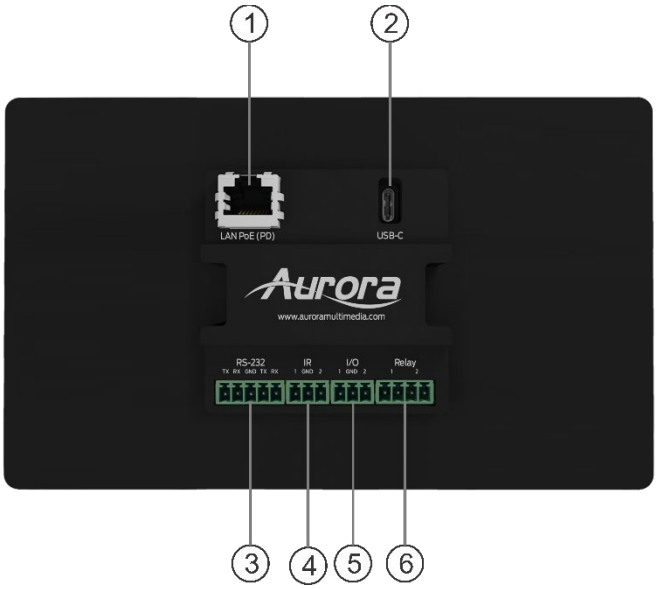
Signal Label	Signal
1	CH1
GND	Signal Ground
2	CH2

⑥ **Relay** – Relay connections for external control which can be configured and addressed via a ReAX control program.



Signal Label	Signal
1	CH1
2	CH2

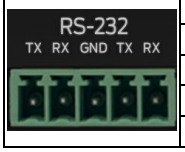
RXT-8WM/10WM Rear Panel Features



① **LAN** – 10/100/1000 Mbps Ethernet control interface. PoE (802.3at Type 1) interface for powering unit.

② **USB Type-C** – Supports HID and storage devices

③ **RS-232** – RS-232 serial connection which can be configured and addressed via a ReAX control program.



Signal Label	Signal
TX	CH1 Transmit
RX	CH1 Receive
GND	Signal Ground
TX	CH2 Transmit
RX	CH2 Receive

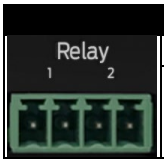
④ **IR** – Ports for IR control which can be configured and addressed via a ReAX control program.

Signal Label	Signal
1	CH1
GND	Signal Ground
2	CH2

⑤ **Digital I/O** – General Purpose I/O. The function of the GPIO pins can be configured in the Digital I/O Settings section of the RXT Setup menus.

Signal Label	Signal
1	CH1
GND	Signal Ground
2	CH2

⑥ **Relay** – Relay connections for external control which can be configured and addressed via a ReAX control program.



Signal Label	Signal
1	CH1
2	CH2

RXT-8-D Rear Panel Features

① **12 VDC input** – 12VDC, 10W, center positive power Input. Provides alternate power source to PoE. Can be used simultaneously with PoE for redundant power.

② **Serial Port** – Requires a USB to serial dongle (optional accessory).

③ **USB** – Standard USB 2.0. Can be used for HID, Mass Storage, etc.

④ **Line Out** – Unbalanced, TRS, stereo output.

⑤ **USB Type-C** – USB OTG only.

⑥ **MicroSD Card** – Provides additional storage capability up to 32GB.

⑦ **LAN** – 10/100/1000 Mbps Ethernet control interface. PoE (15W) interface for powering unit.

RXT-10-D Rear Panel Features

① **LAN** – 10/100/1000 Mbps Ethernet control interface. PoE (15W) interface for powering unit.

② **Serial Port** – Requires a USB to serial dongle (optional accessory).

③ **USB Slave** – Reserved

④ ⑤ **USB** – Standard USB 2.0. Can be used for HID, Mass Storage, etc.

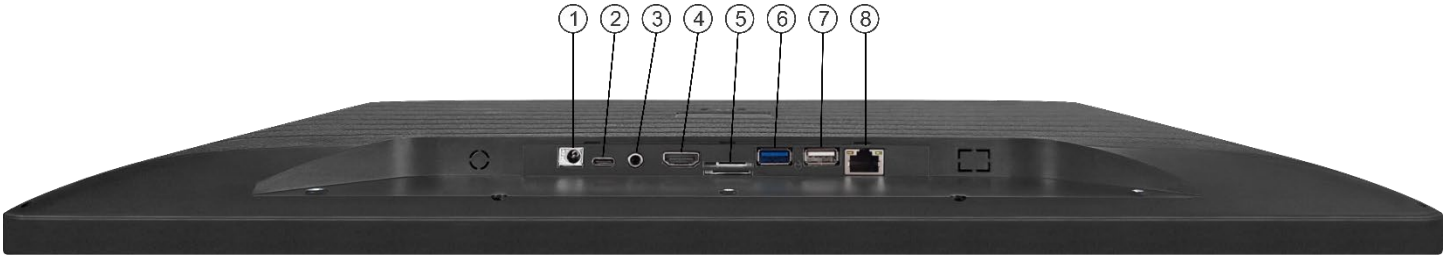
⑥ **Line Out** – Unbalanced, TRS, stereo output.

⑦ **MicroSD Card** – Provides additional storage capability up to 32GB.

⑧ **HDMI Out** – HDMI 1.4 mini output mirrors display content.

⑨ **12 VDC input** – 12VDC, 10W, center positive power Input. Provides alternate power source to PoE. Can be used simultaneously with PoE for redundant power.

RXT-VS Rear Panel Features



① **12 VDC input** – 12VDC, 10W, center positive power Input.

② **USB Type-C** –

③ **Line Out** – Unbalanced, TRS, stereo output.

④ **HDMI Out** – HDMI 1.4 output mirrors display content.

⑤ **MicroSD Card** – Provides additional storage capability up to 32GB.

⑥ **USB 3.0** – High speed USB 3.0. Can be used for HID, Mass Storage, etc.

⑦ **USB 2.0** – Standard USB 2.0. Can be used for HID, Mass Storage, etc.

⑧ **LAN** – 10/100 Mbps Ethernet control interface.

Device Setup

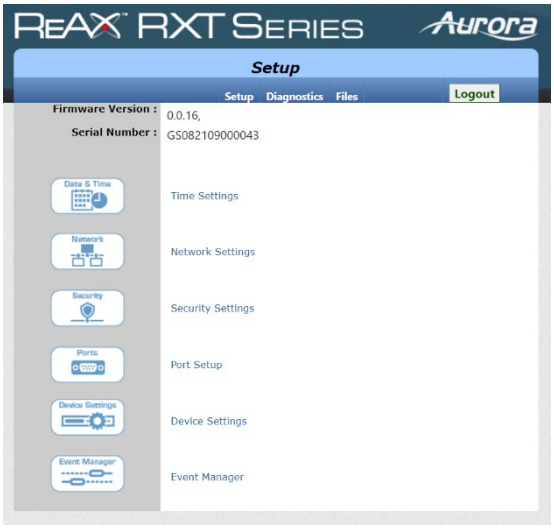
To enter the Device Setup page, navigate in a web browser to *http://**[IP Address]**/setup* where **[IP Address]** is the IP address of the device. This will open a page on the device requesting a username and password.

Assuming the username and password has not yet been changed, the username is 'admin', and the password will be the last 8 digits of the unit serial number which can be found on a serial number sticker affixed to the device.

Once the password has been accepted the screen to the right will appear providing a choice of three menus.

Setup

The Device setup menu provides six sub menu options for selection. Across the top of the menu screen are the same three navigation options as the initial screen – Setup, Diagnostics and Files. Selecting these will take you to the same menus as the initial screen and are provided for convenience.



Logout: Logs the current user out of the RXT device.

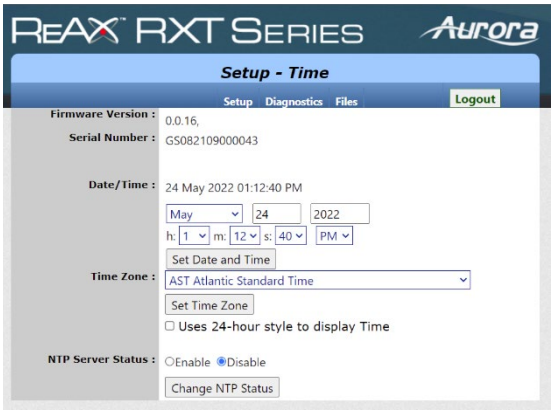
Firmware Version: Quick reference to the current firmware installed on the RXT device.

Serial Number: Quick reference to the Serial number of the RXT device.

Menu Items: Click one of the listed items to open a more specific settings menu. These menus are described below.

Time Settings

The Time Settings page sets parameters related to the date and time for the internal clock of the RXT device.



Date/Time: Enter the current date and time using the provided boxes and then apply the settings by clicking the 'Set Date and Time' Button.

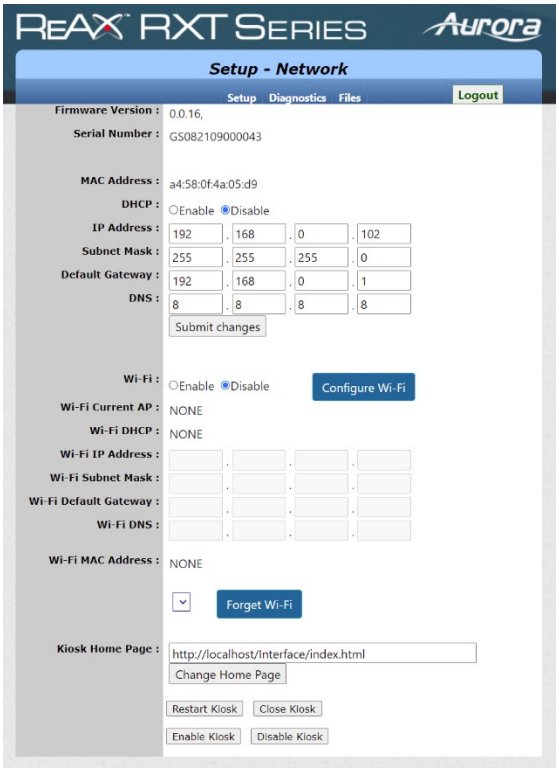
Time Zone: Sets the current time zone of the RXT device. Select desired time zone from the drop-down list and click the 'Set Time Zone' button to apply.

Uses 24-hour style to display Time: Check this box to display time on the RXT device using 24-hour formatting.

NTP Server Status: Enables or disables the use of an NTP server to automatically set the date and time. Makes the selection with the radio buttons and click the 'Change NTP Status' button to apply.

Network Settings

The Network Settings page sets parameters related to the network configuration of the RXT device.



MAC Address: Displays the MAC address of the LAN interface of the RXT device.

DHCP: Enables or disables the use of DHCP to acquire the IP Address, Subnet Mask, Default Gateway, and DNS. If disable, those fields must be entered manually. Click the 'Submit Changes' button to apply.

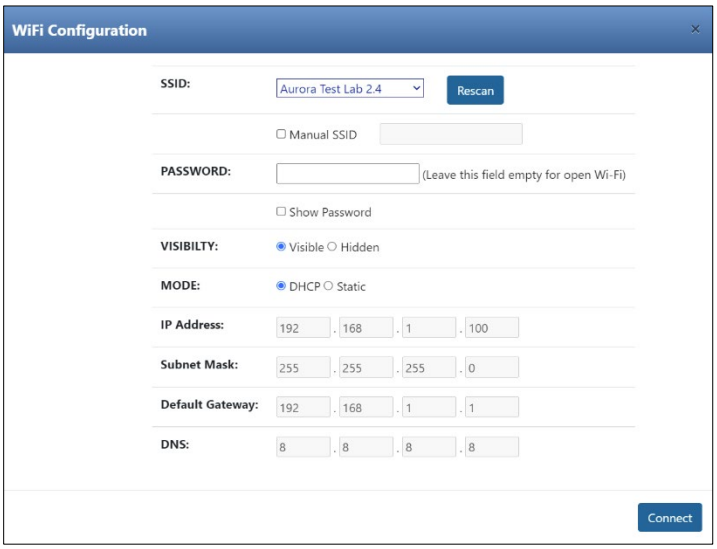
IP Address: When DHCP is set to 'Disable', sets the static IP Address of the RXT device. Click the 'Submit Changes' button to apply.

Subnet Mask: When DHCP is set to 'Disable', sets the static Subnet Mask of the RXT device. Click the 'Submit Changes' button to apply.

Default Gateway: When DHCP is set to 'Disable', sets the static Default Gateway of the RXT device. Click the 'Submit Changes' button to apply.

DNS: When DHCP is set to 'Disable', sets the static DNS of the RXT device. Click the 'Submit Changes' button to apply.

Wi-Fi: Enables or disables the Wi-Fi connection of the RXT device. When enabled, click the Configure Wi-Fi button to configure Wi-Fi settings.



- **SSID:** Select the SSID of the Wi-Fi network you wish to join. Click the 'Rescan' button to refresh the list.
- **Manual SSID:** If this box is checked, enter the SSID in the box provided. This setting is useful for connecting to SSDI that are hidden.
- **PASSWORD:** Enter the password for the selected Wi-Fi network.
- **Show Password:** Check this box to see the password.
- **VISIBILITY:** Select Visible or Hidden to determine whether the RXT device is discoverable on the Wi-Fi network.
- **MODE:** Determines whether the IP Address will be served dynamically via DHCP or manually set as static.
- **IP Address:** When MODE is set to 'Static', sets the static IP Address of the Wi-Fi interface.
- **Subnet Mask:** When MODE is set to 'Static', sets the static Subnet Mask of the Wi-Fi interface.
- **Default Gateway:** When MODE is set to 'Static', sets the static Default Gateway of the Wi-Fi interface.

- **DNS:** When MODE is set to 'Static', sets the static DNS of the Wi-Fi interface.
- **Connect:** Saves all setting and attempts to connect to the selected Wi-Fi network.

Wi-Fi MAC Address: If Wi-Fi is Enabled, displays the MAC address of the Wi-Fi Interface.

Forget Wi-Fi: Click this button to erase Wi-Fi settings for the selected SSID.

Kiosk Home Page: Sets the default page for the Kiosk. This must point to the Control Panel Name property found in the Core Studio Project. This will typically be the same as the name of the interface (*.ci) file of the Core Studio project. Use the format http://localhost/**[CP Name]**/ where **[CP Name]** is the Control Panel Name property in the Core Studio project. By default, this is 'Interface'. Be sure to end the URL with a '/'. Click 'Change Home Page' button to apply.

Restart Kiosk: Click to restart the Kiosk. If the Kiosk is already open, this will close the Kiosk and then reopen it.

Close Kiosk: Click to shut down the Kiosk. The Kiosk can be opened again using the Restart Kiosk button.

Enable Kiosk: Click to enable the Kiosk on power up of the RXT device. By default, the Kiosk is Enabled.

Disable Kiosk: Click to disable the Kiosk on power up of the RXT device. By default, the Kiosk is Enabled.

Security Settings

The security settings page is used to change the administrative password of the RXT Device.

Admin Password: Sets the administrative password. Fill in the 'Old password', 'New password' and 'Confirm new password' and then click the 'Change PW' button to apply.

Port Setup

The Port Settings page is used to configure the serial ports on the RXT device.

: Click this button to jump to the Serial Port Diagnostics page.

Refresh: Refreshes the page with the current settings of the serial port.

Baud: Set the desired baud rate of the serial port. Click 'Save Port Settings' to apply.

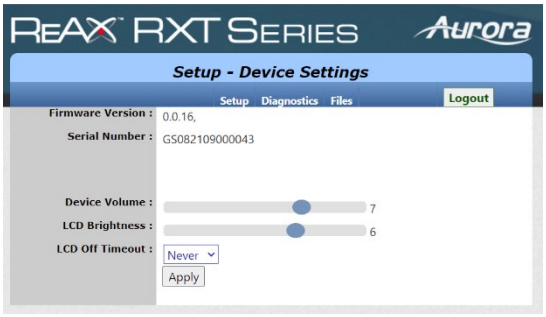
Parity: Set the desired parity of the serial port. Click 'Save Port Settings' to apply.

Data Bits: Set the desired data bits of the serial port. Click 'Save Port Settings' to apply.

Stop Bits: Set the desired stop bits of the serial port. Click 'Save Port Settings' to apply.

Handshaking: Set the desired handshaking of the serial port. Click 'Save Port Settings' to apply.

Device Settings



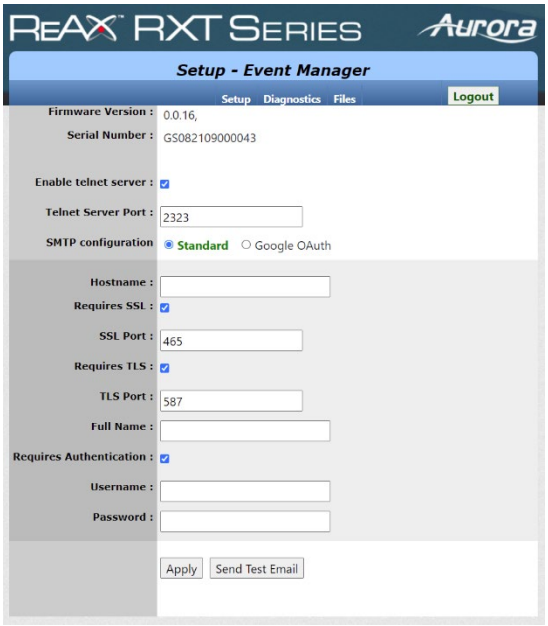
The Device Settings page is used to configure various hardware related settings on the RXT device.

Device Volume: Use slider to adjust the desired volume of the built-in speaker.

LCD Brightness: Use the slider to adjust the desired brightness of the LCD display.

LCD Off Timeout: Use the drop-down box to select the desired screen timeout. The screen will go black and display only the date and time when the selected time expires beyond the last user interaction with the RXT device. The screen will wake up when the LCD is touched. Select 'Never' to keep the display on full- time.

Event Manager



The Event Manager setup page is used to set configurations for Telnet, SMTP and other features used in events.

Enable telnet server: Check this box to enable telnet server on the RXT device.

Telnet Server Port: Set the port number of the telnet server.

SMTP configuration: Select Standard for a generic SMTP configuration or Google OAuth to use Google Authentication. Depending on this selection, the on-page parameters will be different.

If the SMTP configuration is set to 'Standard' the following parameters will be displayed.

Hostname: Hostname of the SMTP server. Click 'apply' to save.

Requires SSL: Check this box if the SMTP server requires SSL.

SSL Port: When 'Requires SSL' is checked, this defines the SSL port of the SMTP server. Click 'apply' to save.

Requires TLS: Check this box if the SMTP server requires TLS.

TLS Port: When 'Requires TLS' is checked, this defines the TLS port of the SMTP server. Click 'apply' to save.

Full Name: Enter the full name of the sender. Click 'apply' to save.

Requires Authentication: Check this box if the SMTP server requires authentication.

Username: When 'Requires Authentication' is checked, this defines the username to use for SMTP server authentication. Click 'apply' to save.

Password: When 'Requires Authentication' is checked, this defines the password to use for SMTP server authentication. Click 'apply' to save.

Send Test Email: Click this button to send a test email using the entered configuration.

If the SMTP configuration is set to 'Google OAuth' the following parameters will be displayed.

Username: Google username to be used for OAuth.

Client ID: Enter the Client ID used for OAuth. The Client ID is a public identifier for apps. This must be obtained from the SMTP server.

Client Secret: Enter the Client Secret used for OAuth. The Client Secret is a key known only to the application and the OAuth server. This must be obtained from the SMTP server.

Authorization Code: This will be filled in once authorization is obtained from the OAuth server. Authorization is obtained using the 'Request Authorization' Button.

Request Authorization: Click this button once all the OAuth configuration is entered. If authorization is granted, the authorization will appear in the Authorization Code field.

Send Test Email: Click this button to send a test email using the entered configuration.

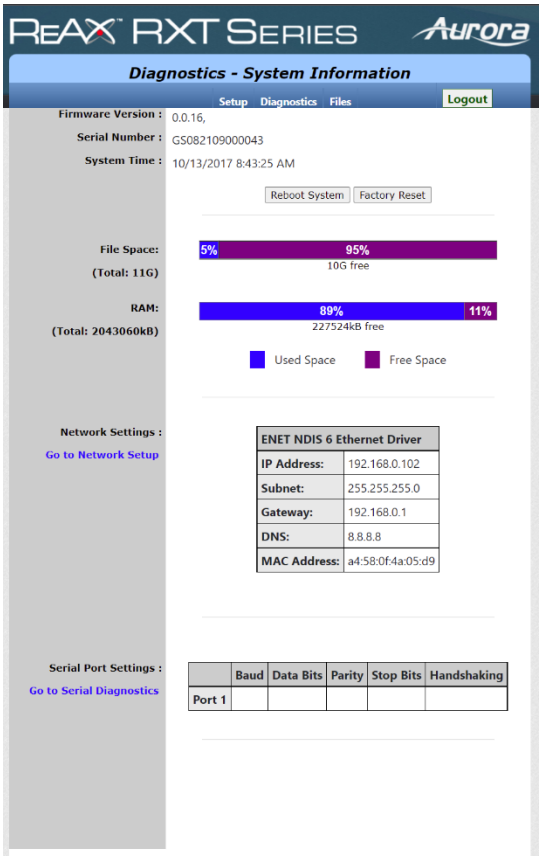
Diagnostics

The diagnostic page provides utilities useful for testing and troubleshooting the RXT device. The page provides three sub menu options for selection. Across the top of the menu screen are the same three navigation options as the initial screen – Setup, Diagnostics and Files. Selecting these will take you to the same menus as the initial screen and are provided for convenience.

Logout: Logs the current user out of the RXT device.

Menu Items: Click one of the listed items to open a more specific settings menu. These menus are described below.

System Info



Firmware Version: Quick reference to the current firmware installed on the RXT device.

Serial Number: Quick reference to the Serial number of the RXT device.

System Time: Quick reference to the current system time.

Reboot System: Click this button to reboot the RXT device.

Factory Reset: Click this button to reset the RXT device back to factory settings and the device rebooted.

File Space: Graph displays the percentage of used storage space in blue and the percentage of free storage space in purple.

RAM: Graph displays the percentage of used RAM in blue and the percentage of free RAM in purple.

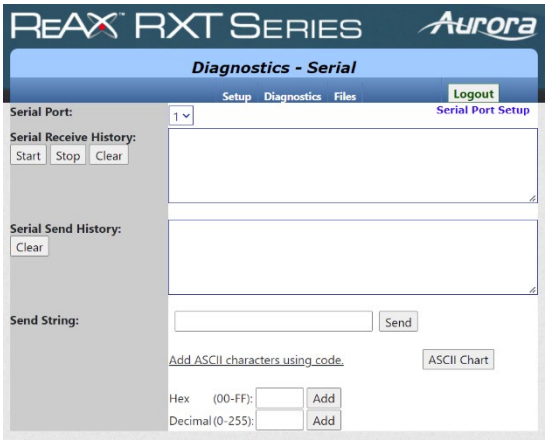
Network Settings: Displays a summary of the current network configuration.

Go to Network Setup: Click this link to jump directly to the Network Setup page.

Serial Port Settings: Displays a summary of the serial port settings.

Go to Serial Diagnostics: Click this link to jump directly to the Serial Diagnostics page.

Serial Port Diagnostics



The Serial Port Diagnostics page provides a tool for debugging the serial ports of the RXT device.

Serial Port: Select the desired serial port from the drop-down list.

Serial Port Setup: Click this link to jump directly to the Serial Port Setup page.

Serial Receive History: This window will display received serial data when a debug session is running.

Start: Click this button to start a debug session. On RXT devices with USB serial connection, a USB to Serial converter must be attached before starting.

Stop: Click this button to stop a previously started debug session.

Clear: Click this button to clear the Serial Receive History window.

Serial Send History: This window will display sent serial data when serial debug session is running.

Clear: Click this button to clear the Serial Send History window.

Send String: Enter a serial string to send via the selected serial port. Click the 'Send' button to transmit the message.

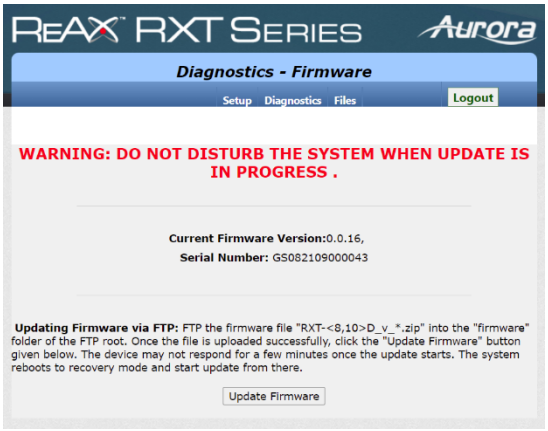
ASCII Chart: Click this button to open an ASCII reference table.

Hex: Enter a Hexadecimal byte and click the 'Add' button. This will convert the Hex code into an ASCII character and append it to the 'Send String' field. If there is no corresponding printable ASCII character, it will add a '%' prefix to identify the subsequent two characters as a Hex byte.

Decimal: Enter a decimal value in the range of 0-255 and click the 'Add' button. This will convert the decimal code into an ASCII character and append it to the 'Send String' field. If there is no corresponding printable ASCII character, it will convert the decimal value to a Hex byte and add a '%' prefix to identify the subsequent two characters as a Hex byte.

Firmware Update

The Firmware Update page provides instructions and means of updating the firmware of the RXT device. Follow the written instructions.

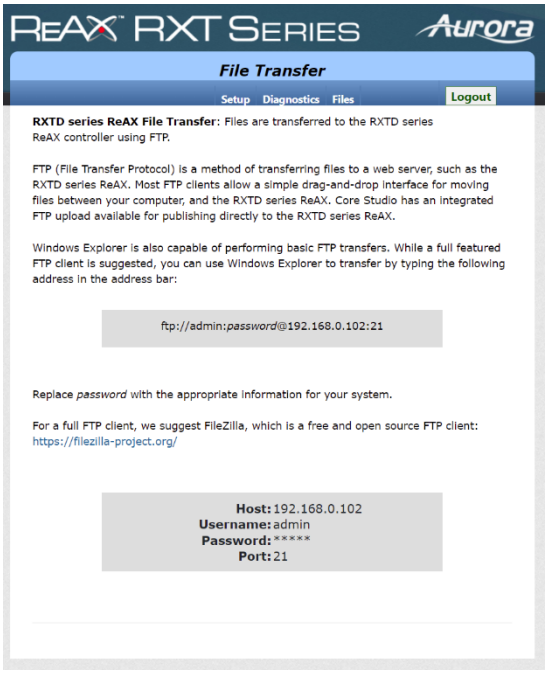


When available, a firmware update file can be obtained directly from Aurora. The update can be downloaded from the Aurora support portal. Be sure to note the current firmware version as well as the version of the firmware update file to ensure compatibility. The current firmware version can be found in the System Info page.

Once a firmware update file has been obtained, upload it to the device using FTP. More information about connecting to an RXT device via FTP can be found in the File Transfer section.

Update Firmware: Click this button after reading and executing the written instructions to update the firmware of the RXT device.

File Transfer



Files are transferred to the RXT series ReAX controllers using FTP.

FTP (File Transfer Protocol) is a method of transferring files to a web server, such as the RXT device. Most FTP clients allow a simple drag-and-drop interface for moving files between your computer, and the RXT device. Core Studio has an integrated FTP upload available for publishing directly to the RXT device.

Windows Explorer is also capable of performing basic FTP transfers. While a full featured FTP client is suggested, you can use Windows Explorer to transfer by typing the following address in the address bar:

ftp://admin:**[password]**@[IP Address] where **[password]** is the administrative password of the RXT device and **[IP Address]** is its IP address.

For a full FTP client, we suggest FileZilla, which is a free and open-source FTP client: https://filezilla-project.org/

Host Settings: At the bottom of the File Transfer page is a grey box which contains the necessary information to configure an FTP client for this specific RXT device.

Kiosk

The RXT device is a Kiosk meaning access to the underlying Android system is locked. The user will not be able to exit from this Kiosk by any means other than that provided by the password protected Kiosk functions.

By default, RXT will always boot to locked mode. If the device is not in locked mode, the user will be able to see a 'Navigation bar' at the bottom of the display.

Home Page

On a factory new device which has never had a Core Studio project published, the default Home screen will appear. This screen contains basic information about the RXT device including its IP address, firmware version, system date and time, serial number, and the Setup URL. The setup URL can be typed into a web browser on a computer on the same LAN to access the Device Setup page.

Once a Core Studio project has been published to the device, the interface of that project will be the default Kiosk and this page will no longer be displayed. At this point, this page can be accessed from a web browser by pointing to http://**[IP Address]**/home where [IP Address] is the IP address of the RXT device. This page can be restored to the default by setting the 'Kiosk Home Page' found in the Network Settings page to 'http://localhost/home'.

The Home page also offer access to the following commands.

Close Kiosk: Click to shut down the Kiosk. The Kiosk can be opened again either by restarting the device or from the Network Settings page. You will be prompted for the administrative password before the command is executed.

Enable Kiosk: Click to enable the Kiosk mode of the RXT device. Access to the underlying Android system will not be available. By default, the Kiosk is Enabled.

Disable Kiosk: Click to disable the Kiosk mode of the RXT device. This will expose the user controls of the underlying Android system. By default, the Kiosk is Enabled. You will be prompted for the administrative password before the command is executed.

Help: Click to access the Quick Start Guide.

Kiosk Menu

Once a Core Studio project has been published to the RXT device, the Home screen will be replaced with the user interface designed in the Core Studio project. To access the same commands that are on the Home Page, the Kiosk menu will need to be opened.

To access the Kiosk Menu, the user must swipe across the screen from left to right for about 80% of the display width of the current orientation.

After entering the administrator password for the RXT device, a small menu will pop up with the following commands.

Close Kiosk: Click to shut down the Kiosk. The Kiosk can be opened again either by restarting the device or from the Network Settings page.

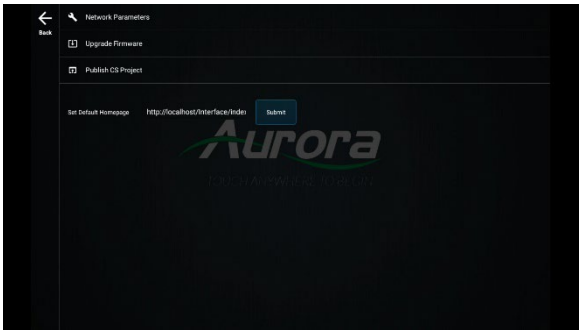
Enable Kiosk: Click to enable the Kiosk mode of the RXT device. Access to the underlying Android system will not be available. By default, the Kiosk is Enabled.

Disable Kiosk: Click to and disable the Kiosk mode of the RXT device. This will expose the user controls of the underlying Android system. By default, the Kiosk is Enabled.

Kiosk Settings: Click to open the Kiosk Settings Menu.

Kiosk Settings Menu

The Kiosk Settings Menu provides on device access to a few of the most common device configurations.



Network Parameters: Provides a read-only listing of the active network configuration.

Upgrade Firmware: Browse for the firmware file either locally on the RXT device or from a USB plugged into the device. See Firmware Update for more detailed instructions.

Publish CS Project: Browse for a valid Core Studio project (*.acs) file either locally on the RXT device or from a USB plugged into the device. This will replace any currently loaded project and reboot the RXT device.

Set Default Homepage: Sets the default page for the Kiosk. This must point to the Control Panel Name property found in the Core Studio Project. See 'Kiosk Home Page' in the Network Settings page for more information. After setting the desired URL, click 'Submit' to apply.

Core Studio Design Software

Overview

Aurora's ReAX™ Core Studio is a professional grade software for creating graphical user interfaces (GUIs) and control logic code. The intuitive drag-and-drop interface allows for easy and flexible design, while enabling rapid duplication and reuse of code blocks. Control programs are published to any ReAX capable control system as a web page. Once loaded on the controller, the control page can be accessed from virtually any device with a web browser. A few examples include Aurora's RXT touch panels, tablets such as an iPad, smart phones, a PC browser, and many other devices. Furthermore, most devices (including those running iOS, Android, and Chrome browser, and others) can launch the Core Studio control pages as a full-screen web app, allowing for a seamless control experience without the need for a native app.

Note: ReAX Core Studio is available for download from our Customer Portal - https://auroramultimedia.com/portal/

Core Studio integrates all the common control elements, such as buttons, various toggle elements, sliders, drop down menus, spinboxes, icons, and other design and graphical elements. In addition, advanced features such as live streaming video preview windows for Aurora's AV over IP devices can be included within your control page. And HTML iframes allow you to include content from the web, such as weather feeds, news feeds, stock tickers, or any other local or internet-based website content. Core Studio has a familiar interface that existing users will understand with little or no learning curve. The published makes use of Node.js and other modern robust technologies for peak efficiency within the ReAX OS. Best of all - ReAX Core Studio is available for free. There is no purchase fee, no registration fee, and no certification fee. Aurora Multimedia offer training videos to get you started and webinar training for introductory or advanced training.

Software Installation

A Windows PC with a processor of 1 GHz or higher and:

- Windows 7 or higher version.
- 1 GB free storage space.
- 1024 x 768 resolution.
- 24 bit or higher color.
- 2GB or higher memory.
- Network (Ethernet) port.

CAT5 cable or current Ethernet network

Visit web page address https://auroramultimedia.com/products/reax-core-studio/

Download software

1. Install files.

After the software is installed, use one of the following methods to enable the software:

- Desktop icons
- Start menu

Software Operation

Getting started in Core Studio is simple. There are several recommended ways to get started and get help.

- Aurora Academy has video training content to help you get going. Visit https://auroramultimedia.com/aurora-academy/ to get started.
- Aurora Academy also has a Core Studio certification program available to train you on the ReAX control system.
- Core Studio includes a comprehensive help system to aid in design.

Appendix A: Specifications

RXT-4WM

Model Name	RXT-4WM
Technical	
CPU	Dual Core A55 1.2GHz
RAM	1GB DDR
ROM	8GB
OS	Linux
Control Engine	ReAX™ control, web server
Display	
Screen Size	4”
Video Resolution	480x480
Brightness	420 nits
Contrast Ratio	900
Viewing Angle	160°
Aspect Ratio	1:1
Network	
Ethernet	RJ-45 10/100/1000M PoE (PD)
Ports	
USB	USB Type C
RS-232	Up to 115k Baud
IR	Bi-Directional
Digital I/O	(2) with A/D capability Output Voltage: 5v Output Power: 17mA Input Max Voltage:12VDC @ 500mW
Relay	(2) Normally Open Max Current: 2A
Other	
Ambient Light Ring	RGB
Video Format	H.265, VP8, RV, WMV.AVS, H.263, MPEG4, up to 4K2K decoding, HTML5, Flash 10
Audio Format	MP3 / WMA / AAC etc.
Image Format	JPEG, BMP, PNG
Speaker	(1) 1W
Microphone	Stereo Digital Microphones
Audio	3.5mm TRS Line Output
Ambient Light Sensor	0.01 lux to 83 k lux
Proximity Sensor	Range:0-18” [0-46cm]
Mechanical	
Color	Black Standard, Custom Color Bezel available
Enclosure	Aluminum Bezel, Plastic Back Enclosure
Dimensions (L x W x H)	TBD
Weight	TBD
Mounting	1 Gang EU Standard 86 Wall Mounting Box, 2 Gang US Adapter Plate Available
Power Supply	PoE (802.3at Type 1)
Power Consumption	9W Max Availability including USB
Operation Temperature	0~40°C [32~104°F]
Storage Temperature	0~60°C [32~140°F]
Relative Humidity	20~85% RH [no condensation]
Warranty	5 Year Limited
Package Contents	
	1 Gang EU Mounting Ring
	2 Gang US Adapter Ring

RXT-8WM

Model Name	RXT-8WM
Technical	
CPU	Dual Core A55 1.2GHz
RAM	1GB DDR
ROM	8GB
OS	Linux
Control Engine	ReAX™ control, web server
Display	
Screen Size	8”
Video Resolution	1280x800
Brightness	430 nits
Contrast Ratio	1000
Viewing Angle	170°
Aspect Ratio	16:10
Network	
Ethernet	RJ-45 10/100/1000M PoE (PD)
Ports	
USB	USB Type C
RS-232	Up to 115k Baud
IR	Bi-Directional
Digital I/O	(2) with A/D capability Output Voltage: 5v Output Power: 17mA Input Max Voltage:12VDC @ 500mW
Relay	(2) Normally Open Max Current: 2A
Other	
Ambient Light Ring	RGB
Video Format	H.265, VP8, RV, WMV.AVS, H.263, MPEG4, up to 4K2K decoding, HTML5, Flash 10
Audio Format	MP3 / WMA / AAC etc.
Image Format	JPEG, BMP, PNG
Speaker	(1) 1W
Microphone	Stereo Digital Microphones
Audio	3.5mm TRS Line Output
Ambient Light Sensor	0.01 lux to 83 k lux
Proximity Sensor	Range:0-18” [0-46cm]
NFC	NFC 13.56MHz，ISO14443A/ISO14443B/ISO 15693/Mifare classic/Sony felica
Mechanical	
Color	Black Standard, Custom Bezel available
Enclosure	Aluminum Bezel, Plastic Back Enclosure
Dimensions (L x W x H)	TBD
Weight	TBD
Mounting	1 Gang EU Standard 86 Wall Mounting Box, 2 Gang US Adapter Plate Available
Power Supply	PoE (802.3at Type 1)
Power Consumption	9W Max Availability including USB
Operation Temperature	0~40°C [32~104°F]
Storage Temperature	0~60°C [32~140°F]
Relative Humidity	20~85% RH [no condensation]
Warranty	5 Year Limited
Package Contents	
	1 Gang EU Mounting Ring
	2 Gang US Adapter Ring

RXT-10WM

Model Name	RXT-10WM
Technical	
CPU	Dual Core A55 1.2GHz
RAM	1GB DDR
ROM	8GB
OS	Linux
Control Engine	ReAX™ control, web server
Display	
Screen Size	10.1”
Video Resolution	1280x800
Brightness	430 nits
Contrast Ratio	1000
Viewing Angle	170°
Aspect Ratio	16:10
Network	
Ethernet	RJ-45 10/100/1000M PoE (PD)
Ports	
USB	USB Type C
RS-232	Up to 115k Baud
IR	Bi-Directional
Digital I/O	(2) with A/D capability Output Voltage: 5v Output Power: 17mA Input Max Voltage:12VDC @ 500mW
Relay	(2) Normally Open Max Current: 2A
Other	
Ambient Light Ring	RGB
Video Format	H.265, VP8, RV, WMV.AVS, H.263, MPEG4, up to 4K2K decoding, HTML5, Flash 10
Audio Format	MP3 / WMA / AAC etc.
Image Format	JPEG, BMP, PNG
Speaker	(1) 1W
Microphone	Stereo Digital Microphones
Audio	3.5mm TRS Line Output
Ambient Light Sensor	0.01 lux to 83 k lux
Proximity Sensor	Range:0-18” [0-46cm]
NFC	NFC 13.56MHz，ISO14443A/ISO14443B/ISO 15693/Mifare classic/Sony felica
Mechanical	
Color	Black Standard, Custom Bezel available
Enclosure	Aluminum Bezel, Plastic Back Enclosure
Dimensions (L x W x H)	TBD
Weight	TBD
Mounting	1 Gang EU Standard 86 Wall Mounting Box, 2 Gang US Adapter Plate Available
Power Supply	PoE (802.3at Type 1)
Power Consumption	9W Max Availability including USB
Operation Temperature	0~40°C [32~104°F]
Storage Temperature	0~60°C [32~140°F]
Relative Humidity	20~85% RH [no condensation]
Warranty	5 Year Limited
Package Contents	
	1 Gang EU Mounting Ring
	2 Gang US Adapter Ring

RXT-8D

Model Name	RXT-8D
Technical	
CPU	Quad Core Cortex 1.8GHz
RAM	2GB
ROM	16GB
OS	Android 10.0
Control Engine	ReAX™ control, web server
Display	
Screen Size	8”
Video Resolution	1280x800
Aspect Ratio	16:10
Network	
Ethernet	RJ-45 10/100 PoE (PD)
WiFi	802.11 b/g/n
Ports	
USB	(3) USB2.0
HDMI	1.4
Audio	3.5mm Stereo Line Out
Other	
Video Format	MP3/WMA/AAC, MPEG-1/2/4, H.263, H.264, H.265
Audio Format	MP3 / WMA / AAC etc.
Image Format	JPEG, BMP, PNG
Speaker	(1) 1W
Camera	Front 5.0M/P
Memory Expansion	SD up to 32GB
Mechanical	
Color	Black or White
Enclosure	Plastic
Dimensions (L x W x H)	8.125” x .4.125” x 5.63” [206.4mm x 104.8mm x 143mm]
Weight	45kg (1.lbs.)
Mounting	Desktop
Power Supply	100-16/240VAC, 50/60Hz 5V Output or PoE (802.3at Type 1)
Power Consumption	12W Max Availability including USB
Operation Temperature	0~40°C [32~104°F]
Storage Temperature	0~60°C [32~140°F]
Relative Humidity	20~85% RH [no condensation]
Warranty	5 Year Limited
Package Contents	
	12VDC Desktop Power Supply

RXT-10D

Model Name	RXT8D
Technical	
CPU	Quad Core Cortex 1.8GHz
RAM	2GB
ROM	16GB
OS	Android 10.0
Control Engine	ReAX™ control, web server
Display	
Screen Size	8”
Video Resolution	1280x800
Aspect Ratio	16:10
Network	
Ethernet	RJ-45 10/100 PoE (PD)
WiFi	802.11 b/g/n
Ports	
USB	(4) USB2.0
HDMI	1.4
Audio	3.5mm Stereo Line Out
Other	
Video Format	MP3/WMA/AAC, MPEG-1/2/4, H.263, H.264, H.265
Audio Format	MP3 / WMA / AAC etc.
Image Format	JPEG, BMP, PNG
Speaker	(2) 1W
Camera	Front 2.0M/P
Memory Expansion	SD up to 32GB
Mechanical	
Color	Black or White
Enclosure	Plastic
Dimensions (L x W x H)	10.188” x 4.38” x 7.375” [259mm x 11.3mm x 187.3mm]
Weight	.66kg (1.46lbs.)
Mounting	Desktop
Power Supply	100-16/240VAC, 50/60Hz 5V Output or PoE (802.3at Type 1)
Power Consumption	12W Max Availability including USB
Operation Temperature	0~40°C [32~104°F]
Storage Temperature	0~60°C [32~140°F]
Relative Humidity	20~85% RH [no condensation]
Warranty	5 Year Limited
Package Contents	
	12VDC Desktop Power Supply

RXT-VS

Model Name	RXT-10VS	RXT-15VS	RXT-21VS
Technical			
CPU	RK3399 Cortex Six core Processor 1.8GHz/1.4GHz		
RAM	4GB DDR3		
ROM	32GB eMMC Flash		
OS	Android 9		
Screen Size	10.1”	15.6”	21.5”
Video Resolution	1280x800	1920x1080	1920x1080
Brightness	350cd/m^2		
Contrast Ratio	800:1	1000:1	1000:1
Aspect Ratio	16:10	16:9	16:9
Active Display Area	136.8 x 219 mm	343.2 x 192.6mm	479 x 270.5mm
Video Format	H.265, VP8, RV, WMV, AVS, H.263. MPEG4, HTML5, Flash 10	H.265, VP8, RV, WMV.AVS, H.263, MPEG4, up to 4K2K decoding, HTML5, Flash 10	
Audio Format	MP3 / WMA / AAC etc.		
Image Format	JPEG, BMP, PNG		
Speaker	2W x 2	3W x 2	3W x 2
Wi-Fi	2.4GHz, 5GHz		
Ethernet	1G LAN PoE		
HDMI	HDMI 2.0 Output		
USB	(1) USB Type C, (1) USB 3.0		
Removable Media	SD Card, SIM Card (4G Option)		
Audio	3.5mm Stereo Line Out		
Mechanical			
Color	Black (add -B), White (add -W)		
Dimensions (L x W x H)	258 x 27 x 175mm	392 x 241.6 x 29.6mm	597 x 321.2 x 35.5mm
Weight	700g	1.4Kg	3.8Kg
VESA	VESA 75	VESA 75	VESA 100
Power Supply	12VDC, PoE	12VDC, PoE+	12VDC, PoE++
Power Consumption	11W	15W	32W
Operation Temperature	Operating: 32º F to 100º F (0 ºC to 50ºC)		
Storage Temperature	-4º F to 122º F (-20º C to 50º C)		
Relative Humidity	Operating: 20% - 80%; Storage; 10% - 95%		
Warranty	5 Year Limited		
Package Contents			

Appendix B: Architect and Engineers Specification

RXT-4WM

The Touchscreen Controller shall have an integrated ReAX control engine with a Dual Core processor, with a minimum of 1GB RAM and 8GB Flash. The Touchscreen shall be a 4” 1:1 touch sensitive display with 480x480 resolution. The Touchscreen Controller shall have a graphics engine capable of decoding 4K MPEG-1/2/4, H.263, H.264, H.265, HTML5, and Flash 10 as well as the ability to decode MP3, WMA and AAC audio codecs. The device shall have a USB Type-C, (2) RS-232, (2) IR, (2) DIO and (2) Relay connections. The Touchscreen Controller shall be PoE powered according to 802.3at Type 1. It shall have a proximity sensor, ambient light sensor, ambient LED ring, stereo digital microphone and a1W speaker. The Touchscreen Controller shall be support 1 gang EU or 2 gang US wall box mounting. Warranty shall be five years. The Touchscreen Controller shall be Aurora Multimedia RXT-4WM.

RXT-8WM

The Touchscreen Controller shall have an integrated ReAX control engine with a Dual Core processor, with a minimum of 1GB RAM and 8GB Flash. The Touchscreen shall be a 8” 16:10 touch sensitive display with 1280x800 resolution. The Touchscreen Controller shall have a graphics engine capable of decoding 4K MPEG-1/2/4, H.263, H.264, H.265, HTML5, and Flash 10 as well as the ability to decode MP3, WMA and AAC audio codecs. The device shall have a USB Type-C, (2) RS-232, (2) IR, (2) DIO and (2) Relay connections. The Touchscreen Controller shall be PoE powered according to 802.3at Type 1. It shall have a proximity sensor, ambient light sensor, ambient LED ring, stereo digital microphone and a1W speaker. The Touchscreen Controller shall be support 1 gang EU or 2 gang US wall box mounting. Warranty shall be five years. The Touchscreen Controller shall be Aurora Multimedia RXT-8WM.

RXT-8D

The Touchscreen Controller shall have an integrated ReAX control engine with a Quad Core Cortex 1.8GHz processor, with a minimum of 2GB RAM and 16GB Flash. The Touchscreen shall be an 8” 16:10 touch sensitive display with 1280x800 resolution, a 170-degree viewing angle and an 800:1 contrast ratio. The Touchscreen Controller shall have a graphics engine capable of decoding 4K MPEG-1/2/4, H.263, H.264 and H.265 as well as the ability to decode MP3, WMA and AAC audio codecs. The device shall have an HDMI output, USB OTG, USB 2.0 and USB Serial connections. The Touchscreen Controller shall be PoE powered according to 802.3af (802.3at Type 1) and shall support 802.11b/g/n Wi-Fi, and NFC. It shall have a micro-SD card slot capable of supporting storage media up to 32GB, a 5.0MP camera, an integrated microphone, a 2W speaker and a TRS line level audio output. The Touchscreen Controller shall be packaged in a desktop package suitable for use on a conference room tabletop. Warranty shall be five years. The Touchscreen Controller shall be Aurora Multimedia RXT-8D.

RXT-10WM

The Touchscreen Controller shall have an integrated ReAX control engine with a Dual Core processor, with a minimum of 1GB RAM and 8GB Flash. The Touchscreen shall be a 10.1” 16:10 touch sensitive display with 1280x800 resolution. The Touchscreen Controller shall have a graphics engine capable of decoding 4K MPEG-1/2/4, H.263, H.264, H.265, HTML5, and Flash 10 as well as the ability to decode MP3, WMA and AAC audio codecs. The device shall have a USB Type-C, (2) RS-232, (2) IR, (2) DIO and (2) Relay connections. The Touchscreen Controller shall be PoE powered according to 802.3at Type 1. It shall have a proximity sensor, ambient light sensor, ambient LED ring, stereo digital microphone and a1W speaker. The Touchscreen Controller shall support 1 gang EU or 2 gang US wall box mounting. The warranty shall be for five years. The Touchscreen Controller shall be Aurora Multimedia RXT-10WM.

RXT-10D

The Touchscreen Controller shall have an integrated ReAX control engine with a Six Core Cortex 1.8GHz processor, with a minimum of 2GB RAM and 16GB Flash. The Touchscreen shall be a 10” 16:10 touch sensitive display with 1280x800 resolution, a 170-degree viewing angle and an 800:1 contrast ratio. The Touchscreen Controller shall have a graphics engine capable of decoding 4K MPEG-1/2/4, H.263, H.264 and H.265 as well as the ability to decode MP3, WMA and AAC audio codecs. The device shall have an HDMI output, USB OTG, USB 2.0 and USB Serial connections. The Touchscreen Controller shall be PoE powered according to 802.3af (802.3at Type 1) and shall support 802.11b/g/n Wi-Fi, and NFC. It shall have a micro-SD card slot capable of supporting storage media up to 32GB, a 5.0MP camera, an integrated microphone, a 2W speaker and a TRS line level audio output. The Touchscreen Controller shall be packaged in a desktop package suitable for use on a conference room tabletop. Warranty shall be five years. The Touchscreen Controller shall be Aurora Multimedia RXT-10D.

RXT-10VS

The Touchscreen Controller shall have an integrated ReAX control engine with a Six Core Cortex 1.8GHz processor, with a minimum of 2GB RAM and 32GB Flash. The Touchscreen shall be a 10.1” 16:10 touch sensitive display with 1280x800 resolution and an 800:1 contrast ratio. The Touchscreen Controller shall have a graphics engine capable of decoding H.265, VP8, RV, WMV, AVS, H.263, MPEG4, HTML5 and Flash 10 as well as the ability to decode MP3, WMA and AAC audio codecs. The device shall have an HDMI 2.0 output, USB Type-C and USB 3.0. The Touchscreen Controller shall be PoE powered according to 802.3af (802.3at Type 1) and shall support 802.11b/g/n Wi-Fi. It shall have a micro-SD card slot capable of supporting storage media up to 32GB, a 5.0MP (2) 2W speakers and a TRS line level audio output. The Touchscreen Controller shall be support VESA 75 mounting. Warranty shall be three years. The Touchscreen Controller shall be Aurora Multimedia RXT-10VS.

RXT-15VS

The Touchscreen Controller shall have an integrated ReAX control engine with a Six Core Cortex 1.8GHz processor, with a minimum of 2GB RAM and 32GB Flash. The Touchscreen shall be a 15.6” 16:9 touch sensitive display with 1920x1080 resolution and a 1000:1 contrast ratio. The Touchscreen Controller shall have a graphics engine capable of decoding H.265, VP8, RV, WMV, AVS, H.263, MPEG4, HTML5 and Flash 10 as well as the ability to decode MP3, WMA and AAC audio codecs. The device shall have an HDMI 2.0 output, USB Type-C and USB 3.0. The Touchscreen Controller shall be PoE+ powered according to 802.3at Type 2 and shall support 802.11b/g/n Wi-Fi. It shall have a micro-SD card slot capable of supporting storage media up to 32GB, a 5.0MP (2) 3W speakers and a TRS line level audio output. The Touchscreen Controller shall be support VESA 75 mounting. Warranty shall be three years. The Touchscreen Controller shall be Aurora Multimedia RXT-15VS.

RXT-21VS

The Touchscreen Controller shall have an integrated ReAX control engine with a Six Core Cortex 1.8GHz processor, with a minimum of 2GB RAM and 32GB Flash. The Touchscreen shall be a 21.5” 16:9 touch sensitive display with 1920x1080 resolution and a 1000:1 contrast ratio. The Touchscreen Controller shall have a graphics engine capable of decoding H.265, VP8, RV, WMV, AVS, H.263, MPEG4, HTML5 and Flash 10 as well as the ability to decode MP3, WMA and AAC audio codecs. The device shall have an HDMI 2.0 output, USB Type-C and USB 3.0. The Touchscreen Controller shall be PoE++ powered according to 802.3bt Type 3 and shall support 802.11b/g/n Wi-Fi. It shall have a micro-SD card slot capable of supporting storage media up to 32GB, a 5.0MP (2) 3W speakers and a TRS line level audio output. The Touchscreen Controller shall be support VESA 100 mounting. Warranty shall be three years. The Touchscreen Controller shall be Aurora Multimedia RXT-21VS.

Aurora Multimedia Corporation

205 Commercial Court | Morganville, NJ 07751

Phone: 732-591-5800 | Fax: 732-591-5801