



Raven Electronics Corporation

Specialized Communication Solutions Since 1968

Automated Radio Check

The 'Idea Shop' committed to solving engineering problems & exceeding expectations.

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Contact Raven Electronics

Thank you for purchasing from Raven Electronics Corporation. Please contact us if you have any questions, concerns, ideas, or suggestions on how to improve this manual. We can be contacted at:

Raven Electronics Corporation
4655 Longley Lane, Suite 106
Reno, Nevada 89502

(775) 858-2400 Phone
Press 2 for Sales
Press 3 for Technical Support
(775) 858-2410 FAX

info@ravencomm.com
sales@ravencomm.com

Please contact us if you have any questions, comments, or concerns. We would love to hear from you.

We are the "Idea Shop" committed to solving engineering problems and exceeding expectations.

Note: Throughout this manual we reference various screens in the program. Depending on the revision of the software received with the shipment, there may be slight variations. This product is always evolving as is the documentation.

Raven Electronics' Warranty and Safety Information

Please be ESD protected before starting any procedures contained in this manual.



This warranty expressly precludes any liability by Raven Electronics Corporation for consequential damages however arising after delivery to the purchaser of the affected equipment, and is limited to the expressed warranty, excluding all implied warranties including merchantability. All equipment manufactured by Raven Electronics Corporation is warranted against defective materials and workmanship for a period of two (2) years from the date of delivery to the original purchaser or end-user. Liability under this warranty is limited to servicing, adjusting, repairing or replacing, as necessary, any equipment returned to the factory, transportation prepaid for that purpose. Factory examination must disclose a manufacturing defect. Repaired or replaced items will be returned to the purchaser surface freight prepaid within the continental USA. This warranty does not extend to any equipment which has been subjected to transportation damage, misuse, neglect, accident, improper installation, or any other circumstances reasonably beyond the control of Raven Electronics Corporation.

Beyond the warranty period, repairs will be billed to the purchaser at cost. In such cases, an estimate will be submitted for approval before repair is initiated. Repaired equipment will be returned to the purchaser with transportation charges collect, unless agreed to between the purchaser and Raven Electronics Corporation.

Setup Guide

Automated Radio Check

Thank you for purchasing the ARC Unit. Be sure you receive the following with your shipment:

- CD Manual
- Automated Radio Check Unit
- Power Cord

There are five **LED Indicators** on the front of the unit: a Power On, RX, TX, COR, and PTT. All LEDs are Green.

If any of these items are missing, please contact Sales at 775-858-2400, press 2.

Changing the IP address:

- 1) Open a web browser and enter "**http://10.1.1.253**" into the address bar. A Windows security window will appear.
 - a. Login using the default user/password of "**admin/admin**".
- 2) Select the "**Network**" tab in the menu at the top of the page.
- 3) Under "**Static IP Address**" section set the IP address in the "**Address**" box.
- 4) For the "**Save Changes**" button to appear in the upper right corner, hit the tab key once.
- 5) Click on the "**Restart Device**" button that appears.

Change the Username:

- 1) Open a web browser and enter "**http://10.1.1.253**" (or your custom IP address) into the address bar. A Windows security window will appear.
 - a. Login using the default user/password of "**admin/admin**".
- 2) Select the "**System**" tab in the menu at the top of the page.
- 6) Under the "**Authentication**" insert the desired user name in the "**User name**" box.
- 3) For the "**Save Changes**" button to appear in the upper right corner, hit the tab key once.

Change the Password:

- 1) Log in using your username and temporary password "**admin**".
- 2) To change the password, click the "**Change Password**" button.
- 3) Enter the old password in the "**Old Password**" box.
- 4) Enter the new password in the "**New Password**" box.
- 5) Enter the new password in the "**Confirm**" box.
- 6) Click the "**Save changes**" button.
- 7) Re-login using the new username and new password.

Message Controls

Add 8 kHz 16 bit PCM audio file:

- 1) Open a web browser and enter "**http://10.1.1.253**" (or your custom IP address) into the address bar.
A Windows security window will appear.
 - a. Login using your username/password.
- 2) Select the "**Files**" tab in the menu at the top of the page.
- 3) Click on the "**Select Audio File**" button and locate the .wav file that you would like to upload and select "**Open**".
- 4) Click on the "**Add Audio File**" button.
- 5) Once the entry is added to the page, you can modify the description and select the message type.
- 6) Select the "**Update**" button for the file that was added.

Deleting an unwanted audio file:

- 1) Open a web browser and enter "**http://10.1.1.253**" (or your custom IP address) into the address bar.
A Windows security window will appear.
 - a. Login using your username/password.
- 2) Select the "**Files**" tab in the menu at the top of the page.
- 3) Press the "**Delete**" button of the file you want to delete.
- 4) Select "**Ok**" at the prompt.

Downloading a Log File:

- 1) Open a web browser and enter "**http://10.1.1.253**" (or your custom IP address) into the address bar.
A Windows security window will appear.
 - a. Login using your username/password.
- 2) Select the "**Log**" tab in the menu at the top of the page.
- 3) Click on the "**Download Log**" button at the bottom of the page.
- 4) Save the log to a location on your computer.

Clearing a Log File:

- 1) Open a web browser and enter "**http://10.1.1.253**" (or your custom IP address) into the address bar.
A Windows security window will appear.
 - a. Login using your username/password.
- 2) Select the "**Log**" page in the menu at the top of the page.
- 3) Click on the "**Clear Log**" button at the bottom of the page.

Adjusting COR or PTT:

- 1) Open a web browser and enter "**http://10.1.1.253**" (or your custom IP address) into the address bar.
A Windows security window will appear.
 - a. Login using your username/password.
- 2) Select the "**Audio**" tab in the menu at the top of the page.
- 3) Make your audio selection.
- 4) Click the "**Save changes**" button that appears in the upper right corner.

Manual Play Option:

- 1) Open a web browser and enter "**http://10.1.1.253**" (or your custom IP address) into the address bar.
A Windows security window will appear.
 - a. Login using your username/password.
- 2) Select the "**Files**" tab in the menu at the top of the page.
- 3) Press the "**Play**" button of the file you want to force to play.
- 4) Select "**Ok**" at the prompt.

Verify/Update Firmware

Verify you are running the latest version of ARC firmware:

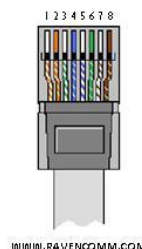
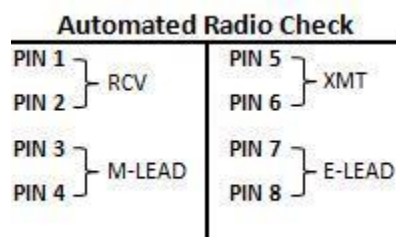
- 1) Open a web browser and enter “<http://10.1.1.253>” (or your custom IP address) into the address bar.
 - A Windows security window will appear.
 - i. Login using your username/password.
- 2) Select the “**Administration**” tab in the menu at the top of the page.
- 3) The current version will be listed under “**Firmware**”.

Update the firmware:

- 1) Follow steps 1-3 above.
- 2) To update your firmware, click the “**Browse**” button and locate the .BIN file that was sent to you and select “**Open**”.
- 3) Click the “**Update Firmware**” button.
- 4) The system should load the new firmware and reboot.
- 5) Log in and follow step two to verify the version number has changed. Verify the version number by following steps 1-3.

Pin Out

Radio Port Pin Out:



Settings Tab

Minimum Recording Time:

Minimum length a message can be in order for the radio check to be performed.

- Default is set to 800 milliseconds
- Range is 10ms-1000 milliseconds
- Can only be set in 10's

Maximum Recording Time:

Maximum length for a message.

- Default is set to 20 seconds
- Range is 1-60 seconds

Squelch Tail:

Removes the squelch from the end of the recording.

- Default is set to 20 milliseconds
- Range is 0-1000 milliseconds
- Can only be set in 10's

Periodic:

How far apart the periodic message will play.

- Default is set to 10 minutes
- Range is 1-1440 minutes

Specifications

4 Wire Audio Ports:

Frequency Response: 5 to 3400 Hz +/-0.5 dBm, ref. to 1 KHz
Input Impedance: 600Ω
Output Impedance: 600Ω

PTT Relay

Maximum contact voltage: 60 VDC, 20 VAC
Maximum current: 100 mA

COR Input

High Input: Open circuit or ≥ +3 VDC
Low Input: ground or negative voltage
True Sense: User determined by software

VoIP:

1 10-100 PoE 802.3af Ethernet Connection
Fusion RTOS
Fusion TCP/IPv4/IPv6
Fusion Voice Engine with RTP
SIP/SDP

Recording Capability:

5 minute (16bit audio), 10 minute (8 bit audio)

Power Requirements:

+5 VDC @ 300 mA maximum

Environmental:

Operating Temperature: 0 to 50°C
Storage Temperature: -40 to 80°C
Relative Humidity: 0 to 95% non-condensing
Maximum Altitude: 15,000 ft (4572 meters)

Physical:

Dimensions: 4.45"x1.43"x5.95"
Weight: 2 lbs. (including power supply)