



HAWKIII - SYSTEM USER MANUAL

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Safety Summary

The Following are warnings and cautions which should be carefully observed.

- **WARNING:** Never insert objects of any kind through openings in the equipment. Conductive foreign objects could produce a short circuit that could cause bodily injury, fire, electrical shock, or equipment damage.
- **CAUTION:** Never connect the system to a voltage outlet other than that designated for the system.
- **CAUTION:** Changes or modifications to this equipment not expressly approved by the party responsible for compliance (HiRiseTech Ltd.) could void the user's authority to operate the equipment.
- **FCC Statements**

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

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note: 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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is 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.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING – RF EXPOSURE COMPLIANCE: This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

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1.DRC- Dedicated Radio Console

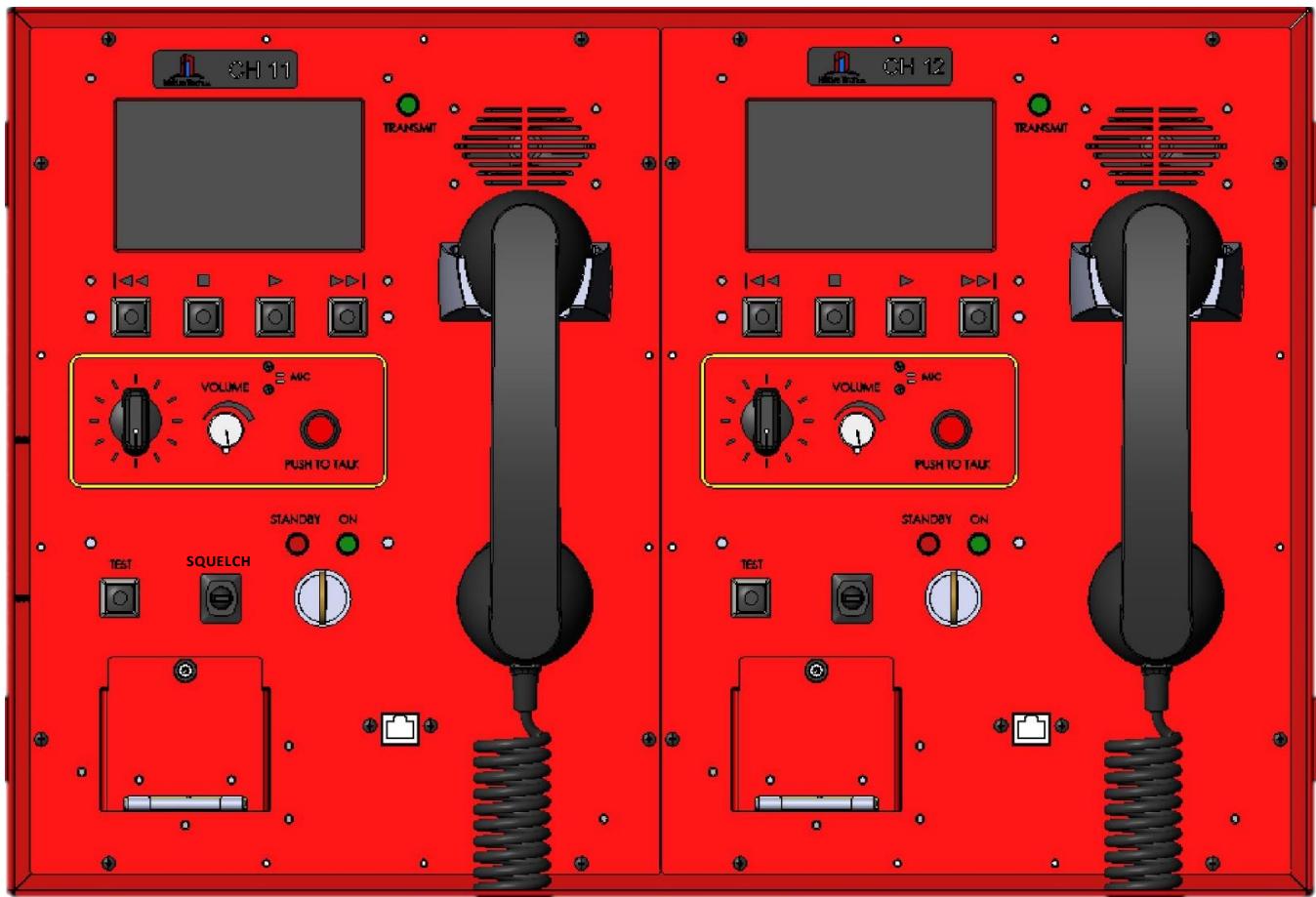


Figure 1: ARCS DRC

The DRC, which fully supports FDNY Tactical Channels 11 and 12, enables the control and operation of the ARC system. Command personnel have full and on-going voice contact with all personnel in the building using their Standard Portable Radios and can communicate with each individual or all together.

The DRC provides digital recording over a removable USB Flash Drive. The recorder records all audio communications on the USB thumb drive. The recorded audio can be played back during the DRC's operation and at a later stage.

On the display, the ARCS provides visual identification and real-time location of each firefighter.

1.1. DRC Activation

To activate the ARCS, the DRC must be turned on. To turn on the DRC:

1. Insert the FDNY 2642 key into the key slot and turn to the ON position. The red STANDBY lamp is extinguished and the green ON lamp lights.
2. Once the main screen is displayed, the ARCS DRC is ready for use.

1.2. DRC Controls and Indicators

This section provides an overview of all the controls and indicators on the ARCS DRC and explanations for their use.

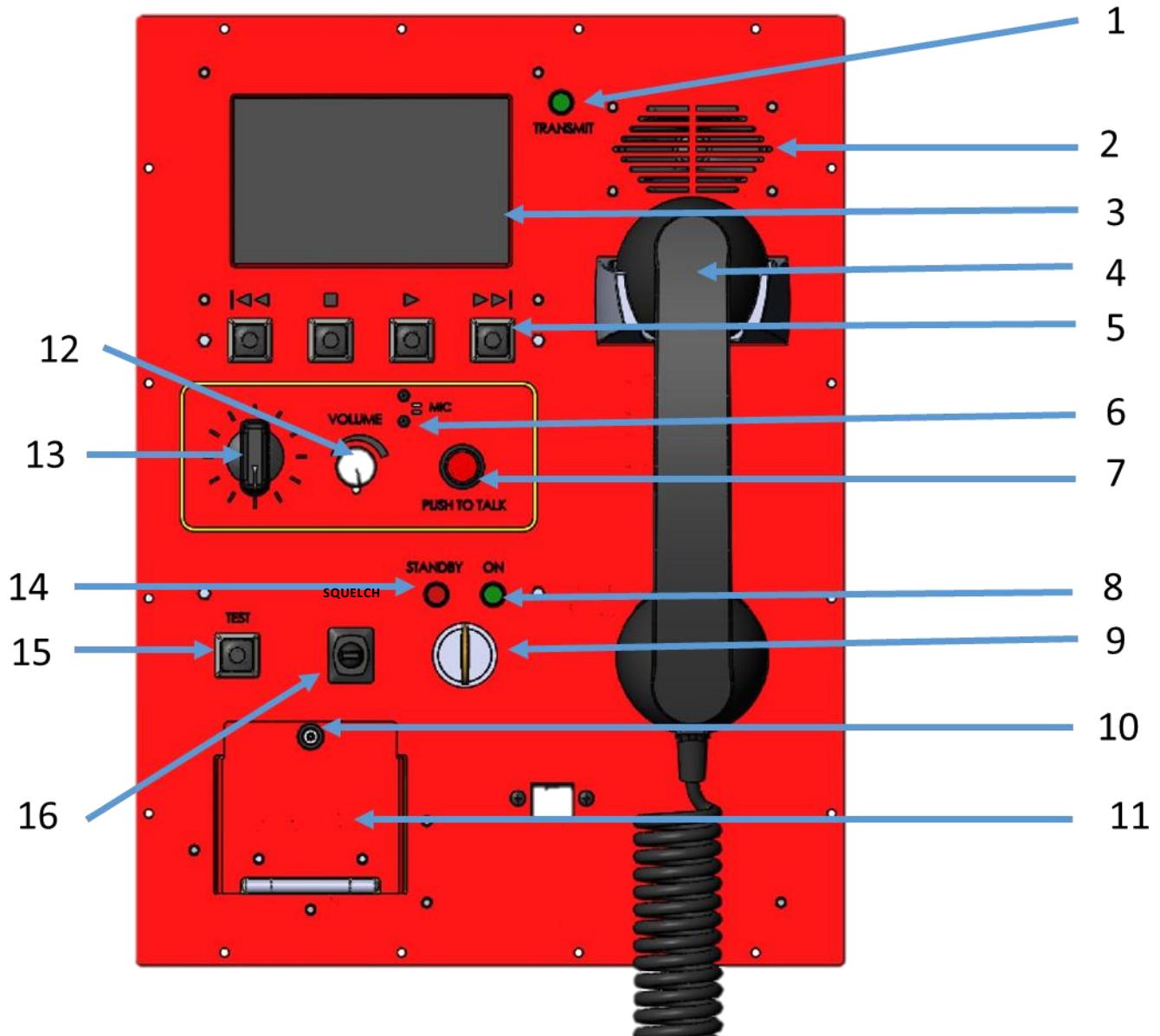


Figure 2: ARCS DRC Controls and Indicators

The following table presents explanations for the ARCS DRC controls and indicators as shown in Figure 2.

Table 1: ARCS DRC Controls and Indicators

	Control or Indictor	Explanation
1	TRANSMIT lamp	Lights when a DRC user is transmitting via the handset or the push-to-talk button
2	Speaker	When handset is on cradle audio is coming out of the speaker
3	Display	Indications of various ARCS activities are shown on the Display
4	Handset	Used to communicate with personnel in the building
5	Playback controls	Used to review recorded material on the flash drive
6	Microphone	When the Push-to-Talk button is depressed, communications is via this microphone
7	Push-to-Talk button	Depressing the button activates communications via the built-in-speaker and Microphone
8	ON lamp	Lights green when DRC is activated
9	Key slot	An FDNY 2642 key is inserted into the key slot to turn on the DRC
10	FLASH DRIVE RELEASE captive screw	When turned, opens / closes the flash drive bay door
11	USB flash drive bay	Includes a port for a USB flash drive used to record all communications on the system
12	Volume control	Controls volume on both the handset and the internal speaker
13	Simplex Channel selector	Use to select one of the simplex channels (instead of repeater channels)
14	STANDBY lamp	Lights red when DRC is dormant
15	TEST activation button	Activates a system self-test
16	CTCSS toggle	Turns CTCSS on/off

Table 2 presents a list of symbols appearing on the ARCS DRC Display.

Table 2: Symbols Appearing on the ARCS DRC Display

	Symbol	Explanation
1		Panel speaker is in use
2		Handset is in use
3		Operator is transmitting
4		Firefighter is transmitting
5		System is recording on USB flash drive
6		System sound is turned off
7		USB flash drive not inserted in port
8		USB flash drive inserted in port

1.3. Communicating over the DRC

To communicate using the handset:

1. Lift the handset from the cradle. The handset active icon is shown on the display (2, Table 2).
2. Press the button on the inner side of the handset to speak. The TRANSMIT lamp lights and the Operator Transmitting Icon (3, Table 2) is displayed.
3. Release the button to listen to connected parties. The Firefighter Transmitting Icon (4, Table 2) is displayed when one or more person is talking.
4. Adjust the volume of the audio using the VOLUME control.

NOTE: If the VOLUME button is turned off, the System Sound Turned Off icon (6, Table 2) is displayed. Otherwise, the System Sound Active Icon (1, Table 2) is displayed.

To communicate using the Push-to-Talk function:

1. Press and hold the Push-to-Talk button to communicate with the firefighters. The TRANSMIT lamp lights and the Operator Transmitting Icon (3, Table 2) is displayed.
2. Release the button to listen to connected parties. The Firefighter Transmitting Icon (4, Table 2) is displayed when one or more person is talking.
3. Adjust the volume of the audio using the VOLUME control.

NOTE: If the VOLUME button is turned off, the System Sound Turned Off icon (6, Table 2) is displayed. Otherwise, the System Sound Active Icon (1, Table 2) is displayed.

1.4. Recording the Audio on a USB Flash Drive

To record communications over a removable USB Flash Drive:

1. Insert a USB flash storage device in the USB flash drive bay. The USB flash drive inserted in port icon (8, table 2) appears.
2. To start recording, use the captive screw to close the flash drive bay door. the recording icon (5, table 2) appears.
3. To stop recording, use the captive screw to open the flash drive bay door. the recording icon (5, table 2) disappears, and the USB flash drive not inserted in port icon (7, table 2) appears.

NOTE: The recorded audio can be played back during the DRC's operation or at a later stage.

1.5. Playing Back Audio from a USB Flash Drive

To play back audio when the system is inactive:

1. Insert the FDNY 2642 key into the key slot and turn to the ON position. The red STANDBY lamp is extinguished and the green ON lamp lights.
2. Once the main screen is displayed, playback can be activated.
3. Press the ▶ button to commence playback.
4. Press the ■ button to stop playback.
5. Press the ▶▶ | button to skip ahead 20 seconds.
6. Press the |◀◀ button to skip back 20 seconds.

NOTE: When play back is activated during recording, the system continues to record all audio in the background.

To play back audio when the system is active:

1. Press the ► button to commence playback. Playback will commence from the beginning of the latest recorded file.

NOTE: Conversations carried out when playback is active cannot be heard.

2. Press the ■ button to stop playback.
3. Press the ►► | button to skip ahead 20 seconds.
4. Press the |◀◀ button to skip back 20 seconds.

2.RAU- Radio Amplification Unit



The Radio Amplification Unit (RAU) serves the FDNY radio Channels 11&12. The RAU interfaces to the Dedicated Radio Console (DRC) by an Ethernet CAT6 cable and is monitored by the DRC. The RAU controls HiRiseTech Smart Splitters using up to two Risers (Top and Bottom). RAU fully monitors the health of the system and generates Alarms, the alarms are displayed in the DRC and indicated on the demarcation points (such as Punch Blocks) for external monitoring systems (such as Fire Alarm Panel). The RAU is the only element in the system

which is power fed (from the building's power source-115VAC). The RAU feeds all ARC System's components (Smart Splitters and DRC).

2.1. ALARMS

The RAU provides the following ALARMS:

- 2.1.1. Low Transmit Power
- 2.1.2. Over Temperature
- 2.1.3. High VSWR
- 2.1.4. Loss of primary power source
- 2.1.5. Low Battery capacity
- 2.1.6. Antenna Failure
- 2.1.7. Tamper switch
- 2.1.8. Water leak

2.2. Troubleshooting

#	ALARM	DRC Indication	Faulty Description and Proposed Solution
1	Low transmit power	LOW POWER	Check Riser-RAU connections, Measure the RAU Riser output RF power for CH-11 & CH-12. Call to HiRiseTech Service.
2	Over Temperature		Open the RAU cabinet and measure temperature on DC UPS, Repeater, CCU and multi-coupler. Turn OFF the RAU and Call to HiRiseTech Service.
3	High VSWR	VSWR	The Riser cable might have been damaged. Check cable continuity.
4	Loss of primary power source		Check if AC Power cable has been disconnected.
5	Low Battery Capacity		Measure battery voltage. Replace the battery.
6	Antenna Failure	LCD report	Replace the Antenna and/or Jumper.
7	Tamper switch		This indicates one of the RAU cabinet doors is open. Check RAU cabinet doors are properly closed.
8	Water Leak		This indicates water at the bottom of the RAU cabinet. Turn OFF the RAU and dry the room.

*** For any alarms and /or additional information call to HiRiseTech Service.**