

ARC-210 Presets Control

ARC-210 Control

Operational Mode:

Secure Voice:
☒ Plain Text
☒ Cipher Text

Frequency:

Channel:

Have Quick | SINGARS | **Presets** | Utility | Status

Ch	Frequency	Modulation
1	10.000 MHz	
2	10.000 MHz	
3	10.000 MHz	
4	10.000 MHz	
5	10.000 MHz	

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Figure 1-121.

The operator enters the Cue Frequency (Cue Freq) in the Channel entry field. This frequency will then be used for channel 31 (Cue channel).

If the radio is data filled, the Cue frequency is display-only and will be grayed out so no entry can be made.

1.37.6.4 Presets Tab.

NOTE

The storage capability of 25 preset simplex frequencies on the airborne ARC-210 is not used. The ARC-210 Control window provides a means of setting up 25 preset frequencies and their associated channels. These settings are saved in a file at the GCS and not loaded to the ARC-210. The ARC-210 is commanded to change to the desired frequency when the operator selects one of the frequency/channel combinations in Preset mode.

The operator enters up to 25 frequencies for Preset operation and clicks the Save button to save the entries. If the GCS computer is rebooted, the Preset frequencies will be recalled from the file. The Enter key must be pressed after typing in a frequency or the frequency will not be activated. The Ch column shows the channel number associated with an entered frequency.

Frequencies have the potential to be AM, FM or both. AM or FM is displayed as appropriate. If a frequency can operate in either AM or FM, a button is displayed so the operator can select AM or FM.

1.37.6.5 Utility Tab.

The ARC-210 Utility tab is shown in Figure 1-122, and the applicable settings are shown in Figure 1-123.

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States

Antenna Select: Receiver Sensitivity:

Squelch: 150 Hz Sq Tone:

AM/FM: Tone Transmit:

Guard Receiver: Low Power:

Actions

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Figure 1-122.

ARC-210 Utility Control Settings

Element	Options / Function
Antenna Select	Not functional.
Squelch	Enables or disables squelch.
	NOTE Squelch disable is not functional.
AM/FM	Performs the same operation as the AM/FM buttons available on the Presets tab. Selects AM or FM operation if both are available on the selected frequency. If no aircraft connection is established, ?? is displayed.
Guard Receiver	Enables or disables Guard Receiver operation.
	NOTE Guard receiver is not functional.
Receiver Sensitivity	Sets receiver sensitivity to high or low.
150 Hz Sq Tone	Enables or disables transmission of a 150 Hz squelch tone in the 30 – 88 MHz band transmitted along with the normal voice modulation.
Tone Transmit	Enables or disables transmission of an audible tone. When enabled the radio transmits a tone that can be received and heard on the receiving station. Tone transmit is used for radio testing.
Low Power	Enables or disables low power operation. When enabled, Tx power is reduced by a factor of 10 so that receiving radios in close physical proximity are not overdriven.
BIT	Activates the radio's built-in test. When BIT is running, a BIT running message is displayed in the upper left corner (warning area) of the left HDD. Error messages are displayed after BIT finishes. If BIT passes, the Warning Message goes away.
Zeroize	Zeros all data fill in the radio.

Figure 1-123.

ARC-210 Status

ARC-210 Control

Operational Mode:

Secure Voice:

- ☒ Plain Text
- ☒ Cipher Text

Frequency:

Channel:

Have Quick | **SINCGARS** | Presets | Utility | **Status**

Radio:

Op Mode:

Frequency:

Modulation:

Waveform:

Guard Receiver:

Guard Frequency:

Error Code:

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Figure 1-124.

1.37.6.6 ARC-210 Status Tab.

The operator can quickly see the status of the ARC-210 by selecting the Status tab Figure I-124. The radio elements available

on the Status tab and the possible messages associated with each element are shown in Figure 1-125.

ARC-210 Status Indications

Element	Possible Messages
Radio	OK Not Responding
Op Mode	BIT running Off Single Channel Scan Mode Maritime Ship Maritime Shore Anti-Jam
Frequency	<div> <div> Tx frequency (also shown on HUD in lower right corner) <ul style="list-style-type: none"> Shown as xxx.xx Cxx. Where xxx.xx is frequency and Cxx is the channel number. For SINCGARS – Fxxx Cxx where xxx is net number and Cxx is the channel number For Have Quick – Axx.xxx Cxx where Axx.xxx is the net number and Cxx is the channel number. </div> <div> Error messages (also shown on HUD lower right corner): <ul style="list-style-type: none"> No HQ WOD No HQ MWOD No Transec No HQ Time No SGR Time </div> <div> <ul style="list-style-type: none"> Anti-Jam Master Guard 121 – applies to 108-156 MHz Guard 243 – applies to 30-88 MHz, 156-174 MHz, and 225-400 MHz BIT running Scan Recall UNKNOWN </div> </div>
Modulation	AM or FM – If no aircraft connection is established then ?? is displayed.
Waveform	No Waveform SINCGARS HQ I
Guard Receiver	OFF or ON
Guard Frequency	xxx.xx (Should be either 121.50 or 243.00)
Error Code	Not used.

Figure 1-125.**1.37.7 EUROPEAN 8.33-KHZ CHANNEL SPACING.**

Channel spacing of 8.33-kHz is used for ATC in Europe. The displayed frequency not only indicates the frequency assignment, but also indicates which bandwidth is to be selected. The following table shows the nomenclature assignment and the increment for channels between 118.000- and 136.975-MHz. Any entries not in the table are interpreted as normal 25-kHz bandwidth frequency.

The air traffic controller specifies a channel name just as is done with 25-kHz channel spacing. The operator sets the channel on the radio control. The radio receives the channel command from the radio control and performs all necessary conversions to translate from an ATC channel to an ATC frequency with the appropriate receiver bandwidth when necessary. The operation is transparent to the radio operator.