

7.0 Antenna Channels

- 7.0 Requirements for Antenna Channels settings
- 7.1 Scanning Channels
 - 7.1.1 Channel Scan Requirements
 - 7.1.2 Automatic Scan At RF Selection
- 7.2 Find Channels
- 7.3 Find More Channel
- 7.4 Skip Channel
- 7.5 Analog Audio 2020/2021 only
- 7.6 Digital Audio

7.0 Requirements for Antenna Channels settings

	Antenna Channels	Requirements	Notes formerly TV Channels
1	Antenna Channels submenu	Available for all inputs including all physical inputs, SmartCast Home, WatchFree+, AirPlay, apps.	Limitation to tuner source only no longer supported due to WatchFree+ OTA integration which requires channel scan from WatchFree+ menu.
2	Find Channels	Changes source to tuner	Can also be adjusted from WatchFree+
3	Find New Channels	Changes source to tuner	Can also be adjusted from WatchFree+
4	Skip Channel	Changes source to tuner	Can also be adjusted from WatchFree+
5	Analog Audio	Applies to tuner only but set from any source.	Can also be adjusted from WatchFree+
6	Digital Audio	Applies to tuner only but set from any source.	Can also be adjusted from WatchFree+
7	Parental Controls	Applies to tuner and composite only. Must be able to adjust from both tuner and composite.	Can also be adjusted from WatchFree+

7.1 Scanning Channels

	Setting	Requirement
1	Find Channels	Channel map cleared, then scan for channels
2	Find More Channels	Channel map retained, scan for new MHz channels and scan for all cable modulations.

7.1.1 Channel Scan Requirements

	Channel Scan Requirements	Notes
1	<p>For Find Channels only digital MHz are scanned; analog no longer included as of 7/2021 when FCC ended analog.</p> <p>For Find More Channels also scan analog and digital cable modulations and analog.</p>	<ol style="list-style-type: none"> 1. Over the air MHz is 2 - 69 (54 MHz - 700 MHz) 2. Analog MHz is 2 - 14. 3. Cable is 1 - 135.
2	<p>Find Channels scan is completed in 1 minute.</p> <p>Find More Channels scan is complete in 7 minutes.</p>	Find More Channels takes longer to include analog and cable scan.
3	<p>Channel Scan is launched in sidebar then</p> <ol style="list-style-type: none"> 1. WatchFree+ is launched with a spinner while All Settings sidebar displays. 2. During the scan, enumerates the number of digital channels found and for Find More Channels, the number of analog and digital channels found. 3. A progress bar displays. 4. Includes a Cancel button and if canceled, TV retains channels scanned if canceled. 	<p>If channel scan is started in WatchFree+, the behavior is different.</p> <ol style="list-style-type: none"> 1. A pop up displays over WatchFree+ Antenna Settings with a Cancel button. 2. A progress bar displays with notification below of "X% Complete". 3. Enumerates the number of channels found. 4. When scan finishes below progress bar notification changed too "Scan is complete" and the Cancel button changes to Next button. 5. Select the Next button allows audio from the first scanned channel (video hidden below Antenna Settings menu) and displays zip code pop up confirmation. 6. Selecting the Confirm or Next soft button in Zip Code displays the Show or Hide Channels setting with a Done button 7. Selecting Done button from the Show or Hide Channels returns to Antenna Settings.
4	When complete, the progress bar notification changes to the cancel button changes to Done button and TV tuned to first scanned channel.	
5	Selection of the Done button returns to the Antenna Channels menu and tunes to the first scanned channel in the channel map.	
6	During scan panel is muted.	
7	At next power on, TV displays a WatchFree+ notification to enter zip code to provide guide data.	Your local antenna channels are now part of Watchfree+. Confirm your ZIP code to enable local listings in your Watchfree+ Program Guide.
8	<p>During scan no other functions supported, the following prohibited:</p> <ul style="list-style-type: none"> • Changes to settings • Input key display of input selector • Casting to the TV 	

	<ul style="list-style-type: none"> • Functions launched from IR remote or SmartCast app (e.g. Volume, Wide, Pic, etc.) • One touch play • Calibration Tests (turned off before scan). • User Manual • Demo Mode. 	
9	<p>To end the scan</p> <ul style="list-style-type: none"> • power off the TV • Sidebar displays, select Cancel button with OK key. • Select another input using the SmartCast app 	No other keys are supported during channel scan.
10	Launch of a channel scan from mobile deep links into the channel scan in Antenna Channels menu.	

7.1.2 Automatic Scan At RF Selection

	Automatic Scan at RF Selection Requirements	Notification
1	If channels have never been scanned when the RF input is selected, WatchFree+ is launched with current streaming channel and no notification displays. then a notification to press the OK key to launch the channel scan automatically displays.	"Tuner has not been set up. To find channels, check if the RF cable is connected, then press the OK key on the remote."

7.2 Find Channels

	Requirements	Notes
1	Selection of Find Channels launches channel memorization for over-the-air antenna, MHz digital modulations only (no analog, no cable), and displays the Find Channels status screen.	FCC ended support for analog channels in July 2021.
2	If another input is source, then the input is automatically changed to WatchFree+ then the scan is started.	From WatchFree+, select Find Channels from Antenna Settings, scan in WatchFree+
3	Panel is muted	
4	Channel Map is cleared, lock status cleared	
5	Scanned channels added to the channel map.	
6	WatchFree+ displays with spinner during scan.	
7	<p>To end a tuner scan:</p> <ul style="list-style-type: none"> • Confirm the Cancel button- TV tunes to first scanned channel. • Select another input using the SmartCast app • Power off the TV. 	
8	<p>During the tuner scan the following are not supported:</p> <ul style="list-style-type: none"> • Changes to settings 	

	<ul style="list-style-type: none"> • Casting to the TV • Functions launched from IR remote or SmartCast app (e.g. Volume, Wide, Pic, etc.) • One touch play • Calibration Tests (turned off before scan). • Demo Mode. 	
9	On completion of channel scan <ul style="list-style-type: none"> • tune to the first channel in the channel map 	

7.3 Find More Channel

	Requirements	Notes
1	If channels have been previously scanned then Find New Channel adds new channels found for MHz modulations (digital and analog) and all cable modulations are also scanned.	
2	If another input is source, then the input must be changed to Tuner first, then the scan is started.	
3	The channel map is retained.	
4	First check if the channel is included in the channel map starting with channel 2.	
5	If channel is in the map, then do not scan the channel and skip to the next channel, in this case channel 3.	
6	If the channel is not in the map then scan the channel and if a channel is found, include in the channel map.	
7	If all MHz modulations have been scanned, then scan all cable modulations.	
8	Dynamic status of the scan displays the same as for Find Channels but only includes the new channels found. <ul style="list-style-type: none"> • During the channel scan, the dynamic status includes the number of analog channels added to the channel map as well as digital channels. 	Dynamic status is: <ul style="list-style-type: none"> • Number of analog channels scanned • Number of digital channels scanned • Percentage of the completed scanned.
9	On exit of the scan, the TV Channels submenu displays the total number of channels in the channel map including the new channels found.	

7.4 Skip Channel

	Requirements	Notes
1	If another input is source, then the input must be changed to antenna first, then the scan is started.	

2	When pressing Channel Up/Down key, channels in the channel map can be skipped.	Applies to Up/Down if changing channels.
3	A list of channels available in the channel map included, each with a checkbox.	
4	Default is unchecked and included with Channel Up/Down	Applies to Up/Down if changing channels.
5	If checked then the channel is skipped with Channel Up/Down.	Applies to Up/Down if changing channels.
6	As a channel is highlighted in Skip Channel, the channel tunes.	
7	A press and hold of Up/Down navigates through the channels and on release selects and tunes to the highlighted channel.	
8	A press of OK checks or unchecks the highlighted channel in the channel list.	
9	If the channel map is empty (channels not scanned or no channels found), then Skip Channel is grayed out, not selectable and does not display in the SmartCast app.	Channel map empty due to <ul style="list-style-type: none"> • channels not scanned • no channel found during scan

7.5 Analog Audio 2020/2021 only

	Requirements	Notes
1	Analog Audio no longer applies to tuner as only applies to analog content (no longer supported). Analog audio supported for composite input only. If no composite then the setting does not display.	FCC ended support for analog channels in July 2021. Not for -K 2022 skus going forward.
2	MTS (Multichannel Television Sound) is the analog audio standard defined for the audio channel available for analog programs.	
3	Though Analog Audio only applies to analog programs over tuner, this setting is always available	This is a set and forget setting.
4	Settings are: <ul style="list-style-type: none"> • Stereo (default) • SAP • Mono 	
5	The Secondary Audio Program (SAP) is typically audio in a different language.	Spanish is the most common SAP.

7.6 Digital Audio

	Requirements	Notes
1	The Digital Audio is included with the over the air broadcast in the digital program stream.	Digital Audio applies only to digital content from tuner.

2	Though Digital Audio only applies to digital programs, over tuner this setting is always available. This allows user to opt for a different language or Video Description, when available.	This is a set and forget setting.
3	Settings are: <ul style="list-style-type: none"> • English (default) • Spanish/Video Description • French 	Selection of the SPA setting produces either Spanish or English with video description as provided by the broadcaster.
4	Per FCC requirement, broadcasters must include video description in the "SPA" (Spanish) secondary audio channel.	
5	If Video Description under Accessibility is <ul style="list-style-type: none"> • Changed to On then the Digital Audio setting is changed to Spanish/Video Description • Changed to Off then the Digital Audio setting is changed to English. 	