



**SENNHEISER**

## Sennheiser TBar Module Help File

Sennheiser, AV clients (Crestron)



## SENNHEISER TCBAR MODULE HELP

Module name	<i>Sennheiser TCBar v1.01.00.umc, SennTCBar_1_01_00.usp, SennheiserTCC.clz/.dll</i>
Version	<i>1.01.00</i>
Description	This document defines the common Crestron module interface for the Sennheiser TCBar unit.
Maintainer	Sennheiser
Inputs	<p><b>Pass-Thru-In, Serial</b>  <i>Used to pass a string command to add or remove a subscription.</i></p> <p><i>Format: XXX:YYY</i>  <i>where XXX is either ADD, or REMOVE.</i></p> <p><i>YYY is the api command</i></p> <p><i>example: /api/device/site</i></p> <p><i>"ADD:/api.device/site"</i></p> <p><i>"REMOVE:/api.device/site"</i></p> <p><b>Debug, Digital</b>  <i>Set to high to enable debugging in console. Set low to disable.</i></p> <p><b>Subscribe, Digital</b>  <i>Pulse to start the subscription tracking.</i></p> <p><b>Unsubscribe, Digital</b>  <i>Pulse to stop the subscription tracking.</i></p> <p><b>Identify, Digital</b>  <i>Pulse to set the unit into Identify Mode.</i></p> <p><b>Audio_Sound_Profile, Serial</b>  <i>Set the Audio sound profile. (Valid values: Wallmount, TableTop, AboveDisplay, UnderDisplay, FreeStanding, Custom )</i></p> <p><b>Sound_Prompt_On, Digital</b>  <i>Sets the Sound Prompt switch to the On position.</i></p> <p><b>Sound_Prompt_Off, Digital</b>  <i>Sets the Sound Prompt switch to the Off position.</i></p> <p><b>Sound_Prompt_Toggle, Digital</b>  <i>Toggles the state of the Sound Prompt switch position.</i></p> <p><b>General_Settings</b></p> <p><b>Position_Tracking, Digital</b>  <i>While high, will actively track the beam position, while low, will not update the position levels.</i></p> <p><b>Exclusion_ZoneX_Active, Digital</b>  <i>Sets the Exclusion Zone switch to the On position.</i></p> <p><b>Exclusion_ZoneX_Inactive, Digital</b>  <i>Sets the Exclusion Zone switch to the Off position.</i></p> <p><b>Exclusion_ZoneX_Toggle, Digital</b></p>

	<p><i>Toggles the state of the Exclusion Zone switch position.</i></p> <p><b>Priority_Zone_Active, Digital</b>  <i>Sets the Priority Zone switch to the On position.</i></p> <p><b>Priority_Zone_Inactive, Digital</b>  <i>Sets the Priority Zone switch to the Off position.</i></p> <p><b>Priority_Zone_Toggle, Digital</b>  <i>Toggles the state of the Priority Zone switch position.</i></p> <p><b>LED_Settings</b></p> <p><b>LED_Brightness, Analog</b>  <i>Sets the LED Brightness value. (Values 0-5)</i></p> <p><b>Audio_Settings</b></p> <p><b>Audio_Mic_Level_Tracking, Digital</b>  <i>While high, will actively track the audio level, while low, will not update the audio level.</i></p> <p><b>Audio_Mic_Enable_Enable, Digital</b>  <i>Sets the enable to the On position.</i></p> <p><b>Audio_Mic_Enable_Disable, Digital</b>  <i>Sets the enable to the Off position.</i></p> <p><b>Audio_Mic_Enable_Toggle, Digital</b>  <i>Toggles the state of the enable position.</i></p> <p><b>Audio_Mic_Mute_Enable, Digital</b>  <i>Sets the mute to the On position.</i></p> <p><b>Audio_Mic_Mute_Disable, Digital</b>  <i>Sets the mute to the Off position.</i></p> <p><b>Audio_Mic_Mute_Toggle, Digital</b>  <i>Toggles the state of the mute position.</i></p> <p><b>Audio_Input_Mic_EQ_Level_X, Analog</b>  <i>Sets the corresponding EQ level value.</i></p> <p><b>NoiseGate_On, Digital</b>  <i>Sets the NoiseGate switch to the On position.</i></p> <p><b>NoiseGate_Off, Digital</b>  <i>Sets the NoiseGate switch to the Off position.</i></p> <p><b>NoiseGate_Toggle, Digital</b>  <i>Toggles the state of the NoiseGate switch position.</i></p> <p><b>Bluetooth_On, Digital</b>  <i>Sets the Bluetooth switch to the On position.</i></p> <p><b>Bluetooth_Off, Digital</b>  <i>Sets the Bluetooth switch to the Off position.</i></p> <p><b>Bluetooth_Toggle, Digital</b>  <i>Toggles the state of the Bluetooth switch position.</i></p> <p><b>Audio_Output_Level, Analog</b></p>
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	<p><i>Displays the set Audio output value.</i></p> <p><b>Audio_Output_EQ_Level_X, Analog</b>  <i>Sets the corresponding EQ level value.</i></p> <p><b>Video_Settings</b></p> <p><b>Video_Camera_AI_AutoFraming_On, Digital</b>  <i>Sets the CameraAI AutoFraming to the On position.</i></p> <p><b>Video_Camera_AI_AutoFraming_Off, Digital</b>  <i>Sets the CameraAI AutoFraming to the Off position.</i></p> <p><b>Video_Camera_AI_AutoFraming_Toggle, Digital</b>  <i>Toggles the state of the CameraAI AutoFraming position.</i></p> <p><b>Video_Camera_AI_PersonTiling_On, Digital</b>  <i>Sets the CameraAI PersonTiling to the On position.</i></p> <p><b>Avideo_Camera_AI_PersonTiling_Off, Digital</b>  <i>Sets the CameraAI PersonTiling to the Off position.</i></p> <p><b>Video_Camera_AI_PersonTiling_Toggle, Digital</b>  <i>Toggles the state of the CameraAI PersonTiling position.</i></p> <p><b>Video_Camera_Up/Down/Left/Right, Digital</b>  <i>Pulse to move the internal camera in the specified direction.</i></p> <p><b>Video_Camera_Zoom_In/Out, Digital</b>  <i>Pulse to zoom the internal camera in or out.</i></p>
Outputs	<p><b>Pass-Thru-Out, Serial</b>  <i>Used to display any data from the main processor that is not part of the main module.</i></p> <p><b>Debug_Fb, Digital</b>  <i>While high debugging will appear in console.</i></p> <p><b>Communicating_Fb, Digital</b>  <i>Will go High when the module has successfully established a response from the process module. Will go low if 5 commands fail.</i></p> <p><b>Identify_Fb, Digital</b>  <i>Goes high if the unit is in Identify Mode.</i></p> <p><b>Device_Product, Serial</b>  <i>Displays the Product type in serial form. "TCBar"</i></p> <p><b>Device_Name, Serial</b>  <i>Displays the Name given to the device in serial form.</i></p> <p><b>Device_Location, Serial</b>  <i>Displays the Location Name given to the device in serial form.</i></p> <p><b>Device_Position, Serial</b>  <i>Displays the Position given from the device in serial form.</i></p> <p><b>Device_Serial_Number, Serial</b>  <i>Displays the Serial Number given from the device in serial form.</i></p> <p><b>Device_Firmware, Serial</b>  <i>Displays the Firmware currently running on the device in serial form.</i></p> <p><b>Errors, Serial</b></p>

	<p><i>Displays any errors encountered from the device in serial form.</i></p> <p><b>Warnings, Serial</b></p> <p><i>Displays any warnings in serial form.</i></p> <p><b>Audio_Sound_Profile_Fb, Serial</b></p> <p><i>Shows the Audio sound profile. (Valid values: Wallmount, TableTop, AboveDisplay, UnderDisplay, FreeStanding, Custom )</i></p> <p><b>Sound_Profile_is_Custom, Digital</b></p> <p><i>While high, will indicate that the current sound profile is custom. Used to expose the EQ level controls.</i></p> <p><b>General_Settings</b></p> <p><b>Position_Tracking_Fb, Digital</b></p> <p><i>While high, will actively track the elevation and azimuth, while low, will not update the position levels.</i></p> <p><b>Beam_Position, Analog</b></p> <p><i>Displays the beam position value.</i></p> <p><b>Exclusion_ZoneX_Active_Fb, Digital</b></p> <p><i>High while the Exclusion Zone switch is in the On position.</i></p> <p><b>Exclusion_ZoneX_Inactive_Fb, Digital</b></p> <p><i>High while the Exclusion Zone switch is in the Off position.</i></p> <p><b>Priority_Zone_Active_Fb, Digital</b></p> <p><i>High while the Priority Zone switch is in the On position.</i></p> <p><b>Priority_Zone_Inactive_Fb, Digital</b></p> <p><i>High while the Priority Zone switch to is in Off position.</i></p> <p><b>LED_Settings</b></p> <p><b>LED_Brightness_Fb, Analog</b></p> <p><i>Sets the LED Brightness value. (Values 0-5)</i></p> <p><b>Audio_Settings</b></p> <p><b>Audio_Level_Tracking_Fb, Digital</b></p> <p><i>While high, will actively track the audio level, while low, will not update the audio level.</i></p> <p><b>Audio_Mic_Enable_Enable_Fb, Digital</b></p> <p><i>Goes high when the mic enable is On.</i></p> <p><b>Audio_Mic_Enable_Disabled_Fb, Digital</b></p> <p><i>Goes high when the mic enable is Off.</i></p> <p><b>Audio_Mic_Mute_Enabled, Digital</b></p> <p><i>Goes high when the mute is On.</i></p> <p><b>Audio_Mic_Mute_Disabled, Digital</b></p> <p><i>Goes high when the mute is Off.</i></p> <p><b>Audio_Level_dB, Analog</b></p> <p><i>Displays active volume level.</i></p> <p><b>Audio_Mic_Input_EQ_Level_X_Fb, Analog</b></p> <p><i>Displays the corresponding EQ level value.</i></p> <p><b>NoiseGate_On_Fb, Digital</b></p>
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	<p><i>Goes high when the NoiseGate switch is On.</i></p> <p><b>NoiseGate_Off_Fb, Digital</b> <i>Goes high when the NoiseGate switch is Off.</i></p> <p><b>Bluetooth_On_Fb, Digital</b> <i>Goes high when the Bluetooth switch is On.</i></p> <p><b>Bluetooth_Off_Fb, Digital</b> <i>Goes high when the Bluetooth switch is Off.</i></p> <p><b>Audio_Input_Bluetooth_Level_Fb, Analog</b> <i>Displays the current Bluetooth level value while connected.</i></p> <p><b>Audio_Input_USB_Level_Fb, Analog</b> <i>Displays the current USB level value while connected.</i></p> <p><b>Audio_Output_Level_Fb, Analog</b> <i>Displays the set attenuation value.</i></p> <p><b>Audio_Output_EQ_Level_X_Fb, Analog</b> <i>Displays the corresponding EQ level value.</i></p>									
	<p><b>Video_Camera_AI_AutoFraming_On_Fb, Digital</b> <i>Goes high when the CameraAI AutoFraming is on.</i></p> <p><b>Video_Camera_AI_AutoFraming_Off_Fb, Digital</b> <i>Goes high when the CameraAI AutoFraming is off.</i></p> <p><b>Video_Camera_AI_PersonTiling_On, Digital</b> <i>Goes high when the CameraAI PersonTiling is on.</i></p> <p><b>Video_Camera_AI_PersonTiling_Off, Digital</b> <i>Goes high when the CameraAI PersonTiling is off.</i></p> <p><b>Video_Camera_Enabled_Fb, Digital</b> <i>Displays the camera active state. While high, camera is enabled and active.</i></p>									
Version History	<table> <thead> <tr> <th>Version</th><th>Date (yy/mm/dd)</th><th>Remarks</th></tr> </thead> <tbody> <tr> <td>1.00.00</td><td>24/04/05</td><td>Initial structure.</td></tr> <tr> <td>1.01.00</td><td>25/04/25</td><td>Added CameraAI features and Mic_Enable signals</td></tr> </tbody> </table>	Version	Date (yy/mm/dd)	Remarks	1.00.00	24/04/05	Initial structure.	1.01.00	25/04/25	Added CameraAI features and Mic_Enable signals
Version	Date (yy/mm/dd)	Remarks								
1.00.00	24/04/05	Initial structure.								
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Advisories/ remarks										
Dependencies	<i>Sennheiser TCBar v1.01.00.umc, SennTCBar_1_01_00.usp, SennheiserTCC.clz/.dll</i>									
Processor support	<i>2-Series, not currently supported. 3-Series, not currently supported. 4-series, supported</i>									
Notes:	<i>Due to the nature of Server Sent Events (SSE) crestron 4-series is the only platform that supports this module.</i>									