

# Changing Audio Settings for the TCIS-2

## Set a Static IP Address on Your Windows 10 Computer

To access the web interface, your computer must be in the same subnet range as the station. There is a video about this on the config file download site you were just on.

1. Click **Start**, and type **Control** in the search field, then select **Control Panel**.
2. Click on **Network and Internet**.
3. Click on **Network and Sharing Center**.
4. On the left pane, click the **Change adapter settings** link.
5. Right-click on your computer's Ethernet network adapter and select **Properties**.
6. Select the **Internet Protocol Version 4 (TCP/IPv4)** option.
7. Click the **Properties** button.
8. Select the **Use the following IP address** option.
9. Set the **IP address** (e.g., **169.254.1.90**).
10. Set the **Subnet mask**. (e.g., **255.255.0.0**).
11. Click **OK**.
12. Click **Close** again to close the network adapter properties.



## Connect the PC, Phone, POE Switch, and TCIS-2

1. Plug the PC into the same Ethernet POE switch as everything else.
2. Use a Firefox or Microsoft Edge browser to log in to the Scale 1 intercom using this IP address: 169.254.1.100
3. Click Login and enter the default User name: **admin**
4. Enter the default Password: **alphaadmin**

## Changing Audio Settings on the TCIS-2

The TCIS-2 is the outside intercom, and the following settings affect its performance.

### Audio Settings

Check the audio settings to make sure they are similar to the following image. Raise or lower the speaker volume to meet your needs, however, note that raising the speaker volume higher makes the noise cancelling circuitry work harder. If you are using an external horn speaker then it is best to keep the speaker volume low on this setting as it will not affect the external horn which has its own volume control.

1. Select **Edge Controller > System Configuration > Call and Audio**

The screenshot shows the 'Call and Audio' configuration page. On the left is a navigation menu with 'System Configuration' expanded to show 'Call and Audio'. The main area contains a table with columns: Number, Name, Auto Answer, Speaker Volume, Volume Override Level, ANC, AGC, AVC, and Accessory. A single device 'Scale 1' is listed with the following settings: Auto Answer checked, Speaker Volume set to 4, Volume Override Level set to 7, ANC checked, AGC checked, and AVC checked. A 'SAVE' button is located below the table.

Number	Name	Auto Answer	Speaker Volume	Volume Override Level	ANC	AGC	AVC	Accessory
300	Scale 1	<input checked="" type="checkbox"/>	4	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Total 1 devices discovered

SAVE

The **Call and Audio Settings** menu include the following parameters:

- **Autoanswer:** When un-checked incoming calls will be ringing (Private mode), and has to be accepted by the user. When checked the call will connect straight through.
- **Speaker Volume:** Sets the loudspeaker volume for the station.
- **Volume Override Level:** Sets the loudspeaker volume during volume override. Volume Override is used by [Group calls with Emergency priority](#).
- **ANC:** Active Noise Cancellation. When enabled most of the background noise will be filtered away from the microphone signal.
- **AGC:** Automatic Gain Control. When enabled the microphone signal will automatically be amplified when speaking with a low voice or if you are far away from the station.
- **AVC:** Automatic Volume Control. When enabled the loudspeaker volume is adjusted according to the ambient noise level. The AVC will perform better if the "Speaker Volume" is set to a fairly low level, as this will give the AVC a more dynamic range for adjustments. Note that the AVC adjustment is disabled while the speaker is playing audio. Adjustments are made in silent periods (min. 100ms silence required).
- **Accessory:** If the station model supports accessories (headset, handset etc.), you can choose the type of accessory here

## Put the Unit in Advanced Programming Mode

1. Under **Main > Recovery** click on Advanced configuration mode and type in the password 1851
2. Put a checkmark in the box and click **Save** and **Apply**.

## Changing Microphone Sensitivity and AGC Volume

The following two settings will affect how loud the outdoor intercom is on the inside station. Increasing Microphone Sensitivity and AGC Volume can increase the volume on the phone inside, however increasing too much can cause distortion. You will need to play around with these settings to find the optimum settings for your environment.

1. Click on the **Edge Configuration** tab and then **Audio**
2. If **Microphone Sensitivity** is lower than 5, change it to 5 or higher.
3. Change **AGC Volume** to 4 or higher.
4. Click the **Save** button

## Changing Noise Cancellation Level

Also under the Audio tab of the last step is the Noise Reduction Level setting. This determines how much noise is cut out. Setting the level too high under extreme noise conditions may also cut out the conversation you are trying to hear. Raising and lowering the noise reduction level will help you find the optimum setting.

In extremely windy conditions we advise using the optional windscreen to reduce wind noise which will overtax the noise cancellation circuitry.

Main			Edge Configuration	Station Administration	Edge Controller	Advanced Network																																																																					
<b>Audio Settings</b>																																																																											
<table border="1"><thead><tr><th>Description</th><th>Configuration</th><th></th></tr></thead><tbody><tr><td>Speaker Volume:</td><td>2</td><td></td></tr><tr><td>Volume Override Level:</td><td>7</td><td>Sets the volume during volume override. Volume and handset override happens during Emergency Group calls. <b>i</b></td></tr><tr><td>Microphone Sensitivity / Line Input Level:</td><td>5</td><td>Default value 4. 0 = very low sensitivity</td></tr><tr><td>Digital/Analog Mic Switch:</td><td>Always Digital</td><td>Default is Always Digital. Switch from Digital to Analog Mic based on settings. Analog I/O Pin: When I/O Pin is triggered, Analog Mic is used, when not Digital Mic is used. Analog I/O Pin Call End: Analog Mic is switched On (Digital Off) by first I/O Pin trigger in call and used until call end.</td></tr><tr><td>Digital/Analog Mic Switch Pin:</td><td>None</td><td>Input/Output Pin for Digital/Analog Mic switching. This doesn't affect other I/O pin configured functionality. NOTE: Pin must be configured as Input.</td></tr><tr><td>Mute speaker while analog mic:</td><td><input type="checkbox"/></td><td>Mute speaker while Analog Mic is used.</td></tr><tr><td>Volume Control Ch1:</td><td>0</td><td>Audio Channel 1 Offset Gain (default routed to Amplifier/Speaker) Note! Shouldn't be used with accessories on TKIE Valid range: [-62..+24] dB</td></tr><tr><td>Volume Control Ch2:</td><td>0</td><td>Audio Channel 2 Offset Gain. (default routed to Line Out Amplifier) Note! Shouldn't be used with accessories on TKIE Note! In Standard Turbine ch2 is same signal as ch1 Valid range: [-62..+24] dB</td></tr><tr><td>Noise Reduction Level:</td><td>7</td><td>0 = disabled.</td></tr><tr><td>Force loudspeaker ringing:</td><td><input type="checkbox"/></td><td>Ringing is now always done on loudspeaker when ringing on headphones or handset.</td></tr><tr><td>Tone Volume:</td><td>0</td><td>(-1)=disabled, 0=default, [1..4]=[-22..-1]dB</td></tr><tr><td>Audio Out Source:</td><td>Voice Audio</td><td>Main Audio Out (Speaker) Sources</td></tr><tr><td>Line Out Source:</td><td>Audio Ch2</td><td>Line out can play audio either from VoIP signal or direct from microphone</td></tr><tr><td>Automatic Gain Control (AGC):</td><td><input checked="" type="checkbox"/></td><td>Automatic Gain Control. If speech level and environmental noise are very unstable it may be turned on.</td></tr><tr><td>AGC Speed:</td><td>0</td><td>0..3 selects different attack/release times. Lesser values means faster attack and slower release time.</td></tr><tr><td>AGC Volume:</td><td>5</td><td>0..7 corresponds to -20..0 dBm</td></tr><tr><td>Automatic Volume Control (AVC):</td><td><input checked="" type="checkbox"/></td><td>Volume depends on noise level</td></tr><tr><td>AVC Debug:</td><td><input type="checkbox"/></td><td>Shows current volume level on OLED display</td></tr><tr><td>AVC Advanced</td><td><input type="checkbox"/></td><td>Check to open advanced settings</td></tr><tr><td>Far-End Audio Squelch:</td><td>Disabled</td><td>Audio Squelch on Far-End Signal (suppress audio on low signal levels)</td></tr><tr><td>Squelch Threshold:</td><td>-60</td><td>Threshold level for suppressing audio signal Valid range: [-92..0] dBm0</td></tr><tr><td>Squelch Activate Delay:</td><td>100</td><td>Delay time with signal below threshold level before squelch is activated. Valid range: [0..10000] ms</td></tr></tbody></table>							Description	Configuration		Speaker Volume:	2		Volume Override Level:	7	Sets the volume during volume override. Volume and handset override happens during Emergency Group calls. <b>i</b>	Microphone Sensitivity / Line Input Level:	5	Default value 4. 0 = very low sensitivity	Digital/Analog Mic Switch:	Always Digital	Default is Always Digital. Switch from Digital to Analog Mic based on settings. Analog I/O Pin: When I/O Pin is triggered, Analog Mic is used, when not Digital Mic is used. Analog I/O Pin Call End: Analog Mic is switched On (Digital Off) by first I/O Pin trigger in call and used until call end.	Digital/Analog Mic Switch Pin:	None	Input/Output Pin for Digital/Analog Mic switching. This doesn't affect other I/O pin configured functionality. NOTE: Pin must be configured as Input.	Mute speaker while analog mic:	<input type="checkbox"/>	Mute speaker while Analog Mic is used.	Volume Control Ch1:	0	Audio Channel 1 Offset Gain (default routed to Amplifier/Speaker) Note! Shouldn't be used with accessories on TKIE Valid range: [-62..+24] dB	Volume Control Ch2:	0	Audio Channel 2 Offset Gain. (default routed to Line Out Amplifier) Note! Shouldn't be used with accessories on TKIE Note! In Standard Turbine ch2 is same signal as ch1 Valid range: [-62..+24] dB	Noise Reduction Level:	7	0 = disabled.	Force loudspeaker ringing:	<input type="checkbox"/>	Ringing is now always done on loudspeaker when ringing on headphones or handset.	Tone Volume:	0	(-1)=disabled, 0=default, [1..4]=[-22..-1]dB	Audio Out Source:	Voice Audio	Main Audio Out (Speaker) Sources	Line Out Source:	Audio Ch2	Line out can play audio either from VoIP signal or direct from microphone	Automatic Gain Control (AGC):	<input checked="" type="checkbox"/>	Automatic Gain Control. If speech level and environmental noise are very unstable it may be turned on.	AGC Speed:	0	0..3 selects different attack/release times. Lesser values means faster attack and slower release time.	AGC Volume:	5	0..7 corresponds to -20..0 dBm	Automatic Volume Control (AVC):	<input checked="" type="checkbox"/>	Volume depends on noise level	AVC Debug:	<input type="checkbox"/>	Shows current volume level on OLED display	AVC Advanced	<input type="checkbox"/>	Check to open advanced settings	Far-End Audio Squelch:	Disabled	Audio Squelch on Far-End Signal (suppress audio on low signal levels)	Squelch Threshold:	-60	Threshold level for suppressing audio signal Valid range: [-92..0] dBm0	Squelch Activate Delay:	100	Delay time with signal below threshold level before squelch is activated. Valid range: [0..10000] ms
Description	Configuration																																																																										
Speaker Volume:	2																																																																										
Volume Override Level:	7	Sets the volume during volume override. Volume and handset override happens during Emergency Group calls. <b>i</b>																																																																									
Microphone Sensitivity / Line Input Level:	5	Default value 4. 0 = very low sensitivity																																																																									
Digital/Analog Mic Switch:	Always Digital	Default is Always Digital. Switch from Digital to Analog Mic based on settings. Analog I/O Pin: When I/O Pin is triggered, Analog Mic is used, when not Digital Mic is used. Analog I/O Pin Call End: Analog Mic is switched On (Digital Off) by first I/O Pin trigger in call and used until call end.																																																																									
Digital/Analog Mic Switch Pin:	None	Input/Output Pin for Digital/Analog Mic switching. This doesn't affect other I/O pin configured functionality. NOTE: Pin must be configured as Input.																																																																									
Mute speaker while analog mic:	<input type="checkbox"/>	Mute speaker while Analog Mic is used.																																																																									
Volume Control Ch1:	0	Audio Channel 1 Offset Gain (default routed to Amplifier/Speaker) Note! Shouldn't be used with accessories on TKIE Valid range: [-62..+24] dB																																																																									
Volume Control Ch2:	0	Audio Channel 2 Offset Gain. (default routed to Line Out Amplifier) Note! Shouldn't be used with accessories on TKIE Note! In Standard Turbine ch2 is same signal as ch1 Valid range: [-62..+24] dB																																																																									
Noise Reduction Level:	7	0 = disabled.																																																																									
Force loudspeaker ringing:	<input type="checkbox"/>	Ringing is now always done on loudspeaker when ringing on headphones or handset.																																																																									
Tone Volume:	0	(-1)=disabled, 0=default, [1..4]=[-22..-1]dB																																																																									
Audio Out Source:	Voice Audio	Main Audio Out (Speaker) Sources																																																																									
Line Out Source:	Audio Ch2	Line out can play audio either from VoIP signal or direct from microphone																																																																									
Automatic Gain Control (AGC):	<input checked="" type="checkbox"/>	Automatic Gain Control. If speech level and environmental noise are very unstable it may be turned on.																																																																									
AGC Speed:	0	0..3 selects different attack/release times. Lesser values means faster attack and slower release time.																																																																									
AGC Volume:	5	0..7 corresponds to -20..0 dBm																																																																									
Automatic Volume Control (AVC):	<input checked="" type="checkbox"/>	Volume depends on noise level																																																																									
AVC Debug:	<input type="checkbox"/>	Shows current volume level on OLED display																																																																									
AVC Advanced	<input type="checkbox"/>	Check to open advanced settings																																																																									
Far-End Audio Squelch:	Disabled	Audio Squelch on Far-End Signal (suppress audio on low signal levels)																																																																									
Squelch Threshold:	-60	Threshold level for suppressing audio signal Valid range: [-92..0] dBm0																																																																									
Squelch Activate Delay:	100	Delay time with signal below threshold level before squelch is activated. Valid range: [0..10000] ms																																																																									
<b>SAVE</b>																																																																											