

Increasing Volume for ISTV-3 Phones

There are two ways to increase volume. One is on the inside phone through its software settings and the other is on the outside TCIS-2 unit. This is the procedure for the TCIS-2 and below that is the ISTV-3.

Set a Static IP Address on Your Windows 10 Computer

To access the web interface of the TCIS-2, 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 House 1 intercom using this IP address: 169.254.1.101
3. Click Login and enter the default User name: **admin**
4. Enter the default Password: **alphaadmin**

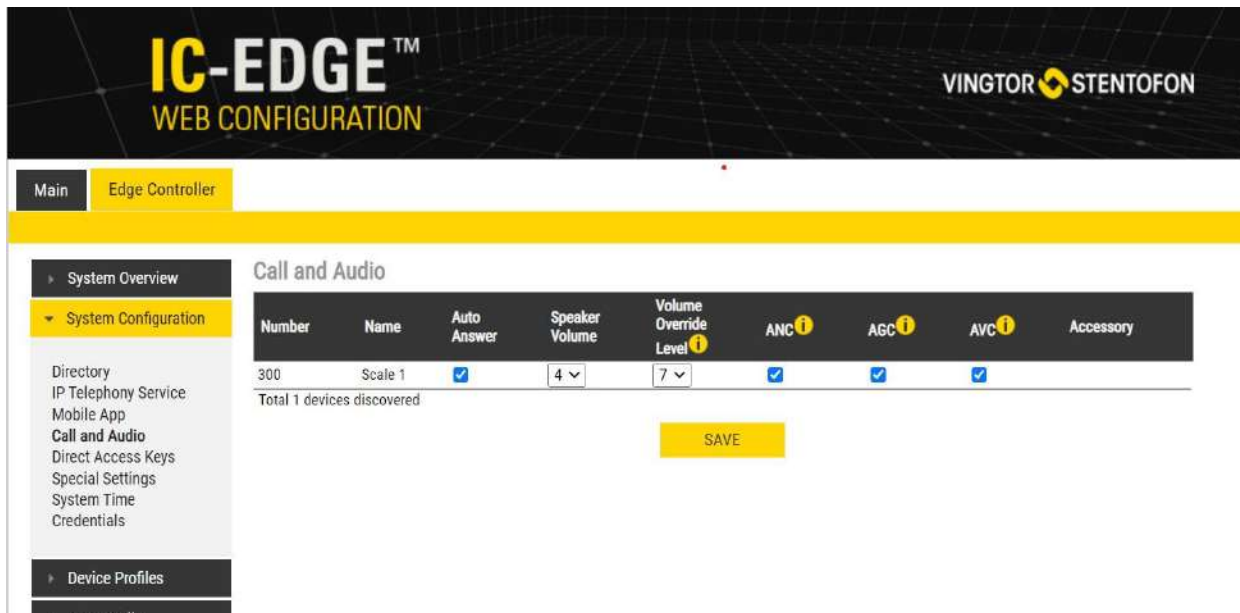
Changing Audio Settings on the TCIS-2

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 for device 300. The interface includes a navigation menu on the left with options like System Overview, System Configuration, and Device Profiles. The main content area displays a table of settings for the device.

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

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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

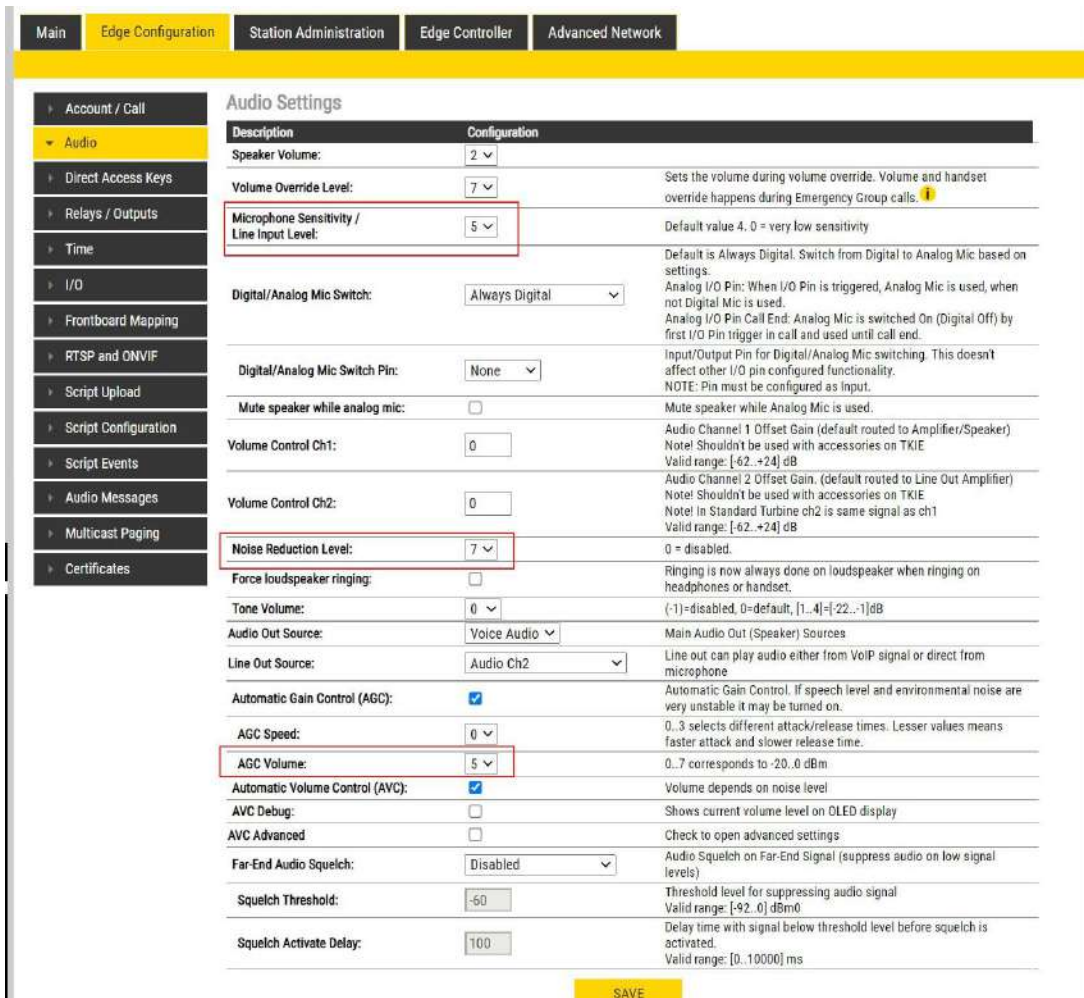
The following two settings will affect how loud the outdoor intercom is on the inside station. Increasing Microphone Sensitivity and AGC Volume can increase the volume on the phone inside, however increasing too much can cause distortion. You will need to play around with these settings to find the optimum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



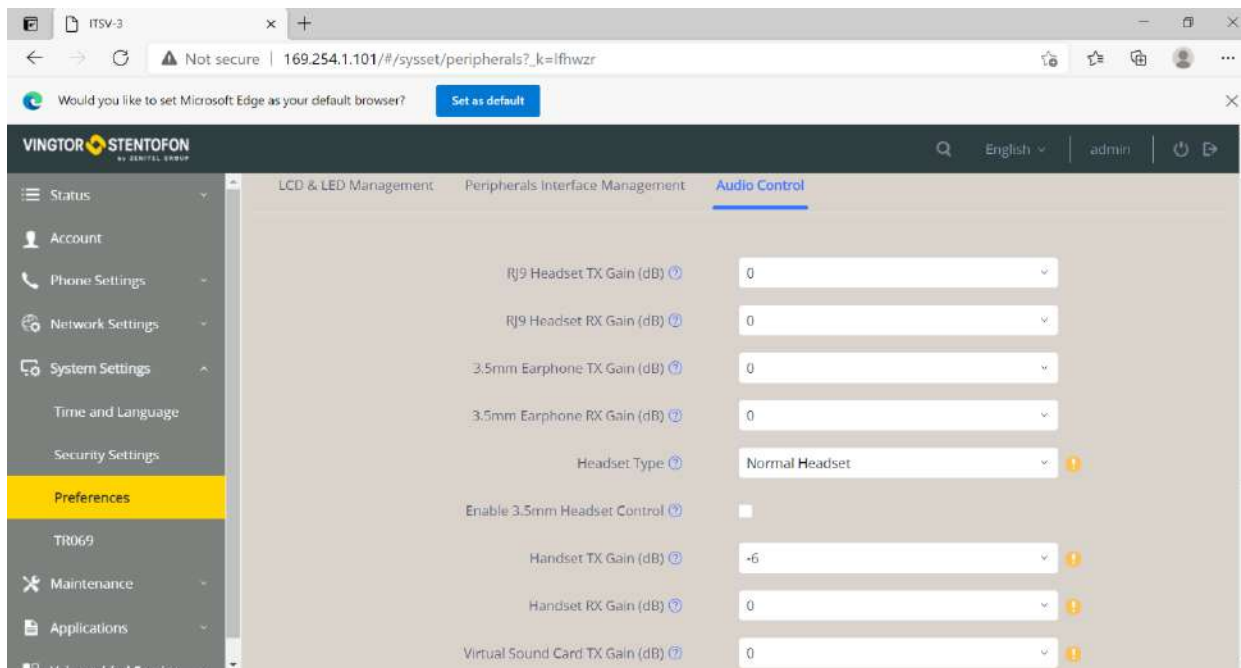
The screenshot shows the 'Audio Settings' configuration page. The 'Microphone Sensitivity / Line Input Level' is set to 5, and the 'AGC Volume' is set to 5. Other settings include Speaker Volume (2), Volume Override Level (7), Digital/Analog Mic Switch (Always Digital), Digital/Analog Mic Switch Pin (None), Mute speaker while analog mic (unchecked), Volume Control Ch1 (0), Volume Control Ch2 (0), Noise Reduction Level (7), Force loudspeaker ringing (unchecked), Tone Volume (0), Audio Out Source (Voice Audio), Line Out Source (Audio Ch2), Automatic Gain Control (AGC) (checked), AGC Speed (0), Automatic Volume Control (AVC) (checked), AVC Debug (unchecked), AVC Advanced (unchecked), Far-End Audio Squelch (Disabled), Squelch Threshold (-50), and Squelch Activate Delay (100).

Description	Configuration	
Speaker Volume:	2	
Volume Override Level:	7	Sets the volume during volume override. Volume and handset override happens during Emergency Group calls.
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:	-50	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

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Increase Volume on the ISTV-3 Inside Phone

1. Enter the IP address of the Phone into the browser address bar (there is a list of IP numbers at the end of this document). If there is only one phone the address is 169.254.1.101.
2. Enter the username and password of the phone. The default username is **admin** and the password is **alphaadmin** however, the password has most likely been changed to **alphaadmin1**.
3. Click on **Security Settings > Preferences**.
4. On the top row of tabs on the screen click on **Audio Control**.
5. Scroll down to **Media Volume** move the slider to the right or left as needed. Note that raising the volume may cause a hissing noise on the phone's speaker when there is no loud noise at the outside intercom.
6. If you want to increase the headset volume change the **Headset RX Gain (db)**.
7. Click **Save**.
8. Click the **Reboot** button on the upper right side of the screen. Click **OK** to approve the change.



The screenshot shows the VINGTOR STENTOFON web interface. The browser address bar displays "169.254.1.101/#/sysset/peripherals?_k=ifhwzr". The page title is "Would you like to set Microsoft Edge as your default browser?". The main content area is titled "Audio Control" and contains the following settings:

Setting	Value
RJ9 Headset TX Gain (dB)	0
RJ9 Headset RX Gain (dB)	0
3.5mm Earphone TX Gain (dB)	0
3.5mm Earphone RX Gain (dB)	0
Headset Type	Normal Headset
Enable 3.5mm Headset Control	<input type="checkbox"/>
Handset TX Gain (dB)	-6
Handset RX Gain (dB)	0
Virtual Sound Card TX Gain (dB)	0