

Sonetics[®]

APEX CONNECT

Manual



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Overview

The Sonetics Apex Connect allows users in low noise environments to connect with their teams in high noise environments without having to wear a hearing protection headset. Users simply leverage their existing corded wired headset or Bluetooth® headset to plug or pair to the Sonetics Apex Connect to communicate with their team up to 800 feet line of sight, hands-free. The Sonetics Apex Connect is rugged and rated at IP67, so it's waterproof and portable to different environments.

Contents in Box



APEX Connect

1 ea x Apex Connect



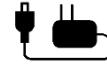
Manual and Reference

1 ea x Quick Start Guide

1 ea x Manual (online at: www.soneticscorp.com)

1 ea x FCC / IC / NRR compliance sheet

1 ea x Warranty Card



Charging

1 ea x AC USB Wall Adaptor

1 ea x USB-C charging cable

1 ea x DC Charging Adaptor



Accessories

1 Connect Magnetic Belt Clip

1 Round Magnet Clasp

Accessories (not included)

Wired Headset

Bluetooth Headset (or ear buds)

Bluetooth Speaker

Connect Belt Pouch

USB Charging Hub

Features

Common Features

Adjustable Volume Control

The Apex Connect has a user adjustable volume control. For convenience, the Apex Connect will remember the last setting each time it is turned on.

Rugged Environmental Design

The Apex Connect has an IP-67 dust and water egress rating. Operation has been verified to -22F / -30C for extreme cold weather environments.

Discrete Size

At a mere 3" x 3" x 1", the Sonetics Apex Connect is discrete in size to be worn on your belt clip, clipped to your clothing, or slipped into a pocket.

Flexible Charging

A USB-C charging cable can be used with either the supplied USB AC wall adapter or DC charging adapter.

Portable and Light Weight

Through the use of the latest weight savings technologies Sonetics is able to deliver a communication device weighing 5.8 ounces in a mere 3" x 3" x 1" enclosure.

Long Battery Life

With over 24 hours of battery life the Connect works whenever the user needs it.

Device Mute

Users can mute all outbound communication from the Apex Connect. With a simple button push full communication is restored.

Auto Shutdown

To extend the life of the batteries, the Apex Connect will automatically shut down. **DECT7 Wireless Shutdown:** If a DECT wireless connection has not been established in 10 minutes, the Connect will power down.

Low Battery Alert

Your Apex Connect has a critically low battery of 5% or less when the Power LED is flashing red.

Auto Noise Gate Setting

The Apex Connect is equipped with an Auto Noise Gate setting which automatically sets the noise gate for you based on what is heard from the device microphone. The Auto Noise Gate setting is continuously working to keep background noise out of the system. If you find a specific noise gate setting is preferred, users can choose their own fixed noise gate setting from the Advanced Menu.

USB Programmable

Using the USB port, the Apex Connect can be updated using a Windows PC. Refer to the section on updates for details.

Voice Prompts

Apex Connect utilizes audible beeps for volume adjustments. Voice prompts are used for Advanced Menu navigation and setting selections.

Radio Push-to-Talk (PTT)

When a two-way radio is interfaced into a Sonetics ComHub and the Apex Connect has DECT pairing, the PTT button press passes the signal to the wireless DECT7 Wireless Base Station.

Wireless Bluetooth® Technology

Apex Connect incorporates Bluetooth for users to pair their preferred device to the Apex Connect for continuous conference call like communication with their team. Users can pair Bluetooth headsets, ear buds, and speakers to their Connect.

Wireless DECT7 Communications

The Apex Connect enables full duplex, conference-call-like communications to others on the same channel. The Apex Connect will pair to stand alone Sonetics Wireless Base Stations or Sonetics IP-DECT7 wireless systems. The Apex Connect provides up to 800ft of range (line of sight) from its wireless base with interference free, digitally encrypted communications.

Backwards Compatibility

Apex Connect devices are backwards compatible with Sonetics first generation wireless DECT, and DECT6 Wireless Base Stations with minimal loss in functionality.

Broadcast Mode

The Apex Connect may be paired into a listen only mode of operation, reducing power consumption considerably. This also allows many more Apex Connects or headsets to be connected to a Wireless Base Station simultaneously. Pressing the Radio PTT button allows the Apex Connect or headset to momentarily talk on any

available slot. A tone will let the user know when they can talk. After talking, there will be a slight delay when other users cannot be heard. Refer to the Wireless Base Station manual for details.

Radio PTT or Intercom Only Selection

The Apex Connect may be configured to send a transmit signal to radios connected via a DECT7 Wireless Base Station or Intercom. The user can transmit over multiple radios depending on the configuration.

Multi-Channel System

Depending on the wireless DECT7 Wireless Base Station or IP-DECT7 system, the user may have access to multiple channels. This allows large teams to have separate channels for different activities and enables users to change channels and become one communication team. Refer to the Wireless Base Station manual for configuration details.

Out of Range Warning

The user is notified when DECT7 signal is weak by a voice prompt saying "DECT Radio Level Low." If the Apex Connect goes out of range a voice prompt saying "Base Station Disconnected" will be heard. Once the Apex Connect reestablishes the DECT7 pairing a voice prompt confirming this will say "Base Station Connected".

Proximity Pairing

To enhance security, the Wireless Base Station will only pair to wireless DECT7 units in close proximity. This adds another layer of protection for users.

Signal Strength Reporting

The Apex Connect may be placed into a field diagnostic mode to detect signal strength at the Apex Connect. This can be used to optimize placement of ComHubs or Base Stations.

Wide Band Audio

Wireless DECT7 communications are transmitted in a high-definition wide band audio format. This gives better sound quality, greater intelligibility, and improves with voice activated control systems. The Apex Connect can also be used in narrow band if necessary.

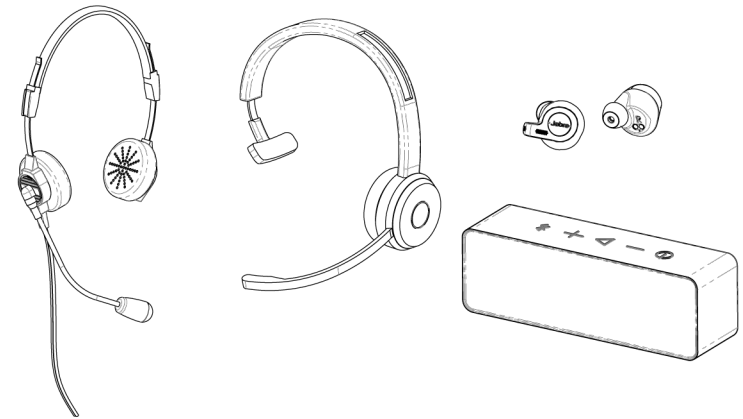
Multi-Base Station Mode

Allows users to pair their Apex Connect to multiple Base Stations at once so users can switch to a different Base Station without having to perform the DECT pairing function each time.

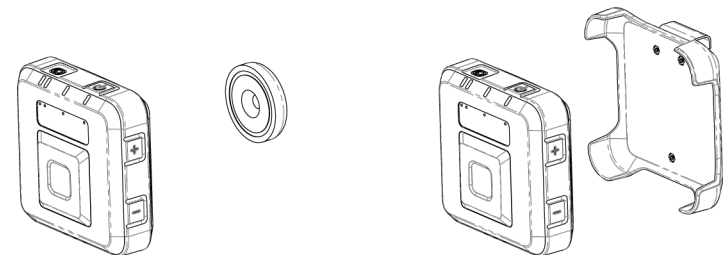
Configuring the Apex Connect

The Apex Connect can be used in a variety of ways including being placed on a desk, worn on your belt with the included magnetic belt clip, clipped to your clothing with the round magnetic clasp or simply dropped into your pocket. Already have a magnetic mount? You can use those too. Users even have many options of what type of device they choose to use with their Apex Connect like Bluetooth headsets, Bluetooth ear buds, Bluetooth speakers/conference call speakers or a 3.5mm wired headset.

Pick Your Headset (or Bluetooth Speaker)



Wear or Mount Your Apex Connect



WARNINGS:

- ⚠ Magnets can pinch and break bones. Use extreme caution when handling magnets to avoid magnets snapping or slamming together. Do not put hands, fingers or any other body parts between magnets.
- ⚠ Use caution to keep magnets at a safe distance from metals, steel and other magnets to avoid instant impact, splintering or breakage.
- ⚠ Magnetic fields, especially those produced by rare earth magnets, can affect pacemakers and other implanted medical devices. Extreme care should be taken to keep magnets away from these devices to avoid deactivation. Please consult a medical professional if there are any questions regarding an implanted device and magnets.

Charging

The Sonetics Apex Connect uses a USB-C charging jack with the connections shown below.

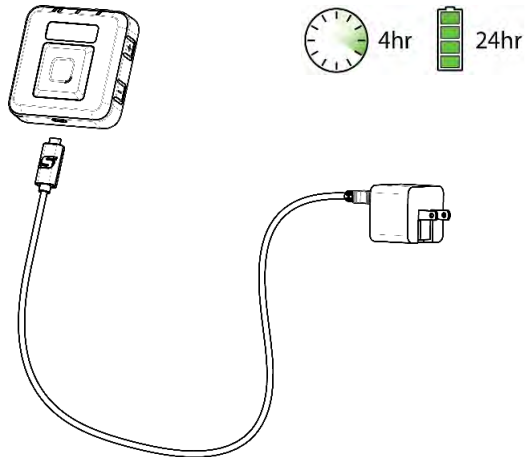
Note: Prior to first use, make sure to charge your Apex Connect to full charge.

Vehicle Charging

Use the supplied USB-C charging cable and DC automotive charging adapter.

Wall Adapter Charging

Only charge the Apex Connect using a regulated USB A wall adapter, 5V 1A minimum. Apex Connect will be fully charged after 4 hours.



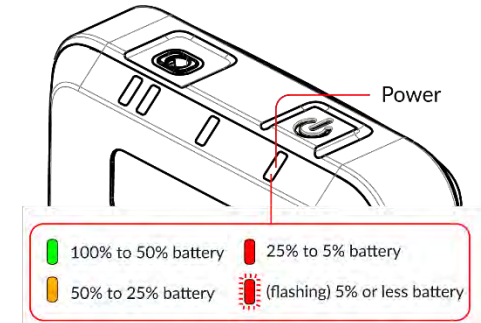
Charge Status

When plugged in, the color of the Power LED indicates the charge status.

 Fully charged

 Charging

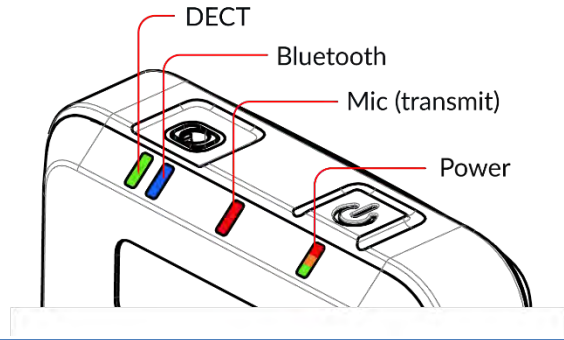
Battery Levels



⚠ **WARNING: Using unregulated wall adapters will damage the Connect and void the warranty.**

LED Indications

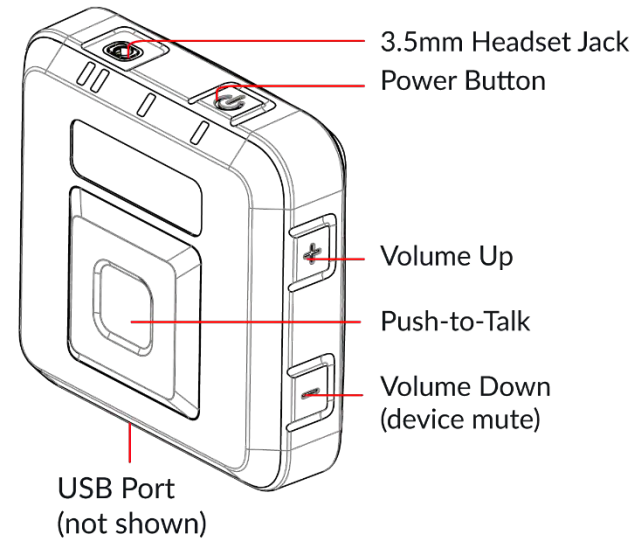
The Apex Connect uses multicolor LED indicators to give additional information on the exterior of the device. The table below describes the behavior while charging or in use.



LED	Status	Lights (blinking/solid)
DECT	Pairing/reconnecting	•••••
DECT	Paired	—————
Bluetooth	Pairing/reconnecting	•••••
Bluetooth	Paired	—————
Mic	Device Mute ON	•••••
Mic	Radio transmit or Intercom On/Toggle transmit	—————

Settings & Operation


Buttons





Turn On

Apply a 1 second short Power  Button press to turn ON the device.

Turn Off

Apply a 1 second short Power  Button press to turn OFF the device.

Adjusting the Main Volume

Press the plus  or minus  buttons on the side of the Apex Connect.

Beeps indicate the increase or decrease in the desired volume adjustments. Apex Connect has up to nine volume level settings (Default level: 70% of max volume).

Adjustments to the volume can also be made on the device paired or plugged into the Connect.

Device Mute

This feature blocks all outbound communication from your device.

With Apex Connect power ON and your headset plugged in or paired via Bluetooth

1. Press and hold the minus **-** for a 2 second long button press.
2. System is Muted when the Red Mic LED is alternately blinking on and off quickly.
3. Press and hold the minus **-** button again or press and release the PTT **□** button to turn OFF the Device Mute feature.

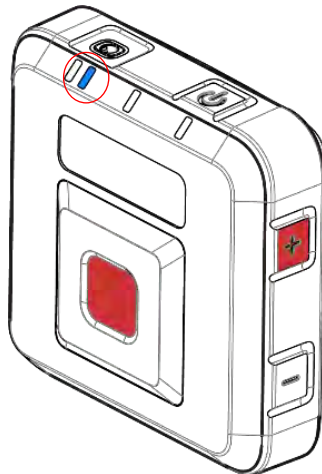
PTT Button

The large square button on the front of the Apex Connect allows for communication over two-way radios via PTT (and intercom operation in Intercom PTT and Intercom Toggle modes).

Simply press and hold the PTT **□** button on the Apex Connect to communicate over the two-way radio frequency connected to your ComHub.

Wireless Bluetooth® Pairing

1. Turn ON your Bluetooth device.
2. Turn ON the Apex Connect.
3. Make sure your Bluetooth device is in pairing mode (follow your manufacturer's instructions).
4. Put the Apex Connect into pairing mode by simultaneously pressing PTT **□** and plus **+** buttons, then hold for 2 seconds and release. The Bluetooth LED will be blinking blue.
5. Pairing successful when Bluetooth LED is solid Blue.



Notes:

- Bluetooth pairing will timeout after 40 seconds.
- When a corded headset is plugged in, Bluetooth turns off.
- Bluetooth headsets (or other Bluetooth devices) will connect to other Bluetooth devices they have previously paired to. Ensure your Bluetooth device you are using with the Apex Connect "Forgets" these other devices. The easiest way to achieve this is to reset the headset.
- Apex Connect only remembers the last device it was paired to.

- The pairing command clears the previous pairing
- SCH305-BT ComHubs can Bluetooth pair to Apex Connects in Bluetooth pairing mode. Make sure your SCH305-BT ComHub is powered OFF while you are Bluetooth pairing your Bluetooth headset to the Apex Connect.



Wireless DECT7

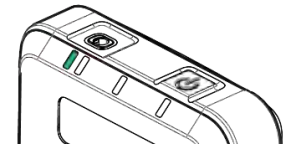
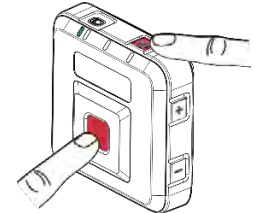
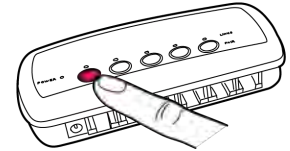
DECT7 Apex Connect devices have the ability to use the Sonetics DECT, DECT6, DECT7 and IP-DECT7 wireless Base Stations for communication. Protected regional frequencies in each region ensure interference free operation.

DECT7 Pairing

DECT7 Wireless Apex Connect devices use a semi-permanent link to a DECT7 Base Station or IP-DECT7 system. No additional steps are required once a Connect has been paired. Each time thereafter, the Apex Connect will remember the Wireless Base Station and automatically reconnect.

To Create a New DECT Pairing

1. Place Base Station into pairing mode (see base station manual for details.)
2. With the Apex Connect powered on, simultaneously push and hold the Power **⏻** and PTT **□** buttons for 2 seconds, then release. The DECT LED light will blink green while pairing.

3. The LED will be solid green when connection is successful. If it does not, repeat the pairing process.




Note: DECT pairing will timeout after 40 seconds.

Out of Range Warning:

- If Apex Connect has low radio signal (RSSI) to its Base Station it will report "DECT Radio Level Low".
- If Apex Connect loses signal to the base station it will report "Base station Disconnected".

- If Apex Connect regains signal to the base station it will report *“Base station Connected”*.
- If device is not connected to a base station it will power down after 10 minutes.

Advanced Menu & Quick Launch

The Advanced Menu is to set-up and configure the Apex Connect for use. Caution must be taken with these adjustments, as they change the operational characteristics of the Apex Connect.

To Enter the Advanced Menu

While the Apex Connect is ON, simultaneously press and hold the plus **+** and minus **-** and Power **⏻** buttons until you hear *“Advanced Menu”* voice prompt.

To Adjust Advanced Menu settings

1. Enter the Advanced Menu.
2. Press either the plus **+** or minus **-** to cycle through the menu setting options.
3. Once you hear the menu setting item you want to change, press the PTT button to select the menu item
4. Again, press either the **+** or minus **-** button to cycle through the settings and press the PTT **□** button to confirm your selection. You will hear a *“Set”* voice prompt.
5. Press the Power **⏻** button to go back to change a different setting or keep pressing the Power **⏻** button to exit the Advanced Menu. You will hear a *“Exiting Advanced Menu”* voice prompt.

To Exit the Advanced Menu

Press the Power **⏻** button until you hear the *“Exiting Advanced Menu”* voice prompt or wait 15 seconds to automatically exit.

Advanced Menu Structure & Settings

- Version
- Radio / Intercom Modes
- Mic Noise Reduction (Noise Gate)
- Bluetooth Mic Gain
- Corded Mic Gain
- Corded Side Tone
- DECT Radio RSSI Reporting
- DECT Audio
- DECT Registration
- DECT Multi-Base Station

Version (“Version 1”)

Indicates what firmware version your Connect is running.

From this menu item users can enter “Factory Options” settings, which allows for the following:

- *“Default Settings”* – when selected Apex Connect is reset to default settings (DECT and Bluetooth pairings remain).
- *“Factory Reset”* - when selected Apex Connect clears all DECT pairings, Bluetooth pairings, and resets to default settings.

Radio / Intercom Modes

Sets the function of the PTT and Intercom.

Radio Transmit: For Radio PTT, when the Apex Connect has a DECT connection, and a two-radio interfaced into the ComHub, the PTT may activate the DECT Radio wireless connection.

Intercom: This configures how the PTT and Mic Noise Reduction (Noise Gate) interact with each other while a person is talking with their local wireless team. If you can hear yourself through the side tone, others can hear you.

Factory Setting	Options:
“Radio VOX”:	<ul style="list-style-type: none"> • <i>“Radio VOX”</i>: Radio Transmit on PTT □, Hands Free Intercom
Radio Transmit on PTT □,	<ul style="list-style-type: none"> • <i>“Radio PTT”</i>: Radio Transmit on PTT □, Push to Talk Intercom
Hands Free Intercom	<ul style="list-style-type: none"> • <i>“Intercom VOX”</i>: Hands Free Intercom only • <i>“Intercom PTT”</i>: □ Push to Talk Intercom only • <i>“Intercom Toggle”</i>: □ Toggle to Talk Intercom only

Mic Noise Reduction (Noise Gate)

Factory Default: “Auto”

The Mic Noise Reduction may be configured into multiple modes of operation to tailor to the user’s application. This setting allows adjustment of the mic attenuation. Higher numbers reflect a more aggressive noise gate, which makes background noise harder to be heard. The “Auto” setting works continuously to automatically select the optimum setting for the user based on the audio level received from the mic.

However, the user can choose a “Fixed” setting (from 1 minimum to 9 maximum) if they choose. Also, “Off” can be selected, resulting in no noise gate.

Notes:

- When using Bluetooth ear buds, a setting of 2 or lower is recommended.
- When the user presses the Radio PTT, any noise gate will be removed when in Radio VOX & Radio PTT modes.

Bluetooth Mic Gain

Factory Default: “4”

Allows adjustment of the mic amplitude for your Bluetooth device. If Bluetooth device controls separately will use those settings. Normally, adjustment is not needed.

Available Settings: 0 – 15 (0 is minimum, 15 is maximum)

Corded Mic Gain

Factory Default: “6”

Allows adjustment of the mic amplitude of your corded device. Normally, adjustment is not needed.

Available Settings: Minimum, 1 – 7, Maximum

Corded Side Tone

Factory Default: “ON”

Side Tone is the ability to hear yourself talking, if you can hear yourself then others on the system can hear you too.

Available Settings: ON / OFF

DECT Radio RSSI Reporting

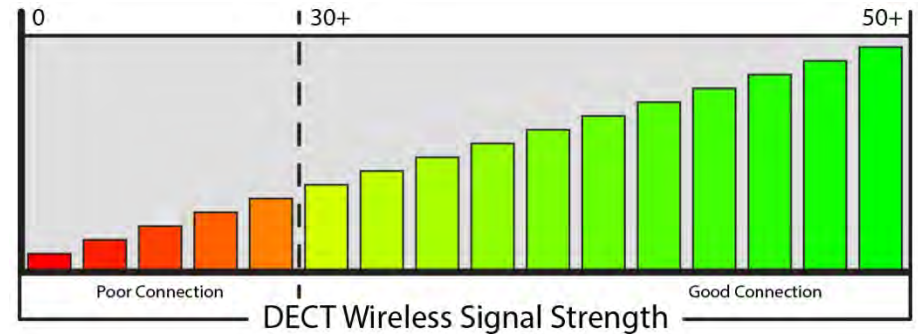
Factory Default Setting: “OFF”

Enabling this setting allows the Connect to read out RSSI (Received Signal Strength Indicator) numbers that tell you how strong the connection to the Base Station or ComHub are. This can be used to improve system installations.

To use signal strength reporting:

1. Make sure your Connect has a DECT wireless connection.
2. Enter the Advanced Menu.
3. Use the plus + or minus – buttons to scroll through settings until you hear “Radio RSSI Reporting”.
4. Press the PTT button to enter the available settings

5. Use the plus + or minus – buttons to change the setting to “ON” or “OFF”.
6. Press the PTT button to confirm your desired setting. You will hear the “Set” voice prompt.
7. If the Apex Connect has a DECT connection and the Radio RSSI Reporting is set to ON, it will announce the signal strength every 5 seconds. If no DECT connection is present, the Apex Connect will announce “No DECT” once.



To exit, press the Power button until “Existing Advanced Menu” voice prompt is heard.

DECT Audio

Factory Setting	Options:
“DECT Wide”	<ul style="list-style-type: none"> • “DECT Wide” – Better sound quality. • “DECT Narrow” – Better resistance to interference.

DECT Registration

Factory Default: “ON”

Allows device to be DECT paired to other base stations. Can be set to “OFF” to prevent accidental unpairing during normal use.

DECT Multi-Base Station


Factory Default: “OFF”

Allows users to pair their Apex Connect to multiple Base Stations at once so users can switch to a different Base Station without having to perform the DECT pairing function each time.

Quick Launch Menu Options

Quick Launch allows for users to access some features quickly without having to go into the Advanced Menu to make adjustments after they are enabled from the

Advanced Menu the first time. (For example, Channel selection and Multi Base Station selecting can be made with having to repeatedly accessing the Advanced Menu).

	Button Press	Voice Prompt
Advanced Menu	Plus + Minus - Power 	"Advanced Menu"
Quick Launch – Channel Mode	Quick plus + & minus -	"Channel"
Quick Launch – Multi Base Mode	Long plus + & minus -	"Multi-base[X]"

Channel Mode

The APEX Connect can be used in Channel Mode by enabling Channel Mode on the Base Station. Up to 5 channels are available through the Wireless Base Station when used in this configuration. Follow the steps below to configure your Base Station.

































Note: The Base Station needs to be put into Channel Mode for the Apex Connect to recognize the Quick Launch command.

Setting the number of channels on your Base Station

To enter configuration mode:


1. Unplug the Base Station (or cycle power on your ComHub, then plug it back in while holding the position 3 pairing button on the Base Station.
2. Hold the pairing button until the green channel indicator LED turns on.
3. The Base Station is now in ComHub mode.
4. To set the number of available channels, press the pair button corresponding to the number of channels desired (button 2 = 2 channels, etc). The current number of channels is shown with a green LED on the associated Mode/Channel Indicator (e.g. Port 5 = 5 channels).

5. To exit configuration mode, unplug your Base Station (or cycle power on your ComHub) from power, then plug it back in. The Base Station is now ready to use.

Number of Channels	LED States					
	Port 1	Port 2	Port 3	Port 4	Port 5	Intercom
1						
2						
3						
4						
5						
LED status: LED Off  LED On 						

Setting up the APEX Connect for Channel Mode:

Now that your Base Station is set up in Channel Mode, your APEX Connect Quick Launch-Channel Mode function is enabled. To change between your desired Channel:

1. Quick press the plus + and minus - buttons simultaneously and release. You will hear the "Channel" voice prompt.
 - a. If you do not hear the "Channel" voice prompt, simply retry the step 1.
2. Use the plus + or minus - buttons to select your desired channel.
3. Once you hear the desired channel voice prompt, repeat Step 1. You will hear the "Channel Exiting" voice prompt. (Pressing Power  also exits Channel Selection.)

Notes:

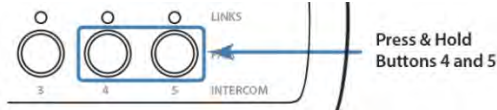
- To switch between the different Channels, repeat the Quick Launch-Channel Mode steps
- If you do not Exit the Quick Launch-Channel Mode, you will not be able to adjust your Apex Connect volume. Simply perform the Quick Launch button press and you will Exit the Quick Launch.

Broadcast Only Pairing


Note: Broadcast Mode needs to be enabled on the Base Station first. Follow the steps below.

Broadcast Only allows up to 100 devices to be paired to a Base Station. One active full duplex pairing must exist for the Broadcast Channel to be opened. Broadcast users never have Radio Transmit capability.

Example: Position 1 has a Full Duplex Apex Connect (or Headset) pairing. Positions 2-4 are available for devices to share. Position 5 broadcasts back to the group.



1. Press and hold Buttons 4 & 5 on the Base Station until 4 & 5 link LEDs begin to flash slowly.
2. Place the Apex Connect or wireless headset you wish to link into pairing mode.
3. The wireless Base Station will automatically connect showing a solid link LED on position 5 and the device will show connected (refer to the Sonetics device manual).
4. If the pairing was unsuccessful, repeat steps 1-3.
5. To pair additional devices, repeat steps 1-4.

Because Broadcast Only Apex Connects and headsets share communication positions, there can be slight delays in communication. To talk, the PTT  button must be held until a position opens. After a Broadcast call is made, there will be a pause in which incoming communications cannot be heard.

To exit Broadcast Only mode:

Press and hold 4 *or* 5 until the link LED flashes slowly indicating pairing mode.



Headset to Multi-Base Station



What is Headset to Multi-Base Station?

In normal operation, an Apex Connect (or headset) may only pair with a single Base Station. The Headset to Multi-Base Station feature allows a user to pair any Apex Connect (or APX377 or APX379 headset) DECT7 Wireless device with up to four SON150 DECT7 Wireless Base Stations.

Before You Begin: Clear All Pairings on the Base Station






Follow these steps for each Base Station to which a Headset to Multi-Base Station user(s) will be paired.

1. Make sure any Apex Connect (or headsets) paired to the Base Station are powered off before you begin.
2. To clear pairings, follow these steps:
 - a. Power ON  the Base Station or ComHub (For a SON150, connect the power adapter to the Base Station and plug the adapter into a standard 120V wall outlet. If the Base Station is installed in an SCH305/310/310T ComHub, press and release the ComHub's power  button).






- b. When all paired Apex Connect (or headsets) are turned off, any position on the Base Station with an active pairing to an Apex Connect (or headset) will display a quick flashing yellow LED above the corresponding pairing button. If you see a steady yellow LED, the Apex Connect (or headset) paired in the position is turned on. Turn the Apex Connect (or headset) OFF before proceeding.
- c. Press-and-hold the pairing button on the Base Station until it displays a slow flashing yellow LED.
- d. Power OFF  the Base Station or ComHub.
- e. Power ON  the Base Station or ComHub and confirm that no yellow LED is visible above the position button.
- f. The pairing is now cleared. Repeat Steps 2a-2e to clear each additional pairing from the Base Station. Perform this sequence for ALL Base Stations to which they will be eventually paired to.

Enabling and Configuring the Apex Connect to Multi-Base Station Mode



To enable and configure the Apex Connect to Multi-Base Station mode, access the Advanced Menu on your Apex Connect:

1. Refer to the Advanced Menu section in this manual for accessing the Advanced Menu.
2. Scroll through the Advanced Menu until you hear the “*DECT Multi-Base Station*” voice prompt, then press the PTT  button to confirm the selection.
3. Use the plus  and minus  buttons to select the number of Base Stations the Apex Connect will pair to. For example, “2 Base Stations”.
4. Press the PTT  button to confirm your selection, you will hear a “*Set*” voice prompt.
5. Use the Power  button to Exit the Advanced Menu.

Pairing the Apex Connect to Base Stations for Use in Multi-Base Station Mode






1. Use the Quick Launch-Multi-Base Station command on your Apex Connect to select the number Base Station you want to pair to by:
 - a. Use a long press of the plus  and minus  buttons at the same time, then release quickly. A “*Multi-Base*” voice prompt will be heard.
 - b. Use the plus  and minus  buttons to select the desired Base Station number, then press the PTT  button to confirm the selection.
2. Put the selected Base Station into pairing mode by pressing and holding the desired position pairing button until the yellow LED flashes.
3. Put the Apex Connect into DECT pairing mode. You will hear a voice prompt: “*Base Station 1 connecting*”.
4. The DECT pairing is complete when the DECT LED on the Apex Connect changes from blinking green to solid green.

IMPORTANT: Pair any additional Apex Connects that will use the Headset to Multi-Base Station feature to Base Station 1 *before* you begin any pairings on Base Station 2, etc. This will ensure that all Multi-Base Apex Connects recognize Base Stations by the same number.

5. Now that you have all Apex Connect devices (or headsets) paired to Base Station 1, turn OFF  the Apex Connect's (or headsets) and Base Station 1.
6. Turn ON  the next Base Station (for example, Base Station 2).
7. REPEAT Steps 1-4 for each additional base station until all are paired (up to 4 Base Stations).

Selecting a Base Station in Multi-Base Mode

After all Base Stations have been set up, you can use the Quick Launch-Multi-Base Station command to flip between the available Base Stations by:

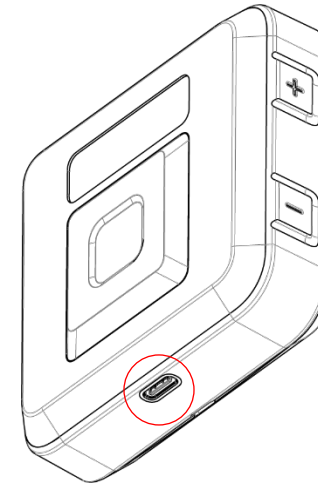
1. Using the Quick Launch-Multi-Base command: Using a long press of both the plus  and minus  buttons simultaneously then releasing quickly. You will hear the "Multi-Base" number voice prompt.
2. Use the plus  and minus  buttons to select the Base Station you wish to connect to (Voice prompts will announce "Multi-Base 1", "Multi-Base 2" (up to four paired Base Stations).
3. Press the PTT  button confirm and exit.

The Apex Connect (or headset) will connect with the selected Base Station. When/if you move out of range of the connected Base Station, the Headset will lose its connection. To select a different Base Station, repeat steps 1-3 above.

Firmware Updates & PC Programming


The Apex Connect can be updated with the latest firmware via the USB port with the following steps:

USB Port Location



Updating Firmware for your Apex Connect

Notes:

- The firmware file will need to be downloaded and saved to your computer from the Sonetics website prior to performing the steps below.
 - Windows PC or Mac can be used to upgrade the firmware. Steps below are for a Windows PC.
1. Turn Apex Connect OFF
 2. Hold Power  on button for approximately 10 seconds
 - Power LED will red slow flash, continue holding until flashes quickly to indicate it's in bootloader mode
 3. Plug USB-C cable into Apex Connect and PC
 4. In File Manager Apex Connect will appear as an extra drive (normally D :)
 5. Select **ALL** the files in the Apex Connect D drive and delete all of them.
 6. Drag and Drop or Copy and Paste **ALL** the update files you downloaded from the Sonetics website onto the Apex Connect drive
 - Files will copy over. Apex Connect will flash yellow as it is transferring over files and updating its libraries.

i. Example file names (not limited to):

1. bp_490-4071-00.sonbin (firmware)
 2. config_[SKU]_490-4036-01.bin (Settings (not pairing))
 3. vp_490-4039-00.sonbin (Voice prompt file)
- If you get an “Error” message, you need to delete the existing files on the Apex Connect, before you can add the new update files.
 - Once complete the Power LED light will flash Green, and then return to Red quick flash indicating it's waiting.
 - Apex Connect will repeat for each file copied into the Apex Connect drive.
 - It's important **ALL** update files are transferred before rebooting.
7. Once all files are updated, hold the Power button ~2 seconds until system reboots.
 8. System will come up in normal operation.
 9. You can disconnect Apex Connect from your PC.

Note: When update is complete, existing settings will be reset to factory defaults. Bluetooth and DECT pairings will remain.

Care and Maintenance

- Inspect your Apex Connect frequently for wear. If you see any defect such as cracks on the enclosure, the Apex Connect should be immediately repaired or replaced.
- Wipe the Apex Connect with a mild soap and water mixture or a hydrogen peroxide-based wipe.

 **WARNING: Do not store the Apex Connect in high temperature environments or direct sunlight.**

Troubleshooting

If you are experiencing symptoms not covered here, or are having difficulty troubleshooting, call us or visit our website. We're here to help.

Service Contact

800-833-4558

service@sonetics.com

General Connection Issues

1. Verify the Apex Connect is turned on.
2. Verify the battery is charged and within its useable life.

Wireless Bluetooth

Disconnects, intermittent connectivity, or difficulty finding, pairing, or connecting.

1. Verify your Bluetooth headset model are Bluetooth compatible (Handsfree Profile Format required).
2. Check that you are in range of the Bluetooth accessory with which you are trying to pair your Apex Connect.
3. With multiple Apex Connects & Bluetooth headsets, ensure devices are dedicated to each other.
4. Apex Connect deactivates Bluetooth when a corded headset is plugged in.
5. Turn on Bluetooth on your device.
6. Turn on discoverable mode on your device.
7. Make sure no previously paired devices are turned on.
8. Cycle the power on the Bluetooth headset and/or the device being connected to.
9. Fully charge both the Apex Connect and your headset.
10. Noisy RF Environments can reduce effective Bluetooth range (including walls, microwaves ovens, Wi-Fi, etc.), ensure you remain as close as possible to your Apex Connect.
11. While pairing, ensure the Bluetooth headset is the closest device to Apex Connect. When pairing, your Bluetooth device must be within 1-3 feet of the Apex Connect.
12. Restart the Bluetooth pairing mode, this will delete the Bluetooth headset from your Apex Connect and create a new pairing.
13. Factory reset your Bluetooth headset to forget previous device pairings.
14. Update your Bluetooth device to the latest Bluetooth firmware.
15. SCH305-BT ComHubs's can Bluetooth pair to Apex Connects in Bluetooth pairing mode, make sure your SCH305-BT ComHub is powered OFF while you are Bluetooth pairing your Bluetooth headset to the Apex Connect.

Wireless DECT

Disconnects, intermittent connectivity, or difficulty finding, pairing, or connecting.

1. Check that you are in range of the DECT Wireless Base Station, and that it is powered on.
2. Verify the Wireless Base Station and the Apex Connect are in pairing mode.
3. Verify the Apex Connect has DECT Registration enabled (Advanced Menu).
4. If DECT is not connected for 10 minutes, Apex Connect will power down to save battery. Any button press delays the power down timer.

5. Cycle the power on the Apex Connect and/or the Wireless Base Station.
6. Fully charge both the Apex Connect and the ComHub (or ensure the Wireless Base Station is plugged in).
7. Check location of the Wireless Base Station and external antenna location. The Wireless Base Station should not be installed inside metal enclosures or any other location closer than 4 inches to a metal object or surface.
8. When reconnecting to a Base Station, you may need to reset the DECT pairing slot.

No audio communication and/or PTT from or to the base.

1. Ensure that power is turned on to the Wireless Headset and it is connected.
2. Ensure that the modular communication cable is connected between the Wireless Base Station and Intercom.
3. Check the modular communication cable between the Wireless Base Station and Intercom for continuity.
4. Ensure correct polarity of the modular plug on both ends of the modular cable.
5. Ensure the corded headset follows standard 4-pin plug (CTIA/AHJ or OMTP), or use appropriate adapter.
6. Verify the Apex Connect radio settings, ensure you are using the correct mode (Advanced Menu).
7. Ensure Mic Noise Reduction is set appropriate for environment (Advanced Menu).



Poor quality audio, low or distorted received or transmitted audio.

1. Make sure that the volume level is properly adjusted on the Intercom (if an intercom is installed). For Digital Intercoms, set the volume level as high as possible on the Intercom without causing distorted audio on the Apex Connect, and then adjust the volume control on the Apex Connect for comfortable listening.
2. Ensure that the proper Wireless Base Station model for your Intercom is used.
3. Power cycle the Base Station.
4. Noisy RF environments can reduce effective Bluetooth range (including walls, microwaves ovens, wifi, etc.).
5. Bluetooth HFP (Hands Free Protocol) connections slightly increases audio latency.
6. Poor quality audio can be caused by a defective headset device. Confirm operation with a headset known to be functioning properly.

Audible interference from portable and mobile radios.

The wireless system is tested and proven to be immune to interferences from portable and mobile communication equipment operated anywhere in the frequency spectrum from 30MHz to 18GHz. However, care should be taken with installation of communication cables between the Intercom and the Wireless Base Station. These cables should be routed away from portable and mobile radios and antenna cabling in order to prevent RF interference from such devices.

Apex Connect unresponsive.

1. Hold down Power  button for 15 seconds (this will restart the Apex Connect).
2. When Apex Connect restarts, release the power button to boot normally.
3. If inadvertently enter bootloader (rapid red flashing after releasing power), press Power  for 2 seconds for normal restart.

Specifications

DECT Specifications

COMMON DECT SPECIFICATIONS

Carrier Spacing:	1.724 MHz
Time Slots:	2 x 12 (up and down stream)
Channel Allocation:	Dynamic
Encryption:	DECT Standard Cipher with 35-bit initialization vector
Audio Bandwidth:	300 Hz to 3.4 kHz, Narrow Band, G.726 compression 50 Hz to 7 kHz, Wide Band, G.722 compression

REGION 1 SPECIFIC SPECIFICATIONS

Authorized for use in:	Canada, USA
Frequency Bandwidth:	1920 MHz to 1930 MHz
Number of Carriers:	5
Total Time Slots:	60 in G.726(narrow band) / 30 in G.722(wide band)
Average Output Power:	4 mW
Maximum Output Power:	100 mW
DECT Range:	800 ft.

Regulatory

FCC

FCC ID APEX Connect:	V9N950140600V1
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FCC Part 15: All Models

INDUSTRY CANADA

IC UPN APEX Connect: 7895A-950140600

Bluetooth® Specifications

Class: Class 2 Device

Frequency Bandwidth: 2400 MHz to 2485 MHz

Maximum Output Power: 2.4mW / 4dBm

Range: Up to Bluetooth standard 33 feet (10 meters)

Version: 5.0/4.2 with secure simple pairing

Physical

Weight: 5.8 oz (8.1 oz w/ belt clip)

Color: Black

Button life: 200k cycles

IEC 60068 tumble testing: 300 cycles

Button overload resistance: 100lbs

Power

Battery: 3.7V rechargeable lithium ion battery

Battery Life: More than 24 hours at 77°F (25°C)

Charge time: 4 hours

AC Charge Source: Supplied; USB Wall Charger 5V, 2.4A

DC Charge Source: 5V, 1A minimum, cable supplied

Over voltage, under voltage, over current and over temperature protection

Environmental

Rating: IP67

Operating temperature: -22°F (-30°C) to +140°F (+60°C)

Storage temperature: -40°F (-40°C) to +122°F (+50°C)

Mil

Humidity per MIL-STD 810F and 810G

Temperature Shock per MIL-STD 810F and 810G

Chemical Exposure per MIL-STD 810

SAE

Salt Spray per J1455, Sec. 4.3

Vibration per J1455, Sec. 4.9

Conducted Immunity per J1113-11

Electrostatic Discharge per J1113-13

Radiated Emissions per J1113-41

ISO

Conducted Transients per 7637-2

Quality Management System ISO 9001:2008

Important Safety Information

⚠ CAUTION! Follow all warnings and instructions marked on the product or contained in the owner's manual.

When using this product, always follow basic safety precautions to reduce the risk of fire, electric shock and injury to persons, including the following:

- ⚠ The Apex Connect water and dust egress IP rating does not apply when the battery door is open. DO NOT expose this unit to rain or moisture if unit is open.
- ⚠ The Apex Connect is not certified for explosive environments. Do not use the Apex Connect to report a gas leak in the vicinity of the leak.
- ⚠ There are no user serviceable parts inside the Apex Connect. Disassembly will void the warranty and will degrade the water sealing and hearing protection.
- ⚠ Use only the power adapters, power cords and batteries indicated in the manual. If more than one type of power adapter is included in the product, the manual specifies which adapter should be used for each component. Be sure to use the proper adapter for each product component.
- ⚠ Do not place the power cord where it creates a trip hazard or where it could become chafed and create a fire or electrical hazard.
- ⚠ Do not subject the unit to high temperatures or leave it in direct sunlight for an extended period of time.

SAVE THESE INSTRUCTIONS

General Warning for Sensitive Electronic Devices

This equipment and any radio-based electronics can potentially cause electromagnetic interference with other equipment and can be interfered with other equipment. This also applies with DECT Equipment. Due to the very low transmission power associated with DECT, the chance for interference is small. However some specific precautions must be taken into account for sensitive electronic equipment, e.g. sensitive laboratory equipment, medical instruments or medical implants to avoid incidental influence of equipment operated in straight nearness to sensitive electronic equipment. You are therefore advised not to place the DECT equipment or its antenna in close proximity to sensitive equipment by maintaining a 20cm minimum distance between the sensitive equipment even in standby mode. Please also consider referencing the documentation provided by us and the manufacturer of sensitive electronic items guiding its proper usage.

General Communication Privacy Notice

Although this equipment may contain specific protocols that enhance security and privacy of communication, privacy of communication may not be ensured when using this equipment.



Industry Canada (I.C.) Notice (APX-CONNECT)

This section applies to radio frequency equipment bearing an I.C. Equipment ID Number (UPN).

This device if labeled with an IC UPN, complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes:

- (1) le dispositif ne doit pas produire de brouillage préjudiciable, et
- (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Canada SAR Information:

This device contains a radio transmitter. This device has been shown to be capable of compliance for localized specific absorption rate for uncontrolled environmental / general public exposure limits specified in RSS-102, ANSI/IEEC95.1-2002 and have been tested in accordance with the measurement procedures specified in IEE 1528-2003.

Déclaration d'exposition aux radiations: Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Any Base Station or approved Base Station antenna meant to be used in conjunction with this equipment must not be used in close proximity to the body. Keep a minimum distance of greater than 20 CM to the human body. This device and antenna must not be co-located in conjunction with any other equipment antenna or transmitter.

IC Compliance Statement (for APX372 and APX373 only)

This Class A digital apparatus complies with Canada ICES-003 requirements for unintentional radiator for Class A Digital Devices.

CET appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.



FCC Part 15 Information (APX-CONNECT)

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Modifications not expressly approved by Sonetics Corporation could void the user's authority to operate the equipment.

FCC/IC RF Exposure Warning

- This product complies with FCC radiation exposure limits set forth for an uncontrolled environment.
- The Connect is designed for body-worn operation and meets FCC RF exposure guidelines when used with accessories supplied with this product. (All necessary accessories are included in the package; any additional or optional accessories are not required for compliance with the guidelines.) Use of other accessories might not comply with FCC or IC RF exposure guidelines.
- This product may not be co-located or operated in conjunction with any other antenna or transmitter.
- Any Base Station or approved Base Station antenna meant to be used in conjunction with this equipment must not be used in close proximity to the body. Keep a minimum distance between human body and Base Station and base antenna of at least 20 CM (8.0 inches) at all times.
- This Connect device and antenna must not be co-located in conjunction with any other equipment, antenna or transmitter.
- This Connect has been tested and meets the FCC RF exposure guidelines.

FCC Part 15 Information (APX-CONNECT)

FCC PART 15.105(a): Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Rechargeable Battery Information

- ⚠ CAUTION!**
***Risk of explosion if battery is replaced by an incorrect type!
Dispose of used batteries according to the instructions.
Do not open or mutilate the battery.
Disconnect the battery before shipping this product.***

- ⚠ This equipment contains a rechargeable Lithium-Ion (Li-Ion) battery (with protection circuit). This battery is not user-serviceable.
 - ⚠ Do not modify or attempt to open the battery cell. In case of exposure to the cell contents, wash the affected area thoroughly and seek medical attention.
 - ⚠ Do not expose the battery to temperatures in excess of 140° F (60° C).
 - ⚠ Do not short-circuit the battery or expose battery to moisture
 - ⚠ Exercise care when handling a battery near conductive materials such as jewelry or buttons: conductive materials can short the battery, and the battery or conductor can overheat and cause burns.
 - ⚠ When charging this equipment, only use the charger designed to charge the battery as specified in the owner's manual: using any other charger may damage the product or cause the battery to explode.
 - ⚠ Before placing the Connect in the charger, make sure the battery is installed and the battery cover is securely in place.
 - ⚠ Do not place the batteries in your regular trash. All batteries must be recycled or disposed of in an environmentally sound manner. Contact your local waste management officials for information and regulations on the proper collection, recycling, and disposal of batteries.
 - ⚠ Use only the replacement batteries approved by Sonetics Corporation which have internal protection circuit, use of non-approved battery replacements may cause fire, injury or damage product.
 - ⚠ Always observe correct battery polarity during use and charging.
-
- ⚠ ***Do not place batteries in your regular trash.***
⚠ ***All batteries must be recycled or disposed of properly.***

Sonetics Standard Limited Warranty

Sonetics Corporation (“Sonetics”) warrants to the original purchaser of its products that products will be free from defects in materials and workmanship under normal and proper use for the period of **one (1) year** from date of purchase.

Sonetics Corporation will repair or replace, at its option, any products showing factory defects during this warranty period, subject to the following provisions and obligations:

1. This warranty applies only to a new product sold through authorized channels of distribution.
2. All work under warranty must be performed by Sonetics Corporation or Sonetics Authorized Service Center.
3. All returned products must be shipped to our address, freight prepaid, and Sonetics will return products to customer via ground freight. Any expedite fees or additional freight charges will be charged to customer.
4. Any attempt to repair, service, or alter the product in any way voids this warranty.
5. This warranty does not apply in the event of accident, abuse, misuse, liquid contact, improper installation, unauthorized repair, tampering, modification, fire, earthquake, or damage from other external sources – including damage caused by user-replaceable parts.
6. This warranty does not apply: (a) to consumable parts such as batteries, ear seals, intercom bags, cables, external power supplies, parts listed as accessories to a system, or other parts designed to diminish in function over time unless a failure is due to a defect in materials or workmanship; (b) to cosmetic damage or to defects caused by normal wear and tear or aging of the product; (c) to damage caused by use with non-Sonetics products; (d) to damage caused by operating the product outside the permitted or intended uses or environments described by Sonetics; (e) to damage caused by service performed by anyone who is not a representative of Sonetics or an Sonetics Authorized Service Provider; (f) to a product or part that

has been modified without the written permission of Sonetics; (g) if any Sonetics serial number has been removed or defaced.

7. This warranty does not extend to any other equipment, apparatus, vehicle, aircraft, or watercraft to which this product may be attached or connected.

THE FOREGOING IS YOUR SOLE REMEDY FOR FAILURE IN SERVICE OR DEFECTS. SONETICS CORPORATION SHALL NOT BE LIABLE UNDER THIS OR ANY IMPLIED WARRANTY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, NOR FOR ANY INSTALLATION OR REMOVAL COSTS OR OTHER SERVICE FEES. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS OF USE, WHICH ARE HEREBY EXCLUDED. TO THE EXTENT THAT THIS EXCLUSION IS NOT LEGALLY ENFORCEABLE, THE DURATION OF SUCH IMPLIED WARRANTIES SHALL BE LIMITED TO ONE (1) YEAR FROM DATE OF PURCHASE. NO SUIT FOR BREACH OF EXPRESS OR IMPLIED WARRANTY MAY BE BROUGHT AFTER ONE (1) YEAR FROM DATE OF PURCHASE.

Subject to the terms and limitations of this Sonetics Standard Limited Warranty, this warranty covers any new covered product found to be defective within the applicable warranty period. Sonetics reserves the right to examine the alleged defective covered product to determine whether this Sonetics Standard Limited Warranty is applicable, and final determination of warranty coverage lies solely with Sonetics. If Sonetics determines that warranty coverage applies, Sonetics reserves the right to either repair or replace a covered product or any part thereof, as determined by Sonetics in its sole discretion. If the product has been subjected to conditions which exclude coverage under the warranty, customer will be so advised. Customer may then authorize paid repair service or other disposition of the product. Notwithstanding any other provision of this warranty, if you sell or otherwise transfer ownership of your covered product, this Sonetics Standard Limited Warranty shall automatically terminate.

Sonetics®

17600 SW 65th Ave,
Lake Oswego, OR 97035 USA
800-833-4558

www.sonetics.com • service@sonetics.com

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