

Lightspeed LSC25 DECT Basestation User Guide

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HEADLINE

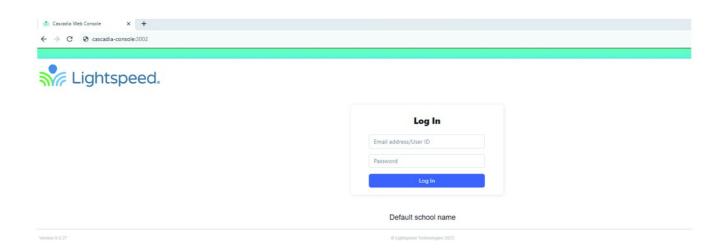
The Cascadia Web Console is a web interface for the network software that monitors all the C25 bases on a network.

Installing the Cascadia Web Console server software For installation instructions see "Cascadia Software

Installation Guide" document.

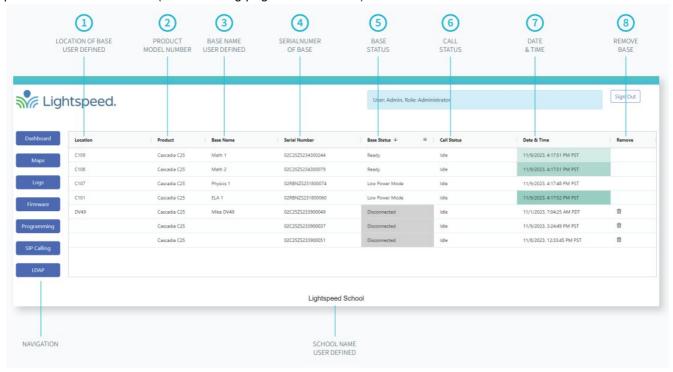
Logging In

Using a computer on the same network as the Cascadia Web Console server, open a web browser with the This address will open the log in page for the Cascadia Web Console. Log in using your organization's network credentials.



Dashboard

The dashboard is the default page for the web console. When a C25 base is connected to the network, it will show up in the dashboard table. (See following page for definitions)



Dashboard Definitions

- 1. Location: Alphanumeric user defined location of the base. New bases on the network will have no location data.
- 2. Product: Product model number
- 3. Base Name: Alphanumeric user defined name of the base. New bases on the network will have no name data.

 If left blank this field will default to the location data.
- 4. Serial Number: Serial number of base
- 5. Base Status: Current status of the base

- Disconnected: Base has missed 3 network health checks and can no longer be found on the network.
- Emergency/Emergency Nearby: If an emergency alert is triggered from a base on the network with a paired mic, the status of that base will change to Emergency. If the alert comes from a non-paired mic, the status will change to Emergency Nearby.
- Help Requested/Help Requested Nearby: If a non-emergency alert is triggered from a base on the network with a paired mic, the status of that base will change to Help Requested. If the alter comes from a non-paired mic, the status will change to Help Requested Nearby.
- Low Power Mode: After 1 hour of inactivity or audio input, the base will enter a low power mode.

Check manual for mention of low power/standby

- Idle: Base is in full power mode and has passed a network health check.
- 6. Call Status: Current call status of the base
 - Idle: No call currently being made
 - · Ringing: Call in progress
 - Busy: Destination phone not available
 - · Connected: Call connected and in progress
 - Failed: Call not able to be initiated for unknown reason
 - · Disconnected: Base status is Disconnected.
- 7. Date & Time: Timestamp of the last known good network health check for a base. Health checks are performed every 5 seconds and the timestamp will flash green.
- 8. Remove: Remove a base from the dashboard. Only available for disconnected bases.

Base Details: Status

NOTE: Double clicking on a base in the dashboard brings up a details page for that base.

Name: Field to enter name for the base.

Location: Field to enter location of the base. Required field for alerts.

Dashboard: Base status shown on dashboard

Network: State of network connectivity Emergency: State of emergency alert Help Request: State of Help Request

SIP Call: State of call

Low Power Mode: State of power mode

SafetyMute: Indicator for system mute due to PageFirst, Relay Input, or Input Priority

Power Source: Power supply for the base Serial Number: Serial number of the base MAC Address: MAC address of the base IP Address: IP address assigned to the base DECT ID: DECT ID assigned to the base

C25 App Version: Processor firmware version for base.

C25 FW Version: DECT/DSP firmware for base.

C25 OS Version: Operating System version for the base.

C25 HW Version: Hardware version for the base Runtime: Total time base has been on the network

Last Restart: Timestamp of last time base was powered down and restarted Last Update: Timestamp of the last known good network health check for a base



Base Details: Paired Devices

PAIRED DEVICES

Lists all the devices that are currently paired with the base. These devices include the Clearmike, Sharemike, and Media Connector (MCN).

Serial Number: Serial number of device

Type: Device type

Connected: Status of wireless connection

between the device and the base. FW Version: Firmware version for device

Student Mode: Toggle on/off for Student Mode. Only available with Clearmike. Ext Mic Detect: Toggle on/off external mic detection. Only available with Clearmike.

Unpair: Delete pairing between the device and the base.



CLEARMIKE DETAILS

Double clicking on a device in the list brings up details on that device. MIC index: Two mics can be paired to a single base. Mic 1 or Mic 2.

Serial Number: Serial number of device

Type: Device type

FW Version: Firmware version for device

HW Version: Hardware version for device (Clearmike only) Pairing Status: Confirmation that device is paired with base

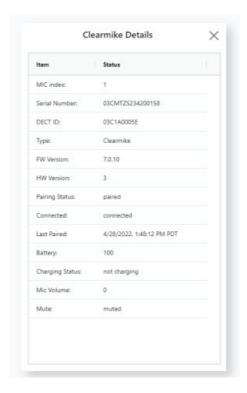
Connected: Status of wireless connection between the device and the base.

Last Paired: Timestamp of when device was paired with base

Battery: Battery level of microphone. 100, 50, and 10 are the levels shown.

Mic Volume: Volume setting of mic. 10 to 100.

Mute: Mute status of mic.

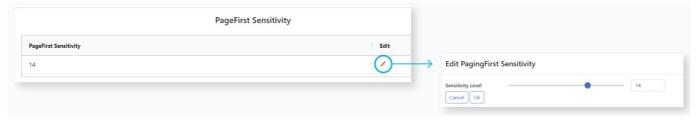


Base Details: Audio Settings

The audio settings for the base can be adjusted from either the front panel on the base or the Audio portion of the Base Details page. Click the edit icon to adjust the audio settings.



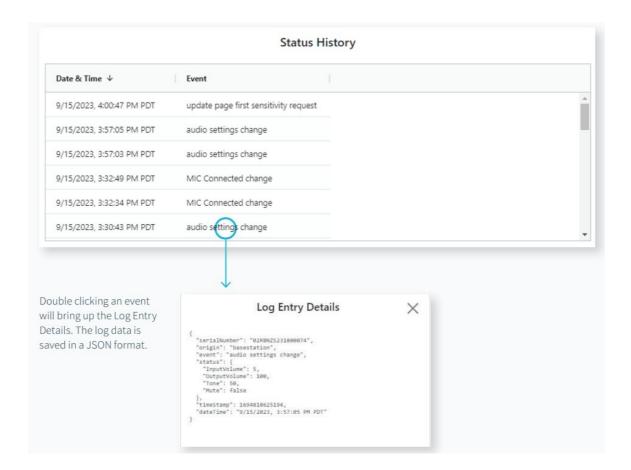
When using the PageFirst sensor, adjusting the sensitivity of the system can be done in the Base Details page. Click the edit icon to adjust the sensitivity level. Setting the sensitivity to 0 will disable this feature.



Base Details: Status History

The base details page includes a Status History that shows displays the last eight events associated with the base.

All events for all bases are saved in a global log file that can be exported using the Logs menu button.



Maps

The Cascadia Web Console has a map feature that can be set up to give a visual representation of the Base Status from the Dashboard. If alerts have been set up in the Cascadia Web Console, the status of the alerts will also be shown on the map.

For details on how to set up the map, see the "Cascadia Software Installation Guide".



Logs

Logs for all the bases on the network are saved as a system log. As a default, the settings for events to be logged are set to the maximum.

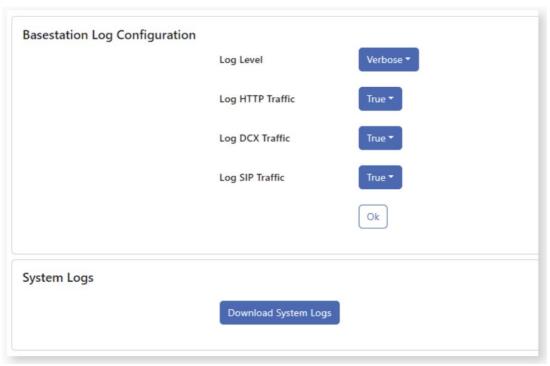
This system log can be downloaded by clicking the "Download System Logs" button.

LOG LEVEL: Chose the level of detail included in log events.

LOG HTTP TRAFFIC: Log network traffic associated with events.

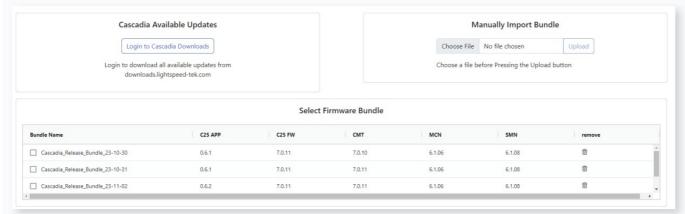
LOG DXC TRAFFIC: Log wireless traffic associated with events.

LOG SIP TRAFFIC: Log SIP call information associated with events.



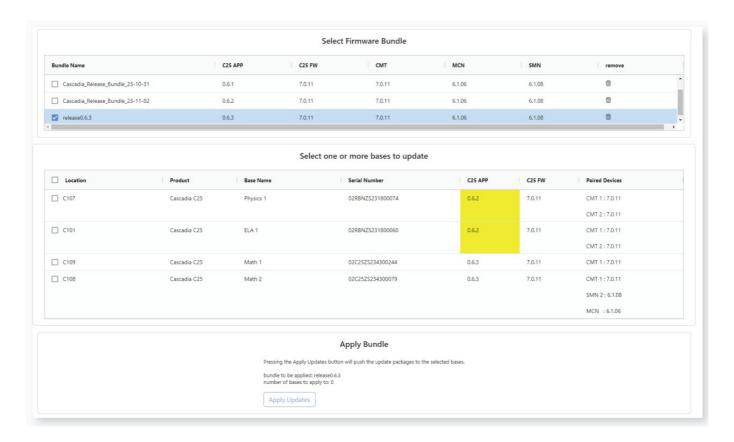
Firmware: Download

Firmware updates can be downloaded directly to the Cascadia Web Console using an internet connection or can be manually loaded. Firmware files for the C25, Clearmike, Sharemike, and Media Connector are included in a firmware bundle.



Firmware: Update

Applying a firmware bundle update to a base will also update all paired devices. Bases can be updated individually or in bulk using the check box. The devices that will be updated are highlighted in yellow.



Programming: Stand Alone

The programming web page has options to pick an integration partner and to program the buttons on the paired Clearmike.

SELECT AN INTEGRATION PARTNER

The Standalone selection can be used for generic integrations if a building is equipped with an alert notification system.

The Alert Button can be programmed to control the contact closure on the rear panel of the C25, which external systems can use to perform a prescribed action, such as notifying the appropriate parties of a classroom alert. Alternatively, the Alert Button can be programmed to activate a contact closure followed by a SIP call to control both functions with a single button press.

ALERT TIMEOUT VALUE

The Alert Timeout Value controls how long alerts are displayed in the Dashboard.

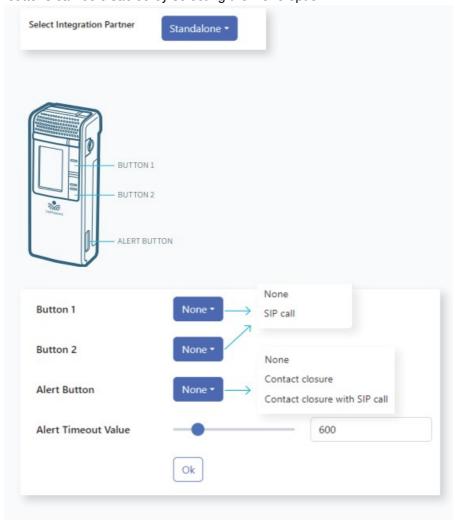
This is a Cascadia Web Console specific setting and does not control other thirdparty systems.

Value can be set between 0 and 3600 seconds.

PROGRAM BUTTONS ON THE CLEARMKIE

Button 1 or Button 2 can be programmed to initiate a SIP call, if that feature is set up using the SIP Calling web page.

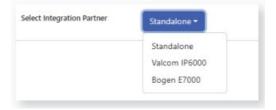
Disable buttons: All buttons can be disabled by selecting the None option.



Programming: Integration Partners

OPTIONS OTHER THAN STANDALONE

For options other than Standalone, the integration is handled through the network. For details on how to sup the network integration with various partners, see the "Cascadia Software Installation Guide".



PROGRAM BUTTONS ON THE CLEARMKIE

The button programming options control what is displayed on the microphone screen and the commansent over the network. The prescribed actions that are activated with the microphone command signals are setup, customized, and controlled by the integration partner system.

Button 1 and Button 2 have the same programming options. The options include a Help Request, SIP call, and Check-in commands. One option combines the Help Request and SIP call into a single button.

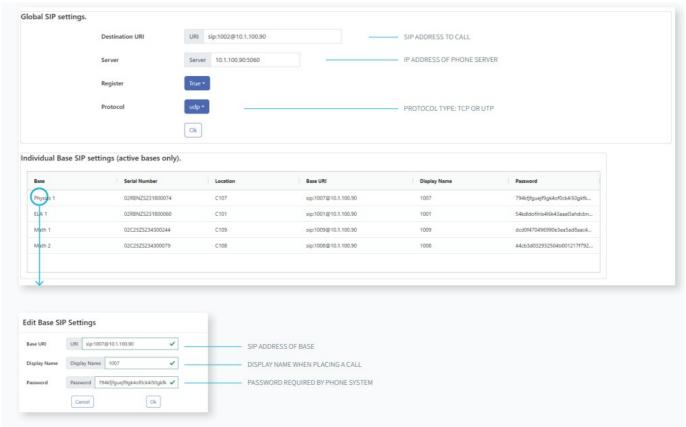
The Alert Button can be programmed to activate an Emergency Alert or the combined action of an Emergency Alert with a SIP call.

Disable buttons: All buttons can be disabled by selecting the None option.



SIP Calling

Use the SIP Calling web page to integrate with a school's phone system to enable SIP calls. Follow the phone system instructions on how to register a third-party SIP device. Double click on a base to edit the individual base SIP settings.



LDAP

Use the LDAP web page to integrate with a school's LDAP system.

SERVER: IP address or system name of LDAP server.

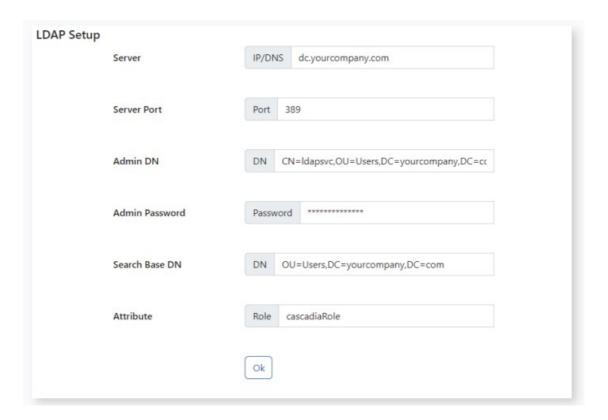
SERVER PORT: Port number to communicate with LDAP server.

ADMIN DN: Distinguished name of LDAP account with read access.

ADMIN PASSWORD: Password for above LDAP account.

SEARCH BASE DN: Distinguished name of LDAP organizational unit where webapp user accounts reside.

ATTRIBUTE: Name of LDAP user attribute that provides webapp access.

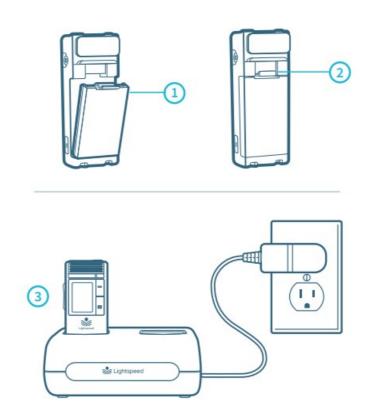


MAINTENANCE & TROUBLESHOOTING

Clearmike Battery Replacement

BATTERY PART #L3.7V

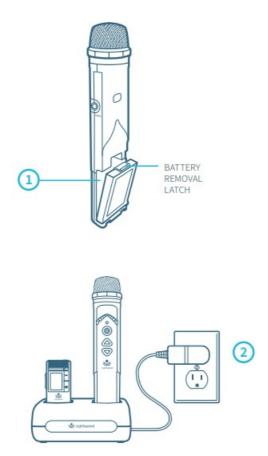
- 1. Push down on the latch and carefully pull the battery pack away from the Clearmike.
- 2. Insert new battery pack as shown and make sure the latch is secure.
- 3. Place the Clearmike in a cradle charger to charge the battery pack.



Sharemike Battery Replacement

BATTERY PART #L3.7V

- 1. Push down on the latch and carefully pull the battery pack away from the Sharemike.
- 2. Insert new battery pack as shown and make sure the latch is secure.
- 3. Place the Sharemike in a cradle charger to charge the battery pack.



Troubleshooting

PROBLEM: Low battery indication: Most problems are directly related to low battery power. Please run through the "Battery Check" items first. For remaining troubleshooting, use known good, fully-charged batteries.

SOLUTION: Battery Check

- Confirm batteries are charged each night. A solid red light on the battery status light indicates a low battery.
- Confirm proper batteries are used: Clearmike and Sharemike require the Lightspeed #L3.7V rechargeable battery pack.
- Make sure the microphones obtain a full charge. A full charge takes 5-6 hours.
- When charging the transmitter, the red charging light is solid. The green light will be solid when a full charge is reached.

PROBLEM: Microphone doesn't indicate a "Ready" signal (solid white light) **SOLUTION:** Follow these steps to ensure the system is ready to use.

Power cycle the microphone using either the Power/Mute button or by placing in a charger and then removing

it. Wait for up to 30 seconds for the white light to turn solid, indicating READY for operation.

PROBLEM: Low volume or feedback

SOLUTION: Follow these steps to eliminate low volume or feedback:

- If the volume is too high, feedback will occur. Adjust accordingly.
- Adjust the volume level on the Clearmike or move the microphone further from the audio system speakers.

PROBLEM: No sound from speaker and wireless components **SOLUTION:** Follow these steps to produce sound from C25:

- Confirm that the white POWER light located on the front panel of the C25 is on.
- Confirm the microphone is powered on and linked to the C25. The Talk/Mute light will be white indicating the microphone is linked.
- Tap the Power/Mute button to confirm that microphone is not muted. The Talk/ Mute light on the front of the microphone will be solid blue indicating microphone is not muted.
- Check speaker connections on the C25. Make sure the cables are properly connected (see page 8 of this manual or the Installation Guide for more information).
- Slowly turn up the volume level while talking into the microphone.

If you still have questions after reviewing these instructions, call Lightspeed Technical Services at 800.732.8999, 5am–5pm, PST.

Customers outside the U.S. should contact their local reseller.

Tips for Optimum Audio Performance

- Speak in a natural voice. A normal conversational speech level will provide an adequate signal. It is not necessary to increase the intensity of your voice— the audio system provides adequate amplification (approximately 5–10 dB) above ambient room noises.
- Avoid wearing jewelry that may rub or bump against the microphone.
- Mute the microphone during private conversations with a student, parent, or other classroom visitor. You can tell the mic is muted when the light turns white.
- Recharge microphones each night. When recharged nightly, operating time (actual usage) for the microphones will last through a typical school day.

WARRANTY, SAFETY & SPECIFICATIONS

Five-Year Limited Warranty

Lightspeed Classroom Audio Systems are guaranteed against malfunction due to defects in materials and workmanship for a period of five (5) years, beginning at the date of the purchase invoice. If such malfunction occurs, the product will be repaired or replaced (at Lightspeed's option) without charge during the warranty period. Lightspeed's Warranty Exchange Program applies to all classroom audio systems within the five (5) year warranty period. If a classroom audio product or component has an issue that requires service, a refurbished replacement will immediately be sent to the customer to minimize downtime. Customers will receive the exchange product(s) or component(s) within 2-3 days. A prepaid return label will be included with exchanged products so original malfunctioned equipment can be returned to Lightspeed. Any exchanged equipment will remain covered under the original five-year warranty.

- 1. Warranty for C25 is five (5) years.
- 2. Warranty on Lightspeed NiMH and Lithium Polymer rechargeable batteries is one (1) year.
- 3. Warranty on microphones and components that support discontinued systems (FMA, SMA and FMCA) is one (1) year.
- 4. A prepaid shipping label will be provided by Lightspeed for warranty repairs within the United States. Customers outside the U.S. should refer to the Lightspeed website (www.lightspeed-tek.com) for warranty repair instructions.
- 5. Warranty does not extend to finish, appearance items, or malfunctions due to abuse or operation other than specified conditions, nor does it extend to incidental or consequential damages. Repair by other than Lightspeed or its authorized service agencies will void this warranty. Information on authorized service agencies is available from Lightspeed Technologies, Inc.

Our Service Department (800.732.8999, 5am–5pm, PST) will handle your repair or replacement needs. Customers outside the U.S. should contact their local reseller.

Safety Warnings and Certifications (Pending Approval)





THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND INVOLVED.



CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

The lightning flash with arrowhead symbol inside an equilateral triangle is intended to alert the user to the presence of non insulated "hazardous voltage" within the product's enclosure, which may be of sufficient magnitude to induce a risk of electric shock to persons.

The exclamation mark inside an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying this product.

CERTIFICATIONS

C UL US

This product is listed to UL standards and requirements for electrical safety by Underwriters Laboratories Inc.

This product conforms with the essential requirements of the following European Union Directives: 2004/108/EC Electromagnetic Compatibility (EMC) and 2006/95/EC Low Voltage Directive (LVD).

Lightspeed Technologies launched a formal product recycle program in Europe that complies with the European Union Directive 2002/96/EC on Waste Electrical and Electronic Equipment ("WEEE Directive"). Please visit www.lightspeed-tek.com for more information.

This product is manufactured using lead-free processes and is free of other materials harmful to the environment. It conforms to the most stringent new European guidelines for consumer products (RoHS).

FCC Statements FCC STATEMENTS

ROHS

NOTE: 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.

NOTE: Lightspeed Technologies is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment. **NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm (8") between the radiator & your body

Canada, Industry Canada (IC) Notices

This device complies with Industry Canada license exempt RSS standard(s). This Class B digital apparatus complies with Canadian ICES-003 and CAN ICES-3(B)/NMB-3(B). 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. The IC number for this device is 1732B-LSC25. This includes accessories such as the Clearmike (IC 1732B-LSCMT), Sharemike (IC 1732B-LSSMN) and Media Connector (IC 1732B-LSMCN).

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiation source and your body.

RF RADIATION EXPOSURE STATEMENT

Your microphone is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) recommended by international guidelines. The guidelines were developed by Health Canada and include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

EU Declaration of Conformity

According to EU Directives EMC 2014/30/EU, LVD 2014/35/EU, RED 2014/53/EU, RoHS 2011/65/EU

Manufacturer:	Lightspeed Technologies, Inc.
Address:	11509 SW Herman Rd. Tualatin, Oregon 97062

We herewith declare that the following systems comply with the appropriate basic safety and health requirements of the Directive based on its design and type, as brought into circulation by us. In case of alteration of the system, not agreed upon by us, this declaration will lose its validity.

Products:	Redcat, Topcat, 975, Access Link, Flexmike, Sharemike, Pod, A ctivate Station, Media Connector, Mobile PA
Model Numbers:	RCN, TCN, 975, ALN, FMN, SMN, POD, ACT, MCN, MPA

As applicable, products conform to the standards listed below:

EN 62368-1:2014

IEC 62133:2012

EN 50385:2017

EN 50566:2017

EN 50663:2017

EN 62479:2010

ETSI EN 301 406 V2.2.2 (2016-09)

ETSI EN 301 489-1 V2.2.3 (2019-11)

ETSI EN 301 489-6 V2.2.1 (2019-04)

EN IEC 63000:2018

The Technical Construction File is available to proper authorities and the product is CE marked.

Lightspeed Representative

Michael Frost, Compliance Engineer

Date: December 6, 2022



C25	Wireless audio base station
24V-2.5A-NA	24V/2.5A power supply for C25
FSCC	Transceiver cradle charger, power supply
5V1C	5V power supply for FSCC
CMT	Clearmike classroom transceiver with battery pack and lanyard
L3.7V	Lithium Polymer rechargeable battery pack for Clearmike, one per Flexmike
FL	Microphone lavaliere cord
SPEAKERS	As ordered

STANDARD COMPONENTS (OUTSIDE U.S. AND CANADA)

C25G	Wireless audio base station
24V-2.5A	24V/2.5A power supply for C25, specify country
FSCC -INT	Transceiver cradle charger, power supply
5V1C -INT	International 5V power supply for FSCC
CMTG	Clearmike classroom transceiver with battery pack and lanyard
L3.7V	Lithium Polymer rechargeable battery pack for Clearmike, one per Clearmike
FL	Microphone lavaliere cord
SPEAKERS	As ordered



SMN	Sharemike handheld transceiver with battery pack
L3.7V	Lithium Polymer rechargeable battery pack for Sharemike
USB C	Charging cable for Sharemike
EMA	Earset microphone with TRRS connector for Clearmike
LMA	Lapel microphone with TRRS connector for Clearmike
MCN	Media Connector with Access Technology, power adapter and power cord.

System Specifications

C25

Description	Wireless audio hub
Wireless Communication	Access Technology (1.9 GHz)
Frequency Response	20 Hz – 20 kHz Power Amp, 150 Hz – 6.5 kHz Wireless
Power Supply Options	24VDC/2.5A or PoE+ 802.3at
Power Output	40 WRMS total (20 WRMS/channel) with 24VDC supply
Tone Control	Bass/Treble control
Ethernet	10/100Mbps
Audio Inputs	Three (3) 3.5mm inputs, one S/PDIF coaxial digital input
Audio Output	One (1) 3.5mm output, one S/PDIF coaxial digital output
Max Input/Output Level	1.4VRMS / 1.4VRMS
Total Harmonic Distortion	<1%
Analog Control Signals	Inputs: PageFirst (25/70V page mute), Relay Input
	Output: Contact closure (initiated from microphone)
Dimensions (W x H x D)	9.0" x 6.1" x 1.2" (229mm x 155mm x 30mm)
Weight	17.5 oz (496g)
Operating Temperature	10°C to 40°C (50°F to 104°F)

CLEARMIKE

Description	Pendant-style transceiver
Earbud Lanyard	Magnetic clasp with integrated earbud
Wireless Communication	Access Technology (1.9 GHz)
Integrated Microphone	Uni-directional electret
Analog Audio I/O	3.5mm TRRS
Digital Audio I/O	USB-C
Control Buttons	Power/mute, volume up/down, alert, two
	programmable
Volume Contro	+/- 12dB
Total Harmonic Distortion	<1%
Display	E-paper display
Battery Power	3.7V LiPo battery pack
Battery Life	8 hours (fully charged)
Charging	Cradle charger or USB-C
Dimensions (L x W x H)	3.0" x 1.2" x 0.9" (76mm x 30mm x 23mm)

Weight	1.3 oz (39g)	
SHAREMIKE		
Description	Handheld transceiver	
Wireless Communication	Access Technology (1.9 GHz)	
Total Harmonic Distortion	<1%	
Integrated Microphone	Uni-directional electret	
Audio input	3.5mm TRRS	
Battery Power	3.7V LiPo battery pack	
Battery Life	8 hours (fully charged)	
Charging	2 contacts for cradle charging	
Power	On/off button	
Registration	Push button for registration with Access L	
Dimensions (L x W x H)	6.0" x 1.1" x 1.1" (153 x 28 x 28mm)	
Weight	2.6 oz (73g)	
MEDIA CONNECTOR		
Description	Wireless audio transceiver	
USB powe	5V USB-C connector	
Wireless communication	Access Technology (1.9 GHz)	
Tone control	1 bass/treble control	
Audio input	Four (4) 3.5mm inputs	
Audio output	Two (2) 3.5mm outputs	
Audio Link indicator	1 LED on front panel	
Device registration	Push button for Access Link	
Dimensions (W x H x D)	7.6" x 5" x 1.13" (193 x 127 x 29mm)	
Weight	9.6 oz. (272g)	

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Fax: 503.684.3197

Revision: MN0682US01-3 1/17/24

Documents / Resources



<u>Lightspeed LSC25 DECT Basestation</u> [pdf] User Guide LSC25 DECT Basestation, LSC25, DECT Basestation, Basestation

References

- Lightspeed Instructional Audio Solutions
- User Manual

Manuals+, Privacy Policy

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