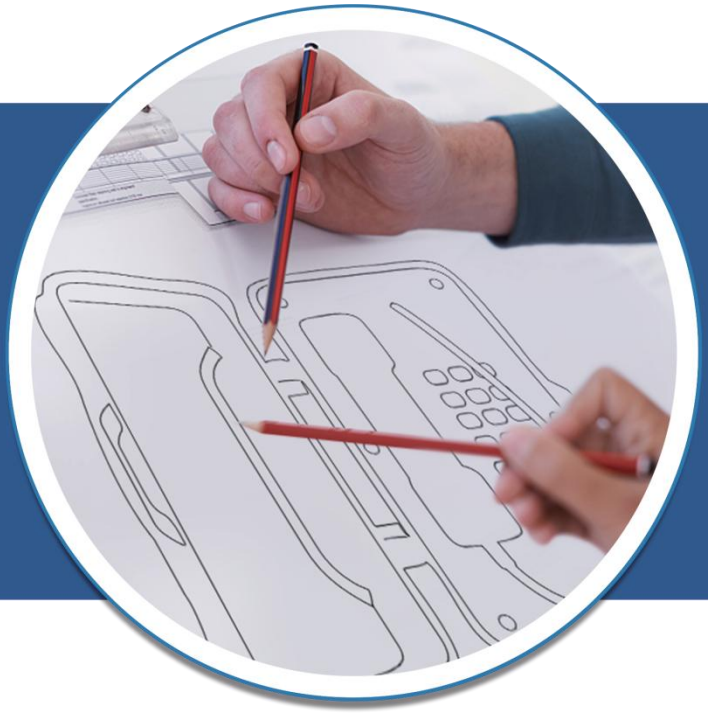
LIGHTCOM
Reliability in Every Call



LCHS-01-S

SIP Speaker Installation and User Guide

LIGHTCOM
Reliability in Every Call

LightCom Inc.



Foreword

SIP Speaker LCHS-01-S is designed for outdoor environments. It allows users to remotely warn off intruders before they commit a crime, to deliver instructions during an emergency or to make general voice messages.

Open standards support easy integration with network video, access control and VoIP (supporting SIP). LCHS-01-S is a standalone unit that can be placed almost anywhere, which supports a flexible, stable and cost-effective approach to system design.

1. Warnings and Safety Instructions



This equipment is a hands free speaker specifically designed for operation in harsh environment. The following warning and safety instructions must be heeded:

1. Do not connect or operate the speaker with voltages other than the voltages specified. All cabling should be routed such that it does not present a tripping hazard.
2. The speaker must only be operated under the specified ambient conditions. Adverse ambient conditions, such as ambient temperatures which are too high or too low, are not permissible because this promotes the failure of electronic components.
3. When operating the speaker, please heed the legal and commercial / industrial regulations, accident-prevention regulations and electrical regulations / provisions.
4. Repairs are only permissible with original spare parts which must be replaced by a specialist. Other replacement parts can cause damage and render the guarantee invalid.
5. The speaker must be installed on a plane surface only, in vertical operating position.
6. Magnetic fields with energy technical frequencies can cause a slight impairment of the listening quality. If this is the case, please ensure that the speaker is installed at a suitable location.
7. Upon mounting or demounting the device, do not damage the cover seal, which keeps the cover tight.
8. Upon repairing the apparatus for use in dust, the repaired parts should once again be subjected to a routine test.
9. Changes to the products which are in the interests of technical progress are possible even without prior notice.

2. Technical Data

Audio	
Audio streaming	One-way
Audio encoding	G.722, G.722.2, G.711μ/a, G.729A/B, G.723.1,OPUS
Additional Media Features	Acoustic echo cancelation (AEC)- multiple path, wideband acoustic EC, Packet Loss Concealment, Silence Suppression, Voice Activation Detection, Adaptive Jitter Buffer
Speaker	
Max sound pressure level	>115dB
Frequency response	280 Hz - 12.5 kHz
Intelligent audio	health monitoring of speaker
Coverage pattern	70° horizontal by 100° vertical (at 2 kHz)
Amplifier	
Amplifier description	Built-in 25 W Class D amplifier
Announcement	automatic announcements as pre-programmed
Protocol Support	
VoIP and Signaling	SIP–RFC 3261, SDP–RFC 2327, SIP over TCP/UDP/TLS, DNS_SRV (Redundancy), Digest authentication, PRACK, Early Media, SIP Subscribe notify, BLF (busy lamp field)
Data Protocols	IPv4,TCP,UDP, ICMP, ARP, RTP, SRTP, RTCP-XR,802.1x,Static IP/DHCP IP Assignment, IEEE802.1p/Q,QoS/ToS,HTTP/HTTPS/DHCP,NTP,FTP/TFTP,CDP/LLDP VLAN Configuration, LDAP
Security	802.1x, HTTPS, SIP over TLS and SRTP, Configuration file encryption
Provisioning & Management	Web Server for Configuration and Management,Configuration update via FTP, TFTP, HTTP, HTTPS, DHCP Options (66,67,160,12,60,77)
General Specifications	
Casing	Impact-resistant engineering plastic, IP65-IP66-rated
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at (max. 12.95 W)
Connectors	RJ45 10BASE-T/100BASE-TX PoE
Operating conditions	-40°C to 60 °C Humidity 10-100% RH (condensing)
Dimensions	280mm*205mm*280mm
Weight	1.8KG

3. Advanced Settings (Quick Set-up)

1.Web interface

You can use any standard web server (such as Microsoft Internet Explorer) to access the web interface of the IP speaker. The IP address used to access the web interface is the IP speaker address, received from a DHCP server or manually configured (static IP address) Enter the speaker's web interface:

1. Connect the speaker's WAN port to the IP network (use your local Internet service provider's network cable or ADSL modem).

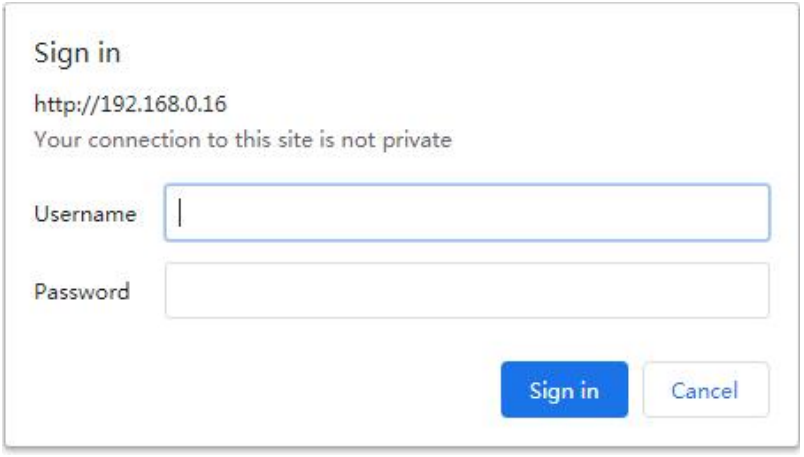
Determine the IP address obtained from the DHCP server, you can see the IP address on the LCD display. Or after the speaker connects to the network (it takes 40 ~ 60 seconds to successfully connect to the network), you can hear the voice of the IP address broadcast.

2. Open the web interface and enter the IP address of the speaker (such as https://192.168.0.7) in the UPL address field, as shown below:



The web login window appears：

Web login window



3. Enter the User name and Password, and then click OK.

Note: The administrator's default login user name and password are "admin" and "admin" respectively.

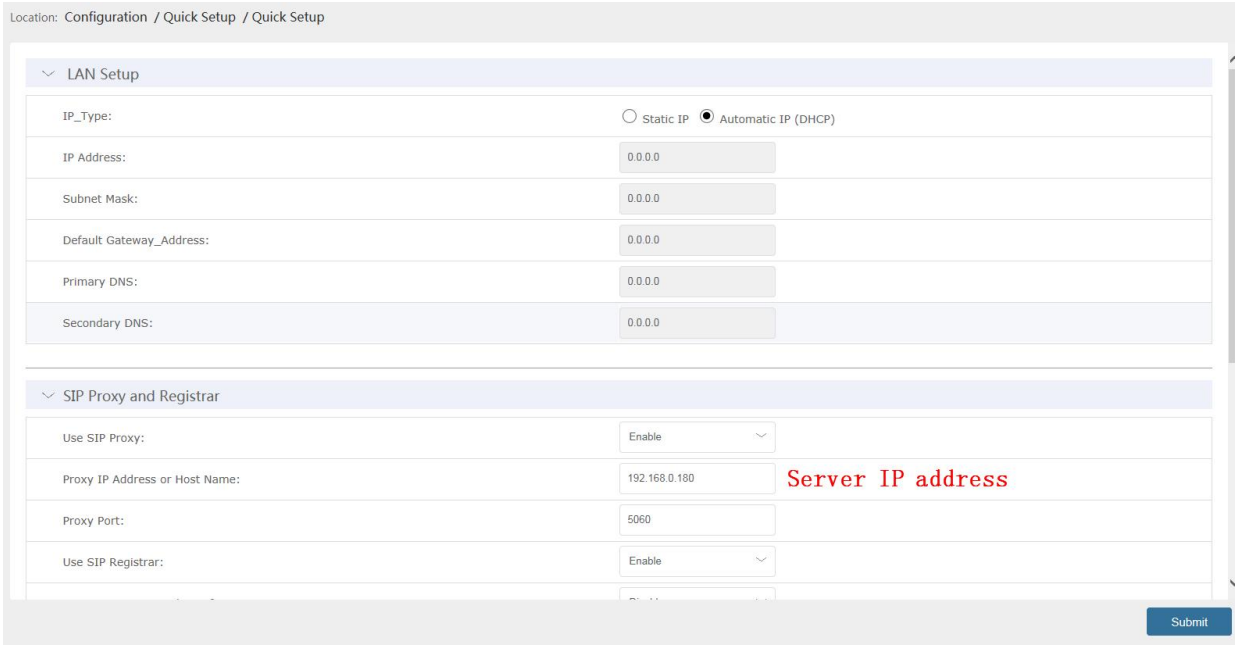
4. When there is no DHCP server, the speaker cannot obtain a dynamic IP address. This speaker has a second IP address. This IP address is static. You can connect to the speaker through 192.168.188.200.

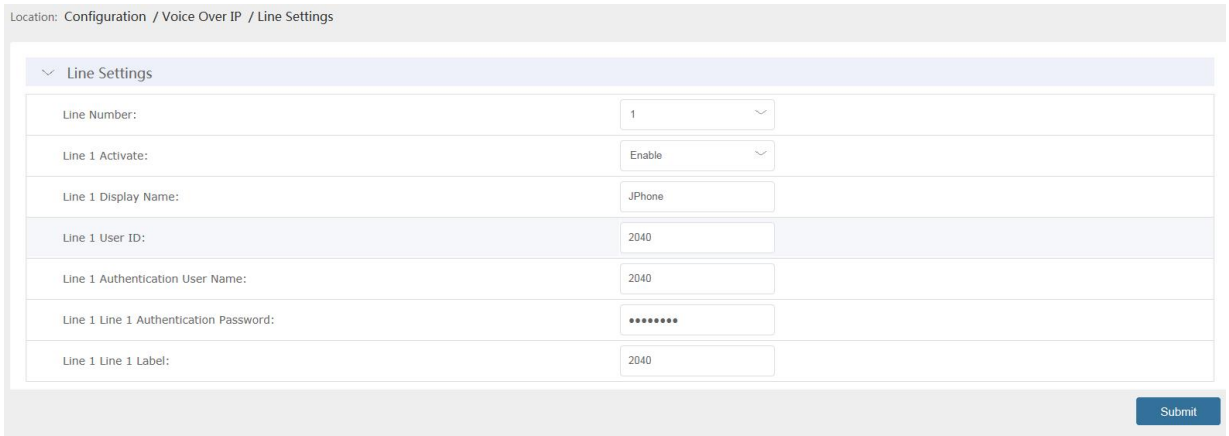
2. Quick Setup

To quickly setup your speaker：

Access the "Quick Setup" page (Configuration tab > Quick Setup menu > Quick Setup)

Quick Setup Web Fields





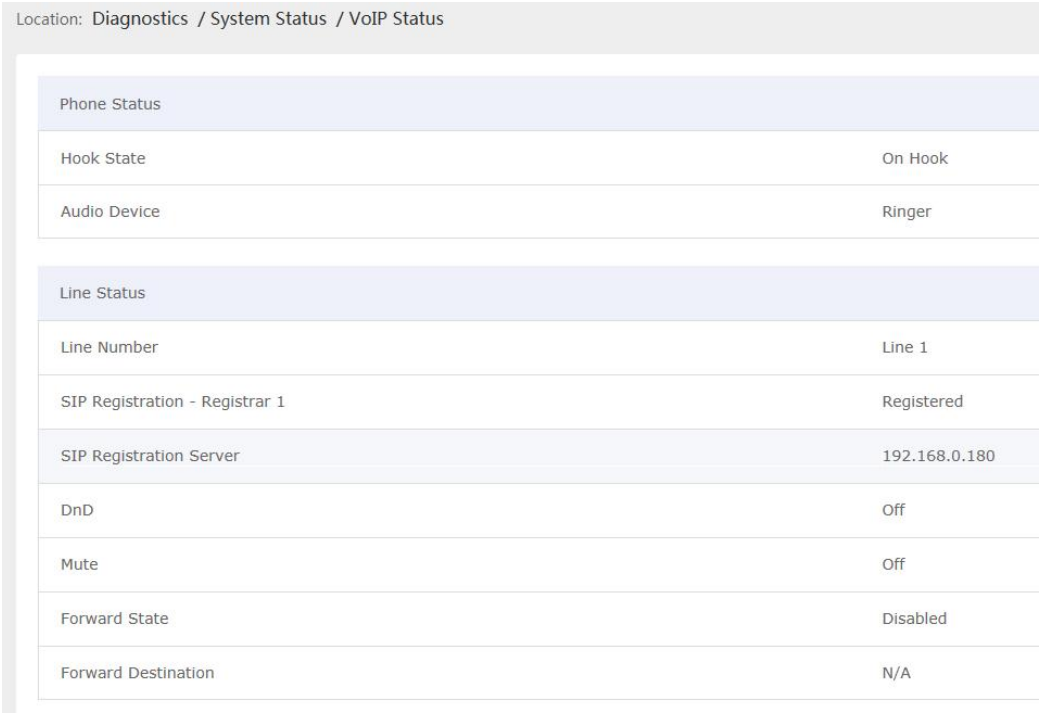
If shown in the figure above:

1. First select the use SIP proxy in the SIP proxy registration server bar to open, and then fill in the IP address of the IP server at the proxy server address. Other parameters remain unchanged as shown in the figure.

2. Fill in the line identification username, password and other information in the line Settings bar, and then click submit to complete the registration.

3. After successful submission, you can view the registration results in the VOIP status bar, as shown in the following figure:

Go to "VOIP status" page (status TAB → system status menu → VOIP status)



3. Configuring Auto Answer

Digit maps and Dial plans can be configured using the Web as described below.

To configure Auto Answer:

Access the ‘Dialing’ page (Configuration tab >Voice Over IP menu >Dialing).

Auto Answer Web Fields



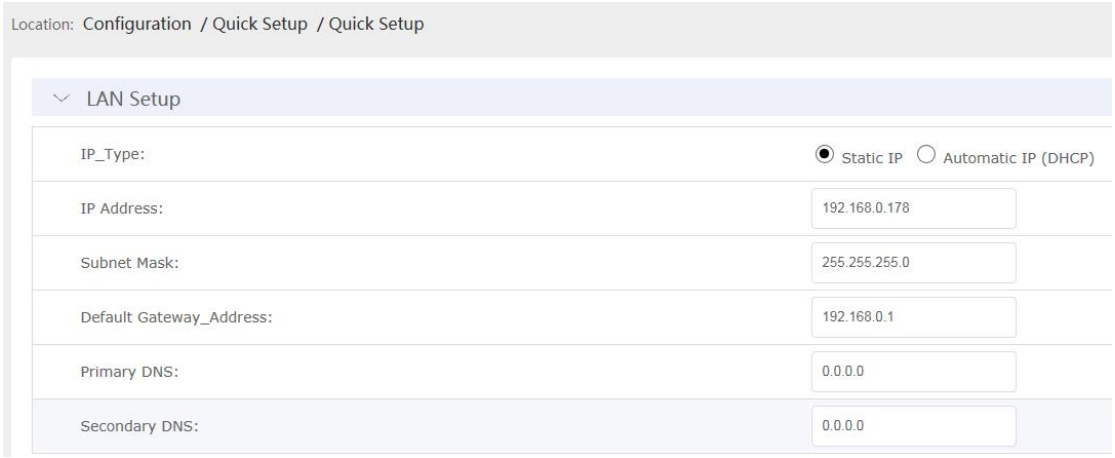
Configure the auto answer and then click Submit.

4. Configure the static IP address

The speaker's LAN configuration includes defining a method for obtaining an IP address. The IP address of the speaker can be static. By manually entering the IP address, it can also automatically obtain an IP address from a DHCP server. The method of setting the static IP address is as follows:

Go to the Quick Configuration page (Configuration tab → Quick Configuration menu → Quick Configuration)

Quick Configuration Page Field



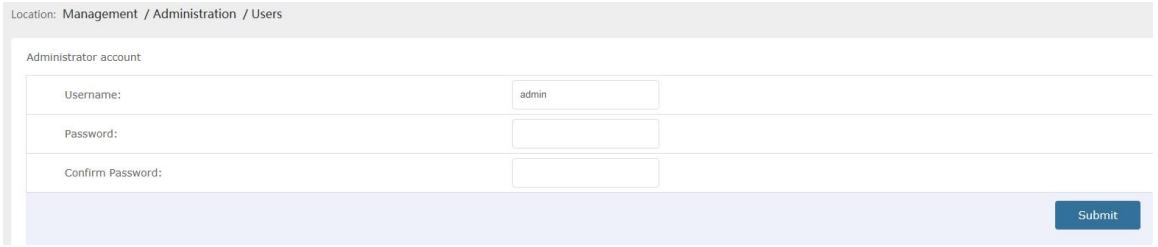
Select Static IP on the right of IP mode, then enter the static IP address to be set in the IP address box, fill in 255.255.255.0 in the subnet mask box, fill in the default gateway address in the Default gateway box, and click Submit.

Note: Please record the modified static IP address to avoid being unable to log in to the WEB configuration page after forgetting.

5. Modify the user login credentials

Go to the "User Management" page (Management tab → speaker Management menu → User Management)

System Authorization Page Field



In the username field, enter the username.

In the password field, enter a new password, and then re-enter the new password in the confirm password field.

Click submit, A confirmation box appears.

Click OK.

6. Restart the speaker

Go to "restart" page (management TAB → speaker management menu → restart system)

Restart the system Page Field

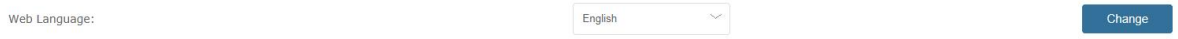


Click the restart button, a confirmation box will appear, prompting you to confirm, then click confirm.

7. Language switching

Switch between English and Chinese

Go to the "Reset System" page (Administration tab → speaker management menu → Restart system).



8. Restore factory settings

Restore the factory default settings of the speaker：

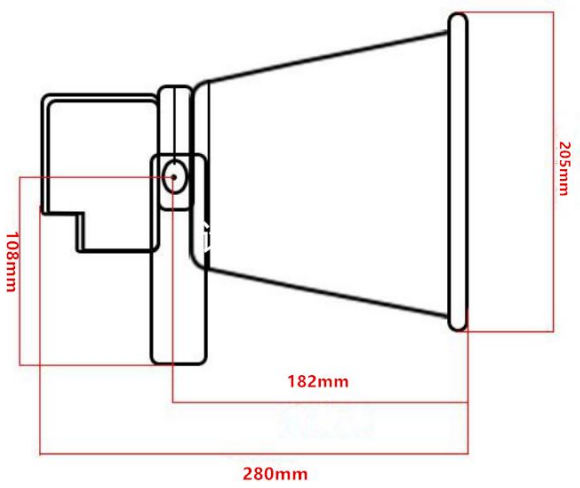
Go to the “Reset System” page (Administration tab → speaker Management Menu → Reset System).

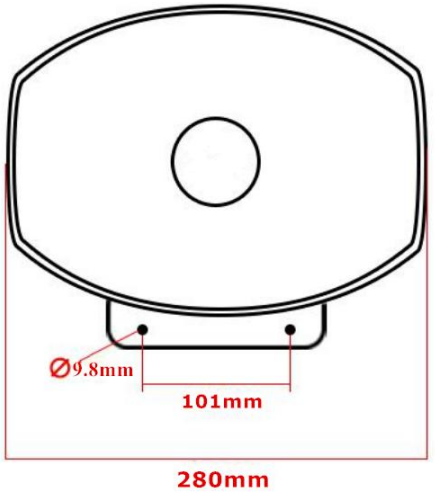
Restore Defaults Page Field



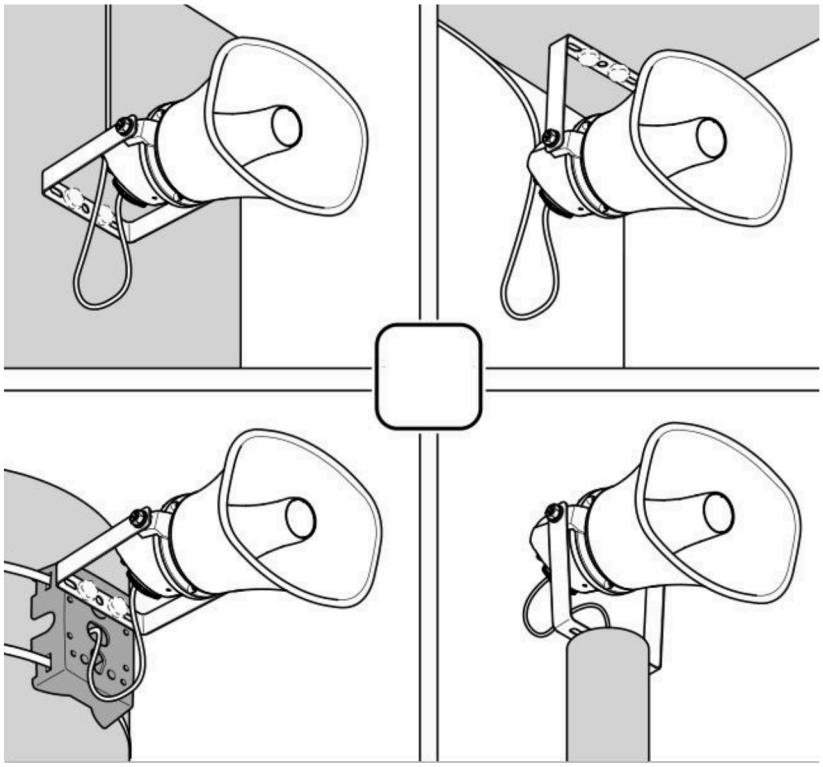
Click the submit button; a confirmation box will appear, prompting you to confirm, then click confirm.

6. Dimension





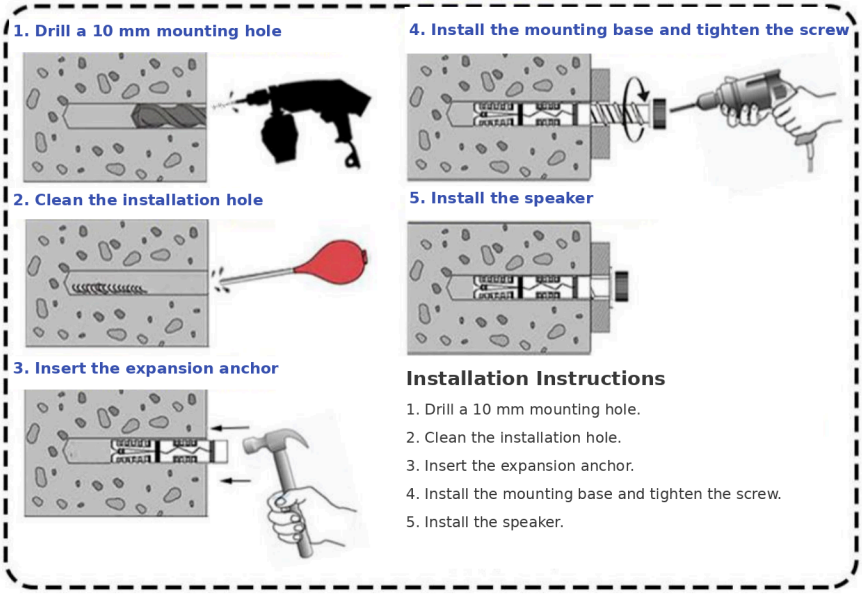
7. Installation



1. Mounting

2. Installation Notes

1. Drill hole, drill bit 10mm
2. Clean installation holes
3. Put in the expansion head
4. Install the bottom shell and tighten the screws
5. speaker installation



8. Service

The SIP speaker is manufactured by LightCom and subject to stringent quality controls. If you have questions regarding the speaker or if a malfunction has occurred · even after the guarantee period · please contact LightCom or the distributor in your area.
Please have the type and series number ready (these numbers can be found on the speaker side or on the PCB) when you contact us.

Maintenance and servicing

The speaker is maintenance-free. Nevertheless, if the speaker is deployed in areas with significant impurities due to dust, grease, oil etc., then it should be cleaned from time to time. The speaker should be wiped with a damp cleaning cloth. Caution!
Never use sharp objects for cleaning.

Waste disposal

The device may be completely recycled as electronic waste. Upon disassembling the device, the plastic, metal and electronic components must be disposed of separately.
In every single case the national requirements and regulations for waste disposal must be observed.
The waste-disposal requirements of your country must be observed.

9. Warranty Replacement

1. LightCom offers free repair for the following products within 1 year, but additional warranties are available at additional cost:

Scope: ① Hardware damage under normal using according to standard operation criterion of LightCom
② Other defects authorized by LightCom

LightCom's responsibility for product defects is limited to repair or replacements service as determined by LightCom in it sole discretion, LightCom is not responsible for direct, special, incidental or consequential damages resulting from any breach of warranty or condition.

2. Operation flow of repair

a. Apply for a valid RMA number from LightCom.
b. LightCom will check whether the product qualifies for replacement and will respond within one working day via fax or e-mail.
c. Purchaser should send the defective products with original packaging to LightCom after obtaining the valid RMA number.
d. Within 1 week days of receipt of the returned products, LightCom will send the replacement to the purchaser.

3. Relative explanation

a. LightCom recommends that you return products by reputable freight forwarders in order to avoid damage or loss during shipment.
b. LightCom is NOT responsible for any damage or loss of products during shipment.
c. During the warranty replacement period, LightCom reserves the ownership of the defective components after replacement.

4. Consider purchasing new equipment

Customers are encouraged to consider purchase of new equipment under warranty, for both the improved reliability of new product, the possibility of a more cost effective solution, and the warranty coverage provided with the new equipment.

LIGHTCOM
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