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LR 8882 H323 User's Manual Version A July 2005

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1 Getting Started

Overview

The LR 8882 H323 is designed to avoid complicated installation. And with the buttons on the keypad, you are able to access the user-friendly on screen display menu (OSD), easily control the functions and make adjustments.

The LR 8882 H323 has a built-in high quality CCD camera and an active matrix liquid crystal display. Images are transmitted through the Internet at up to 24 frames per second (fps) (@ CIF resolution). While making a video call, you can enjoy the brilliant real-time color images of yourself, your correspondents or both. If you do not want your image to display on the caller or receiver's screen. The LR 8882 H323's private mode can do just that.

The LR 8882 H323 is fully compliant with H323 V4 SIP (Session Initiation Protocol) international standards for video communication. It can be used with any video phone that are compatible with this standard.

Feature highlights:

- Broadband IP address videophone
- Connect the other videophone by simply entering the phone number
- Built-in high quality CCD camera with cover protection
- High quality 5" TFT LCD display
- Friendly and easy operation through keypads
- Phonebook dialing function
- 1 set of A/V input/output for large display of additional video/audio input & output
- Up to 24 frames per second video display (@ CIF resolution)
- Ovideo selectable and picture image up to VHS quality
- Echo-cancellation and no delay high quality audio
- Built-in 2-port switch to connect two LANs (The default port is the one with red line marking)

Hardware Specifications LED Status

VideoPhone LR 8882 H323 is ON and in standby mode

The "En Service" LED $\mathbf{\Phi}$ is on permanently.

Video connection indication

If the video connection is establish, the Video LED 🛦 turns on.

When the video connection terminates, this Video LED 🔊 turns off.

Network connections(modem)

The system is connected to an external ADSL modem. The characteristics are:

IP: 2 Ethernet ports (RJ-45) of 10/100 Mb/s, one of them with the red line marking indicates that the Ethernet cable connector (in red color) should be plugged into it.

Video Input

The video input features are:

Internal CCD camera

Focal length is adjustable to cover 2.5 meters wide at a distance of 3 meters

Focus(rotation of lens) is manually controlled by the end user

Capability to adjust brightness and contrast. These parameters are controlled via the roller

Support for 1 Audio/Video input

Video Output

Support for 1 Audio/Video output

Audio Input

The audio input features are:

The handset microphone

The built-in hands-free internal microphone

Audio Output

The user can adjust the sound volume with " \checkmark " and " \checkmark " keys on his VideoPhone LR 8882 H323.

The audio is output to the VideoPhone LR 8882 H323 speaker (or handset depends if the user is using the hands-free function).

VideoPhone LR 8882 H323 packaging description

The VideoPhone LR 8882 H323 package includes:

LR 8882 H323 Videophone.

VideoPhone LR 8882 H323 user manual.

A wired handset & cable.

Each set of power cord / power adaptor comes with a secure lock mechanical design that is capable of connecting VideoPhone LR 8882 H323 tightly.

An ethernet cable is used to connect VideoPhone LR 8882 H323 to an ADSL modem either directly or through a PLT (optional).

An A/V Convertible Cable which provides one pair of Audio/Video input (with green ring near the connector) of RCA female connectors and one pair of Audio/Video output (with red ring near the connector) of RCA female connectors.

2 What's In The Package

The following is a summary of VideoPhone LR 8882 H323 accessories:



Color: Dark Grey



Color: Black Length: 1600mm

Handset x 1

Power Adapter x1





Color: Black Length: 1830mm

Handset Cable x 1



Power Cord x1

Color: Black (Brown tags- A/V Input, Green tags- A/V Output) Length: 230+ -10mm

Audio/Video Convert Cable x 1 set

Connectors:

Mini-DIN 8(Male) x 1:	Color: Yellow
RCA(Female) x 2:	Color: Yellow
RCA(Female) x 2:	Color: White

Color: Beige

Ethernet Cable x1

Connectors: RJ-45 x 1

Color: Red

3 Getting to Know Your LR 8882 H323 Front view



Front view (cont.'d)

Cursor Panel

OK: ◀

Used with OSD menus; to pop up the OSD menu, to enter the sub menu, or to confirm the selection.

Used with OSD menus; it is used to move the cursor left or to go back to the previous menu. During a video call, it is used for reducing the incoming video bit rate. When used with OSD menus; it is used to move the cursor up. During a call, it is used for turning the volume of the speaker phone up.

 ► Used with OSD menus; it is used to move the cursor right or to enter the sub menu.
 During a video call, it is used for raising the incoming video bit rate.

In OSD menus; it is used to move the cursor down. During a call, it is used for turning the speaker phone volume down.

Hot Keys



Take Line/Hands-free key (Green):

The "Take line / Hands-free (green color)" key allows the user: taking the line by microphone or handset for incoming calls taking the line / launching a call after having dialed the numbers or picked up the phone number from the directory (inbox/outbox lists)



Hang up key (Red):

The Hang up (red color) key allows the user: hanging up the line during a communication refuses an incoming call going back to the stand-by screen directly(offline panic key)

OK

4



Annuler key (Black):

In offline status, press Annuler key to return to the previous screen without having to start from the beginning of the menu.



Menu key(Black):

The "Menu" key is accessible only during offline state (even if the terminal is not connected - it is possible to enter the configuration menu without having any network connection).

The screen displays entries such as phone book management, Inbox/Outbox menu, and adjustments menu.

From the "Menu" function: sub-menu such as phone book, adjustments, Inbox/Outbox...etc are displayed.



Phonebook (Blue):

The Phonebook key allows the user calling a contact directly from his Phone Book (online or offline).



Bis key(Shortcut to the outbox list-blue):

If users press his key (offline), the outbox lists is displayed. Then calls can be launched from the lists by pressing "OK" or "Take line" key.



"Son" sound privacy key (Blue):

The caller can mute the sound to the other party when pressing the "Son" key.



"Miroir" key (Orange):

When the call is in video mode, presses the "Miroir" key will display user's local image (PIP). The user can also use this key to move up his local image.

In offline state, the mirror images of the users can also be displayed (before calling a distant party) even if the service is not active. The images are usually reversed.



"Still/Privacy" key(Orange) :

Press once to freeze the video image of callers so that the other party can have a clearer display. Press twice to hide the display image to the other side.

Source

"Source" key (Orange):

The user can change the video source during the call or enter a standby state by pressing this key.

In offline state, this off/on external video source function is applicable for one call only (by default, the external video source is off: it is the local video which is sent to the distant party). The user can activate the external video source before launching a call. In that case, when the call party is going to activate the video source, the caller will not send his local video but rather the external video source instead. To switch from this external video source to the local one, he just needs to press the Source key again.

At the end of this call, the external video source function is no longer activated by default.

LEDs

 \square

"Video" :

The "Video" LED is in **yellow**:

If the user is on line and the video mode is off, the LED is off. When the user switches in Video mode, the LED lights up permanently.

As soon as user freezes his local image or when the 'Privacy' mode is on, the LED flickers/blinks.

"Power"

"Message"

When VideoPhone LR 8882 H323 is well-connected, the LED is in permanent red color.

Front view (cont.'d) Numeric Keypad

Inputting numbers

Pressing any key on the numeric keypad can input the corresponding number. For example, pressing (*) will generate the number " 8 ".

Inputting letters

Every button on the numeric keypad has characters printed on it, in addition to the numbers. Number keys from "2" to "9" have English letters on them, so they can be used to input English letters. When inputting data, pressing a key consecutively will generate the letters on it.

For example, "7" key has the number "7" and the alphabets "PQRS" on it.

Press this key once will generate the number " P ".

Press this key twice consecutively will generate the letter " Q ".

Press this key three times consecutively will generate the letter " R ".

Press this key four times consecutively will generate the letter " S ".

Press this key five times consecutively will generate the letter "7".

"1" key

In numeric filed, "1" is shown.

In alphanumeric field, press once to display "1", twice to display " ... ". Press "1" for 1.5 seconds to launch the message systems.

"*" key

In *numeric* field: use "." for IP addresses and "*" for phone numbers.

In *alphanumeric* field: press "*" once to display "*", twice to display ".", and three times to display ",".

"0" key

In *numeric* field: "0" is shown. In *alphanumeric* field: Refer to pictures at right.

	Add contact
*	First Name: 00 ↓ 0 * # @ : : ! ? / \ ; ¿ () <> ~ + = % & € \$ £ IF acoress:
	음 : Auto answer: OFF ABC
	R





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Installing the unit

Step 1 Pick a good spot

Stability

Place your LR 8882 H323 on top of a counter, desk, or table with the CCD camera opening in front.

Lighting condition

Make sure the lighting is sufficient and does not shine directly into camera lenses.

View of camera

Avoid using LR 8882 H323 in a room with brightly painted walls or flamboyant wallpaper. Soft and evenly painted background provides the best results.

Prolonging the lifespan

Avoid storing or operating LR 8882 H323 in abnormal conditions. High temperatures or excessive humidity could cause the unit to malfunction and shorten its useful lifespan.

Step 2 Handset connection

When handset is connected to the phone users can answer the call via Mic or handset.



Installing the unit (cont'd)

Step 3 Connect the Ethernet cable

Plug one end of the Ethernet cable in one port of the jacks marked " 量 " on LR 8882 H323. Plug the other end of the Ethernet cable in the RJ-45 jack of the Ethernet device (hub, router, or ATU-R).



Connect Ethernet cable to the Ethernet device

Using external devices (Optional)



5 System Setup

The System Setup section gives instructions on how to set up your LR 8882 H323 system under some mostly used interconnection types. There is a condition bar on each page (as shown in the figure), indicating what type of connection the setup guide on that page is for. Look for the type of connection you use with your LR 8882 H323 to find the setup instructions you need.



Connection ADSL Type Constant ADSL IP Single, Public, & Fixed

When the IP is used exclusively by LR 8882 H323



LR 8882 H323 System Setup

A	Network Setup	Network Setup
C Leadtek	Image: Second	Bandwidth ▶ IP setup NAT setup GK setup Default WiFi setup
00:52:53	R	R
	IP setup ➤ Connect type: Static IP address: 192.168.128.175 Submask: 255.255.255.0 Gateway: 192.168.128.254 PPPoE setup	б

Note : IP address, Subnet Mask and Gateway are assigned by your SIP, each consisted of 4 sets of numbers with dots in between them. Check with your ISP for the information.

Connection ADSL Type Constant ADSL IP Multiple, Public, & Fixed

When LR 8882 H323 uses one of the IPs (without a DHCP server connected)



LR 8882 H323 System Setup

C Leadtek 70/01/01 00:52:53	Network Setup	Network Setup Bandwidth ▷ IP setup NAT setup GK setup Default WiFi setup
	IP setup ► Connect type: Static IP address: 192.168.128.175 Submask: 255.255.255.0 Gateway: 192.168.128.254 PPPoE setup	

Note : IP address, Subnet Mask and Gateway are assigned by your SIP, each consisted of 4 sets of numbers with dots in between them. Check with your ISP for the information.

Connection ADSL Type Timing ADSL IP Single, Public, Dynamic

When the ADSL is used exclusively by LR 8882 H323



LR 8882 H323 System Setup



Note: IP, Subnet Mask and Gateway are assigned by PPPoE.

Connection Cable Type - IP Single, Public, & Dynamic

When the IP is used exclusively by LR 8882 H323



LR 8882 H323 System Setup



Note : IP, Subnet Mask and Gateway are assigned by the DHCP server of your SIP.

Connection LAN Type
Firewall
NAT
Packet Filter

With a DHCP server connected



LR 8882 H323 System Setup





Connection LAN Type Firewall NAT Packet Filter

Without a DHCP server connected



LR 8882 H323 System Setup



Note: IP address, Subnet Mask and Gateway are assigned by your SIP. If you are using an IP segment, which is x.x.x.0-x.x.x.255, your settings should be:
IP : one chosen from the range between x.x.x.1 to x.x.x.254
Subnet mask : 255.255.255.0
Gateway : one chosen from the range between x.x.x.1 to x.x.x.254, usually x.x.x.254, and can't be the same as your IP address.
Remember that *Public IP* is required.

Connection LAN Type 🗹 Firewall 🗆 NAT 🗹 Packet Filter

With a DHCP server connected







Note : IP address, Subnet Mask and Gateway are assigned by your SIP. If you are using an IP segment, which is x.x.x.0-x.x.x.255, your settings should be:
 IP : one chosen from the range between x.x.x.1 to x.x.x.254
 Subnet mask : 255.255.255.0
 Gateway : one chosen from the range between x.x.x.1 to x.x.x.254, usually x.x.x.254, and can't be the same as your IP address.

Connection LAN Type I Firewall NAT Packet Filter

With a DHCP server connected





Connection LAN Type I Firewall NAT Packet Filter

Without a DHCP server connected



LR 8882 H323 System Setup



Note: You can assign your own IP, Subnet Mask and Gateway within your private segment. If the segment is 172.16.0.0-172.16.0.255, your settings should be:

IP : one chosen from the range between 172.16.0.1 to 172.16.0.254 **Subnet mask :** 255.255.0

Gateway : one chosen from the range between 172.16.0.1 to 172.16.0.254, usually 172.16.0.254, and can't be the same as your IP address.

When NAT is ON, NAT door is set to router's IP address.

6 Making a Call Before making a video call

Here are a few things you need to consider before making a video call.

1 Keep a distance of 0.5 meters away from LR 8882 H323.



2 Make sure of the most appropriate lighting source, preferably from the front with the beam on your face.



5 Avoid having a lot of movement in the background and try not to move around excessively. Too much movement tends to slow down the frame rate of the video image, resulting in a jerky picture. **3** Avoid having lights behind you that might shine into the camera lens.



4 Do not point the LR 8882 H323 at a mirror or bright light.



Making a video call

Step 1 Turn on the power of the unit. The LCD screen shows the bootup screen.

Step 2 Press before entering the specific phone numbers or IP address.
When a key is pressed, the bootup screen disappears and the input numbers are displayed.



Bootup screen

Input phone number/ IP address

Press button before dialling.

- Step 3 The other party answers the phone, and the video connection is established. You will be able to see the person you are talking to.
- Step 4 To end the connection, simply press •
- Step 5 If there is difficulty in making connection, please make sure that the LR 8882 H323 has been properly installed. Please also check if the network settings are configured properly.



Dialing (local view)

7 Using OSD Menus Outbox

Outbox



You can dial out directly from the Outbox list.

Using OSD menus Network Setup ► Bandwidth

Bandwidth



Please set the bandwidth according to the bandwidth your SIP provides.

Using OSD menus Network Setup ► IP Setup

IP Setup



Connect Type:

STATIC: IP address/Subnet Mask/Gateway have to be assigned (Consult your SIP provider).

DHCP: IP address/Subnet Mask/Gateway will be assigned by DHCP server.

PPPoE: PPPoE Username/PPPoE Password have to be assigned (Consult your SIP provider).

PPPoE setup:



Using OSD menus Network Setup ► NAT Setup

NAT Setup



Using OSD menus Network Setup ► GK Setup

GK Setup



GK: When the Gatekeeper is turned off the GK IP, Phone number, H323 alias and Keep alive functions are unavailable.

GK IP: You need to get the IP of the gatekeeper from your gatekeeper service provider.

Phone number: phone number is displayed on the screen.

H323 alias: The alias may be assigned by your gatekeeper service provider.

Keep alive: If your gatekeeper service provider periodically inquires for your Videophone's online status, you can set Keep Alive to **OFF**; if it doesn't make such an inquiry and you want to stay online for a long period of time, it is better to set Keep Alive to **ON**. Consult your gatekeeper service provider if you don't know how to do Keep Alive setting.

Using OSD menus Missed Calls

Missed Calls



You can dial out directly from the Missed Calls list.

Using OSD menus Phonebook ► Add

Adding to the phonebook



Using OSD menus Phonebook ► List

List of numbers Edit contact



(Continued)

Using OSD menus Phonebook ► List

List of numbers (cont'd) Delete contact



Make call



If you cannot dial out with LR 8882 H323, please hang up or press o button to return to local view, and try to dial again.

Using OSD menus Inbox

Inbox



You can dial out directly from the Inbox list.

Using OSD menus Phone Setup ► Time setup

Time setup



Please set the time zone according to the area you are using the phone.

Using OSD menus Phone Setup ► Language setup

Language setup



Choose the language for the OSD Menu..

Using OSD menus Phone Setup ► Software update

Software update



Using OSD menus Phone Setup ► Return default

Return default



Press () to restore the factory settings. Press () to cancel.

Using OSD menus Calls Setup ► Communication mode

Communication mode



Users can choose the Communication mode to be either *Audio* mode only or *Video* + *Audio* mode.

Using OSD menus Calls Setup ► Caller ID

Caller ID



When Caller ID is ON, the caller ID will display on the screen when an incoming call is received.

Using OSD menus Calls Setup ► T.140

T.140



During the phone conversation, users can type in words instead of talking on the phone when T.140 is set to ON.

Using OSD menus Calls Setup ► Auto answer

Auto answer



While dialing, the Auto answer function is turned on when the auto answer function for a phonebook entry is set to ON.

Using OSD menus Calls Setup
Auto answer rings

Auto answer rings



When Auto Answer is ON, you can set the number of rings $(0\sim9)$ before the auto answer function is activated.

Using OSD menus Information

Information



This screen displays system information such as IP, Submask, Gateway, software & hardware version.

OSD Menu Tree



Trouble Shooting

Your LR 8882 H323 is reliable and easy to use. If you encounter any problem while using this product, please refer to the table below for possible solutions.

Power Indicator OFF

Plug power adapter in the unit. Plug the power cord in the power outlet in the wall. Turn on the power switch.

Video of local view is dark

Increase light on the image and reduce back lighting.

No image is displayed on LCD screen

Make sure the power indicator is ON.

> If auxiliary video input is used on LCD, select the appropriate video input for LCD.

Video in local view has a red cast



Aim the LR 8882 H323 at a strong white light source momentarily.

The unit is not responding when the (or button is pressed

Be sure the RJ-45 wire is plugged into one of the two " 品 " ports directly on the LR 8882 H323.

Video connection is not established correctly

Hang up and call again. Ask the other party call you.

Can not dial a phone number

Plug RJ-45 cable from the Ethernet device into one of the two " 品 " ports on the unit.

Green or yellow blocks appear in the remote picture

Probable cause is bad connection (noisy line). Hang up and try again. This time, ask the other party to call you.

10 Tech Support

In the event of not finding the solution to your problem, please contact your local distributor. You may also contact our technical support staff; E-mail to <service@leadtek.com.tw> with the following information:

Product name:

It will be easier for our staff to answer your question if you know the name of the product.

Detailed description of your problem:

Please describe in detail all the problems you encountered, including the kind of software and hardware you are using, and the contents of your system files.

11 Limited Warranty

Leadtek warrants to the original purchaser of this product that it shall be free of defects resulting from workmanship or components for a period of one (1) year from the date of sale. Defects covered by this Limited Warranty shall be corrected either by repair or, at Leadtek's discretion by replacement. In the event of replacement, the replacement unit will be warranted for the remainder of the original one (1) year period or thirty (30) days, whichever is longer. THERE ARE NO OTHER ORAL OR WRITTEN WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This Limited Warranty is nontransferable and does not apply if the product has been damaged by negligence, accident, abuse, misuse, modification, misapplication, shipment to the Manufacturer or service by someone other than the Leadtek Transportation charges to Leadtek are not covered by this Limited Warranty. To be eligible for warranty service, a defective product must be sent to and received by Leadtek within fourteen (14) months of the date of sale and be accompanied with proof of purchase. Leadtek does not warrant that this product will meet your requirements; it is your sole responsibility to determine the suitability of this product for your purposes. Leadtek does not warrant the compatibility of this product with your computer or related peripherals, software.

LEADTEK'S SOLE OBLIGATION AND LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT. THE MANUFACTURER SHALL NOT, IN ANY EVENT, BE LIABLE TO THE PURCHASER OR ANY THIRD PARTY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIABILITY IN TORT RELATING TO THIS PRODUCT OR RESULTING FROM ITS USE OR POSSESSION.

12 FCC Statement

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

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of 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.

Shielded interface cables must be used in order to comply with emission limits. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.