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FCC Warning

This equipment has been tested and found to comply with the regulations 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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, 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.

CE Mark Warning

In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Revision

User's manual for PLANET Internet Conferencing Station

Model: ICF-1000S

Rev: 1.0 (August. 2003)

Part No. EM-ICF1000S

Safety Instructions

Please read and understand all instructions before using this product.

- All openings on the housing of this product are designed for ventilation. Do not block or cover them. Do not insert any foreign objects in the openings. Doing so might cause a short circuit, electrical shock and/or fire.
- Before cleaning, unplug the machine and wipe it gently with soft cloth damped with water or diluted liquid soap. To avoid damage or malfunction to the machine, do not use alcohol or other strong solutions.
- Avoiding Electrical Shock:
 - Be sure to ground your machine so that the built-in shock arrester will function and reduce the chance of being shocked.
 - Do not connect the grounding wire to a gas or water pipe.
 - If possible, switch power off and unplug the machine during a thunderstorm.
- Do not try to disassemble the machine. Unplug the machine and call for service in the following situations:
 - The power cord or plug is damaged or frayed.
 - Some liquid is spilled into the machine.
 - The machine appears wet with water.
 - The machine appears faulty and cannot be repaired despite having followed all instructions in the manual.
 - The machine is damaged from being dropped or the housing is broken.
- Power Requirements and Power Cords:
 - Use a single wall outlet with the power of 100-240 V AC, 50/60 Hz 1A depending on label indication.
 - Do not place anything on the power cord. Avoid having people step on it.

Table of Contents

Chapter 1 Introduction	1
1.1 Features	1
1.2 Specification	2
Chapter 2 Installation	5
2.1 Package Contents	5
2.2 Front Panel introduction	6
2.3 Back panel introduction	7
2.4 Hardware Installation	8
Chapter 3 System Configuration	11
3.1 Power On and Access Configuration Menu	11
3.2 General Settings	12
3.3 Network	16
3.4 H.323	20
3.5 Exit the System Configuration	23
3.6 Phone Book Setup	23
Chapter 4 Getting Started	25
4.1 Making Video Calls	25
4.2 Using the Phone Book	25
4.3 Receiving Video Calls	26
Chapter 5 On-line Operation	27
5.1 Picture Quality	27
5.2 Frame Rate	28
5.3 Snapshot	28
5.4 View	29
5.5 Switch the Video source	29
5.6 Show the Connection Status	30
5.7 Adjust on-line video and audio quality	30
5.8 Activate Video Mute	35
5.9 Activate Audio Mute	36
Chapter 6 Troubleshooting	37

<u>Chapter 1</u> INTRODUCTION

PLANET's Video Conferencing Station, the ICF-1000S, brings you a vivid video conferencing experience through the Internet. No PC is required and none of the usual complications of complex web camera, sound card and software settings and specialized data connections. The ICF-1000S is an easy-to-use integrated system ideal for home offices and conference rooms. All that is needed is a TV and a high speed Internet connection. Using simple setup procedures through a remote control, you can install and use voice and video conferencing in a few minutes.

ICF-1000S is H.323 compliant, which means you can have a seamless conferencing experience with other H.323 compliant video conferencing systems, VoIP gateway/phones and Microsoft NetMeeting. With Gatekeeper and MCU support, the ICF-1000S from PLANET make communication with your business partners quick and cost-effective.

The ICF-1000S have three video inputs which can be used to connect to external cameras for group meetings and/or a document camera for showing detailed documents or photographs. With up to 30 fps frame rate, outstanding picture and sound quality, the PLANET Internet Video Conferencing Station offer you a superior communications experience using the Internet.

1.1 Features

- ITU H.323 version 2 compliant
- Support H.263 Video Codec and G.723,1, G.711 Audio Codec
- Compatible with H.323 VoIP gateway, Gatekeeper , MCU (Multipoint Control Unit) and Microsoft NetMeeting
- Built-in High Quality CCD Camera
- Full-duplex Voice Conversation
- Superior voice quality with Voice Activity Detection(VAD), Automatic Gain Control(AGC), Acoustic Echo Cancellation(AEC) and Electrical Echo Cancellation(EEC) support
- Support Static IP, PPPoE, DHCP Connection
- Support Dynamic DNS
- · 3 video resolution mode supported, CIF, QCIF and SQCIF
- Control bandwidth to 128K, 256K, 384K, 512K, 768K and no limit
- Supports frame rate up to 30 fps
- Phone book of 100 Names/Addresses and quick search
- On-line change of remote / local video size (PIP)

- On-line video/audio mute function
- · On-line snapshot of remote video function
- On-line call status information about Tx/Rx frame rate and bandwidth usage
- Provide Auto-answer mode which allow you to monitor remote location with real-time picture and voice
- Remote Control and Microphone Pod Included
- 3 RCA Video input interfaces for multiple camera connection
- 1-pair RCA Audio/Video output for TV connection
- 1 VGA Video output for Monitor connection

Product	Internet Video Conferencing Station	
Model	ICF-1000S	
Hardware		
LAN	1 x 10/100Mbps RJ-45 port	
Camera	Built-in High quality CCD Camera, adjustable focus/tilt	
Audio/Video Input	3 RCA video input 1 MIC connector	
Audio/Video Output	1 pair RCA Audio/Video output 1 speaker connector 1 VGA connector	
LED indicator	1 PWR/LNK LED	
Dimension(WxDxH)	295 x 200 x 71.5 mm	
Weight	1.13 kg	
Operating Environment	0~40 degree C, 10~90% humidity	
Power Requirement	12V DC, 2A	
Power Consumption	20W, 68 BTU	
EMC/EMI	CE, FCC	
Protocols and Standard		
Standard	ITU-T H.323 v.2	
Video Standard	Н.263, Н.263+	

1.2 Specification

Audio Standard	G.723.1, G.711	
Control Standard	H.245	
Compatibility	Compatible with Gatekeeper, H.323 Videophone, H.323 VoIP gateway, Microsoft NetMeeting, Mul- tipoint Control Unit (MCU)	
LAN standard	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet	
Network and Configuration		
Connection Type	ADSL, Cable, VPN, LAN	
Access Mode	Static IP, PPPoE, DHCP	
Bandwidth Usage	128K, 256K, 384K, 512K, 768K and No Limit	
Video Resolution	CIF(352x288), QCIF (176x144) and SQCIF (128x96)	
Configuration Interface	Remote controller with On Screen Display (OSD)	

-4

<u>Chapter 2</u> INSTALLATION

2.1 Package Contents

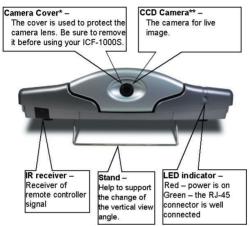
Check the contents of your package for following parts and quantity:

1. ICF-1000S ×1	2. Power Adapter & AC Cord x1
3. RCA Cable x1	4. Microphone Pod x 1
5. Remote Controller x 1	6. Battery for remote controller (4A 1.5VDC) x 2
7. User Manual x1	

If any of these pieces are missing or damaged, please contact your dealer immediately, if possible, retain the carton including the original packing material, and use them against to repack the product in case there is a need to return it to us for repair.

2.2 Front Panel introduction

The following show the front panel of ICF-1000S.



Note:

- 1. Please keep the camera cover in a known place and cap the cover back if ICF-1000S is not using for long time.
- The focus of the camera is adjustable, screw the lens gently by clockwise or anti-clockwise to find the best resolutions for the first operating if needed.

2.3 Back panel introduction

The real panel of ICF-1000S has three video inputs which can be used to connect to external cameras for group meetings and/or a document camera for showing detailed documents or photographs. It also provides 1 set of RCA AV output connector for connecting to TV, projector or stereo.



The following table lists all the connectors on the back panel of ICF-1000P and their function.

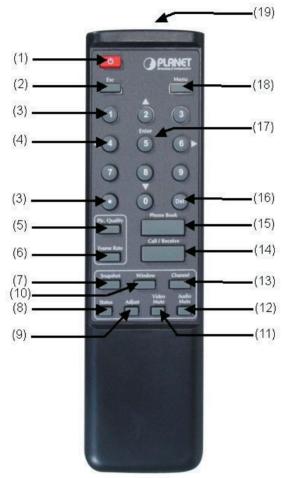
POWER	Connect to the DC output of power adapter.	
NTSC/PAL Switch	Switch between NTSC, PALM, PAL-B NOTE: To use VGA out, please switch to PAL-M	
VGA	By connecting with a monitor. ICF-1000S can use a monitor as an alternative video output device. NOTE: Please switch to PAL-M and set the bandwidth under 384Kbps to ensure the picture quality.	
MIC	Microphone jack.	
SPK	Speaker jack.	
Audio Out	Output audio to TV.	
Video Out	Output video to TV.	
Video In	Input video from external device. ICF-1000S can connect with up to three external cameras.	
Ethernet	Connect to your local network or Cable/DSL modem. This port supports both 10Mbps and 100Mbps speed	

NOTE

- 1. The device is a power-required device, it means, the device will not work until it is powered. If you need to use it all the time, please consider use an UPS (Uninterrupted Power Supply) for this device.
- In some area, installing a surge suppression device may also help to protect your device from being damaged by unregulated surge or current to the device or the power adapter.

2.4 Hardware Installation

The remote controller is the key device to operate ICF-1000S. While using / controlling, please aim the remote controller at the IR receiver of the ICF-1000S unit. (Please refer to section 2.2 for the detailed location).



The following table lists the button definition of the remote control.

Button	Definition	
1. Power	To switch the power on/off.	
2. Esc	Cancel your current selection or reject incom- ing call.	
3. •,1,,9.0 number key	Enter the number to input or edit IP address.	
4. ▲, ▼, ◀, ►	Move cursor in System Configuration, phone book, or on-line adjustment.	
5. Pic. Quality	It shows the picture quality of the system con- figuration that you set.	
6. Frame Rate	To adjust local image. It allows you to alter the transmitting speed and sharpness of the video images displayed on your TV.	
7. Snapshot	Freeze remote site image.	
8. Status	Show the status of Bit Rate, Frame Rate, and Timer on-line.	
9. Adjust	Adjust setting on-line.	
10. Window	Switch windows of remote site and local site.	
11. Video Mute	Pause video transmitting from local site to re- mote site.	
12. Audio Mute	Pause audio transmitting from local site to re- mote site.	
13. Channel	Switch camera sources between build-in camera and external ones.	
14. Call/Receive	Initiate a call or answer an incoming call, or dis- connect a video call.	
15. Phone Book	Phone Book provides user with a convenient way for retrieving the IP addresses of some regularly called parties.	
16. Del.	For correction purpose.	
17. Enter	Confirm your current selection.	
18. Menu	Enter System Configuration.	
19. IR Transmitter	The IR transmitter that should aim to the IR receiver in front of ICF-1000S	

____10

<u>Chapter 3</u> System Configuration

3.1 Power On and Access Configuration Menu

After power on, the LED on the front panel turns red to indicate it have received power. The LED will then turn green if the Ethernet network connection is established. Be reminded, the conferencing station should take about 50 seconds to complete the power on self-test (POST) and system start up. In this period, the screen is still blank. Please do not press any button on this period.

After the booting process is completed, the following page is shown on the screen.



Press [Menu] button, a System Configuration page is shown.

Please use arrow key, $[\blacktriangle]$, $[\blacktriangleright]$, $[\lor]$ and $[\triangleleft]$ to move the highlight to the function you need to configure and [Enter] to enter the function menu. After the configuration, press [Esc] to return to standby-screen as above figure, and save the settings.

3.2 General Settings

General Settings provides some general parameters on using the ICF-1000S.

Syst	em Configuration
General Setting	Network H.323
Auto-Answer Mode	: Disable
Picture Quality	: LAuto
Auto-Send Video	: LYes
System Sleep	: 10 minutes
User Name	: <u>ICF-1000S</u>
PPPoE Password	: [****
Security	: Disable
Password	: [****

3.2.1 Auto-Answer Mode

This feature allows the video station to answer incoming calls automatically.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [▲] or [▼] key to highlight "Auto-Answer Mode".
- 3. Press [Enter] key to show the choice list.
- 4. Press [▲] or [▼] key to select the setting you want.

Enable - ICF-1000S automatically answers any incoming calls.

- Disable Incoming calls can be answered only when receiver press [Call/ Receive] button on remote control.
- Press [Enter] key to confirm the setting or press [Esc] key to return to the previous page.

3.2.2 Picture Quality

This function is responsible for the video quality that is sent to the remote site. There are three kinds of format (CIF, QCIF, SQCIF) provided.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [▲] or [▼] key to select the Picture Quality.
- 3. Press [Enter] key to show the choice list.

- 4. Press $[\blacktriangle]$ or $[\blacktriangledown]$ key to select the setting you want.
 - CIF –Common Intermediate Format, also known as Full CIF (FCIF). The video resolution is 352 x 288 pixels.

QCIF – Quarter CIF. The video resolution is 176 x 144 pixels.

SQCIF – Sub-Quarter CIF. The video resolution is 128 x 96 pixels.

Auto switch -The system automatically switches to a suitable quality.

- Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.
 - NOTE: While bandwidth is low, low-resolution image format (QCIF or SQCIF) is suggested for getting real-time image. The following table shows the maximum frame rate for each picture format on different bandwidth settings.

Bandwidth (Kbps)	Picture Format	Maximum frame rat	e (fps)
		NTSC	PAL
No Limit	CIF	30	25
	QCIF	30	25
	SQCIF	30	25
768	CIF	30	25
	QCIF	30	25
	SQCIF	30	25
512	CIF	25	25
	QCIF	30	25
	SQCIF	30	25
384	CIF	20	20
	QCIF	30	25
	SQCIF	30	25
256	CIF	15	15
	QCIF	15	15
	SQCIF	20	20
128	CIF	10	10
	QCIF	15	15
	SQCIF	20	20

3.2.3 Auto-Send Video

Allows the user to decide whether to send local image to the remote site automatically or not. If disabled, no image of local site can be sent to the remote site during the call.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [▲] or [▼] key to select the Auto-Send Video.
- 3. Press [Enter] key to show the choice list.
- 4. Press [▲] or [▼] key to select the setting you want.

Yes -> Auto Send Video enabled

No -> Auto Send Video disabled

Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.

3.2.4 System Sleep

System Sleep mode will be on when system is idle for a pre-set period.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [▲] or [▼] key to select the System Sleep.
- Press [Enter] key and use number key to input sleep time. (Up to 99 minutes)

NOTE: To disable the System Sleep mode, please set the time to "0" minute.

- 4. Press [Del.] key for correction.
- 5. Press [Esc] key to confirm the setting and to return to the previous page.
 - NOTE: When system is under sleep mode, press any key to wake up the system.

3.2.5 User Name

The User Name is the name assigned to the PPPoE server.

Press [Menu] key to enter the Main Menu of System Configuration.

- 1. Press [▲] or [▼] key to select the User Name.
- 2. Press [Enter] key to enter the on-screen keyboard to input your name.
- 3. Press [Del.] key for correction.
- 4. Press [Esc] key to confirm the setting and to return to the previous page.

3.2.6 PPPoE Password

The PPPoE Password is the name assigned to the PPPoE server.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [▲] or [▼] key to select the PPPoE password.
- Press [Enter] key to enter the on-screen keyboard to input your PPPoE password.
- 4. Press [Del.] key for correction.
- 5. Press [Esc] key to confirm the setting and to return to the previous page.

3.2.7 Security

When this function is enabled, you need to input the password for entering the System Configuration.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press $[\blacktriangle]$ or $[\blacktriangledown]$ key to select the Security.
- 3. Press [Enter] key to show the choice list.
- 4. Press [p] or [q] key to select the setting you want.

Yes -> Security function is enabled.

No -> Security function is disabled.

Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.

If the security is set to enabled, a Password field is shown below Security. To configure the password:

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [▲] or [▼] key to select the Password.
- 3. Press [Enter] key to enter the on-screen keyboard to input your password.
- 4. Press [Del.] key for correction.
- Press [Esc] key to confirm the setting and to return to the previous page. NOTE: The default password is "0000".

3.3 Network

System Configuration Seneral Setting Network > H.323 Bandwidth : 1384 Kbps Network Mode : Manual Subnet Mask : 255.255.255.0 User IP Address : 192.168.0.254 **Router IP Address** : 192.168.0.1 DNS IP Address : 168.95.192.1 **DDNS** Hostname : LICF-1000S **DDNS User Name DDNS** Password

Network page allows you to set network relative parameters.

3.3.1 Bandwidth

Select appropriate bandwidth in compliance with your Internet transmission speed when placing a call.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.
- 3. Press [Enter] key to show the choice list.
- Press [▲] or [▼] key to select the bandwidth you need. ICF-1000S supports the following bandwidth settings.

No Limit, 768k, 512k, 384k, 256k and 128k

Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.

3.3.2 Network Mode

The Network Mode function is used for network configuration.

- NOTE: You can get the network setup information from your Internet Service Provider (ISP) or your network administrator.
- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.

- 3. Press $[\blacktriangle]$ or $[\blacktriangledown]$ key to select the Network Mode.
- 4. Press [Enter] key to show the choice list.
- 5. Press $[\blacktriangle]$ or $[\blacktriangledown]$ key to select the setting you need.
 - Manual Fixed IP Mode. Acquire the IP address, default gateway address, and subnet mask address from your ISP or your network administrator.
 - DHCP Dynamic Host Configuration Protocol is used to automatically assign IP addresses within a LAN. Most cable modem Internet connection also use DHCP to dynamically assign IP address.
 - PPPoE PPPoE (Point-to-Point Protocol over Ethernet) is a protocol used by many Internet Service Providers with ADSL Internet connection. A User Name and PPPoE Password should be provided.
- Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.

3.3.3 Subnet Mask

Enter the subnet mask for the LAN. (Please acquire Subnet Mask address from your ISP or your network administrator.)

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.
- 3. Press [▲] or [▼] key to select the Subnet Mask.
- Press [Enter] key and use the number key to input your Subnet Mask Address.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.3.4 User IP Address

Enter the static IP address assigned to the ICF-1000S. (Please acquire Subnet Mask address from your ISP or your network administrator.)

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.
- 3. Press [▲] or [▼] key to select the User IP Address.
- 4. Press [Enter] and use the number key to input your Router IP Address.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.3.5 Router IP Address

Enter the network's default router IP address. (Please acquire Subnet Mask address from your ISP or your network administrator.)

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.
- 3. Press [▲] or [▼] key to select the Router IP Address.
- 4. Press [Enter] and use the number key to input your Router IP Address.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.3.6 DNS IP Address

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.
- 3. Press [▲] or [▼] key to select the DNS IP Address.
- 4. Press [Enter] and use number key to input your DNS IP Address.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.3.7 DDNS Hostname

ICF-1000S currently supports the dynamic DNS service from DynDNS.org. It allows Internet users to connect to your ICF-1000S using a URL, rather than an IP Address.

This also solves the problem of having a dynamic IP address. With a dynamic IP address, your IP address may change whenever you connect, which makes it difficult to connect to you.

The Service works as follows:

- You must register for the service at http://www.dyndns.org (Registration is free). Your password will be E-mailed to you.
- After registration, use the "Create New Host" option (at www.dyndns.org) to request your desired Domain name.
- Enter your data from www.dyndns.org in the DDNS Hostname, DDNS User Name and DDNS Password field.
- ICF-1000S will then automatically ensure that your current IP Address is recorded at http://www.dyndns.org
- 5. From the Internet, users will be able to connect to ICF-1000S using your Do-

main name.

The following illustrate the procedures to configure the DDNS Hostname.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.
- 3. Press [▲] or [▼] key to select the DDNS Hostname.
- Press [Enter] and use the on-screen keyboard to input your DDNS Hostname. For example, "ICF-1000S.dyndns.org", "ICF-1000S.homeip.net", etc.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

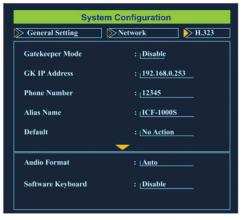
3.3.8 DDNS User Name

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.
- 3. Press [▲] or [▼] key to select the DDNS User Name.
- Press [Enter] key to enter the on-screen keyboard to input your DDNS User Name.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.3.9 DDNS Password

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the Network page.
- 3. Press [▲] or [▼] key to select the DDNS Password.
- Press [Enter] key to enter the on-screen keyboard to input your DDNS Password.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.4 H.323



3.4.1 Gatekeeper Mode

When register a gatekeeper, you can assign a number to the video station. This makes the video station user-friendly, as users only have to dial a number instead of entering an IP address when making a call.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the H.323 sheet.
- 3. Press [▲] or [▼] key to select the Gatekeeper Mode.
- 4. Press [Enter] key to show the choice list.
- 5. Press $[\blacktriangle]$ or $[\triangledown]$ key to select the setting you want.

Disable -> not to register a gatekeeper.

Auto -> Automatically search for gatekeeper IP.

Manual ->User must input gatekeeper IP address.

Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.

3.4.2 GK IP Address

Enter the Gatekeeper IP address assigned to the ICF-1000S. (Please acquire Subnet Mask address from your ISP.)

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the H.323 sheet.
- 3. Press $[\blacktriangle]$ or $[\blacktriangledown]$ key to select the GK IP Address.
- 4. Press [Enter] and use number key to input your GK IP Address.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.4.3 Phone Number

This function is to assign a dedicated number to your video station.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the H.323 sheet.
- 3. Press $[\blacktriangle]$ or $[\blacktriangledown]$ key to select the Phone Number.
- 4. Press [Enter] key and use number key to input your Phone Number.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.4.4 Alias Name

The alias name is the GK name given to the ICF-1000S by the GK Manager. It may be used in place of an IP address when dialing H.323 calls.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to come to the H.323 sheet.
- 3. Press [▲] or [▼] key to select the Alias Name.
- 4. Press [Enter] key to enter the on-screen keyboard to input your Alias name.
- 5. Press [Del.] key for correction.
- 6. Press [Esc] key to confirm the setting and to return to the previous page.

3.4.5 Default Setting

You can use this function to reset System Configuration back to factory default value.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the H.323 sheet.
- 3. Press [▲] or [▼] key to select the Default Setting.
- 4. Press [Enter] key to show the choice list.
- 5. Press $[\blacktriangle]$ or $[\blacktriangledown]$ key to select the setting you want.

No Action - Retain the present setting.

Configuration - Initiate System Configuration to default value.

Phone Book – Initiate Phone Book to default value.

Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.

3.4.6 Audio Format

PLANET Video station complies with two audio protocols - G.711 and G.723.

The audio format can be adjusted to compensate for audio distortion caused by high packet loss. Select a proper audio protocol for audio transmission.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the H.323 sheet.
- 3. Press [▲] or [▼] key to select the Audio Format.
- 4. Press [Enter] key to show the choice list.
- 5. Press $[\blacktriangle]$ or $[\blacktriangledown]$ key to select the setting you need.

Auto - The system automatically switch.(Default)

- G.711 64kbps
- G.723 6.3kbps
- Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.

3.4.7 Software Keyboard

Software Keyboard allow you to edit the dial number and Address field of phone book by using an on-screen keyboard. Enable this function if you need to dial destination device by DNS name.

- 1. Press [Menu] key to enter the Main Menu of System Configuration.
- 2. Press [◀] or [▶] key to go to the H.323 sheet.
- 3. Press [▲] or [▼] key to select the Software Keyboard.
- 4. Press [Enter] key to show the choice list.
- 5. Press [▲] or [▼] key to select the setting you want.

Disable - The Software Keyboard Mode is off.

Enable - The Software Keyboard Mode is on.

Press [Enter] key to confirm the setting or press [Esc] key to return the previous page.

3.5 Exit the System Configuration

After completing the system configuration, please press [Esc] key to save and exit.



3.6 Phone Book Setup

The ICF-1000S provides an address book to store access names and numbers. You can make a speed dial directly from the phone book. The ICF-1000S address book can store up to 100 entries.

	Name	Address
00	PLANET	icf.planet.com
01	Factory	192.168.0.230
02		
03		
04		

- From the main screen, press [Phone Book] key to enter the Phone Book page.
- 2. Press [▲] or [▼] key to select the entries.
- 3. Press [◀] [▶] to switch between Name column and Address column
- 4. Press [Enter] key to input the Name or Address.
- 5. Press [Phone Book] key again to save and exit the Phone Book page.
- NOTE: You can press a number to jump the phone book entry by 10 by using the number keypad [1], [3], [7] and [9]. For example, you can press [7] or [9] to jump from 00th to 10th phone book entry.

3.6.1 Input Name

- 1. From the Phone Book page, select one entry and switch to the Name column.
- 2. Press [Enter] key to enter the on-screen keyboard to input your Alias name.
- 3. Press [Del.] key for correction.
- 4. Press [Esc] key to confirm the setting and to return to the previous page.

3.6.2 Input Address

- 1. From the Phone Book sheet, switch to the Address column.
- 2. Press [Enter] and use number key to input the destination IP Address.
- 3. Press [Del.] key for correction.
- 4. Press [Esc] key to confirm the setting and to return to the previous page.
- 5. Press [Phone Book] key again to save and exit the Phone Book sheet.
- NOTE: If software keyboard is enabled (3.4.7), an on-screen keyboard is shown. Please use [▲][▶][♥][◀] to move the highlight to the word you want and press [Enter] to input. Press [Del.] for correction.

<u>Chapter 4</u> Getting Started

Before making a video call, please make sure that the unit has been installed and set up successfully.

4.1 Making Video Calls

1. From the main screen, press [Call /Receive] key and dial the IP Address of the remote site.



2. Press [Call/Receive] key again to make a connection.



- When the connection is set up successfully, the video communication starts and the remote site video will be shown on the local screen.
- 4. Use [Call /Receive] key to end the connection.

4.2 Using the Phone Book

This Phone Book provides user with a convenient way for retrieving the IP addresses of some regularly called parties.

- 1. From the main screen, press [Phone Book] key to enter the phonebook sheet.
- From the phonebook sheet, use Select Buttons to select the name/IP address you want to call.
- 3. Press [Call/Receive] key to establish a connection.



- When the connection is set up successfully, the video communication starts and the remote site video will be shown on the local screen.
- 5. Press [Call/Receive] key to end the connection.
 - NOTE: You can press a number to jump the phone book entry by 10 by using the number keypad [1], [3], [7] and [9]. For example, you can press [7] or [9] to jump from 00th to 10th phone book entry.

4.3 Receiving Video Calls

4.3.1 Auto-Answer Mode

When a video call comes in, the video station rings and answers it automatically. The connection will be established within a few seconds.

4.3.2 Manual Mode

When a video call comes in, just pick up the handset or press $[\mbox{Call/Receive}]$ key to answer the phone.

If you want to reject the video call, you can press [Esc] key.

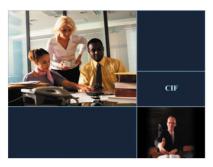
<u>Chapter 5</u> On-line Operation



5.1 Picture Quality

It shows the Picture quality of the system configuration that you set.

- 1. Press [Pic. Quality] key to show the Picture quality info.
- 2. Press [Pic. Quality] again to hide the picture quality information.
 - SQCIF 128 X 96 pixels
 - QCIF 176 X 144 pixels
 - CIF 352 X 288 pixels



5.2 Frame Rate

This function is to adjust local image. It allows you to alter the transmitting speed and sharpness of the video images displayed on your TV.

- 1. Press [Frame Rate] key to enter Frame Rate adjustment.
- Press [▶] key to increase the TX image quality and decrease the image frame rate.
- Press [◀] key to decrease the TX image quality and increase the image frame rate.



5.3 Snapshot

The snapshot function captures the remote image. This function allows the two parties to see more details of the pictures.

- 1. Press [Snapshot] key once to take a snapshot of the remote site image.
- 2. Press [Snapshot] key again to release the image and return to current video call.



5.4 View

The ICF-1000S supports PIP (Picture in Picture) for you to view remote site and local site on same screen. You can use this function to switch the video showing mode. There are three modes available for selection.

Press [Window] key to switch the video display mode in the sequence as below:

Remote and local video \rightarrow Remote full screen video \rightarrow Local full screen video.

5.5 Switch the Video source

ICF-1000S allows you to connect with three external video sources, for example, a camera. When external devices are connected to the video station, you can switch to the video taken by other external devices.

- 1. Press [Channel] key to enter the channel selecting function.
- 2. Use $[\blacktriangleleft]$ or $[\blacktriangleright]$ to switch to other cameras.

Main (Built-in camera) → Camera 1 → Camera 2 → Camera 3



5.6 Show the Connection Status

This function is to display the status of Network connecting, for example, connecting time, TX/RX Bit Rate as well as TX/RX Frame Rate and so on. For getting better quality you can adjust the settings below under online mode.

- 1. Press [Status] key once to show the status information.
- 2. Press [Status] key again to hide the status information.

TX: Transmitting Rate. RX: Receiving Rate

Encode: Encoding Rate Decode: Decoding Rate



5.7 Adjust on-line video and audio quality

For getting better video and audio quality you can adjust the settings below under online mode.

- Speaker Volume
- Camera Hue
- Camera Saturation
- Camera Contrast
- Camera Brightness
- Display Hue
- Display Saturation
- Display Contrast
- Display Brightness

5.7.1 Adjust Speaker Volume

- 1. Press [Adjust] key to enter on-line adjustment.
- 2. Use [▲] or [▼] key to locate Speaker Volume
- 3. Use [▶] key to increase the speaker volume.

- 4. Use $[\blacktriangleleft]$ key to decrease the speaker volume.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.7.2 Adjust Camera Hue

This function can adjust video color from camera input.

- 1. Press [Adjust] key to enter on-line adjustment.
- 2. Use [▲] or [▼] key to locate Camera Hue
- 3. Use [▶] key to increase the video hue from camera input.
- 4. Use $[\blacktriangleleft]$ key to decrease the video hue from camera input.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.7.3 Adjust Camera Saturation

This function can adjust video saturation from camera input.

- 1. Press [Adjust] key to enter on-line adjustment.
- 2. Use [▲] or [▼] key to locate Camera Saturation

- 3. Use [▶] key to increase the video saturation from camera input.
- 4. Use $[\blacktriangleleft]$ key to decrease the video saturation from camera input.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.7.4 Adjust Camera Contrast

The function is to adjust the video contrast from camera input.

- 1. Press [Adjust] key to enter on-line adjustment.
- 2. Use [▲] or [▼] key to locate Camera Contrast
- 3. Use [▶] key to increase the video contrast from camera input.
- 4. Use [4] key to decrease the video contrast from camera input.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.7.5 Adjust Camera Brightness

The function is to adjust the video brightness from camera input.

1. Press [Adjust] key to enter on-line adjustment.

- 2. Use [▲] or [▼] key to locate Camera Brightness
- 3. Use $[\blacktriangleright]$ key to increase the video brightness from camera input.
- 4. Use [4] key to decrease the video brightness from camera input.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.7.6 Adjust Display Hue

The function is to adjust display video hue.

- 1. Press [Adjust] key to enter on-line adjustment.
- 2. Use [▲] or [▼] key to locate Display Hue
- 3. Use [▶] key to increase the display video hue.
- 4. Use [◀] key to decrease the display video hue.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.7.7 Adjust Display Saturation

The function is to adjust display video saturation.

- 1. Press [Adjust] key to enter on-line adjustment.
- 2. Use [▲] or [▼] key to locate Display Saturation
- 3. Use [**>**] key to increase the display video saturation.
- 4. Use [4] key to decrease the display video saturation.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.7.8 Adjust Display Contrast

The function is to adjust display video contrast.

- 1. Press [Adjust] key to enter on-line adjustment.
- 2. Use [▲] or [▼] key to locate Display Contrast
- 3. Use [▶] key to increase the display video contrast.
- 4. Use [4] key to decrease the display video contrast.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.7.9 Adjust Display Brightness

The function is to adjust display video brightness.

- 1. Press [Adjust] key to enter on-line adjustment.
- 2. Use [▲] or [▼] to locate Display Brightness
- 3. Use [▶] key to increase t the display video brightness.
- 4. Use [◀] key to decrease the display video brightness.
- 5. Press [Adjust] key again to exit on-line adjustment.



5.8 Activate Video Mute

If you want to temporarily stop video transmission to remote site during the connection, you can use this function to conceal the local video.

- 1. Press [Video Mute] key once to stop transmitting local image.
- Press [Video Mute] key again to release the image and return to current video call.



5.9 Activate Audio Mute

If you want to temporarily stop audio transmission to remote site during the connection, you can use this function to conceal the local audio.

- 1. Press [Audio Mute] key once to stop transmitting local voice.
- 2. Press [Audio Mute] key again to release the voice and return to current video call.



<u>Chapter 6</u> Troubleshooting

Your ICF-1000S is a reliable and easy to use video station. If you encounter any problems when you use this product, please refer to the following solutions, which might help you solve your problems. If none of these solutions are helpful, please contact us for assistance.

1. The ICF-1000S can't be turned on.

Please make sure that the LED on the Adapter is always green and the LED on the ICF-1000S is always red or green. Also check the input voltage is correct. If you still can't turn on the ICF-1000S, please contact the local dealer.

- 2. ICF-1000S can't make a call successfully.
 - Please make sure that the RJ-45 plug has been put into the socket correctly and firmly. The LED on ICF-1000S should turn green if well connected with Ethernet.
 - Press the [Menu] key to check all the setting of "Network" and "H.323" is correct.
 - Please reconfirm the remote IP address or DNS name.
- 3. ICF-1000S can't receive an incoming call automatically.

Press the [Menu] key and switch the setting page to "General", and check whether the function of Auto-Answer Mode has been activated. Otherwise you should press [Call/Receive] key to receive the incoming call.

- 4. The IP phone or VoIP Gateway cannot communicate with ICF-1000S.
 - Please verify that the devices are compliant with H.323 standard.
 - Press the [Menu] key and enter "General" sheet to check the function of Auto Send Video hasn't been activated.
- 5. The remote site only receives the local video without audio.

At the remote site, please adjust the "Speaker Volume" and make sure that the AV connector has been connected correctly and firmly to the video station.

- 6. The voice quality is not clear or not continuous.
 - The microphone input volume should be moderate.
 - If the speaker volume is too high, the echo cancellation might become invalid. Please set the speaker volume to default value.

- Please check if your bandwidth is broad enough. The minimum bandwidth required is 128Kbps for both upstream and downstream.
- Please set the bandwidth of the remote site and local site to the same level.
- 7. The video quality is low. (The image is blocking or freezing.)
 - Please check if your bandwidth is broad enough. The minimum bandwidth required is 128 Kbps for both upstream and downstream.
 - Please set the bandwidth of the remote site and local site to the same level.
- 8. ICF-1000S can't receive the audio sent from the remote site.

Check if the remote site microphone is well connected and make sure the local site speakers are correctly connected and turned on.

- 9. ICF-1000S can't send audio to the remote site.
 - Please make sure the microphone is well connected.
 - Check whether the "Audio Mute" is on. If so, please disable it.
 - In the remote site, please adjust the "Speaker Volume" and make sure that the AV connector is connected correctly and firmly to the Station.
- 10. The remote controller is insensitive or can't work properly.

Please check the battery status.

11. The remote site image is not smooth.

Please use [Frame Rate] key to adjust the receiving frame rate until the remote image is smooth enough. You can also adjust the transmitting frame rate when the remote site can't have a smooth picture from your site.

12. The local image is not clear.

Please adjust the focus by rotating the lens.

13. I can not call or be called from PLANET VoIP Gateway.

For ICF to work with VIP gateway, please first make sure the firmware version of PLANET VoIP gateway is 3.23 or later. Besides, the VAD function of the voice profile should be turn off.

The configuration on PLANET VoIP gateway is as the following:

ITG>set coding 0 vad off

ITG>config activate

ITG>config store

14. How to call a VoIP gateway with extension number?

Please enable the software keyboard function and dial:

"extension number" + "@" + "IP or DNS name".

For example, if you want to dial IP 192.168.0.253 with extension 201, please input 201@192.168.0.253 on the address field.

15.How to configure the NAT router if I install the Video conferencing device behind the NAT router.

Please enable the DMZ function of the NAT router and map to the private IP address of the video conferencing device.

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Part No.: EM-ICF1000S