InnoMedia

MTA 3368 IP VideoPhone

Version 1.05

QuickStart Guide

H.323, SIP and MGCP

I. Introduction

InnoMedia MTA 3368 IP VideoPhone is a compact, all-in-one desktop phone that takes the complexity out of videoconferencing and enable easy to use and real-time face-to-face video calls anywhere in the world over a broadband IP network.

II. Usage Environment

Design to suit both residential and enterprise environment, the InnoMedia MTA 3368 IP VideoPhone achieves best performance when it is being deployed in a broadband network with the following conditions:

- QoS LAN or cable modem connections
- Network that supports 10/100 BaseT equipment
- Managed network that guarantees a minimum bandwidth of 64 kbps
- Ethernet connections offering minimum bandwidth requirement of 64 kps
- NO Firewall configured within the LAN environment
- Network that is NOT operating behind Network Address Translation (NAT)

III. Installation & Setup Requirements

The following system settings have to be configured before making any calls. You can either manually assign a fixed setting or leave the setting as 0.0.0.0 to enable auto provisioning by DHCP server

[H] - settings for Videophone to register to a H.323 Gatekeeper

[S] - setting for Videophone to register for a SIP Call Agent/Proxy

- IP Address
- Netmask
- Default GW
- Gatekeeper [H] (optional) – To enable calling via Phone number / Ext number
- Call Agent [S] (compulsory) – To enable calling via phone number
- Phone number (min. 3 digits) – Have to ensure the assigned phone number is configured into the GateKeeper/Call Agent as well
- Network BW – select operating bandwidth between 64 kbps – 768 kbps

IV. Setting up MTA 3368 IP VideoPhone

Below is an illustration of the overall setup of the MTA 3368 IP VideoPhone.

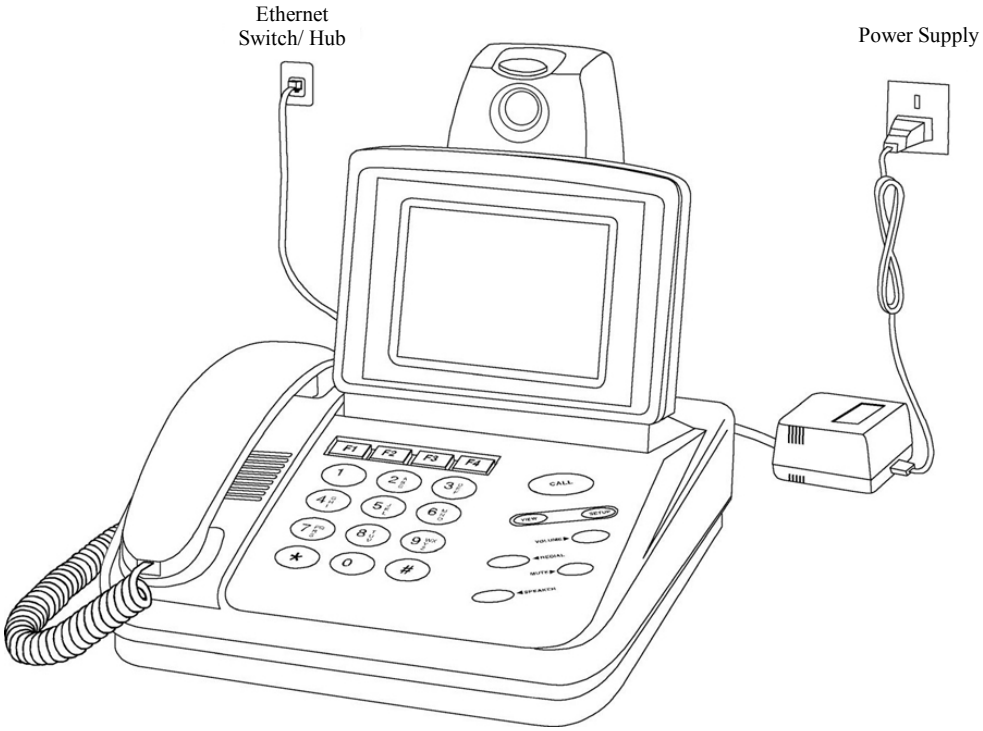


Figure 1.1 Overall connection

A. Connecting IP VideoPhone

1. Connect up the accessories, which include the CCD camera, telephone handset and cord to the videophone main body.
2. Please ensure CCD camera is compatible to the wall socket frequency before connecting the camera to the videophone main body, refer to the table below

Frequency	Camera
50Hz	PAL
60Hz	NTSC

3. Plug your network cable (RJ45) into the 'UPLINK' connector at the back of the unit.
4. Connect one end of the power adapter* to the '12V DC 1.5 A' power connector at the back of the videophone unit and the other end to the wall power supply.

5. Switch on the videophone. During boot up, the ring indicator will be lighted up in green and a series of diagnostics will be conducted by the videophone
6. Once the boot-up process is successfully completed and the videophone is ready, the ring indicator light goes off and the orange power light changes to green. A local view will appear on the LCD screen. The main menu will appear on the LCD screen, beneath the images.

* Check that you have the correct power rating for your power adapter.

B. Configuring the System Settings

Once the hardware connection is successfully completed and powered up, the next step would be to configure the IP VideoPhone **System** settings before calls can be made.

The four softkeys (yellow tabs) on the screen can be accessed using the corresponding function buttons F1, F2, F3 and F4 on the videophone unit.

H,M SoftKeys	**Phonebook**	**Call History**	**Settings**	**About**
S SoftKeys	**Phonebook**	**Call History**	**Disconnect**	**Info**
Buttons	**F1**	**F2**	**F3**	**F4**

For example to select view of **Phonebook**, press **F1**

Below are the basic settings necessary for making a video call. Please consult your system administrator for the correct settings.

[**Note**] To access the **System Settings**, please enter the password **8888** at the prompt

Basic settings for H.323, SIP and MGCP software

Fields	**Remarks**
IP address ^ **	Either ▪ Static IP – Manually enter the IP address of the videophone. or ▪ Dynamic IP – DHCP server will assign the unit with an

Fields	Remarks
	IP address, when the field is left blank or configured as 0.0.0.0
Netmask ^ **	Either ▪ Manually enter the Netmask of the network or ▪ DHCP server will assign the unit with a Netmask, when the field is left blank or configured as 0.0.0.0
Network BW	▪ Select the preferred video bandwidth setting for your video call depending on your network bandwidth availability ▪ For optimum performance set BW at 128kbps.
Default GW ^	Either ▪ Manually enter the Gateway IP in the network or or ▪ DHCP server will configure the Gateway IP of the unit, when the field is left blank or configured as 0.0.0.0
GateKeeper [H] (optional)	▪ IP VideoPhone will register with a GateKeeper iff the settings is configured
Call Agent [S] (compulsory)	▪ IP VideoPhone will register with a SIP Call Agent iff the settings is configured
User name (optional)	▪ The assigned name will be used as the caller ID when device is making outgoing calls
Phone number (H.323 - optional) (SIP - compulsory)	▪ The assigned phone number/ext is used to make calls via phone number/ext between devices. It is compulsory that both devices are registered to the same gatekeeper
FQDN[M]	▪ Manually enter the Domain Name or IP address assigned e.g. Videophone@innomedia.com
EndPoint ID[M]	▪ Manually enter the assigned setting, whose formats include phone number or username or customized ID e.g. aaln/1
MGCP variant [M]	▪ Depending on the MGCP Call Agent type, select between Telcordia and MGCP 1.0/NCS variant

^ Compulsory Settings
** The settings obtained can be viewed in **Info** -> **About** menu.
[M] MGCP settings only

H.323 , SIP and MGCP optional Settings

Fields	Remarks
Menu Password	▪ Default Password is 8888, for subsequent PW changes ▪ Go to **Settings** -> **System** page ▪ Enter new password in **Menu Password** settings or ▪ Leave the settings blank to disable the feature
GK Password	▪ The feature supports MD5, RAS authentication. ▪ Enter a password (can be both alphanumeric) which is used for authentication when Videophone registers to a GateKeeper
IVAS Address	▪ The Upgrade server provides new firmware notices to all registered end devices and also supports firmware upgrade process ▪ Enter the IP address of the Upgrade server.
SNTP Address	▪ The server provides the time settings in Videophone ▪ Enter the IP address of the Time server.
Timezone GMT	Scroll and select one out of the 29 pre-configured time zones
Auto answer	Select **1 ring**, **2 rings**, **3 rings**, **4 rings** or **5 rings**. to enable Videophone to auto answer mode. Select **Never** to disable feature
Screen saver	▪ This feature enables LCD to power down when VideoPhone is in a power save mode. ▪ Select either **5s**, **10s**, **30s**, **1 min, 2 mins**, **10 mins**, **30 mins**, **1 hour** or **never**
Language	Select **English** or **Chinese** for the preferred language display in **Menu** and **LCD messages**
PPPoE	Select **On** or **Off** to control the activation of the feature to support PPPoE deployment
Audio codec	Select either **G.711 A-law**, **G.711 u-law** or **G.723.1** and **G.729** for the preferred audio codec standard
Video size	Select either **CIF** for resolution at 352 x 288 pixels or **QCIF** for resolution at 176 x144 pixels
Video quality	Select either **High, Average** or **Low** for the preferred video quality settings

Please reboot your videophone after configuring the above settings.

Example:

To configure the system settings:

Press <**SETUP**> S button or **F3** for **Settings**, then press **F2** to enter the **System** menu

Case 1 - DHCP mode or PPPoE mode

IP	-	0.0.0.0
Netmask	-	0.0.0.0
Default GW	-	0.0.0.0
Network BW	-	128 kbps

Case 2 – Static IP mode

IP	-	192.168.0.1 (virtual) or 202.79.82.122 (real)
Netmask	-	255.255.255.0
Default GW	-	202.79.82.121 (Determined by your network administrator)
Network BW	-	128 kbps

[Note]

- **PPPoE**, **DHCP** and **Static IP** are mutually exclusive modes
- **PPPoE** is enabled when **PPPoE** is set to **On**, **IP address, Netmask** and **Default GW** settings are invalid
- **DHCP** mode is enabled, when **PPPoE** is set to **Off**, **IP address** is set to 0.0.0.0
- For **DHCP** and **PPPoE** mode, press **F3** to **Disconnect/Connect** with the network
- **Static IP** mode is enabled when **PPPoE** is set to **Off**, and **IP address, Netmask** and **Default GW** are configured accordingly
- Your network administrators usually configure these system settings. Please refer to your network administrator for more details.

V. Quick Feature References

Figure 1.3 InnoMedia MTA 3368 IP VideoPhone main body

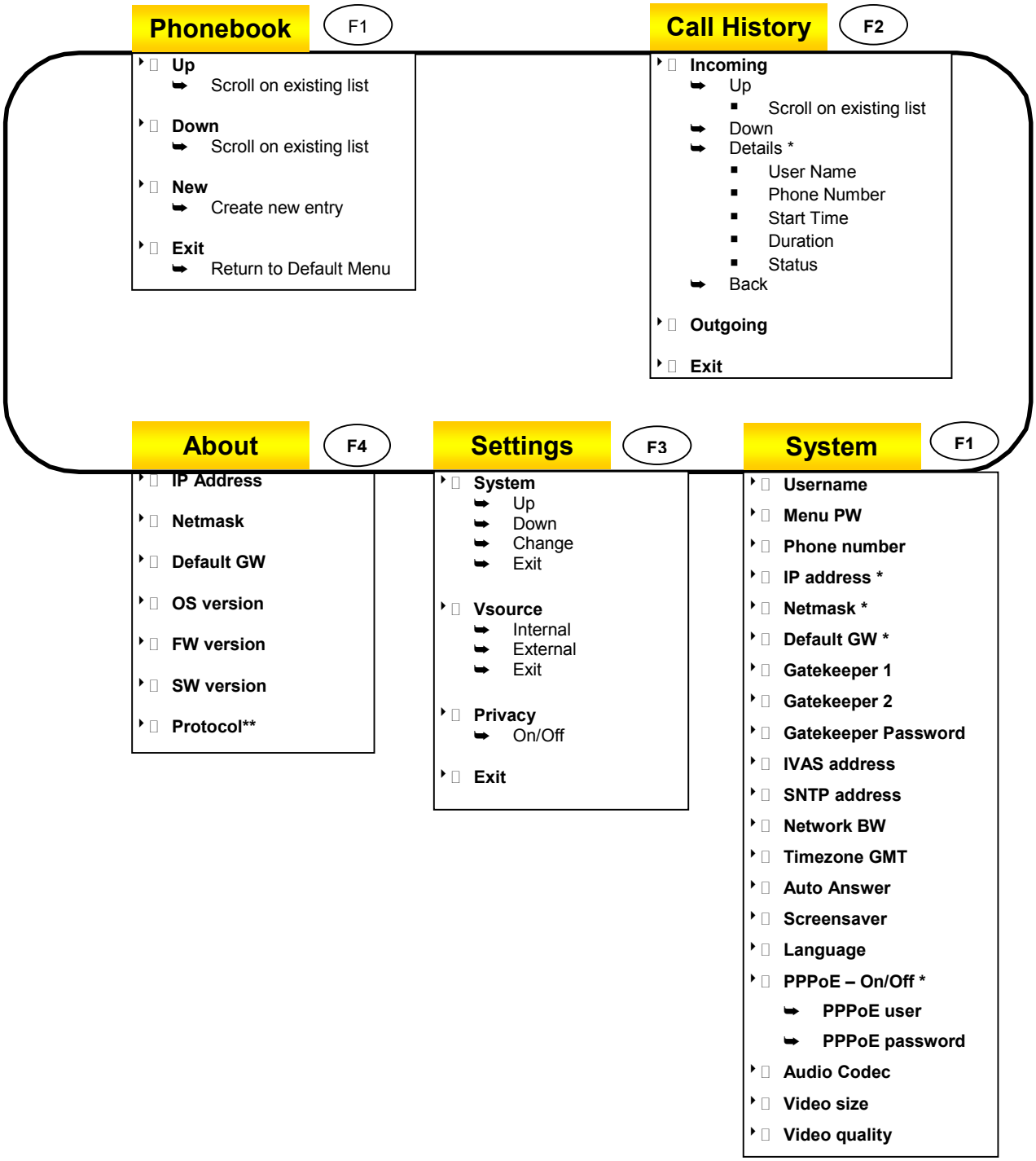
A. Key Panel User Interface

Hard Keys	Functions
<CALL>	1. Direct Dialing • Enter either the IP address or the phone number to call, then press <CALL>[M]. 2. On-screen **PhoneBook** and **Call History** auto-dialing • Press <CALL> to display the on-screen phone book. Scroll to the name of the person you wish to call and press <CALL> again.
<VIEW>	Press to toggle between SELF view, REMOTE view or BOTH views during videoconferencing.
<REDIAL>	Press to call the last number dialed.
<SPEAKER>	Press to activate speakerphone mode. Pressing this button again deactivates the speakerphone mode unless the handset is picked up.
<VOLUME>	Press to adjust the volume during conversation in speaker or handset mode, as well as to adjust the ringer volume when the videophone is in idle mode.
<MUTE>	Press to activate audio mute so that the remote user is unable to hear you.
<SETUP>	Press to configure the System Settings and view the system component information.

[M] For MGCP version, direct dial only requires the entry of the phone numbers

Navigation Menu [H.323]

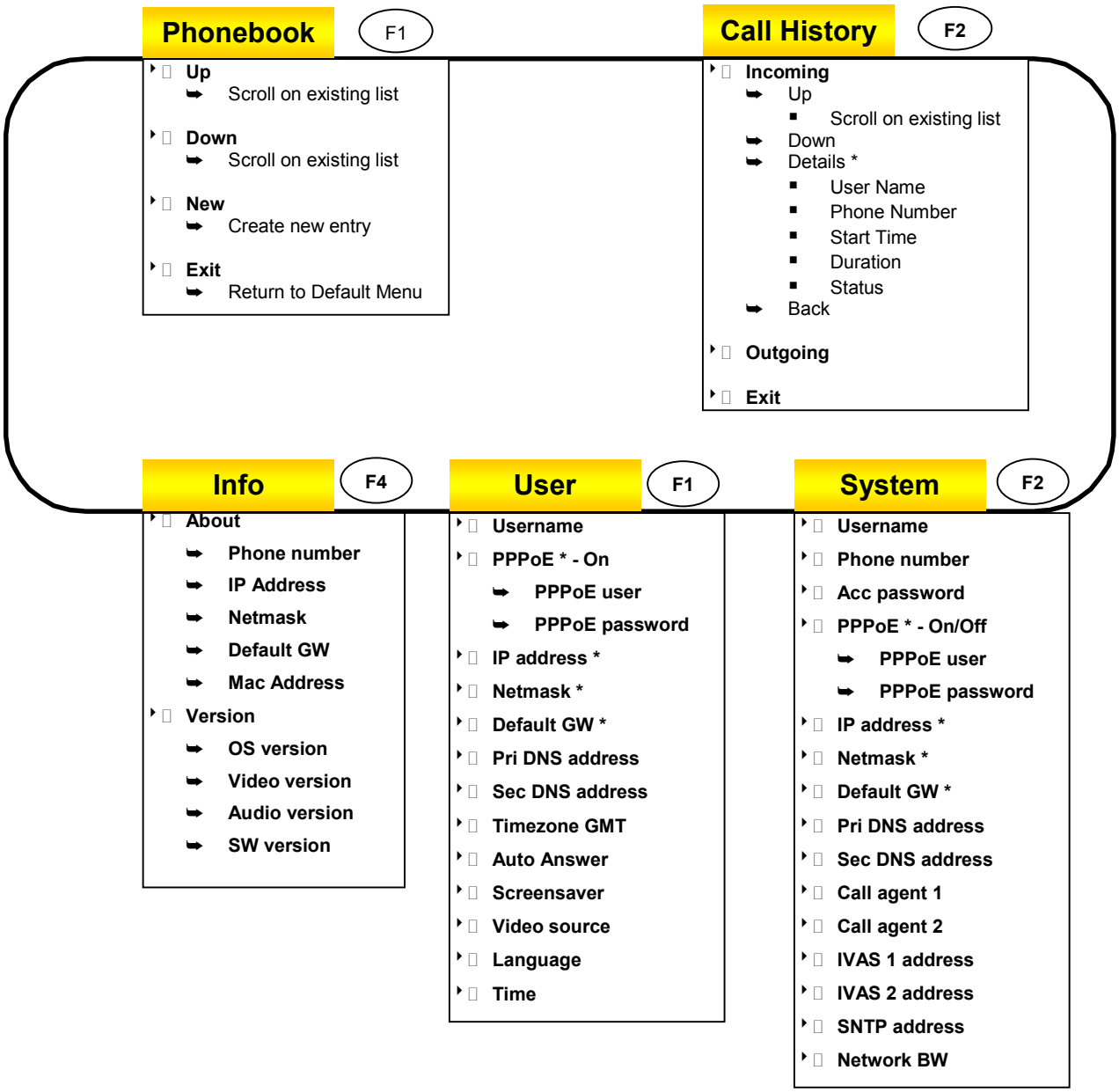
The following chart is an overview of the Navigation Menu of the MTA 3368 IP VideoPhone [H.323]



* For Videophones with SIP software, **Detail** setting is replaced by **Clear All** – this enables videophone to **Clear All** the existing records in the end devices

B. Navigation Menu [SIP]

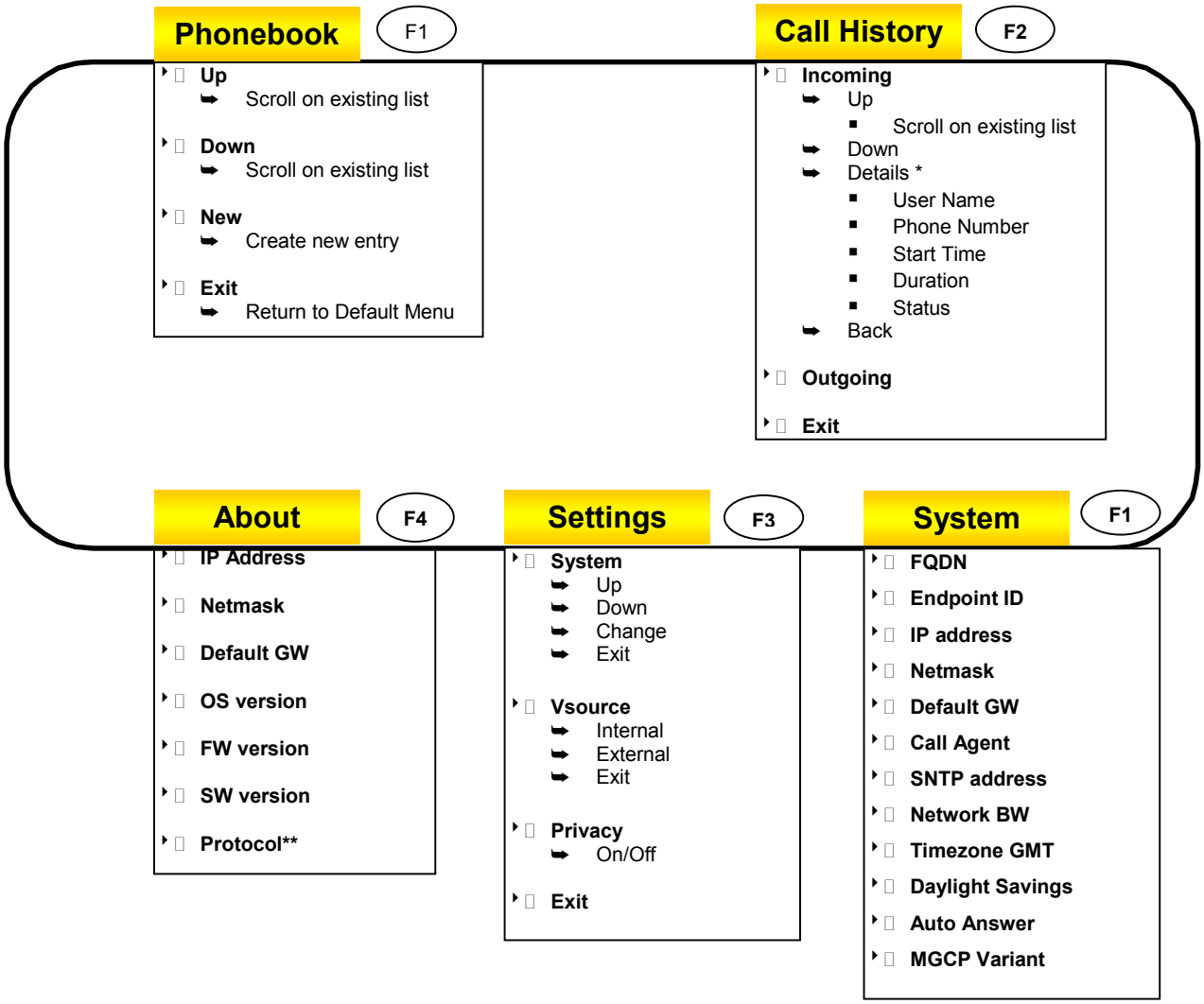
The following chart is an overview of the Navigation Menu of the MTA 3368 IP VideoPhone [SIP]



* When **PPPoE** is set to **On, IP address**, **Netmask** and **Default GW** settings will not be available

C. Navigation Menu [MGCP]

The following chart is an overview of the Navigation Menu of the MTA 3368 IP VideoPhone [MGCP]



Making Calls

A. Calling Methods

There are 4 simple ways to call another IP Videophone user.

- Method 1 - Direct dial via **IP address** [H] or **phone number** [H,S] or **extension** [H,S]
- Method 2 - **Phonebook** [H,S]
- Method 3 –**Call History** [H,S]
- Method 4 - **Redial** [H,S]

Method 1a – Direct Dial (via IP address) [H only]

1. Enter the number you wish to dial. The videophone allows user to call using the IP address or phone or extension. If you are entering a remote IP address, please use '✶' to enter the dot delimiter.
   E.g 202 ✶ 79 ✶ 82 ✶ 122 for the IP address 202.79.82.122

2. Once the telephone number or IP address is entered, press <CALL> to start dialling. You will see the message '**Dialling (IP address)**' followed by '**Ringing…**' once the call is successful. Wait for the remote user to pick up the call to begin your videoconferencing session. To end the call, simply hang up the phone.

Method 1b - Direct Dial (via phone number or ext. to a Gatekeeper) [H,S,M]

MTA 3368 IP VideoPhone is require to register to a H.323 gatekeeper/ SIP Call Agent for direct dialling of phone number or extension number

1. Enter the phone number/ extension number of the remote videophone, then press <CALL>.
2. You will see a message similar to ' **Dialing (phone number / extension)**'…. Wait for the call to be picked up.

[Note] For MGCP version, making an out going call via Direct dial requires the user to enter the phone number without pressing the **CALL** button

Method 2 – Phonebook [H,S, M]

1. Press <CALL> or press **F1** to access the PhoneBook. Scroll to the name of the person you wish to call using the **Up** and **Down** function keys (F1 and F2).
2. Once the name of the person whom you wish to call is selected, press <CALL> to start dialing. You will see a message similar to **' Dialing (name)…**' Wait for the remote user to pick up the call to begin your videoconferencing session. To end the call, simply hang up the phone.

Method 3 – Call History [H,S,M]

1. Select to enter either **incoming / outgoing** calling records
2. Scroll through the call records and select phone numbers to call
3. Press <CALL> to activate dialling function

Method 4 – REDIAL [H,S,M]

If you wish to re establish the video call with the person whom you have just finished calling, you will find the Redial feature useful.

1. Pressing <REDIAL> while the handset is on-hook will initiate the call connection to the last dialled number.
2. You will see a message similar to ' **Dialing (name)…**' Wait for the remote user to pick up the call to begin your videoconferencing session. To end the call, simply hang up the phone.

B. During video conversation

Once the video call is successfully connected, you will immediately see the image of the person you are talking to. There are some features that you can tune or adjust to optimise your videoconferencing experience:

i) Volume level
The <VOLUME> button allows the loudness of the audio source to be adjusted.

ii) Audio mute
Press <MUTE> to block your voice from being transmitted if you do not wish to be heard by the remote user.

iii) Privacy mode
Pressing <PRIVACY> blocks your image from being transmitted so that the remote user sees only a blue screen.

iv) Brightness & Contrast
The brightness and contrast can be controlled using the respective buttons by the right side of the videophone.

C. Receiving calls

a. Manual answering using handset or speakerphone

When there is an incoming phone call, the phone will ring and the ring indicator will start flashing. At the same time, the LCD screen will display the name or the IP address of the caller. To answer the call, simply pick up the handset or press <SPEAKER> to answer in speakerphone mode.

b. Auto answer mode

You may also enable the auto answer feature so that your videophone will automatically pick up the call as soon as it detects an incoming call. To enable this feature,

H Go to <**Settings**> ➔ <**System**>

S Go to <**SETUP**> ➔ <**User**>

Scroll to **Auto Ans** then set it as **1 ring**, **2 rings**, **3 rings**, **4 rings** or **5 rings**.

D. Summary of Features / Functions

Videoconferencing

- 4” TFT Colour LCD
- High frame rate - max at 30 fps
- CIF resolution (352 x 288 pixels)
- QCIF resolution (176 x 144 pixels)
- Privacy mode to block local image, i.e. no local view for remote party
- Can switch between Remote and Self View PIP
- Video out connectivity to TV, VCR or projector
- Video input for external camera, camcorder, VCR, DVD, or digital camera
- PAL and NTSC format support for input; NTSC only for output
- High Quality CCD
- Adjustable focus
- Remote web management (videophone upgrade, system configurations & password customisation)
- Multi-party conferencing with external MCU

Telephone

- Speakerphone
- Full digital volume control for Speakerphone, handset and ringer
- Last number redial
- Speakerphone and handset mute
- Build-in phonebook unlimited means of storing IP address/Phone number
- Incoming Caller ID
- Call to PSTN (via Gateway)
- Auto-answer option for remote surveillance

* Specifications subject to change without notice.