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Introduction

Introducing VGo and the power of “active presence”. VGo gives you the ability to not only **be** in a remote location but also to **move around** in that remote location. Manage your staff, check on the patient, inspect the lab, meet the visiting client, diagnose the manufacturing line, visit with co-workers, monitor development progress – from anywhere. With just a broadband internet connection you can move around and interact through VGo as if you were there.

VGo allows you to navigate around a place of business and engage in 2-way video conversations with exceptional audio and video quality. It’s completely interactive and easily used by anyone who has been given permission. VGo is a revolutionary communications experience.

About this VGo System

This VGo is a truly remarkable device – it will change the way you work, interact with others and give you more time. There are a few things to remember:

- 1) It is designed for indoor use
- 2) Although it has sensors to prevent accidents, if you override these sensors and drive it down a set of stairs it will most likely result in serious damage.
- 3) The standard battery will last 6 or more hours before it needs to recharge. The extended life battery will last at least 12 hours.
- 4) Although the VGo will tell you when your WiFi signal is getting low, be careful not to drive out of range, you may lose your connection.
- 5) The VGo App is only available for Windows operating systems today, but check for a MAC version in the future.

VGo is a real-time communications device. This means that, unlike a movie that may be streamed to your laptop or mobile phone, the data transmitted (audio, video and driving) must go between the VGo and the remote user reliably and immediately. The VGo’s performance is dependent on the quality of the network connection from the VGo to the remote user. Careful attention must be paid in particular to the WiFi environment to which the VGo connects to transmit and receive audio, video and driving commands. Not all WiFi environments are setup for real-time communications and so the network configuration must be reviewed and modified as appropriate. See the section on **VGo Technical Requirements** for more details.

[NOTE: This equipment has been tested and found to comply with the limits for a Class A 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 the instructions, 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.](#)

[NOTE: Changes or modifications not expressly approved by VGo Communications, Inc. for compliance could void the user’s authority to operate the equipment.](#)

Important Safety and Operational Information

Attention and Electric Shock Symbols

The following symbols may appear on VGo products and in this manual.



This symbol indicates attention should be paid to this important user information.



This symbol indicates a risk of electric shock.

Safety Information

Please pay attention to the following safety warnings:



VGo is for indoor, dry location use only.



Do not disassemble. Refer servicing only to qualified and authorized personnel. There are no serviceable parts inside the VGo, other than the battery and fuse.



Use standard North American 120 Volt outlet only.



Do not operate the device in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.



Do not use a damaged power cord, plug, or a loose power outlet. To prevent damage or a person tripping, do not leave the power cord exposed on the floor. If the power cord is damaged, call your support center to get it replaced.

 Remove any foreign substances accumulated on the cliff sensor windows or the VGo may be in danger of falling down the stairs. This may cause personal injury and/or critical damage to the product. To prevent risk, clean the sensor window.

 Always keep the power cord of the charger plugged into the outlet. Although the VGo has a self-charging function, if the power cord of the charging dock is unplugged, it cannot charge itself automatically.

 Install the charging dock in a location that can be easily accessed by the VGo. Allow at least 1 foot of space on either side of the charging dock. Be sure there is at least 4 ft of clear space above the charging dock. Be sure there are no highly reflective materials nearby such as floor mirrors or polished metal cabinets that could cause the docking sensors to incorrectly guide the VGo.

  Do not place any metal objects on top of the charge dock as this will result in critical damage to the charger.

 When cleaning the product, do not spray water directly onto the exterior or wipe it with a volatile material such as benzene, thinner or alcohol as this may result in critical damage to the product.

  Before cleaning the charger, make sure to disconnect the power cord.

  Replace faulty battery only with VGo certified parts. Do not use 3rd party batteries.

 VGo is designed to operate in temperature between 5 °C to 40 °C. Operation outside of this range may result in damage to the product.

 Store at a temperatures between -10 ° to +50 °C. Remove batteries during storage.

 VGo complies with FCC Part 15 Class A, and is intended for use in business, industrial and commercial settings.

Network Requirements for the VGo

Active Presence is enabled by a remote user who is connected to a VGo through a network. The users and VGo's "presence" and connectivity are managed by VGoNet, an intelligent cloud-based service that is invisible to users.

VGo requires the following network elements for successful operation:

- Broadband internet access with minimum 768Kbps upload speed
- If inside the firewall, the following outbound firewall ports must be open:
 - Port 5222 (XMPP, TCP)
 - Port 3478 (STUN, UDP)
 - Port 80 (HTTP Non-Proxy, TCP)
 - Port 433 (HTTPS, TCP)
- 802.11 b/g (at 2.4 Ghz) or 802.11 a (at 5.0 Ghz) WiFi network coverage over the area where the VGo will be used
 - WiFi Security can be Open, WEP, WPA, WPA2
 - 802.1x authentication using the EAP-TLS method is supported
 - Other devices, that connect to the same network that VGo is using, which are 802.11b only, should be restricted to the max data rate only (11Mb)
 - This prevents low data rate devices from bringing down the overall data rate of the network
- If the VGo will be setup for WiFi Roaming (where it can automatically move from one access point to another as it travels around a building)
 - Access Point features **Dynamic Transmit Power Control** and **Dynamic Channel Assignment** should be turned **OFF**
 - These settings are not intended for use with a real-time roaming device such as a VGo or wireless phone. These settings could cause unexpected, random low WiFi signals and channel re-negotiations which will severely impact performance.
 - Utilization (traffic) rates must be within network design guidelines for both wireless and wired connectivity
 - An overloaded network will generate packet loss and impact performance
 - Access Points must not have any settings that could exclude VGo from connecting to the AP
 - For example, one AP may permit any device to connect but if the next only permits specific MAC addresses and the VGo is not one of them, then the VGo cannot Roam.
 - All WiFi APs and Controllers must be served by the same DHCP server
 - VGo must have a constant IP address
 - All WiFi APs should be configured with the same security settings (SSID, Authentication, Password, etc)

Network and Computer Requirements for Remote Users

The person who will be operating the VGo remotely must have a Computer with the following minimum configuration:

PC Requirements:

- Windows 7, Vista or XP (with service pack 3). Windows 7 is recommended.
- Mouse with a scroll wheel is highly recommended – this is the easiest way to drive and control your view
- 2GB RAM
- 30MB available hard disk space
- Core Duo 1.6 Ghz or greater processor
- Camera, microphone and speakers (integrated or separately attached)
- PC can be hardwired or wireless

Mac Requirements:

- Software version: Mac OS X 10.6.x or higher.
- Processor Type: Intel Based processor
- Processor Speed: 1GB
- Memory: 2 GB
- Camera, microphone and speakers (integrated or separately attached)
- Mac can be hardwired or wireless

Computer Camera, headset, and speaker recommendations:

- Computer cameras with a “face finding” feature in its software is recommended. This helps fill the VGo’s screen with the user’s face and less of the surrounding background.
- For users that will be operating VGo’s in a noisy environment, a headset is recommended. The headset will reduce background noise heard by people who are with the VGo and also enable the remote user to better hear sounds picked up by the remote VGo without having to raise their computer speaker volume excessively.
- For users that will be operating VGo’s in an environment with other individuals who are working nearby, a headset is recommended so that others are not disrupted.

The remote user’s Computers must have the following network requirements for successful operation:

- Broadband internet access with minimum 768Kbps upload speed
- If inside the firewall, the following outbound firewall ports must be open:
 - Port 5222 (XMPP, TCP)
 - Port 443 (HTTPS)
 - Port 3478 (STUN, UDP)
 - Port 80 (HTTP Non-Proxy, TCP)

Setting up the VGo

Setting up a VGo for the first time will take about 15 minutes. If you are not already a registered user on vgo.com, it will take an additional 5 minutes to setup your account and download your VGo App software onto your computer.

There are 4 steps in the setup process:

1. Setting up the hardware (5 minutes)
2. Setting up the wireless connection (5 minutes)
3. Creating a VGo account and downloading the VGo App (5 minutes if not a current user)
4. Authenticating the VGo with the VGoNet network (5 minutes)



Before you begin – you'll need to know the name of the WiFi network that VGo will use and any associated keys/passphrases/password(s) required for connection to that WiFi network. Depending on the WiFi type, there may be additional information you need – see below in *Step 2 – Setting Up the Wireless Connection* for more details. (If you do not have this information, check with the person responsible for the WiFi networks in your facility). VGo cannot be setup and used if it is not connected to a WiFi network which in turn has access to the internet.

Step 1 – Setting up the hardware

Connecting upper and lower sections

- Open the box and remove the VGo upper section (the section with the LCD screen) and set it aside.
- Remove the VGo lower section (the section with the wheels) and place it on the floor.
- Hold the upper section vertically with the LCD screen at the top.
- Align the upper section stalks with the corresponding sockets in the lower unit – the front of the LCD display on the upper section should be on the same side as the speaker grill on the lower section.
- Open the latches and hold them all the way up.
- Gently but firmly seat the upper section stalks in the lower section sockets and flip the latches down so they are flush with the supporting stalks on both sides of the VGo.

Inserting the battery

- Remove the accessories box from the bottom of the VGo shipping box and ensure that it contains the following items:
 - Charge dock
 - AC adapter and power cord for the charge dock

- Battery (for the VGo)
- Handheld remote control (with AAA batteries)
- Remove the VGo's battery compartment cover (on the top of the lower section).
- Separate the Velcro battery strap to make room for the battery. If you are using the larger extended life battery, remove the foam spacer block that is taped in place in the battery compartment.
- With the wires on the top, grip the batter by its sides (not by the wires) and gently lower the battery into VGo's battery compartment beside the foam spacer block.
- Click the connector plug into its socket.
 - If it won't click in place, try turning the plug around 180 degrees as it only fits correctly in one direction.
- Attach and tighten the Velcro strap to hold the battery firmly in place.

Using the Blue Button Touchpad

During the setup process, you will make selections and enter information using the intelligent blue button touchpad below the VGo LCD display.

Each button is active only when it is lit (blue). Buttons are context sensitive and so functions or availability may change depending on what is being displayed on the screen.

Horizontal soft buttons

Each of these three buttons performs the function as described by the label immediately above it. For example: **Help** will often appear above the right hand button, indicating that help for that screen can be accessed by a simple touch.

Arrow buttons

In a four way cluster, these are used to navigate menus and also to locally control the remote person's volume when they are visiting.

OK /Accept/Select button

Touch here when you need to select a menu choice.



Step 2 - Setting up the Wireless Connection

- Press the **Power** button found on the rear of the VGo just behind the battery compartment cover.



The battery should have enough power for the VGo to turn on and be setup. If the VGo does not turn on, insert the bayonet end of the AC power cord into the socket located just below the VGo's power button on the rear of the VGo and the other end into a power outlet. The VGo can operate normally once the powercord is connected, so you can continue with the setup. Note that when the powercord is connected directly, the drive system is disabled.

- The VGo will take about a minute to boot up and you'll then see a **Welcome** screen on the display. Select **Next** to configure your WiFi.
- After the VGo scans for available WiFi networks, it will display a list of networks it has detected.
 - If the required network is "hidden" (Non-broadcasted SSID enabled), it will not be displayed in the list. To connect to a network that is not listed, select **Add Hidden** and enter the SSID as supplied by your network administrator and follow the instructions. You'll need to know the Authentication type (**None, WEP, WPA, WPA2, WPA Enterprise and WPA2 Enterprise**) and the Encryption type (**None, WEP, TKIP or AES/CCMP**) as well as the passkey.
 - If the Authentication type is WPA Enterprise or WPA2 Enterprise (these use EAP authentication certificates - 802.1X), go to Appendix I of this document.
- Use the blue arrow keys to highlight your WiFi network and touch the **OK** button.
 - When a network is highlighted, it will also display the Authentication type and Encryption type detected for that network. These settings will be configured automatically. You can change these settings manually later.
- Next enter your WEP key or Passkey using the **arrow** buttons to highlight the character and the center **OK** button to select. Select **Accept** when you are done.
 - If you don't see a screen to enter your key, but instead see a screen titled **Select EAP Method**, then you are on an Enterprise network that requires certificate(s) to be loaded on the VGo. Go to Appendix 1 for further instructions.
- Next choose the **IP Addressing** connection type. Most wireless networks use **DHCP**. If your network administrator requires a **Static IP** address, you'll need the following additional information – enter this information in the next set of screens:
 - **IP Address**
 - **SubNetmask**
 - Default **Gateway**
 - **DNS Nameserver**

- The VGo will connect to the network – this may take a minute or two. A green check mark will appear on the screen and then display a new screen that has an activation key and says “**Please login to vgo.com . . .**”. Leave your VGo at that screen and proceed to *Step 3 – Creating a VGo account and downloading the VGo App*.
 - Note: If you get an error message, the problem could be with either the VGo’s connection to the WiFi or the WiFi connection to the internet. Both must be working for the VGo to display the activation key.

Step 3 - Creating a VGo account and Downloading the VGo App



If you already have a VGo account and have downloaded the new 1.5.0 VGo App software, you can skip this step and proceed to *Step 4 – Activating your VGo*.



If your organization already has a VGo Steps 3 and 4 should be completed by the person who will be administrating VGo’s for your organization. Contac your VGo administrator to get a username, password, and access granted to the appropriate VGo’s.

To activate your VGo (establish the association between you and your new VGo), you’ll need a VGo account. To use your VGo you’ll also need to download the VGo App software from the vgo.com website onto your PC or Mac.

Go to <http://www.vgo.com/> and click on **My Account**

1. **Click on Create a new account.**



VGo
VGoNet Manager

Sign up

If you want to connect to a VGo in your organization, contact your VGo administrator and they will set up an account for you.

If your organization is setting up VGo(s) for the first time, an administrator will need to setup a new account so they can manage users and VGos. This is done by selecting "Community Manager" below and completing the registration form.

If you need to create a legacy account for an individual, select "Individual Account" below.

For more information, see the [User's Guide](#) or contact VGo Support at support@vgo.com.

Account Type	<input checked="" type="radio"/> Community Manager <input type="radio"/> Individual Account (Legacy)	
User Name *	<input type="text"/>	Unique user name (letters, numbers, dash or underline)
Password *	<input type="password"/>	Must have uppercase and lowercase letters and numbers
Confirm password *	<input type="password"/>	Confirm password
First Name *	<input type="text"/>	
Last Name *	<input type="text"/>	
Display name (optional)	<input type="text"/>	
Email Address *	<input type="text"/>	
VCode *	<input type="text"/>	This is the vcode provided by your reseller
Community Name	<input type="text"/>	Required for Community Manager accounts. See Communities more more informaiton.

2. On the Sign Up page

- Select “**Community Manager**”
- Enter a user name
- Enter a password, confirm password, first name, last name and email address
- Enter the VCode given to you by your reseller
- Enter a unique community name. This can be your organizations name.
- Click “**Create Account**”

(If the user name or community name have already been used you will be asked to pick another one)

3. Go to your email and open the message titled “Your new VGo Account Setup”

- If you don’t see the email:
 - check your Junk / Spam mail folder
 - wait a few minutes, some email systems may not deliver email immediately
- Click on the link attached to your email that will enable you to log in for the first time.

4. Select **Download Software**.

For PC VGo App

- Click on **PC Download Now**. A new page is displayed. Follow the instructions to download and install the software.
- When it asks if you want to Run or Save, select **RUN**.

If you get a popup window that says “The publisher could not be verified. . .”, select **RUN**.

- During the install, you’ll need to **check the box** for “I accept the terms in the license agreement”, then click on **Install** to continue.

If you get a pop-up that says “An unidentified program wants access to your computer”, click on **ALLOW** to continue.

The download and install are complete when the popup windows close and you have this shortcut icon on your desktop. 

If you are setting up a new VGo, keep your web browser open and stay logged in since you’ll need to authenticate the new VGo with the network.

For Mac VGo App

- Click on **Mac Download Now**. A new page is displayed. Follow the instructions to download and install the software.
- During the install, accept the terms in the license agreement, click on **Agree** to continue.
- Type your password to allow the installer to make changes, then click **OK**

The download and install are complete when the popup windows states “**The installation was successful**” and you have this icon on your dock tray. 

If you are setting up a new VGo, keep your web browser open and stay logged in since you'll need to authenticate the new VGo with the network.

Step 4 – Authenticating your VGo

For more information on the VGoNet manager, see the section “**Introduction to VGoNet Manager**”.

1. If you are not logged into your account, go to www.vgocom.com, click on **My Account**.
2. Enter your userid and password and click **Login**.
3. Select the **VGo** tab and then select **Add a VGo**.

VGO
VGoNet Manager

User: vgo_test
[Logoff](#)

[VGos](#) [Users](#) [Groups](#) [My Account](#) [Download](#)

Add a Vgo

Please enter the authentication token that is displayed on the screen of your Vgo
This key is displayed on your new VGo the first time you start it after it has been added to the network. If you do not see this key appear on your new VGo please contact VGo customer support at: support@vgocom.com.

Activation Key *

[Add VGo](#)

[Back to the VGos page](#)

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5. Type the Activation key that is currently displayed on the screen of your VGo, into the box on the webpage and select **Add VGo**.
 - Note: If screensaver photos are on the VGo display, touch any blue button to bring up the previous active screen.
6. You will now see your new VGo listed under the VGo tab.
 - It will typically be called **New VGo for (community name)**.
 - You may need to refresh the page to see this.
7. Click on the VGo's name.
8. Click on **Edit Properties** and give it a descriptive Display Name, enter the VGo's location and press **Update**.

9. Click on **Edit User Access List**.
10. Select the users who are allowed to access this VGo and select **Update List**.

You are now ready to use your VGo. On your computer, launch the VGo app login with the username and password you created earlier. You will see your VGo in the contact list and you can click on the camera icon to connect to your VGo.

At some point you'll need to find a convenient place to put the Charge Dock. See the Section – **Charge Dock Placement**.

Disabling VGo to Automatically search for another WiFi Access Point while driving (sometimes referred to as “Roaming”). For network environments with only one WiFi Access Point you will want to set Roaming to off

Your VGo arrives from the factory set to always stay connected to the same WiFi access point. This prevents your VGo from trying to scan for new access points that may not exist, but of course limits the driving range of the VGo to within the broadcast range of the access point. If your WiFi network is comprised of multiple access points then you'll want to have VGo automatically sense when the network is getting weak and then switch to the next access point as you are driving from one place to another.

In the wireless world this feature is called Roaming (no - your VGo will not roam about on its own, VGo only moves when you drive it).

To turn Roaming On

- First, check with your IT manager to find out what frequency is being used for the WiFi specific network that VGo is connected to. The choices are:
 - 2.4 GHz
 - 5.0 Ghz
 - Both
- From the **Main Menu**, move the highlight using the **blue left and right arrow keys** to **Settings** and touch the center **OK** button.
- Highlight **Network Settings** and touch **OK**.
- Highlight **WiFi Roaming and Scanning** and touch **OK**.
- Highlight **Roaming**. If it says **Off**, then touch **OK** to toggle Roaming to **ON**.
- Highlight **Scan Frequency** and touch **OK** to toggle to the correct setting

With Roaming **ON**, when the VGo determines that it needs to switch to the next WiFi access point, it will automatically stop moving, you will see the message “Searching for Network, Please Wait” while it scans for an access point with a stronger signal and then switches to that access point. The switch to the next access point will take about 3 seconds at which time your audio, video, and driving is restored.

If you are at the edge of the range of your WiFi network, and no stronger access points are available, VGo will re-connect to its current access point and then scan again after about 20

seconds. If you see VGo “Searching for Network” more than once within about 30 seconds, you should assume that you have reached the outside range of the WiFi network and go back 10 or 15 feet to remain in good WiFi operating range.

If you continue to move further out of range, the message “**Your WiFi Signal is Low**” will be displayed and you should not drive further or you may lose remote control of your VGo.

To turn Roaming Off

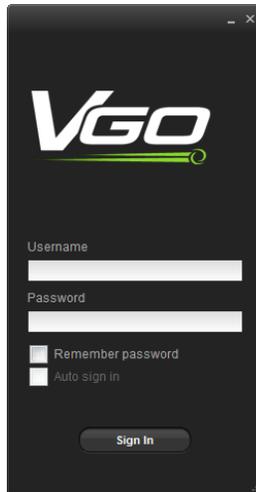
- From the **Main Menu**, move the highlight using the **blue left and right arrow keys** to **Settings** and touch the center **OK** button.
- Highlight **Network Settings** and touch **OK**.
- Highlight **WiFi Roaming and Scanning** and touch **OK**.
- Highlight **Roaming**. If it says **ON**, then touch **OK** to toggle Roaming to **OFF**.

Launching the VGo App

On your PC desktop or in your Mac application folder you will see an icon that looks like this



- 1) Double Click that icon to open your log-in window which looks something like this.

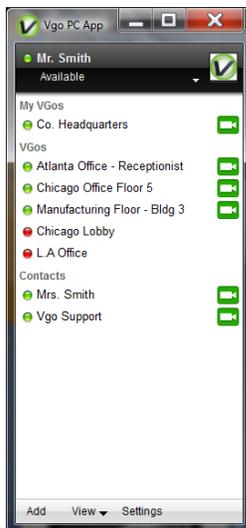


- 2) Enter your username and password (these are the same ones you just created for your account on the VGo website.)

We recommend that you check the two boxes for **REMEMBER PASSWORD** and **AUTO SIGN IN** to make signing in easier going forward.

- 3) Click **SIGN IN**

The VGo App window will then open and look something like this:



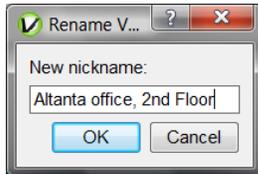
You'll see your user name with a green circle beside it at the top. The VGo that you'll use is listed under "VGos" and you might see other people's names under "Contacts".

The circle indicates "presence" and can be one of three states as indicated by its color:

-  Ready
-  Busy (only one person can use a single VGo at a time)
-  Grey – Offline, this VGo or contact is not logged in and so is not available.

If a VGo, most likely, it is powered off or is not connected to the network.

You can rename a contact or a VGo to something other than the assigned username. Using your mouse pointer, right-click the VGo whose name you wish to change and select the **Rename** option.



Type in the new VGo (or contact) nickname and select **OK**.



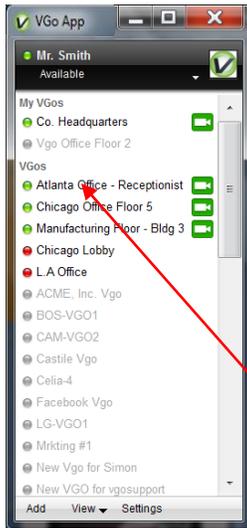
Only designated users who have been granted permission by the manager of each VGo, have access to VGo(s). If a VGo is not in your contact list – you cannot access it. Contact the manager of that VGo if you want access.

NOTE: You can close the VGo App window at any time and the application will remain running in the background – your status remains “available” and you will be notified if another user places a desktop video call to you or sends you an instant message.

- To reopen, so you can connect to a VGo or a Contact – double click on the  in your task tray on the bottom right of your PC screen or Dock tray at the bottom of your Mac screen.
- To logout completely (others will see you as “offline”) - right click on the  and select **EXIT/QUIT** or if the VGo App is displayed on your screen – click **Available** (presence status) just under your username and select **EXIT**.

Using your VGo App

Establishing your Active Presence with a VGo



Click the VGo/Location where you want to visit and a connection is made with the remote VGo and the VGo video window will be opened on your computer display. You will see yourself until you are connected to the remote VGo. You will then see (the view through the VGo's camera) and hear (the sound picked up by the VGo's microphones) as if you were there. Driving mode is enabled. See below on how to drive.



Note that VGo's and contacts may not be displayed if they are not on-line. To view all contacts whether they are available or not, click on **View** and toggle-on **Show Offline Contacts** by clicking on it – a check mark will appear. To display only sites that are on-line, click on **Show Offline Contacts** again, the check mark will disappear, and only online VGo's and contacts are shown.

Diagram of VGo Functions and Controls

Name of the VGo to which you are connected

Duration of visit

Sensor Message Area

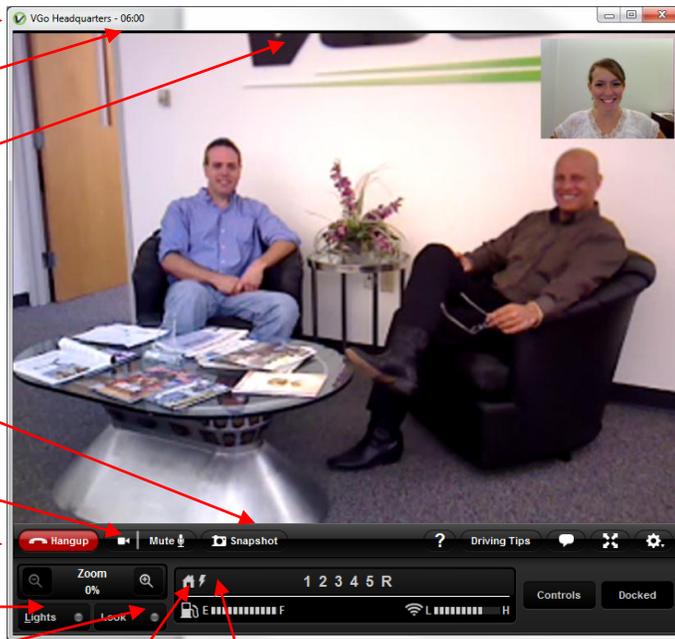
Snapshot Button (see below)

Mute Auto/Video Button (see below)

Hangup Button

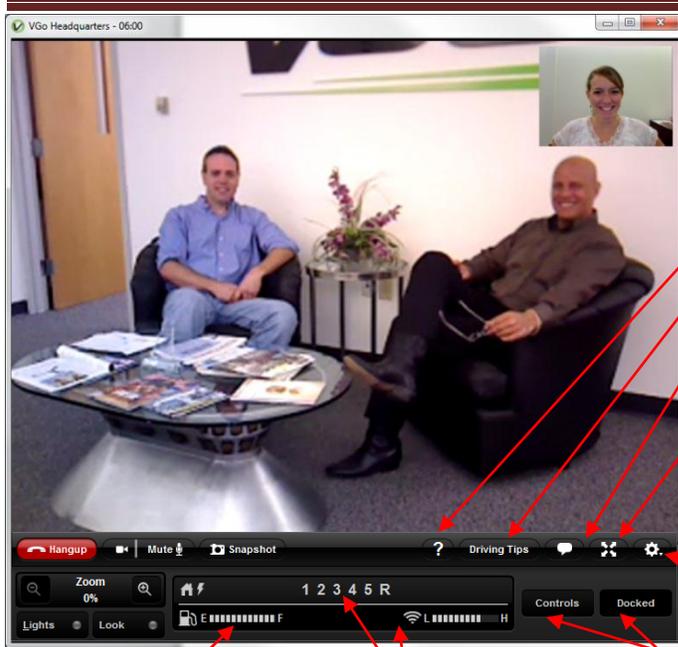
Lights Button (see below)

Look Button (see below) dock



Dock icon (house) – indicates the VGo is on the

Charging icon (lightning bolt) – indicates the VGo battery is actively charging. It is not displayed if the battery is fully charged. It is also displayed if the power cord is plugged directly into the VGo.



Help button
Driving Tips button –instructions and tips on driving VGo
Talking VGo (see below)
Full screen button – click the button again or press Esc to exit full screen mode
Options button (Local Video PIP and diagnostics - see below)

Battery gauge – indicates battery strength. To see more detail, hover your mouse pointer over the gauge

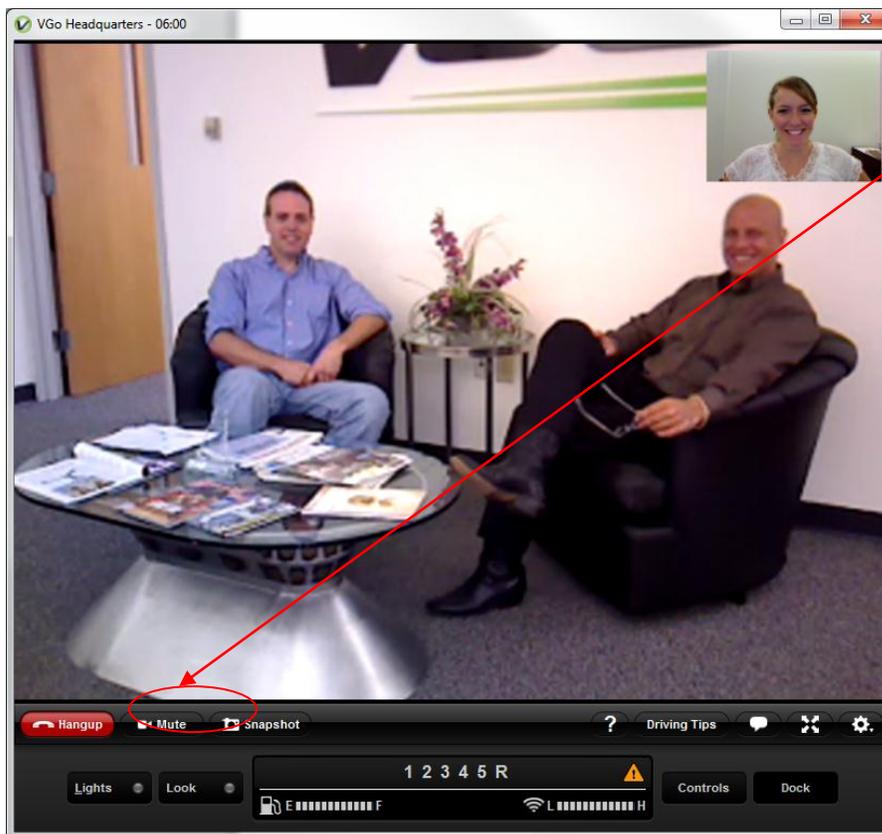
Speed gauge – The associated number will be displayed in orange.
WiFi Level gauge – a message also warns you when you are driving in an area where the WiFi signal strength is too low

Controls button - (VGo volume, Mics and Cliff sensors - see below)
Dock button – (see below)

Muting the Audio and Video

MUTE stops the transmission of your audio and video to VGo while still maintaining the connection to give you temporary privacy. For example, maybe you need to answer a phone call.

- To Mute - Click the **MUTE** button at the bottom left of the video window
 - The button will change to **Muted** and go from white to orange
 - The distant VGo will display a message on its screen notifying people that you have muted
 - The distant VGo will not display your video image or reproduce your voice (people in the presence of the VGo cannot hear or see you)
 - You will still be able to see and hear from the VGo, unless it is also muted
- To Un-Mute - Press the **MUTE** button again
 - The people in the distant location can again hear and see you



Mute Button

Looking Around (without moving)

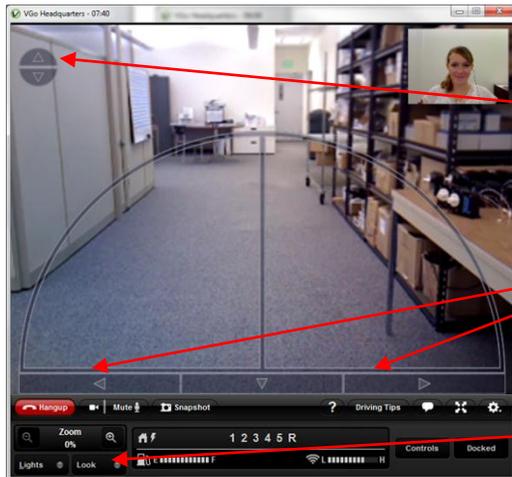
To look up or down

If you are using a mouse with a scroll wheel (recommended), you can roll the scroll wheel to tilt the camera up or down. Also, camera tilt arrow keys (up and down) will automatically appear in the upper left corner of the window when you move your mouse pointer over the video window. Click on either arrow to change your view up or down.

To look left or right

Move your mouse pointer over the video window to illuminate the left and right arrows at the bottom of the window. Click on the left arrow to look left (VGo will rotate in place) or click on the right arrow to look right. You can also use the arrow keys on your PC/laptop keyboard.

- Left arrow – Look left (VGo turns in place to the left)
- Right arrow – Look right (VGo turns in place to the right)



Camera Tilt arrows

Turn in place left and right arrows

Look Mode Button

To look all around using the **Look Mode Button**

Look Mode enables you to look around an area using a single control rather than the alternative of combinations of up/down camera controls and left/right drive controls. When you are in Look Mode, Driving mode is turned off.

Click on the **Look** button - a little green light appears inside the button indicating the Look mode is turned on. Move your mouse pointer to the center of the video window. Relative to the center of the video image, click and hold your left mouse button and move your mouse pointer in the direction you want to look. For example, if you want to look down to your left, drag the mouse pointer to the lower left side of the video window. VGo's camera will automatically tilt and the VGo will turn in place to the left. The speed at which VGo "looks around" is relative to the distance from the center of the viewing window.

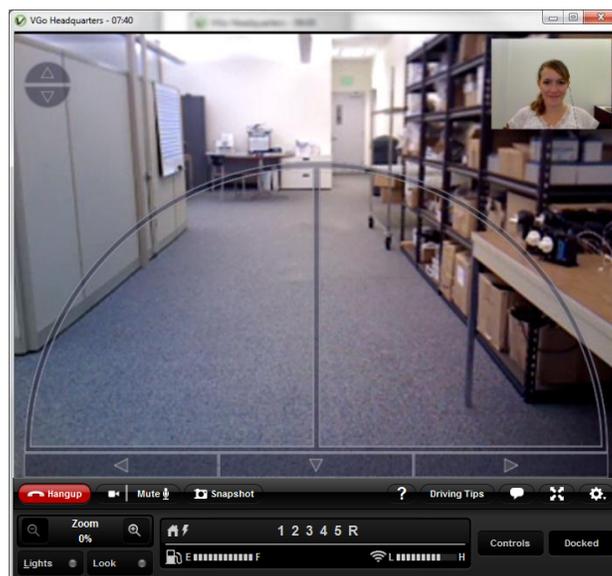
To turn off **Look Mode** (and turn drive mode back on), click on the **Look** button again.

Moving around Remotely - Driving the VGo

There are two ways to move around in your distant location.

1. Using your mouse or pointing device:

- Move your mouse pointer over the video window to display the “heads up” driving control which looks like a half circle.
- Move your mouse to the bottom center and hold down your mouse button – **the pointer will turn yellow**. The yellow pointer means that the motors are now active and you can move around.
- While holding down the mouse button, slide the pointer in the direction you want to go. The VGo will move in the direction of the arrow. Release the button to stop.
- The VGo’s speed is determined by how far you are from the starting point at the bottom center. Closest to the bottom center, the VGo goes slower. Out by the edge of the circle the VGo goes faster – whether you are going straight or turning.
- The direction is determined by where the pointer is, within the half circle. If the pointer is along the vertical center line, the VGo goes straight. If the pointer is along the horizontal line the VGo will turn left or right in its own footprint. In between the two, the VGo will go forward while turning left or right.



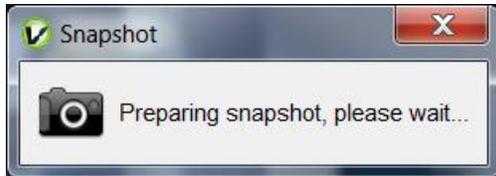
2. Using the arrow keys on your PC keyboard:

- Up arrow – Go forward (VGo moves straight forward)
 - The VGo will accelerate up to its top speed as you continue to hold the key down.
 - Acceleration rate can be changed, go to **Driving Settings**
- Down arrow – Go backward (VGo moves straight backward)
- You can move forward (or backward) and turn simultaneously by pressing the up (or down) arrow and left or right arrow keys at the same time.

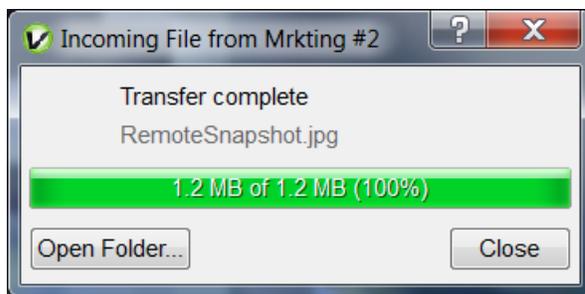
Taking a Snapshot

The remote user can take a still image hi-resolution photo at any time while using VGo.

At the bottom left of the video window, click on the **SnapShot** button to immediately take a snapshot photo using VGo's camera. While the VGo is processing the image you'll see a pop up message such as this:



The snapshot will then be automatically transferred to your computer and stored in a folder. A popup window will inform you once the transfer starts. After transfer completion, you can view the photo immediately. To do so, click on **Open Folder**.



Photos are stored in a folder that is specified within **Settings** (bottom section of the **General** tab). The default folder is **VGo Files and Snapshots** and is located in your documents folder for PC and User folder for Mac. Snapshots will have a file name of RemoteSnapshotxxx.jpg (where x is a number that increments with each successive snapshot). Snapshot photos remain in the folder until they are moved or deleted by the user.

Using Auxiliary Camera Lights

A set of small LED lights surround the camera on the VGo. These lights are normally off. They can be toggled on and off remotely. In normal lighting conditions, they will not show a noticeable difference in the video picture. In very low light or dark rooms, these lights can provide enough illumination to successfully drive around.

- Click on the **Lights** button to toggle lights on and off (a little green light appears in the button indicating the lights are on).

The lights will turn off automatically when you disconnect from the VGo.

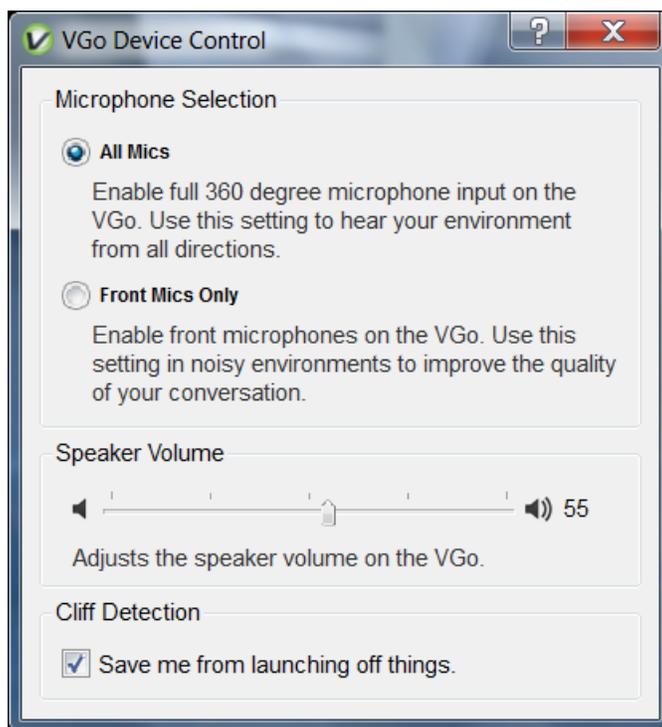
Toggling the Local Video Window (PIP) ON and OFF

When you first connect to VGo, overlaid in the upper right hand corner of the video window is a small video window that displays live video of what the far end is seeing – usually you!

- Click on the **Options** button.
- Click on **Show Local Video** to toggle off and on.

The Controls Button

Click on the **Controls** button to bring up the controls menu.



Reducing Microphone Sensitivity in Noisy Environments

VGo is designed to enable you to hear everything – just as if you were there. However, in noisy environments, you may not want to hear everything. For example, at an event where many people are standing around having separate conversations, VGo will pick all the conversations and may make it difficult for you to focus on hearing just the people you are talking with. To help, you can turn off VGo's rear microphones.

- Click on **the Controls** button. Select the desired Microphone setting.

Adjusting the VGo's Volume Remotely

You can change the VGo's volume remotely, just as if you were there raising or lowering your voice.

- Click on the **Controls** button. Click on the volume slider within the **Speaker Volume** control and slide it up or down to adjust the volume. The volume setting will persist after you disconnect.

"Cliff" Warnings on your Video Window

VGo can automatically detect a drop-off (cliff) and stop a remote user from driving off of it, which of course could damage or topple the VGo. If you see a warning message in your video window while driving the VGo such as "Left Cliff" or "Right Cliff" then the VGo has detected a drop (such as stairs) and will not allow you to drive forward. Use your camera tilt controls to look down at the floor. Click on the down arrow on the video window to back away from the drop off. If you see "Rear Cliff", then you will not be able to move backwards, you can only move forwards.

Disabling Cliff Detection Remotely

There may be occasions though where a floor type will fool the cliff sensor even though a cliff may not be present. This most often can occur when the VGo encounters a black or very dark floor surface. For example, after tilting the camera to look down, you may see that it is just a black extension cord running across your path. To continue to drive forward, you must disable the cliff sensor.

- Click on the **Controls** button. In the **Cliff Detection** control, click on the check mark to uncheck Cliff Detection.

Docking the VGo to Re-charge the Battery

VGo can dock itself to re-charge its battery. The remote user must drive the VGo in front of the dock so that both devices "sense" each other. VGo can charge on any VGo charge dock.

- Drive the VGo in front of a charging dock and turn to face it head-on. The VGo can be from about 1 to 10 feet away (if too close the VGo does not have room to turn itself around)
- When the Dock and the VGo sense each other, the **Dock** button at the bottom right of the video window will change color from grey to green and the docking button becomes "active".

-
- Click on the green **Dock** button. The button flashes while the VGo is docking itself. The VGo will position itself correctly in front of the dock; turn around so it is not facing a wall, and then back onto the dock. Once the VGo is on the charging dock the label will change to Docked and the Docked icon (house) and Actively Charging icon (lightning bolt) will appear above the battery gauge.

VGo Auto Re-dock feature

- If the VGo is accidentally bumped off its dock it will automatically try to re-dock itself
 - If the VGo senses an object behind it, it will nudge itself back several times to try to re-connect its charging contacts
 - If the VGo does not sense something behind it, it will drive forward a couple of feet to try to detect the dock with its docking sensors

Making a Call to another VGo App User (PC or Mac)

- Right-click on the name of the person you want to call
- Click how you want to call them.
 - **Send IM** will enable you to send a text instant message
 - **Call with Voice** will launch a voice call
 - **Call with Video** will launch a video call

If a video call, a new window will open and you will see your local camera view until the far end has answered the call – you'll then receive the video and audio coming from the far end.

If a voice call, a new window will open, and both parties will be able to talk once the far end has answered.

If just sending an IM to another VGo App user, a new window will open where you can type and receive your instant messages. A time stamp is not displayed, but if you hover over the received or sent message, a time bubble will be visible.

Answering a video call from another VGo App user or a VGo

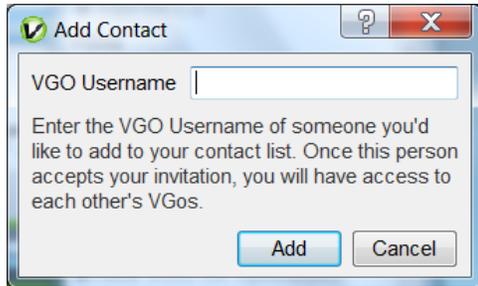
When someone calls your computer from their VGo App, your computer will ring and the video call window will open. If it is a video call, you will see yourself until you click the **Answer** button. If it is an audio only call, the window will not have any video displayed.

If the VGo App is open but not the active window then, the video window will remain in the background and just the VGo App icon will flash in your tray at the bottom of your screen.

- To answer the call – click on the green **ANSWER** button
 - Note – if your computer speakers are muted or volume level turned down very low or if your ringtone setting is OFF, you may not hear a ring.

Adding a Contact to your list

- At the bottom of your VGo / Contact list, click on **Add**.



- Enter the username of the person you want to add. If you want to add a VGo, you'll need to enter the username of the manager of that VGo.
- A message will be sent to that contact and they must accept your request for them to be available in your contact list. Until they accept, their presence ball will remain grey colored even if they are on-line. When a manager of a VGo(s), accepts your request, all VGo's that they manage will appear in your VGo/Contact list.

Making your VGo talk



Talking VGo - A demonstration of VGo's ability to talk using its own synthesized voice is available when you are visiting with VGo. You type a string of words and VGo will speak them.

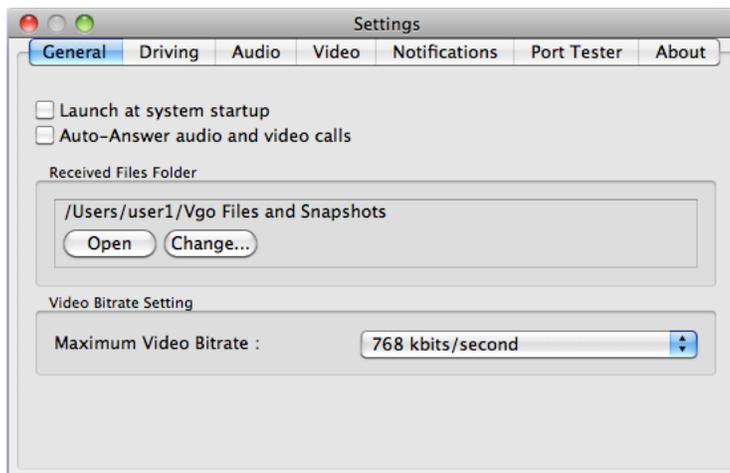
- Click on the Talking icon,  ("Toggle Text Chat") in the lower right area of your video window.
- A white text box will expand under the video window with an active text cursor flashing on the left side.
- Up to 200 characters can be typed in the box. Press **ENTER** and the VGo will immediately say the message. Even though you are remote, you will softly hear the VGo speak your message.

Changing settings in your VGo App

To open the settings window:

- Click on **SETTINGS** on your VGo App (located at the bottom).

General Settings

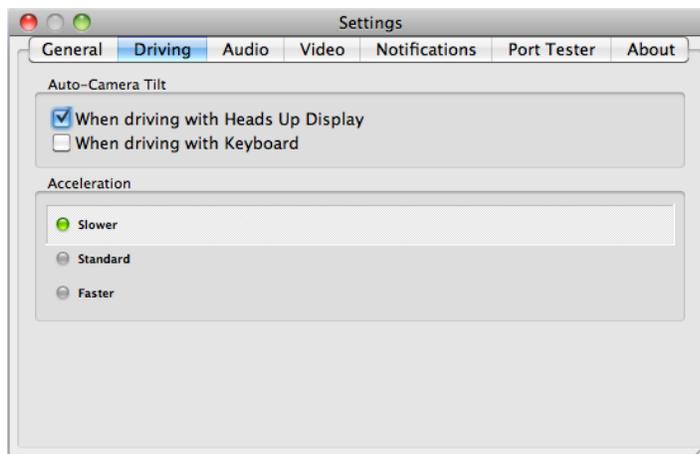


- Start-up Settings:
 - To launch the VGo App when your computer starts, check the “Launch” box.
 - To auto-answer video calls that come into your computer from another user, check the corresponding box.
- Received files folder
 - Select **Open** to open the folder where files and snapshots are stored.
 - Select **Change** to designate where files and snapshots will be stored on your computer.
- Maximum Video Bitrate:

This function will send more data per second and provide better quality video. This function needs to be set on both the VGo and the VGo App to take effect.

 - Toggle 384/768 kbits/second

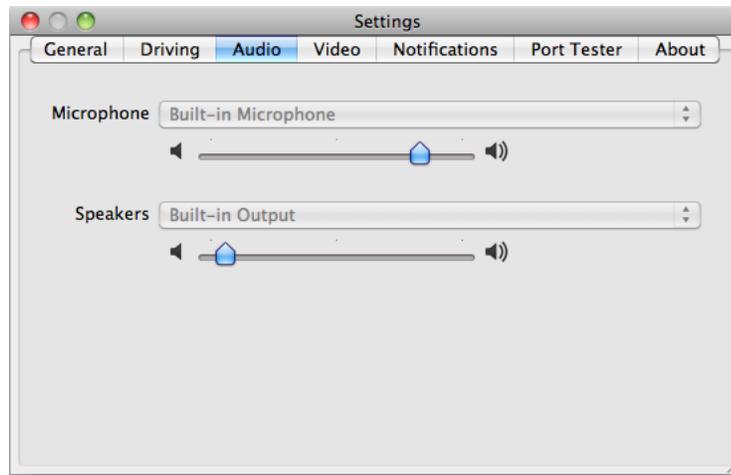
Driving Settings



- Auto Camera Tilt
 - **Auto Camera Tilt** enables VGo to automatically tilt the camera as you drive (driving slower makes the camera tilt to the ground directly in front of it, and driving faster makes the camera tilt up, to see what is ahead).
 - To have the camera tilt automatically while driving with the “Head’s Up Display,” check the corresponding box.
 - To have the camera tilt while driving with the keyboard, check the corresponding box.
 - Note: When driving in **REVERSE**, the auto-camera tilt is not enabled. You must tilt the camera manually.

- Acceleration
 - You can select one of three settings for the rate of acceleration. First time users might prefer to have VGo accelerate “**Slower**”. Experienced users will want to select “**Faster**”.

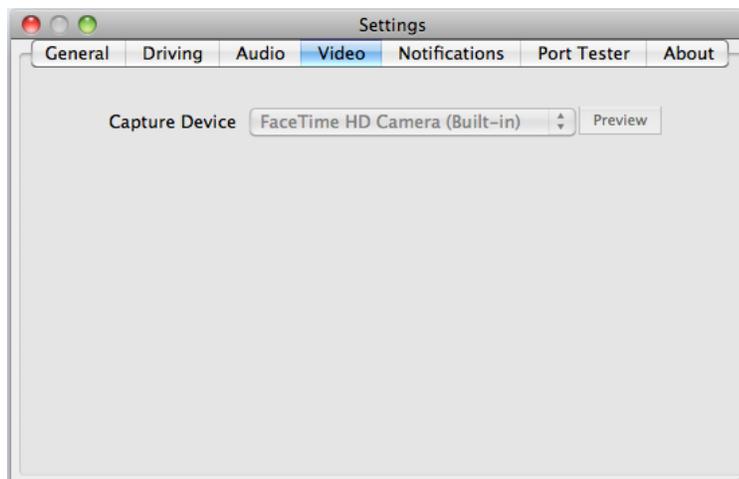
Audio Settings



- Microphone
 - This is where you select the microphone that is used by the VGo App.
 - If there is just one microphone, the VGo App will select it for you.
 - Many computers have a built-in microphone. In the instance that you have an external microphone plugged in, you will need to specify which of those you want to use for audio input.
 - The slider enables you to set the microphone loudness level
 - Normally, you shouldn't have to change the loudness level
 - Note: some operating systems may change this setting for you automatically

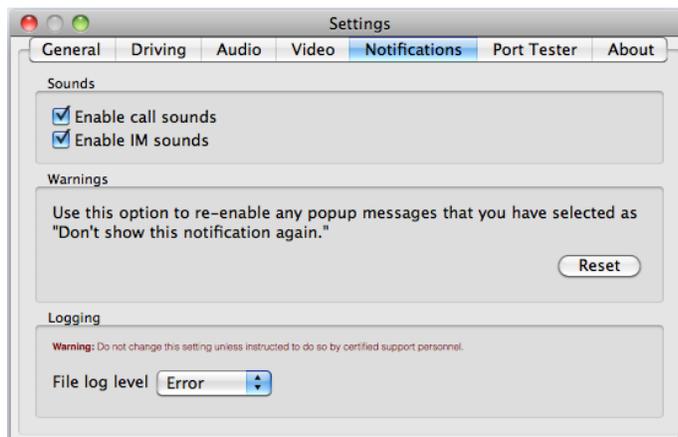
- Speakers
 - Enables you to select the speaker source used by the VGo App.
 - If there is just one set of speakers available, the VGo App will select it for you.
 - Many computers have built in speakers. In the instance you have external speakers plugged in, you will need to specify which of those you want to use for the audio output.
 - The slider enables you to set the default speaker loudness level
 - Normally, you shouldn't have to change the loudness level
 - Note: some operating systems may change this setting for you automatically

Video Settings



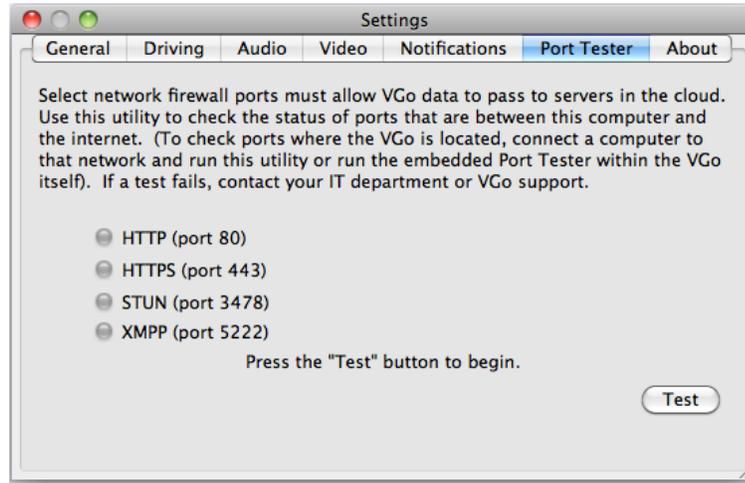
- Capture Device
 - Identifies the camera that is used by the VGo App
- Preview
 - Turns on the camera and displays the image it sees in a window. This enables you to see that the camera is working properly.

Notifications Settings



- Sounds
 - Enable call ringtones – turns incoming call ringing on and off
 - Enable IM sounds – turns incoming IM sounds on and off
- Logging – These settings are not to be changed unless instructed to do so by a certified support engineer.
- Warnings – Reset allows you to reset notifications

Port Tester tab



- Network Port tester – If inside the firewall, the following outbound ports must be open:
 - Port 80 (HTTP Non-Proxy, TCP)
 - Port 443 (HTTPS)
 - Port 3478 (STUN, UDP)
 - Port 5222 (XMPP, TCP)

About tab



- This is where you will find the software version number for your VGo App

Operating the VGo locally

Although VGo's are intended to be operated remotely, there are some functions that can be performed locally.

The VGo is intended to be left on at all times – that way someone can visit any time, even if they are somewhere else. The VGo can be carried without turning it off. For example, you can carry it for use on another floor or building within your facility.

Incoming visitors will be connected automatically (unless you prefer to manually permit a person to enter your facility – see **SETTINGS** below).

What the different lights mean

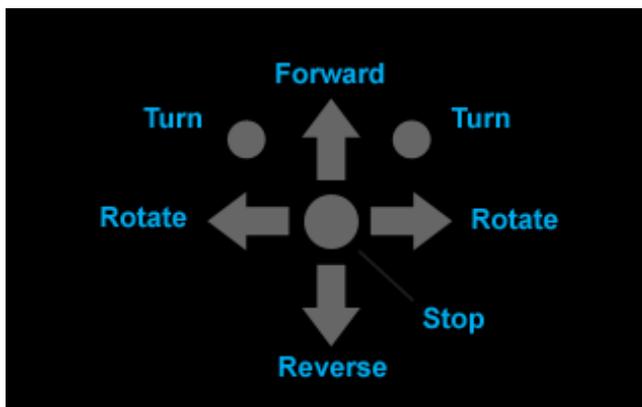
- Lights surround the LCD display
 - Flashing green and red lights – a remote person is about to arrive
 - Steady green lights – a remote person is presently visiting
 - Steady red lights (surrounding the LCD display) – your VGo is in use and you have **Muted** your audio and video. The remote person cannot see or hear you, but you can hear and see them.
 - Flashing orange/green – the VGo is connecting to a new Access Point (Roaming)
 - Steady orange – the VGo is updating or restarting
- White base headlight clusters – are always turned on when a remote person is visiting.

Using the VGo's Handheld Remote Control



- The **MENU** key always displays the Home menu.
 - The **MENU** key does not function when the VGo is in use by a remote visitor.
- **MUTE** stops the transmission of your audio and video to the far end to give privacy to people who are with the VGo. The lights surrounding the LCD will turn red and the camera will turn off and tilt down automatically. Press it again to re-start the transmission of audio and video. It has no effect when VGo is not in use.
- The **ARROW KEYS** are used for menu navigation.
 - They can also be used to drive locally
 - When not in use, after the **DRIVE** key has been pressed
 - When in use, they are always active for driving
- The center **OK** button is used to select a menu item.

- The **BACK** key will move back to the previous selection or screen. The **BACK** key is not available when a remote person is visiting.
- **VOLUME** keys adjust the system volume. This includes the loudness of the arriving visitor announcement and ring as well as the loudness of visiting person's voice.
- The **Answer/Call** key is used to manually admit an incoming visitor as well as initiate a connection to a remote user at their PC or to another VGo.
- The **HANG-UP** key is used to terminate an existing connection or reject an incoming visitor.
- The **TILT** keys move the camera position up and down.
- The **SWAP VIEW** toggles the live video on the display between the far end view and the local VGo view. **SWAP VIEW** enables the person who is with the VGo locally to see what the far end person is seeing.
- The **SNAPSHOT** button will capture the currently displayed video image and save it to a file on a USB flash drive.
 - The flash drive must be in the USB slot labeled  2 (right hand USB slot as viewed from the back) on the back of the LCD display.
 - On the USB drive, Snapshots are stored in a folder titled **images**. VGo will create this folder if it doesn't exist.
 - The file format **IMG_xxxx.jpg**.
 - Use **SWAP VIEW** to toggle between local and far end views.
- The **DRIVE** key currently enables and disables local driving of the VGo when not connected to a remote user. The LCD will continuously display a diagram of the keys on the handheld remote control that are available to drive the VGo.



It is recommended that the user place the VGo in an open space as they learn how to drive with the handheld remote control.

-
- Press and hold any of the keys above to drive the VGo.
NOTE: The VGo will typically continue to move for 1 to 2 feet after the key is released.
 - To immediately stop the VGo, press the center **OK** key.
 - The round **Turn** buttons move the VGo forward while simultaneously turning to the left or right.
 - The **Rotate** and **Reverse** functions operate at half the speed of the **Forward** and **Turn** keys.
- The **DOCK** key tells the VGo to automatically position itself on a charge dock. Note that the charging dock must be “seen” by the VGo. Drive or place the VGo facing the front of the charge dock, within about ten feet.

The VGo LCD Display and Menus

When your VGo is not in use, or it hasn't been used for about five minutes, the LCD will display a screen saver such as the date and time, or a series of photos or it will be turned off. To get to the previous screen, just touch any of the touchpad keys or press any key on the handheld remote control.

The main **Menu** is very simple. User selectable menus and choices can be accessed using either the lighted blue touch pad on the VGo or by using the handheld remote control.

In the upper left is an icon (a series of vertical bars) that will always display your **WIRELESS SIGNAL STRENGTH**.

Beside the signal strength icon you will see the Network Icon  which indicates active WiFi and internet connectivity. If either the WiFi or Internet connection is not active you will see **OFFLINE**.

In the upper right is an icon that will always display your **BATTERY STRENGTH**. If you see a single red bar, the VGo's battery is very low and the VGo should be docked or plugged into the wall charger immediately. If you see a lightning bolt, then the VGo is receiving external power to charge the battery – either through the charge dock or with the power cord plugged directly into the back of the VGo.

The menu items across the center of the screen are user selectable. Make your selection by touching the left or right **ARROW KEYS** to highlight the function you want to select (**Contacts**, **Events**, **Goodies** or **Settings**) and then touch the center **OK** button.

Contacts

Contacts is a list people or locations that can access the VGo. You can also initiate a connection to those contacts using the VGo.

- Use **UP/DOWN ARROW KEYS** to highlight a contact, touch the center **OK** button to select.
- A list of available locations for that contact will be displayed.
- Use **UP/DOWN ARROW KEYS** to highlight a location, touch the corresponding **FUNCTION KEY** associated with **CALL** for a video call.
 - Note: only sites that have a green presence indicator (to the left of the location name) can be called. If the presence indicator is red or grey or not there – that site is unavailable.

Note: other VGo's are listed under the contact name of the person who is managing that VGo.

Events

Events is a list of previous VGo activity.

On the left side of the screen is an icon that indicates the type of activity:

- A green circle with an arrow pointing to the right indicates a visitor who used the VGo
- A green circle with an arrow pointing to the left indicates that the VGo was used to make an outbound call.
- A red circle with a dash indicates that visitor attempted to use the VGo but was not admitted.

Beside the icon is the name of the person or VGo in that event.

On the right side of the screen is an indicator of when the event happened.

More details can be viewed by moving the highlight to the desired event and touching the center **OK** button.

Goodies

Goodies are some fun things you can select when not in a call. Items may also be designated to be displayed while in screensaver mode when VGo is not in use.

- Use the **UP /DOWN ARROW KEYS** to highlight a **Goodie**, touch the center **OK** button to select. Touching any key will stop the Goodie and take you back to the menu.
- Note: if you select the digital clock, see the section on **User Settings**
- Note: if you want to view your own photos in the slide show, see the section on **User Settings**

VGo Settings

Settings are a set of screens that details information about your VGo. This is also where you can set specific VGo behavior particularly with respect to your privacy. Most settings are changed by toggling using the center **OK** button. Other settings are changed by touching the left or right **ARROW KEYS**.

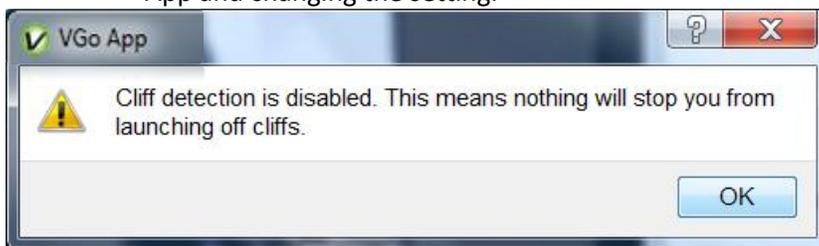
User Settings

Under **User Settings**, you can:

- Block people from using the VGo:
 - **Availability** – sets **Do Not Disturb** on or off. The default setting is **Available** – so others can use the VGo. When set to **Do Not Disturb**, it shows the VGo's presence to others as busy (red ball), so they cannot visit.
- Disable auto answer:
 - **Auto Answer** – turns auto answer on or off. The default is set to **ON**. When this setting is set to **OFF**, an incoming visitor is indicated by lights flashing and the VGo announcing the identity of the visitor. The visitor must be admitted manually by touching the blue button under Answer on the VGo touchpad or by using the handheld remote control.
- Change what is shown on the screen after a period of inactivity:
 - **Screen Saver** – Touch **OK** to change the selection
 - **Digital Clock** – Displays the current time. The time is set for you automatically by the network. You may have to set your **Timezone** (see below).
 - **Slideshow** – Displays a new picture every 5 seconds. You can over-ride the default images and show your own pictures.
 - Pictures must be in the **.jpg** file format
 - Picture files must be in a folder titled **images** on a USB flash drive.
 - The flash drive must be in the USB slot labeled  **2** on the back of the LCD display.
 - **Screen Blank** - Turns off the LCD display until any of the touch buttons is touched. This can save power when the VGo is not in use and not on the charge dock.
- Change the screen saver wait time:
 - **Screen Saver Wait (min)** – changes the amount of time before the Screen Saver is activated. Use the **left and right blue arrow keys** to change the wait time in minutes.
- Select the **Timezone** for the VGo's location:
 - Touch **OK** to cycle through and display your current time zone. US and Canadian time zones are available.

Advanced Settings

- Most of these settings are for support personnel only. Do not change these settings unless instructed to do so.
- LogLevel Keep at Info unless VGo Support requests a different setting
- The **Cliff Detection** setting may be set to **OFF** if the type of flooring, where VGo is being used, triggers false warnings.
 - **Cliff Detection** prevents the remote user from driving the VGo over a drop-off such as a stair or ledge. Sometimes these sensors can be fooled by a very dark floor material – it thinks that it is looking down over a drop off and will not let the remote driver move forward. The remote user can temporarily override the setting using a control on their VGo App.
 - If the entire area where VGo is driven is covered in black floor tile or carpet, then it makes sense to disable **Cliff Detection** provided the remote user cannot accidentally drive over a drop off that may damage the VGo.
 - When **Cliff Detection** is set to **OFF**, users will see a popup message letting them know that they are not protected. Users can temporarily turn Cliff Detection **ON** for the duration of that visit by clicking on the **Controls** button on their VGo App and changing the setting.



- Auto Re-Dock The VGO will automatically re-dock itself if accidentally bumped out of place or driven off the dock for less than 2 seconds
 - The VGo must be docked for Auto Re-Dock to trigger
 - This feature can be toggled **On** or **Off**, the default setting is **On**.
- Automatic Updates allows your VGo to automatically update its self when software is released to the field.
 - VGo recommends this to be toggled to **On**
- Maximum Bitrate will send more data per second and provide better quality video. This function needs to be set on both the VGo and the VGo App to take effect.
 - Toggle 384 or 768 kbits/second, the default is set to **768 kbits/second**
- Network Port tester – If inside the firewall, the following outbound ports must be open:
 - Port 80 (HTTP Non-Proxy, TCP)
 - Port 443 (HTTPS)
 - Port 3478 (STUN, UDP)
 - Port 5222 (XMPP, TCP)

System Information

- This information is for your system administrator. It includes:
 - The VGo's serial number (also found on the back of the LCD display)
 - MAC Address – the MAC address for this VGo
 - Wireless Network – the name (SSID) of the wireless network currently used by this VGo
 - IP Address – the IP address in use by this VGo
 - Device Nickname – the Nickname assigned by the person managing this VGo. This is the name that remote users will see in their contact list in their VGo App unless they have renamed it in their personal contact list.
 - Domain – the name of the domain used by VGoNet

Version Information

- This information is primarily for your VGo support representative.
- **Software version number** - You may be asked for the version number of the **Application** software that is currently loaded into the VGo. This user guide reflects Application version 1.5.0.
- **Check for Updates** – Periodically, software updates will be available for download. Usually you will see a message asking if you would like to receive the update. You can check to see if an update is available by highlighting **Check for Updates** and touching the **OK** key.

Network Settings

- This is where you go to change WiFi networks and any settings for a particular WiFi network.
- **WiFi Networks** – select this menu choice and the system will scan for available networks. The network to which VGo is currently connected will have a large blue ball beside its name. Other networks that have been setup but not currently being used will have a purple ring beside their name.
 - To connect to a different WiFi network, just highlight the network name and select it and then follow the prompts. See the section **Setting up the VGo** for more details.
 - To connect to a network with a hidden SSID, select **Add** and then follow the prompts.
- **IPv4 Settings** will have the values that were previously entered if your network requires a Static IP address. Any of these values can be modified here or you can re-select a network and change the values as part of the setup process, just as you did the first time you went through the setup process.
- **WiFi Roaming and Scanning**

Your VGo arrives from the factory set to always stay connected to the same WiFi access point. This prevents your VGo from trying to scan for new access points that may not exist, but of course limits the driving range of the VGo to within the broadcast range of the access point. If your WiFi network is comprised of multiple access points, then you'll want to have VGo automatically sense when the network is getting weak and then switch to the next access point as you are driving from one place to another.

In the wireless world this feature is called Roaming (no - your VGo will not roam about on its own, VGo only moves when you drive it).

To turn Roaming On

- First, check with your IT manager to find out what frequency is being used for the WiFi specific network that VGo is connected to. The choices are:
 - 2.4 GHz
 - 5.0 Ghz
 - Both
- From the **Main Menu**, move the highlight using the **blue left and right arrow keys** to **Settings** and touch the center **OK** button.
- Highlight **Network Settings** and touch **OK**.
- Highlight **WiFi Roaming and Scanning** and touch **OK**.
- Highlight **Roaming**. If it says **Off**, then touch **OK** to toggle Roaming to **ON**.
- Highlight **Scan Frequency** and touch **OK** to toggle to the correct setting.

With Roaming **ON**, when the VGo determines that it needs to switch to the next WiFi access point it will automatically stop moving and display the message “Searching for Network, Please Wait”, scan for an access point with a stronger signal and then switch to that access point. The switch to the next access point will take about 3 seconds at which time your audio, video and driving is restored.

If you are at the edge of the range of your WiFi network, and no stronger access points are available, VGo will re-connect to its current access point and then scan again after about 20 seconds. If you see VGo “Searching for Network” more than once within about 30 seconds, you should assume that you have reached the outside range of the WiFi network and go back 10 or 15 feet to remain in good WiFi operating range.

If you continue to move further out of range, the message “**Your WiFi Signal is Low**” will be displayed and you should not drive further or you may lose remote control of your VGo.

To turn Roaming Off

- From the **Main Menu**, move the highlight using the **blue left and right arrow keys** to **Settings** and touch the center **OK** button.
- Highlight **Network Settings** and touch **OK**.
- Highlight **WiFi Roaming and Scanning** and touch **OK**.
- Highlight **Roaming**. If it says **ON**, then touch **OK** to toggle Roaming to **OFF**.

Muting your audio and video on your VGo

MUTE stops the transmission of your audio and video to the remote user to give privacy to people who are with the VGo. When the VGo is muted, the remote user cannot see or hear anything from the VGo. People who are in the presence of the VGo will still be able to see and hear the remote user.

- To **Mute** – Touch any button on the blue button touchpad to display hidden status information and controls. They will appear at the top and bottom of the LCD. Touch the blue button under **Mute**. You can also just press the red **Mute** key on your handheld remote control.
 - Your LED lights around the LCD display will turn from green to red
 - The far end will not be able to hear or see you
 - The far end will see a message on their screen notifying them that you have muted
- To **UnMute** – Touch or Press the **Mute** button again.
 - Your LED lights will turn from red to green
 - The far end can hear and see you again

Admitting Visitors Manually

- Your VGo is set to automatically be available (auto-answer) for incoming visitors.
- If you have changed the **SETTINGS** to manually admit incoming visitors, the visitor will not be admitted until you tell the VGo to answer, much in the same way that you answer the door in your home when someone knocks. If you don't answer the door, no one comes in.
- Look at the display to see who is requesting to visit.
 - Using the blue touchpad, touch the button under **Answer**. When using the handheld remote control, press the **ANSWER** button.
 - If you don't want to admit the visitor, using the blue touchpad, touch the button under **Ignore**. When using the handheld remote control, press **Hang-up**.
 - You can also do nothing, in which case the lights will continue to flash until the person attempting to visit goes away.

Using your VGo to call out

- From the **Home** menu, use the **LEFT/RIGHT ARROW KEYS** to highlight **CONTACTS** and touch **OK** to select.
- Use **UP/DOWN ARROW KEYS** to highlight a contact, touch the center **OK** button to select.
- A list of available locations for that contact will be displayed.
- Use **UP/DOWN ARROW KEYS** to highlight a location, touch the corresponding blue button for **CALL**.

Note: only sites/contacts that have a green presence indicator (to the right of the name) can be called. If the presence indicator is red or grey— that site/contact is unavailable.

Re-charging the battery

If you see a red line on the battery strength indicator, the VGo must be recharged.

Using the charge dock:

- Position the VGo so it is facing the front of the charge dock, within one to ten feet. Touch the blue **Dock** button on the Main Menu or press the **Dock** button on the handheld remote control. Once the VGo is successfully docked, the battery charge level

icon on the VGo will change to look like this:



- The VGo can also be docked by the remote user – see the section on *Using the VGo App*.

If the charge dock is not available:

- Plug the AC wall charger into the back of the VGo (just below the Power button). Note that the VGo will not drive when the powercord is plugged into the VGo directly.

In general, we recommend that your VGo be on the charge dock before retiring for the night.

Charge Dock placement

The charge dock should be placed where it is convenient for a remote user to drive and out of the way of people and moving equipment in the facility where VGo is used. You don't want the VGo to be in a place where someone could bump into it accidentally since it could come off its charge dock and the battery eventually will drain completely.

If the facility is large, consider adding charge docks so one is never far away when a person is done visiting using VGo.

Placement requirements:

- Power source within reach of the Charge dock power cord (6 ft).
- A solid wall or cabinet to brace the dock from moving backward when VGo docks itself
Note: the back of the charge dock has mounting screw holes which can be employed to guarantee no movement of the charge dock will occur when docking or by people passing by, etc.
- One foot clear space to either side of the charge dock for the VGo to maneuver.
- At least 48" of clear space above the dock (no low overhanging shelves) so the VGo has room to back onto the dock.
- No highly reflective materials nearby (mirrors, shiny metal cabinets, windows, etc) so the VGo sensors can operate efficiently.

Getting VGo Serviced

Contact your reseller for help with installation, operation, problems and repairs.

You can also consult the Support section on vgocom.com

Also available from your reseller are accessories and replacement parts including:

- Replacement and large capacity (12 hr) batteries
- Hand held remote controls
- Charge docks

Introduction to VGoNet Manager

VGoNet Manager is a web based management system for managing VGo devices and the users who can access them. The ability to create, update and delete user accounts, associate VGos with accounts, and monitor system usage within an organization are all critical elements in the deployment of a Robotic Telepresence system.

With the 1.4.2 release of software, we have introduced a significant upgrade to the web management system. This provides the kind of control that enterprise administrators need to make system deployment, control and monitoring easy. New with 1.4.2 is the ability for a single administrator to setup all user accounts for an organization and manage all VGo access from a single interface. We call these “Community” accounts and they are described below.

Prior to the 1.4.2 release, each user setup their own individual account and then sent contact invitations to other users. Each of an individual’s contacts has access to the VGos associated with that individual’s account. This capability is still provided as a legacy service but we recommend that even users with a single VGo should convert over to the new Community model.

VGoNet Manager can be reached by clicking on **My Account** on the www.vgocom.com homepage or by going to <https://controlpanel.vgocom.com>.

Account Types

VGoNet Manager supports two user models depending on their needs. All users are either VGo community members or individuals. Enterprise users should setup a community to manage all of their users and VGos. Existing users with just one or two VGos and only a few users can continue to use the individual accounts they setup previously. Existing users with just a couple of VGos should consider using a community account to get more control over who can access their VGos.

Community

A community is a collection of users and VGos that are managed as a group. Administrators for that community add, update and remove users from the community. They also add VGos and assign access to the VGos to users within the community. Users within a community can have one of 3 roles:

- Manager** This is the user who establishes the community. They have the ability to create Admin and User accounts.
- Admin** This role can add new users to the community but cannot see the manager or other admins.
- Users** This role is for regular users who just want to call VGos or other users. They can only make changes to their personal profile.

The first user who creates a community account becomes the manager of that community. They can then create new accounts quickly and without doing email verifications on each account since the manager’s email has been verified.

Managers and admins can also add VGos to a community by activating them on the VGoNet Manager site. Once a VGo has been activated managers and admins can assign calling privileges to any of the users within that community. This ability to assign calling privileges to specific user provides fine grain control over who can call into the VGo. It also allows users within the

community to add users as contacts without granting them implicit access to VGo that user can call.

Community managers and admins can also setup contract groups. Users assigned to a contact group are automatically made contacts of all other users of the group. A contract group could be assigned for all members in a department, for members of a project team or any other grouping that a community may need.

Individuals (Legacy)

An individual who owns one or two VGo can setup up an individual account and add those VGo to that account. From within the desktop application the user can invite other users to be contacts (buddies) just like any other chat service. Once a contact has been invited and accepted by that contact, the user can see the contact's presence and make desktop to desktop calls to that contact.

Users who own a VGo can add the VGo to their account by activating the new VGo on the VGoNet Manager site. Once activated the user becomes the owner of that VGo. All of that user's contacts can now make calls to that VGo.

An owner can make one or more of their contacts a "keyholder" for a VGo. Once a contact becomes a keyholder, all of their contacts can now see and call the VGo as well. The only difference between an owner and a keyholder is owners can assign or remove keyholder status to users. When using the desktop application, owners and keyholders are the same. The benefit of using the keyholder status is that it allows that user the ability to create their own contact list which can access the shared VGo rather than requiring all of the users to be associated with the initial owner. As an example, in a home environment each person that lives in the home will use their own contact list to share access the VGo. By setting each person in the home as a keyholder, each of their contacts will have access to the VGo. In many enterprise deployments this feature does not allow for the security that an IT organization will be looking for, check with your IT group before adding a keyholder to a VGo.

For small groups this model of allowing access to a VGo to mirror its owner's contact list and does not require specific action on the VGoNet Manager site.

With individual accounts, each user visits the web site independently and creates and manages their own account.

Common Tasks

Setup a community account

To setup a new community account:

1. Go to <https://controlpanel.vgocom.com>
2. Click on "Create a new VGo Community or Individual Account"
3. On the Sign Up page
 - Select "Manager of a Community"
 - Enter a user name
 - Enter a password, confirm password, first name, last name and email address
 - Enter the VCode given to you by your reseller

- If you had an individual account before you can login with that account and look under the “My Account” tab to find your current VCode.

- Enter a unique community name
- Click “Create Account”

(If the user name or community name have already been used you will be asked to pick another one)

4. You will receive an email shortly to verify your account. Click on the verify link inside
5. You can now login with your new account. You will see tabs across the top to:

VGos	add, view and manage your VGos and who can call them
Users	create, view, update and delete user accounts for your community
Groups	create and manage Contact Groups
My Account	view and manage your account information
Download	download desktop software

Add a VGo

Each new VGo needs to be activated before it can be used. If a VGo has been deleted from one account it will be reset to its factory default settings and can then be activated on a new account.

When a VGo is added to an individual account, that user is the “owner” and the only one who can make changes to the VGo.

When a VGo is added to a community account it can be managed by any of the managers or admins for that community.

Follow these steps to add a VGo to an account.

- 6) From the VGo display, follow the steps to add the VGo to a Wifi network.
- 7) Once added the VGo will present an Activation Key that can be used to attach a VGo to the system
- 8) Login to a manager or admin account (or an individual account if not part of a community)
- 9) Click on “VGos” and then select “Add a VGo”
- 10) Enter the “Activation Key” that is displayed on the VGo. These key will change every five minutes as a security precaution.
- 11) The VGo will now appear in your VGos list

Access to the VGo will depend on whether you are a community user or an individual user as described above.

Migrate your Individual account to a community account

There is no direct conversion of individual accounts to community accounts. These steps will remove the VGos from an individual account, setup a user community with a user accounts and then add the VGos to the new community.

- 1) Login with your current individual account
- 2) Go to “My Account”, find your VCode and write it down

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- 3) Go to the “VGOS” page and click “Delete” next to your Vgos to unbind them from your account
 - 4) Your VGos will reset, enter your Wifi information to get them on the network again
 - 5) Create a new community account as described above, you will need your VCode to do this
 - 6) Login and go to “User’s” and click “Add a User” to create new user accounts for your community
 - 7) Go the “VGos” page and click on “Add a VGo”
 - 8) Enter the activation key that is displayed on the VGo and click “Add VGo”
 - 9) You will now see your new VGo on the VGos page.
 - 10) Click on the “Edit Access List” link for your new VGo
 - 11) Select the users who are allowed to call the VGo and click “Update List”

You now have a new community and a manager account to configure the community. There are new VGos and new users who can call them.

Working with more than one manager (community users only)

A Manager can create accounts with user, admin or manager roles. If a manager wants to assign another user full rights to manage a community they would create a new user on the “Users” page and specify the role of Manager. They could also edit the properties of a current user and change them to the manager role.

At this point a community has multiple managers. If the first manager no longer needs manager access, the second manager can change their role or remove them from the system. A manager cannot remove themselves from a community as that might leave the community without a manager account.

Appendix 1 – Configuring EAP Authentication (802.1X) for WiFi connectivity

Before configuring the VGo, you must have your EAP authentication certificate(s) (files) loaded on a USB drive (if required). You might have one file that has the entire certificate verification chain or there could be two files (client certificate and authentication chain). The file(s) must be in the **PEM** format. The file(s) can be in any folder on the USB drive.

- Insert the USB drive into the **USB port #2** located on the back of the LCD display of the VGo.
- From the **Main Menu** select **Settings**
 - If you are not at the **Main Menu**, select **Back** repeatedly until the **Main Menu** is displayed or press the **Menu** button on the hand held remote.
- Select **Network Settings**
- Select **WiFi Networks**
- Select the required WiFi network from the list
 - If the WiFi network you require is “hidden”, select **Add Hidden**, enter the SSID. On the next screen select the Authentication as **WPA-Enterprise** or **WPA2-Enterprise**
- Select the **EAP Method**. Methods supported are **TLS, LEAP, PEAP** or **TTLS**.
- Depending on the Method selected, you will be prompted for one or more of the following items. Continue through all the screens.
 - On the **Client Certificate** screen (**TLS** only), browse the folders/files list (of the USB drive) and select the client certificate file.
 - On the **CA Certificate** screen (**TLS, PEAP, or TTLS**), browse the folders/files list (of the USB drive) and select the CA certificate file containing the authentication chain.
 - Note: this step will be skipped if the authentication chain is included in the client certificate file.
 - You may also be asked if a CA Certificate is required (**PEAP, MS ChapV2**)
 - On the **Identity** screen (**TLS, LEAP, PEAP, or TTLS**), you will be prompted to enter the Identity associated with the certificate. By default, this entry will be filled in using the subject information from the client certificate. If this is incorrect, go

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- to **BackSpace** to delete the characters and then enter the correct Identity – then select **Accept**.
- On the **Key PassPhrase** screen (**TLS, LEAP, PEAP, or TTLS**), enter the Key passphrase associated with the client certificate or identity.
 - On the **PEAP Version** screen (**PEAP** only), choose **0** or **1**.
 - On the **PEAP Label** screen (**PEAP** only), choose **Client EAP Encryption** or **Client PEAP Encryption**.
 - On the **Secondary EAP Method** screen (**PEAP, TTLS**), choose **MD5** or **MS-Chapv2**
 - On the **IP Addressing** screen, select the connection type. Most wireless networks use **DHCP**. If your network administrator requires a **Static IP** address, you'll need the following additional information:
 - **IP Address**
 - **Sub Netmask**
 - **Default Gateway**
 - **DNS Nameserver**
 - The VGo will then connect to the network – this may take a minute or two – you will see **Please Wait . . . Connecting to . . .** A green check mark will appear on the screen when the connection is successful.
 - If you are setting up the VGo for the first time, the VGo will then display a new screen that says “**Now we need to authenticate your VGo**”. Leave your VGo at that screen and go to the section of this document titled: *Step 3 – Creating a VGo account and downloading the VGo App*.
 - Note: If you get an error message, the problem could be with either the VGo's connection to the WiFi or the WiFi connection to the internet. Both must be working for the VGo to be authenticated.