

# TELOS VSET BROADCAST PHONESETS

For use with Telos VX, Hx and iQ6 Systems



## USER MANUAL

VSet12 / VSet6 Phone Sets

**Models:**

VSet12 — Software: v1.3.0

VSet6 — Software: v1.3.0

**For use with:**

Telos VX Systems

Telos Hx6 Six-Line Talkshow system

Telos iQ6 Six-Line Telco Gateway



[TelosAlliance.com](http://TelosAlliance.com)

## User Warnings and Cautions

The installation and service instructions in this manual are for use by qualified personnel only. To avoid electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified personnel.

This instrument has an autoranging line voltage input. Ensure the power voltage is within the specified range of 100-240VAC. The ~ symbol, if used, indicates an alternating current supply.



This symbol, wherever it appears, alerts you to the presence of uninsulated, dangerous voltage inside the enclosure – voltage which may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions. Read the manual.

### CAUTION: HAZARDOUS VOLTAGES

The instrument power supply incorporates an internal fuse. Hazardous voltages may still be present on some of the primary parts even when the fuse has blown. If fuse replacement is required, replace fuse only with same type and value for continued protection against fire.

### WARNING:

The product's power cord is the primary disconnect device. The socket outlet should be located near the device and easily accessible. The unit should not be located such that access to the power cord is impaired. If the unit is incorporated into an equipment rack, an easily accessible safety disconnect device should be included in the rack design.

To reduce the risk of electrical shock, do not expose this product to rain or moisture. This unit is for indoor use only.

This equipment requires the free flow of air for adequate cooling. Do not block the ventilation openings on the rear and sides of the unit. Failure to allow proper ventilation could damage the unit or create a fire hazard. Do not place the units on a carpet, bedding, or other materials that could interfere with any panel ventilation openings.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## USA CLASS A COMPUTING DEVICE INFORMATION TO USER.

### WARNING:

This equipment generates, uses, and can radiate radio-frequency energy. If it is not installed and used as directed by this manual, it may cause interference to radio communication. This equipment complies with the limits for a Class A computing device, as specified by FCC rules, part 15, subpart j, which are designed to provide reasonable protection against such interference when this type of equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference. If it does, the user will be required to eliminate the interference at the user's expense.

Note: objectionable interference to TV or radio reception can occur if other devices are connected to this device without the use of shielded interconnect cables. FCC rules require the use of shielded cables.

## CANADA WARNING:

“This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the radio interference regulations of the Canadian department of communications.”

“Le présent appareil numérique n’émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques (de Class A) prescrites dans le règlement sur le brouillage radioélectrique édicté par le ministère des communications du Canada.”

## CE CONFORMANCE INFORMATION:

This device complies with the requirements of the EEC council directives:

- ◆ 93/68/EEC (CE MARKING)
- ◆ 73/23/EEC (SAFETY – LOW VOLTAGE DIRECTIVE)
- ◆ 89/336/EEC (ELECTROMAGNETIC COMPATIBILITY)

Conformity is declared to those standards: EN50081-1, EN50082-1.

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Patent information can be found at [www.TelosAlliance.com/legal](http://www.TelosAlliance.com/legal)

## Updates

Telos VX Prime+, and VX Enterprise features and operations are determined largely by software. The Telos Alliance strives to provide the most stable and feature-rich software available. We encourage you to check for software updates from time to time by visiting our website or by contacting us directly.

## Feedback

We welcome feedback on any aspect of our products or this manual. In the past, many good ideas from users have made their way into software revisions or new products. Please contact us with your comments or suggestions.

## We support you...

### By Phone/Fax

You may reach our Telos Support Team in emergencies by calling +1 216-622-0247. For billing questions or other non-emergency technical questions, call +1 216-241-7225 between 9:00 AM to 5:00 PM USA Eastern Time, Monday through Friday.

### By Email.

Non-emergency technical support is available at [Support@TelosAlliance.com](mailto:Support@TelosAlliance.com).

### By Web

The Telos Web site has a variety of information that may be useful for product selection and support. The URL is <https://www.telosalliance.com/Telos>.

## SERVICE

You must contact Telos Alliance before returning any equipment for factory service. We will need your unit's serial number, located on the back of the unit. We will issue a return authorization number, which must be written on the exterior of your shipping container. Please do not include cables or accessories unless specifically requested by the Technical Support Engineer. Be sure to adequately insure your shipment for its replacement value. Packages without proper authorization may be refused. US customers, please contact Telos Alliance Technical Support at +1-216-622-0247. All other customers should contact local representative to make arrangements for service.

## Warranty



For the latest Telos Alliance warranty, visit: [telosalliance.com/warranty](https://telosalliance.com/warranty)

## Register your product

Register your product today to get the full benefits of our warranty, support, and product updates. [telosalliance.com/product-registration/](https://telosalliance.com/product-registration/)

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# Creating the Most Exciting and Engaging Audio Experiences Imaginable

**Congratulations on your new Telos Alliance product!**

The gang here at Telos is committed to shaping the future of audio by delivering innovative, intuitive solutions that inspire our customers to create the most exciting and engaging audio experiences imaginable.

We're grateful that you have chosen audio tools from Telos® Systems, Omnia® Audio, Axia® Audio, Linear Acoustic®, 25-Seven Systems®, and Minnetonka Audio®. We're here to help you make your work truly shine. We hope that you enjoy your Telos Alliance product for many years to come and won't hesitate to let us know if we can help in any way.

**Telos Alliance**

# 1 Introduction

Through the years, phone systems have continued to evolve. We began in a world where there was no dialing system. You lifted the receiver off the hook and instead of hearing dial tone you heard, “Number please...” You would then answer with an exchange followed by a number (Chapel 1-7225) and the operator would connect you manually with a patch cable. As networks got bigger and more and more people had telephones installed, there was a need for a better system.

Enter the Plain Old Telephone Service, or POTS for short, which had complex analog dialing and switching equipment in central offices to complete calls automatically. Using POTS lines, we became familiar with things like dial, ring-back, busy, reorder, and off-hook tones. We moved on from pulse dialing with step by step switching and rotary dials to digital switching systems with touch tone dialing with DTMF tones. As this system got more and more complicated with even more people installing telephones and at some point, computers, we needed yet another update.

Instead of forcing computers and other digital devices to operate over the analog POTS lines, ISDN lines were implemented. ISDN allowed for multiple channels of digital information to be sent from one place to another without having to convert the information to analog for switching, routing or transmission. Now, with the increasing use of the Internet and further development of Internet Protocol (IP), ISDN is moving over for Voice over Internet Protocol (VoIP) and Session Initiation Protocol (SIP) for telephony. In many cases, you don’t even need a PBX in your building and you don’t even need to remember a phone number.

Just like the phone company, Telos has been making improvements throughout the years to make the equipment better and easier to use. We know that top quality caller audio is important to your show, just as we also know that you need an easy-to-use system to get callers or guests on the air without a hassle. As newer phone systems allow us to do more and more, we also need to keep the experience of using the equipment easy and enjoyable, but also, more powerful.

We have come a long way. The Mitel Superset paved the way for the Desktop Director and its handy Line Status Symbols, dual mode operation, and flexibility within the 2101 system. The VSet is the latest in phone system control. Designed like a VoIP hard phone, the VSet can be connected to a talkshow system through a LAN as well as through a direct connection. It looks and acts like a phone set, but it’s really a computer disguised as a phone set. This makes for a very powerful, but user friendly call controller. Upon set up, each VSet will be assigned its own IP address and will talk to the system through the local network (if there is one) just like a computer, without a Studio I/O. This means that you can control the equipment from anywhere in the building, just as long as there is a network connection in the room.

# 2 VSet Anatomy



- |                             |  |
|-----------------------------|--|
| 1. Handset                  | 11. Delay Dump GPIO Button                   |
| 2. Handset Line Buttons 1-6 | 12. Hold Button                              |
| 3. Air Line Buttons 1-6     | 13. Next Call Button                         |
| 4. Upper Display            | 14. Drop Button                              |
| 5. Upper Soft Keys          | 15. Lower Soft Keys (VSet 12 Only)           |
| 6. Menu button              | 16. Lower Display (VSet 12 Only)             |
| 7. GO Button                | 17. Air Line Buttons 7-12 (VSet 12 Only)     |
| 8. Number Keypad            | 18. Handset Line Buttons 7-12 (VSet 12 Only) |
| 9. Screen Hold Button       | 19. Handset Cable                            |
| 10. Block All Button        |  |

# 3 Installation

## Before You Begin...

Your new Telos VSet phone is designed for fast, intuitive control of Telos VX Engine, iQ6, and Hx6 Talkshow Systems. Please configure your Telos phone system according to the instructions in the User Manual before connecting your VSet to the network.

VSet phones receive 48-volt power through their Ethernet connection, allowing PoE (Power over Ethernet) to be supplied by Ethernet switches equipped to provide it. Note that this uses 15.4 watts of your switch's PoE power. If your Ethernet switch does not have PoE capability, please use an in-line PoE injector. A PoE injector is also required for non-switched direct connections to the Hx6 Digital Talkshow System.

## Connect Your VSet

First, determine whether your system's Ethernet switch provides PoE. If so, connect one end of the supplied Ethernet cable to one of your switch's PoE-enabled ports, and the other to your VSet.

If your switch does not have PoE capability, connect an in-line PoE Injector to the switch via the Data In jack. Connect your VSet to the Data & Power Out jack and plug the injector into an AC power outlet.

A direct, non-switched connection between the Hx6 and a VSet is possible without use of a cross-over cable. Standard Ethernet cables from the HX6 between the PoE power supply and both the Hx6 and VSet are acceptable.

The LED indicators near the VSet connection port should show solid green (good connection); the yellow LED should be flashing, indicating data flow. After a few seconds, the VSet's LCD screens will light. If they do not, check the connection of the PoE Injector and / or Ethernet cable.



## Assign an IP Address

### Note:

In factory default configurations, the IP addresses between a VSet and an Hx6 should default to directly compatible settings.

Press the Menu Button and find the Setup option. On the VSet 6, you will need to scroll down using the soft keys or press the Line Button next to More. Press and hold the Line button next to Setup for five (5) seconds and release. No visible change will occur while holding this button. The long-press is needed or the Setup options will be disabled on the next screen.



### IMPORTANT:

The Star (\*) Key is used to enter a dot (.) and the Pound (#) key is used to enter a Backspace.



Enter the IP address and netmask values that you wish to assign to the phone. When the IP address is entered, press either the GO Button or the Enter soft key to save the entry.

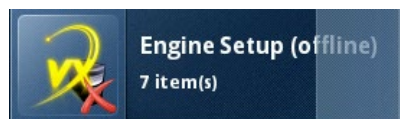
### Note:

Do not assign a Gateway address unless directed to do so by Telos Support

Press the Menu Button to save settings and exit.

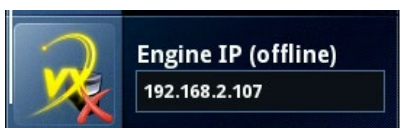
## Connect to the Telos System

Press the Menu Button and find the Engine Setup option. On the VSet 6, you will need to scroll down with the soft keys or press the Line Button next to More.



Press and hold the Line Button next to Engine Setup for five (5) seconds and release. No visible change will occur while the button is being held. The long-press is needed to allow you to change the settings in the next screen.

Press the Line Button next to VX Engine List to select from the list of VX Engines and/or talkshow systems installed on your network. OR using the Engine IP box, manually key in the IP address of the VX Gateway or other Telos hybrid or VX Engine you wish to connect to the VSet. The star key is . and the # key is backspace. Press the GO Button or the Enter Soft Key to save the entered IP. If the login information of the system has been changed, enter it into the User and Password fields. Default is Username is user and there is no password. Press the Menu Button to save settings and exit.



## Select Studio

Select the correct Studio from the VX Engine or hybrid. Do this by pressing on the corresponding Line number button. The available Studios will be listed vertically.



## Select Show

Once the Studio is selected, you will be prompted to select the Show. Once the Show is selected, the available lines will show as available on the VSet's display (s).

After this step, your VSet is ready to control calls.



### IMPORTANT:

Since certain functions work differently in "Talent" verses "Producer" mode, it is important that your staff understand that there are two modes, and how to switch between them. This is covered in the beginning of the next section (User Operation) and again in the menu navigation section.

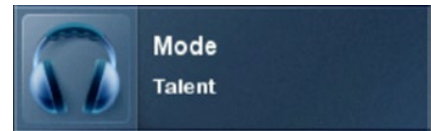
# 4 User Operation

## Talent and Producer Modes

The VSet can be set to either Producer or Talent Mode. This can be changed at any time independently for each VSet on the network. Producer mode can be thought of as “call screener mode” while Talent Mode can be thought of as “calls on-air” mode.

The VSet should be set to Talent mode when it is located in the studio and is used to put calls on the air. Producer mode is for a VSet that is being used to screen calls. In Producer mode, calls cannot be put on-air and are protected from being dropped.

To change between Producer and Talent Mode, press the Menu button to access the menu functions. The LCD will show the various items that can be changed. Press the On-Air Line Button next to the Mode Section, select Talent or Producer and then exit the menu functions by pressing the Menu button.



The VSet will indicate when it is in Producer mode by placing a little letter 'P' in the upper left hand corner of the Home Screen.

## Line Status Display

On the Home Screen, each phone line has a portion of the LCD display that shows symbols and info about the line such as status and Caller ID:



The Line is ready for incoming or outgoing calls



The Line is ringing



The Line is On the Air



The Line is Locked On the Air



The Line is assigned to the Handset



The Line is on Hold



The Line is on Screened Hold and will be seized when NEXT >> is pressed



The Line is ready for ENBLOC Dialing --- more on that later.

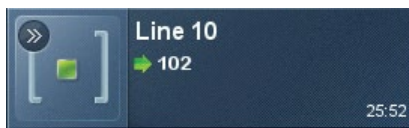


The Line is in use elsewhere, perhaps in another studio. Shhhh...



The Line is Blocked

## The Next Indicator



The '»' symbol marks the line that will be taken when the NEXT button is pressed.

## Fader Number



The orange rectangle near the status icon a with number indicating which hybrid is handling the call.



## Fader Select (not depicted)

When a line is selected for Air, Hybrid 1 is automatically selected and you will see options appear next to the soft keys. There will be one per hybrid. Pressing the soft keys next to these options will choose which hybrid handles the call and on which console fader the call appears. You will see the Fader Number change depending on which selection you make. When used with the VX Engine, backspace may be an option for ENBLOC dialing (more on that later).

## Line Name

This is the first line of text in the line row. This is defined using the VX Engine's web GUI and is automatically configured for POTS lines by the Hx6 or iQ6.

## Caller ID

Caller ID will be displayed on incoming calls if it is available. Outgoing calls will show the number dialed. The green arrow pointing to the right indicates an outgoing call while a blue arrow pointing to the left indicates an incoming call. Calls that are blocked or that come in from lines without caller ID may display 'anonymous'.

## Time

The length of time the call has been active, ringing in or on Hold.

## Action Prompt (not depicted)

When PROMPTED HOLD/DROP mode is enabled, this icon shows what line will be affected by drop and hold. Choose the line you want to drop or hold after pressing either of those two buttons. This is shown only when more than one is possible; this step is not needed when only one line is possible, when the line would be dropped or held immediately.

## Line Button Columns

Each line has 2 associated buttons to the left of the LCD. Pressing a left column line button puts a held or ringing caller on the handset. Press the right column button to put a line on air, dropping any other unlocked calls. If a call is already on the air, pressing the right button locks the line, or if already locked, unlocks it. That is, it toggles between the two states. Not to worry, we've made it difficult to accidentally drop a call. Call screeners or producers should use the Ready Hold button (the one with the checkmark) to put lines in ready hold mode and assign priority for the Next function. See "Next" Button and function.

Ready hold works like normal hold, except the line status icon has the checkmark to indicate to operators that a call has been determined to be ready for air, normally by a producer/screener. The Vset must be in Producer mode in order to use this key.

### PRO TIP:

You can re-order the next priority queue at any time. Put lines in Ready Hold - even those already on Ready Hold - in reverse order from the order you wish to air them. First, Screen hold the call to be aired last, then the call to be aired second to last and so on. You would screen hold the call that you want to be aired next, last. At first blush, this may seem confusing, but it makes sense when you remember that the call held the longest goes first to air.

## Hold Button

Holds a call that is ringing, on the handset, or on-air. When PROMPTED HOLD / DROP mode is enabled and if more than one line is active, there will be a small hold icon near the status icon on the lines that could be held. Press the line that you want to hold. If PROMPTED HOLD / DROP mode is disabled, all unlocked active lines will be held.

When a call is on hold, the caller will be able to hear the Program On Hold that is sent to the POH input of the system. Selecting that line for air or picking up the handset and selecting the line will take the call out of hold.

## Drop Button

This button drops a call that is active in the handset, or unlocked on-air. When PROMPTED HOLD / DROP is enabled, there will be a small drop icon next to the status icon on the lines that are unlocked and could be dropped. If this mode is disabled, all unlocked active lines will be dropped.

## Lock

Normally, taking a call to air causes any others on-air to be dropped. If you need to conference two or more calls, you can use the lock function. Press an already on-air line button to lock it. The line status icon will change to display the locked symbol. Pressing the button again unlocks the line and the lock icon goes away. Locked calls remain on-air until they are unlocked. The Drop and Hold buttons have no effect on a locked line.

## Next Button

In Talent mode, this button puts the “next” call on the air. The Talent NEXT priority is as follows:

1. Longest waiting ready/screened hold
2. Longest waiting hold
3. Longest ringing-in

The Producer can manually override these and assign priority as desired. In Producer mode, this button takes the “next” ringing call. So the Producer NEXT priority is the line that has been ringing in the longest. In Producer mode, NEXT does not take any held lines.

## Block All

Pressing this button will cause all inactive and ringing lines to be dropped and blocked from handling any calls. Calls on-air, on the handset, on hold and the fixed lines will not be affected. The usual application for this function is to let you prevent early callers from getting in on contests until after you’ve made the announcement and released the lines to accept calls.

### **HOT TIP:**

**As you may know, there have been several lawsuits regarding the “fairness” of radio contests. By consistently activating the **Busy All** feature before announcing a contest, your staff will reduce the liability for the station.**

When block all mode is selected, as lines become available, they will automatically “go busy”.

Pressing Block All again will release the lines and allow incoming and outgoing calls.

When Block All is active, a small letter ‘B’ will appear in the upper right hand corner of the main screen.

**Note:**

**Block All will affect any lines that are shared between studios. So if a you are seeing a blocked line on a VSet that is not in Block All mode, odds are there is a studio in the building that has Block All active.**

## Numeric Keypad and the GO Button

This section is used for dialing out either on the handset or on air. The VSet operates differently depending on which system it is connected to.

**PRO TIP:**

**The DTMF “Touch Tones” used by telephones can be easily decoded. When dialing on the air, do not enter private numbers or passwords without first turning off the hybrid’s audio on your console or this private information will be broadcast.**

## Hx6 & iQ6

When the VSet is used with the Hx6 or the iQ6, the VSet will operate like a normal POTS phone. When a line is selected for air or the handset is lifted and a line selected, dial tone will be heard. When a number is dialed it will be dialed in real time with DTMF tones.

When the last digit is entered, you will either hear ring-back, busy, or re-order tone (Or dead air followed by the operator error message if you didn’t enter enough correct digits.) Hopefully, if you hear ring-back tone, it doesn’t last for too long and the correct party answers. On with the show!

## VX Engine

When the VSet is used with the VX Engine, the VSet will operate like a VoIP phone and ENBLOC dialing is used. When a line is selected, no dial tone is heard and the line will not be seized until the call is executed.

While a number is being composed, the digits will appear in the line info field. During this time, the selected line is blocked and all other VSets on the network will display the Line as ‘in-use’ to avoid glare and unwanted interruptions.

After a number is entered, the GO button initiates the connection, similar to a cell-phone. After pressing the GO button, you will not hear any DTMF tones, just a short pause and your call will be completed, presuming you entered the correct digits.

When the handset is used to make a call, dial tone and DTMF tones will be heard, but the call will not be executed until the GO button is pressed.

With ENBLOC dialing, you have the opportunity to correct any dialing mistakes by using the backspace soft key and correcting the number before executing the call. The keypad works during an active call to generate DTMF tones for use with voice mail, automated attendants, and being obnoxious on the air.

#### CURIOSITY NOTE:

We don't know why the condition of picking up a line which was about to ring and getting an incoming call instead of dial tone is called "Glare." Perhaps it's because of the looks air staff give engineers when this happens too often! If you find out, be sure to let us know.

## Transferring Calls

There is one of two ways to accomplish a call transfer and it depends on which system you are using.

### Hx/iQ6 Systems

A call transfer over POTS is traditionally done with three way calling. To do this, move the call to the VSet handset by lifting the handset and selecting the unlocked line with the left (un-numbered) line button. Flash the handset's hookswitch by pressing and releasing within 300ms and you will be presented with a dial tone. Enter the number to which you wish to transfer the call and wait for a ringback tone. When the second party picks up, flash the hookswitch again to conference the calls and hang up.

Notice: If three-way calling is not available on your circuit, you will not be able to perform this transfer.

### VX System



**TRANSFER**

When a call is active on the VSet, you will see a transfer icon appear next to the top most soft key on the right of the VSet's display. Press this soft key and you will be presented with a dial tone. Enter the extension to which you wish to transfer the call and press GO. The call will leave the VSet and will ring to the new extension you have specified.

**FADER 1**

**FADER 2**

Notice: This feature is not available in the 1.1.4 software version for regular VX. Contact Support for an update.

## Take it Easy

We've built a lot of flexibility into the VX system to support all the sophisticated things you might want to do. But you don't have to use all the fancy-pants stuff when you don't need it and a simpler subset will do.

In the simplest case, when you are a talent supported by a producer, you could just use the NEXT and DROP buttons. You press the NEXT button to take calls in the sequence determined by your producer and you press the DROP button when you are finished with your last call and you want to stop taking more.

One step up would have you pressing the right column Line buttons to select the calls you want, one at a time. Again, when you are finished taking calls, you would press DROP. You could use the left column Line buttons to talk with callers on the handset.

At the next level, you would use either the Lock function or the fixed line capability to conference calls.

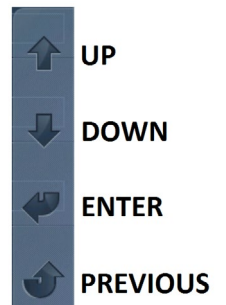
# 5 Menu Button



Pressing the Menu Button sends you to the main menu screen. This is where you will find all of the features and functions that do not appear on the main screen because they will not be used as often. After pressing the Menu Button, the menu screen will appear on the display with a set of soft key functions.

When selecting items from the Menu Screen, you can use the corresponding on-air Line Buttons or you can navigate the menu using the soft keys.

If you are using the VSet 6, only half of this menu will be visible at a time. You can scroll through the menu with the soft keys or select the “more” option next to its corresponding Line Button.



## Mode

This item toggles between Talent and Producer mode. When the VSet is in Producer mode, a small ‘P’ will appear in the upper right hand corner of the Home screen. For more info on the Mode settings, please refer to the User Operation Chapter of this manual.

## Select Show

This item allows you to recall a show configuration that has been set up and stored within the Vx Engine. Because they are single show systems, there is no show preset function with the Hx6 and iQ6. For more info about setting up a show, please consult the Vx Engine Manual.

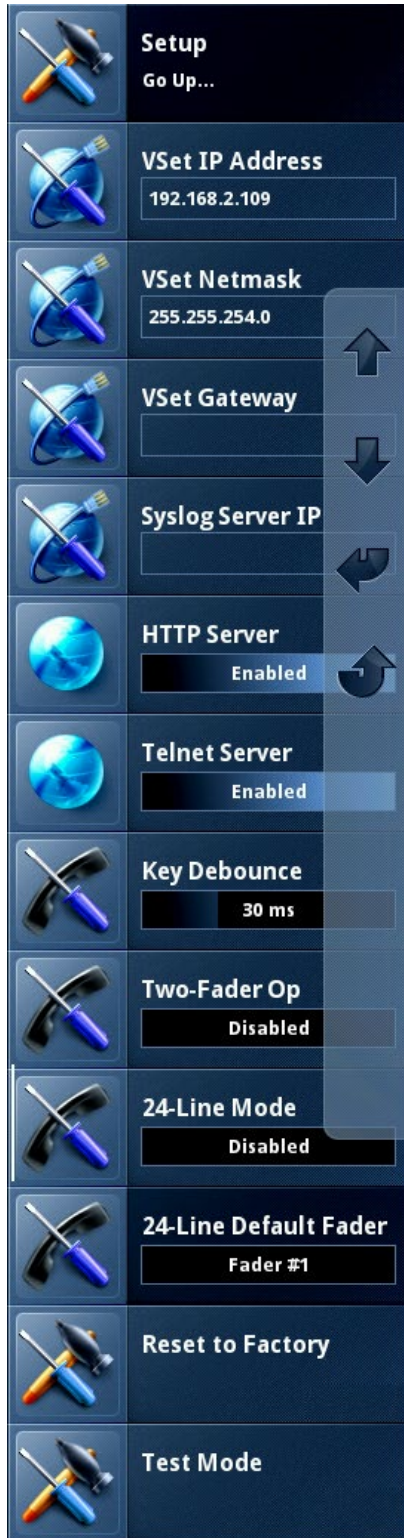
## Mute Ringer (Master)

Enable this function if you do not want any ringers to sound when there is an incoming call on the line. It is recommended that this setting be enabled because VSets usually live in places where there may be live microphones, such as studios, editing bays, etc.

When the master ringer is muted, there will be a small ‘M’ in the upper right hand corner of the Home Screen on all VSets in the system.



## Setup Menu



Here is where you will find the most fundamental of settings for the VSet. There is a trick you need to know in order to change any of these settings. Within the main menu, you must press and hold the numbered line button next to Setup for 5 seconds and release.

If you don't do this, the VSet will only allow you to read these parameters. We do this so you can keep tinkers out of the network setup and this keeps you (the engineer) from having to reset them. So keep this a secret.

### VSet IP settings

The first two fields are straight forward. The VSet's IP address and netmask are configured here. The pound key is used for backspace and the star key is used for dot (.)

### Syslog Server IP

If your facility has a syslog server installed and if you need to have the VSet report things to it for diagnostics, here is where the IP address of that machine is entered.

### HTTP Server

Enabling the HTTP Server function allows you to access the VSet's web GUI from any computer connected to the network by typing the VSet's IP address into a web browser. If you don't want to allow people to access the web GUI to make changes, disable this function. More on this later.

### Telnet Server

Enabling the Telnet Server function allows you to access the VSet using telnet services that use port 23 such as Pathfinder or Putty for control and diagnostics.

### Key Debounce

All small mechanical switches exhibit something called *hysteresis*. When this happens, the VSet may sense multiple presses when a button is only pressed one time. The Debounce function reduces hysteresis by ignoring input that happens faster than the setting in the field, in this case, 30 milliseconds.

### Two-Fader Op Mode

Some users don't prefer the two or three-button press method of placing a caller onto hybrid #2. This mode allows the user to place calls on hybrid #1 using the left-hand line column (unmarked) and to place calls on hybrid #2 using the right-hand (numbered) line column. When the handset is off-hook, the left-hand (unmarked) column will control the handset once again.

### 24-Line Mode and Default Fader (VX Systems Only)

These functions are used when there is a need to have more than 12-line positions present on the controller. When 24-Line Mode is enabled, the left-hand blank (handset) column controls line positions 1-12 while the right-hand numbered column controls line positions 13-24. The number selected in the Default Fader field will determine which fader callers go to when selected from this controller in 24-Line Mode.

## Reset to Factory

This does exactly what you think it might. Once you select this option, there is no turning back. All parameters will have to be reset. Use this as a last resort.

## Test Mode

This is an advanced diagnostic system for advanced troubleshooting.

## Engine Setup Menu

Here is where you will find all of the settings regarding the Telos system to which you want the VSet to communicate. After initial setup, there will be very few adjustments you may need to make to these settings and there is a trick you need to know in order to change them. Within the main menu, you must press and hold the On-Air line button next to Engine Setup for 5 seconds and release.

If you don't do this, the VSet will only allow you to read these parameters. We do this so you can keep tinkers out of the engine setup and this keeps you (the engineer) from having to reset them. So keep this a secret.



### Engine IP

Use this input field to tell the VSet with which Telos system to work. If there are multiple Talkshow Systems on the network (iQ6, Hx6, or Vx Engine), you can manually dial the IP for the system you want into this field. Once the IP is entered, the GO button or the Enter soft key will commit this IP and you will see the VSet react.

### Vx Engine List

If you just can't remember the IP addresses of all the talkshow systems on your network, not to worry. When this menu item is selected, the VSet will display all of the compatible Talkshow Systems that are available on the network with their IP addresses. Select a system by using the soft keys or by pressing the On-Air Line Button next to the system to which you wish to connect.

### User and Password

The VSet needs to log itself into the system in order to communicate. In these two fields you will enter the user name and password for the Talkshow system to which you want the VSet to connect. The factory default is User: **user** Password: **<leave this blank>** To change the user name and password, please refer to the manual for the talkshow system with which you are working.

### Select Studio

Use this item to select the Studio for the VSet. Hx6 and iQ6 is only capable of handling one Studio. For info on setting up a Studio, please refer to the Vx Engine Manual.

### Studio Line Shift

If you have more lines available than you have Line Buttons on the VSet, you can offset the display by the number of buttons available to allow access to those other lines.



## User Preferences Menu



Within this menu you will find parameters that dictate how the VSet will operate.

There is no long pressing involved in being able to change settings within this menu set.

### Auto Hold

This menu item enables or disables the Auto Hold function on your hybrid. When it is enabled, there will be a small “H” in the upper right hand corner of the main display. A call will automatically be answered and placed on hold by the hybrid. When a call comes in, the caller will hear POH until the call is picked up. When Auto Hold is disabled, the incoming call will ring in as usual.

### Ringing Line Preference

With this enabled, incoming calls will be automatically taken and sent to the handset when the handset is lifted from the cradle. With this function disabled, the VSet will wait for you to select a line from the handset Line column before taking an incoming call.

### Lockless Mode

This feature turns off the Call Lock function to allow the VSet’s On-Air Line Buttons to operate more like an office phone. With this function enabled, you will be able to seize and drop calls from the Line Buttons instead of using the Drop button.

#### Be careful with this one!

With Lockless Mode disabled, an on-air call is locked with the second push of the Line Button. With Lockless Mode enabled, an on-air call will be **dropped** with the second push of the Line Button. So if you have On-Airs who are used to office phones, use this feature. If you have On-Airs who are used to legacy Telos controllers with the lock function, do not use this feature. You have been warned!

### Ignore Mute (Producer)

Enable this function if you want the local VSet (the one in front of you) to ring. This will over-ride the Mute Ringer function, if it is enabled, in producer mode only. The VSet will stay muted in Talent Mode, providing the Mute Ringer function from the Main Menu is enabled.

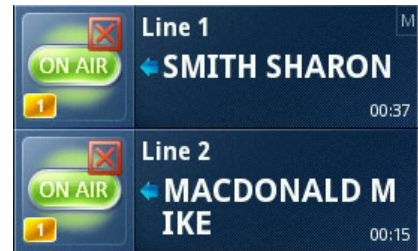
### Auto Dial Timeout

When dialing using ENBLOC (remember the GO Button), the number dialed will automatically dial after the specified amount of time if the GO Button is not pressed. When this function is set to Disabled, the VSet will wait until the GO button is pressed before executing a call. If you are using the VSet with an iQ6 or Hx6, you are not using ENBLOC dialing and therefore this feature does not apply.

## Prompted Drop/Hold

With this function enabled, the VSet will display an action prompt when two or more calls are unlocked and the Drop or Hold button is pressed. It will then wait for you to select the call with its corresponding Line Button before executing.

Disable this function if you want all unlocked calls to be affected at once when the Drop or Hold button is pressed.



## Ringer In Headset

Enable this function if you are using a headset with the VSet and you wish to hear an alert in the earpiece when a call comes in.

## Brightness

This item allows you to control the brightness of the display. Use the + and – soft keys to adjust.

## Volumes

This item takes you to the Volumes Menu where all of the volume controls for the VSet can be found.

## Address Book



The Address Book menu in the VSet is pretty straight-forward. What you see is what you get. If the Phone Book section of the hybrid / Vx Engine is set up, you will see a list of names along with their corresponding phone numbers.

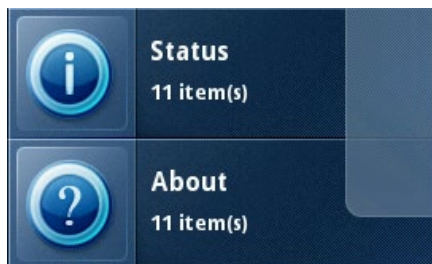
If you want to dial a number from the Address Book, select the contact using the soft keys and execute the call using the Enter soft key.

This can also be done by simply pressing the On-Air Line Button next to the contact you wish to dial.

In Talent Mode, the selected contact will be sent to Air, while in Producer Mode, the selected contact will be sent to the handset.

Adding and removing contacts is done on the talkshow system's web GUI because the Address Book database lives inside the hybrid / Vx Engine. This is done so that if you have to change a contact in the phone book, you will only have to do it once and all VSets will stay up-to-date. Refer to the phone book section of the manual to your hybrid / Vx Engine for instructions on adding and removing contacts.

## Status and About



These two menu items will display information about the local VSet, that's the one in front of you.

The Status Screen will tell you things that are happening inside your VSet in real time. This screen can be used for diagnostics and general information about your VSet's behavior on the network.

The About Screen is the about screen. It tells you *about* the VSet, software, Telos, etc.

Give it a look.

# 6 Web Graphical User Interface

The image shows a web browser interface for a VSet device. It consists of six stacked panels, each with a dark blue header and a light gray body. 
 1. **Screenshot**: Has a 'Take screenshot (png):' label, a 'Screenshot' button, and a notice: 'Notice: Screenshot will open in the same window.'
 2. **Config**: Has 'Backup config (xml):' with a 'Backup' button, and 'Restore config (\*.xml):' with a 'Browse...' button (showing 'No file selected.') and a 'Restore' button. A notice states: 'Notice: Network configuration, e.g. IP address, is not saved in the config and will not be restored.'
 3. **Firmware Upgrade**: Has 'Firmware image:' with a 'Browse...' button (showing 'No file selected.') and an 'Upgrade' button. A notice states: 'Notice: Firmware will be uploaded to inactive bank.'
 4. **Firmware Version**: Shows two banks. Bank 1 is selected (radio button) and shows 'ver. 1.2.1-r12364 (build Mon Oct 20 10:16:18 2014) (active)'. Bank 2 shows 'ver. 1.2.0-r11629 (build Tue Sep 17 13:09:10 2013)'. There is a 'Change bank' button and a warning: 'Warning: System will reboot after changing active bank.'
 5. **User password**: Has 'New password:' and 'Repeat new password:' labels with text input fields, and a 'Change password' button. A notice states: 'Notice: Password length must be less than 32 characters.'
 6. **Syslog Server Configuration**: Has 'Syslog Server IP:' label with a text input field and an 'Apply' button. A notice states: 'Notice: Syslog Server IP must be a valid IP address.'

The Web GUI can be viewed with a browser on a computer on the same network as the VSet and its hybrid / VX Engine.

With HTTP Server enabled on the VSet, key the IP address of the VSet into a web browser and you will be asked to log into the VSet.

## The Default login is:

User Name: user

Password:

## Screenshot

This button will load the current VSet display onto the browser for troubleshooting and diagnostics. Just copy and paste.

## Config

Use this function to backup the configuration of the VSet. This makes it easy to reload settings into the VSet if it happens to forget what it's supposed to do, or if you replace the VSet.

Once the VSet is all set and ready to go, click the Backup Button. This will allow you to save an XML file to your computer. To load a configuration file, click the Browse button and select the appropriate XML file. The file will display in the config section to confirm. Once you have confirmed the file, click Restore.

### Note:

The network configuration, i.e. IP address and net mask, will not be saved in the config file, therefore cannot be restored. You will have to enter those manually using the steps in the Installation chapter of this manual.

## Firmware Upgrade and Version

The time may come to update the firmware inside the VSet. Firmware updates fix problems that may exist and improve on functionality in general.

The first step is to get the new firmware onto your PC. This will usually be via a download from the Telos website or an email attachment from Telos customer support. The file will have the extension \*.vspk. When the firmware is available on your PC, click the Browse Button to locate it, and then click Upgrade to load it into the inactive bank on the VSet.

Once the software loads into the VSet, it is now necessary to reboot the VSet into the new firmware. To do this, click on the inactive bank's radio button in the Firmware Version section of the GUI, and after confirming that this bank has the new firmware on it, click Change Bank.

The VSet will reboot and when it comes back to life, it will be running the new firmware. To verify, you can look at the very top of the GUI and read the software version and build date. If you are still not convinced, you can press the Menu Button on the VSet and navigate to the About Screen.

### IMPORTANT:

**DO NOT run the software on your computer. The software is meant to run on the VSet. So if you have your browser set to automatically run downloaded files, turn it off for this process.**

## User Password

Here is where you will enter and confirm a new password for the web GUI. The default is no password, blank. All current Telos default passwords are blank. So if a new password is created, you must remember it, or else you will not be able to log back into the GUI.

If the password is changed and forgotten, it can be reset to blank by resetting the VSet to factory defaults. To do this navigate to Menu / Setup (hold for 5 seconds) / Reset to Factory. For more information on resetting factory defaults, please refer to the Setup Menu section of this manual.

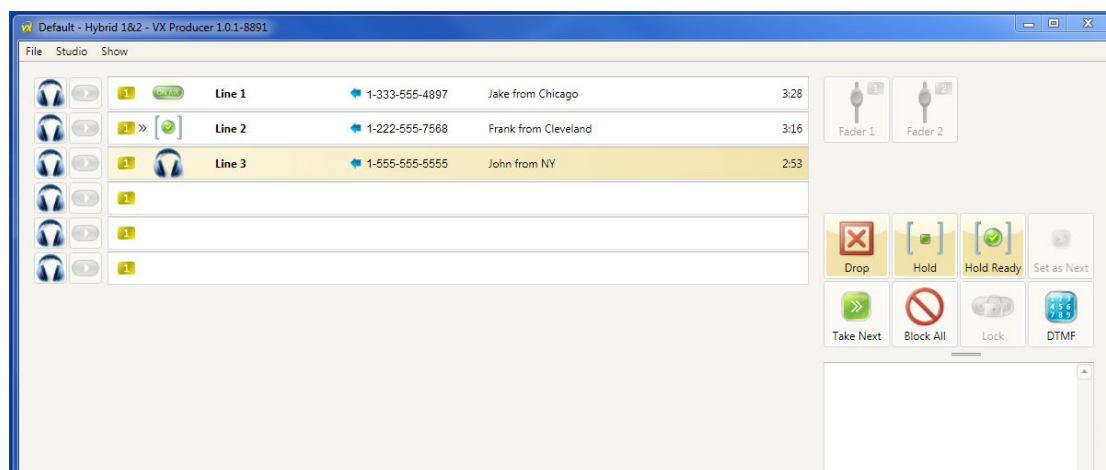
## Syslog Server Configuration

The VSet will communicate to a network logging system or a Syslog. If your studio network has a Syslog server and you want the VSet to appear in the logs, enter its IP address here.

# 7

## VX Producer

VX Producer can be downloaded from The Telos Alliance website and will turn your computer into a call screener and a basic call controller. This is the perfect tool to compliment the VSet. Don't those controls look familiar?



File / Connect will allow you to connect to any iQ6, Hx6, or VX Engine on the same network as the computer.

File / Settings allows you to select the Mode of VX Producer. The same rules apply to VX Producer as they do to the VSet regarding Talent and Producer Modes. Also in this section, you will find the audio input and output configuration tab.

VX Producer has all of the same call directing functions as the VSet plus a few more features that can be useful to a call screener such as a comment input field. Double click in the area next to the phone number and you can key in a short message that will be visible on the VSet. This is helpful if the host wants information about the caller before taking the call. Other features include the ability to record, but we won't be discussing that here.



Clicking the Headphone icon next to a line row will seize the corresponding line and send it to the output on your computer chosen in the aforementioned settings dialog.



Clicking the Play icon (in Talent Mode) next to a line row will seize the corresponding line and send it to Air.

All the other basic call functions on the main screen are identical to the functions on the VSet so if you have read the previous chapters, you should be fine.



# 8 Troubleshooting...

It happens to everyone. Sometimes equipment just won't behave. In some cases, the equipment might need to be sent in for repair. In other cases, something else is amiss and is disguising itself as a malfunction. Here is a list of things to consider before contacting Technical Support.

Problem:	Remedy:
VSet is not responding. Screen is dark and blank.	Check that the VSet is connected to a network switch with PoE or that the PoE injector is connected properly.
VSet is not responding. Screen is on (white) and blank	Power cycle the VSet and wait several minutes. If no change, then the firmware is corrupt or the unit is bricked.  Contact Technical Support for repair.
VSet shows line positions, but everything is blank. Other VSets work fine.	Studio Line Shift is enabled. Enter the Engine Setup menu and disable it. See Section 5
I can't change the VSet IP, network or Engine configurations. The information is greyed out and is inaccessible.	Go back to the Main Menu and hold down the button for "Setup" or "Engine Setup" for 5 seconds and release.
The VSet is on the network but won't talk to the Hybrid / VxEngine.	Check the condition of the hybrid/engine and confirm that both the VSet and the Talkshow system are on the same subnet.  Also, make sure that the Engine / Hybrid IP is correct within the VSet "Engine Setup"
Some Lines are Blocked and Block All is not active.	Block All is active in another studio. Find a VSet on the network that is in Block All (small 'B' in the upper left corner of the home screen) and deactivate Block All.
I can take and make calls from the Handset, but I can't put calls on the air.	The VSet is in Producer Mode. Switch the VSet to Talent Mode.
I dialed a number and nothing happened.	If you are using the VxEngine, calls are handled with ENBLOC Dialing. Press the GO button after the last digit is dialed.  --OR--  Set the Auto Dial Timeout in the Preferences Menu to a reasonable time.
Calls are being initiated before I can finish dialing all the digits.	Set the Auto Dial Timeout in the Preferences Menu to a longer duration.
When I pick up the handset to take a call that is on hold, a ringing line is picked up instead.	Ringing line preference is enabled.  Go to Menu / Preferences / Ringing Line Preference and disable it.
Calls are dropping instead of locking.	Lockless Mode is enabled.  Menu / Preferences / Lockless Mode
When I press a numbered line button, the call always goes to Hybrid 2 instead of Hybrid 1.	VSet is in Two-Fader Op mode. The unmarked line key controls Hybrid 1 in this mode.

# 9 User Reference

## Legend of Symbols

### Line Status Symbols

	Ready
	Ready & Fixed (line <i>n</i> to hybrid <i>n</i> )
	Ringing
	Line is On-Air (Fader #2)
	Line is Locked On-Air (Fader #1)
	Active in Handset
	Line is on Hold
	On Screened Hold (Next in cue)
	Ready for ENBLOC dialing
	Line is active elsewhere
	Line is Blocked (See Block All)

### Soft Key Functions

	Navigate Up
	Navigate Down
	Return / Enter
	Go back one menu
	Backspace
	Delete
	Adjust Up
	Adjust Down
	Handset Volume Up
	Handset Volume Down
	Fader Select
	Call Transfer (VX Only)

### VSet Status Symbols

These symbols will appear in the upper right hand corner of the main screen of the VSet:

	VSet is in Producer Mode
	System Master Ringer Mute is On
	Block All is active
	System is in Auto Hold



## System Specifications

The VSet is designed to work with all VX products, the Hx6, and the iQ6. The VSet will NOT work with Nx family, Telos One family, Telos Two family, 2101, Hx1 and Hx2.

### Default IP Addresses:

VX Engine IP: 192.168.2.107

VX Prime(+) IP: 192.168.2.200

VX Enterprise IP: 192.168.2.200

Hx6 IP: 192.168.2.200

iQ6: 192.168.2.200

### Default Login:

User Name: user

Password:

These defaults can be changed within the VX Engine / Hybrid please refer to the manual for your system.

## VSet GUI Access

### IP Address:

On the VSet, navigate to Menu / Setup and read the VSet IP address field.

### Default Login:

User Name: user

Password:

## VSet Ethernet Specifications

### Network Addresses and Subnet Mask

Readable on the VSet. Navagate to Menu / Setup.

### TCP/IP port:

20514

### PoE Power Consumption:

15.4 watts

Use this page to list things like IP addresses, phone numbers, usernames, passwords, serial numbers, etc.

[illegible]



# Telos Alliance Limited Warranty

## Telos Alliance Limited Warranty



For the latest Telos Alliance warranty, visit: [telosalliance.com/warranty](https://telosalliance.com/warranty).

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