



Visual Concert FX User Guide

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Introduction to Visual Concert FX

Overview

Visual Concert™ FX is a peripheral device that is designed with ultimate ease of use in mind, and allows unprecedented collaborative capability with the ViewStation™ FX and VS4000 videoconferencing systems.

Visual Concert FX transmits live output in real time from the presenter's computer without the need for a supporting application running on the presenter's computer. This allows the presenter to transmit live images and sound from any application that can run on the desktop (such as PowerPoint, Excel, a Web page, or proprietary software applications) regardless of the computer's operating system.

The Visual Concert FX unit acts as a tabletop communications hub. This allows a presenter to connect the computer to the Visual Concert FX unit using the special VGA/Audio/Ethernet cable, and immediately enjoy full network connectivity and full audio and video transmit capability, whether the presenter is in a conference or not.

The Visual Concert FX VGA output port allows the presenter to connect a high-resolution projection system or VGA monitor for in-room displays. When in a conference, the Visual Concert FX unit's dual stream capabilities allow display of video and graphic images at the near and far sites, video on one monitor, and the live graphics on a second monitor or projector.

Visual Concert FX supports input resolutions of up to SXGA resolutions up to 1280 x 1024, and will auto-sync with your conferencing system to provide the optimum output resolution. The maximum output resolution is XGA (1024 x 768).

Visual Concert FX is designed to work with both the ViewStation FX and the VS4000 conferencing systems. For the sake of brevity, "ViewStation FX" is used throughout the manual to indicate functionality for both systems. Visual Concert FX is designed for the tabletop, but can be mounted on a wall, under a conference table, or inside a podium.

What's in the Box

Your Visual Concert FX box contains the following items:

- Visual Concert FX unit
- One 30-ft. FX power connection cable
- One 4-ft. PC connection cable (VGA/Audio/Ethernet)
- Two 6-ft. microphone cables
- Wall-mount accessories
- One CD: required software and user documentation
- One QuickStart (installation) card
- One power supply
- One AC power cord

System Requirements

The following hardware and software requirements are the minimum necessary to install and operate Visual Concert FX.

ViewStation Software

The following Polycom systems must have at least the following software versions to support dual-streamed video with Visual Concert FX.

Polycom Systems	Software Releases
ViewStation FX	Release 4.0 or greater
VS4000	Release 4.0 or greater
ViewStation	Release 7.0 or greater.
ViaVideo (single-stream)	Release 2.5 or greater PC screen is sent as main video stream.

VGA Display Settings

Visual Concert FX can transmit VGA output from any computer running any operating system, as long as the VGA output matches one of the following resolutions and frequencies.

Resolution	Frequencies
640 x 480	60, 72, 75, 85 Hz
800 x 600	60, 72, 75, 85 Hz
1024 x 768	60, 70, 75, 85 Hz
1280 x 1024	60 Hz

Most computers have a default VGA output frequency of 60 Hz. This is the recommended frequency.

For further information about VGA display resolution settings, see “Troubleshooting the VGA Output Display,” on page 15.

Installing Visual Concert FX

This chapter contains information about installing Visual Concert FX (see the section “Installation Instructions” below). It also explains how to set the computer and the ViewStation FX display options (see “Display Option Settings,” on page 7).

Installation Instructions

This section covers the following information:

- How to connect Visual Concert FX to the ViewStation FX (see “Connect Visual Concert FX to the ViewStation FX” below)
- How to perform a software update (if necessary) for the ViewStation FX (see “Update the ViewStation FX Software,” on page 6)
- How to connect Visual Concert FX to the presenter’s computer (see “Connect Visual Concert FX to the Computer,” on page 6)
- VGA Display Connection Configurations (page 6)

Connect Visual Concert FX to the ViewStation FX

Follow the steps below to connect Visual Concert FX to the ViewStation FX:

1. Connect Visual Concert FX to the ViewStation FX, as shown on the installation diagram on the *Visual Concert FX QuickStart* card.

Note The *Visual Concert FX QuickStart* card is included in the Visual Concert FX shipping box.

2. Connect the microphone pods to Visual Concert FX using the enclosed special microphone pod cables.
3. Power on the ViewStation FX.
4. If you have not already done so, perform a software update on the ViewStation FX as described in “Update the ViewStation FX Software” below. Otherwise, skip to “Connect Visual Concert FX to the Computer,” on page 6.

Update the ViewStation FX Software

To update the ViewStation FX software to the version provided with Visual Concert FX:

1. Access the `Softupdate.exe` file, as follows:
 - a. Insert the Update CD into your computer CD-ROM drive.
 - b. Double-click the `Softupdate.exe` icon to open the application. When the application opens, click **Softupdate**.
2. Enter the IP address of your ViewStation FX in the dialog box that appears. If your ViewStation FX has an administrator password, enter it here and click **OK**. If it does not have a password, leave it blank and click **OK**.
3. Softupdate locates your ViewStation FX and provides basic information. To delete your existing Address Book and system setting files, check the appropriate boxes. Click **Continue**.
4. As the software is being upgraded, you will be informed of its progress. When it is finished, click **OK**. The ViewStation FX automatically reboots. Once the ViewStation FX reboot is complete, you are ready to use Visual Concert FX.

Note You can also download the latest ViewStation FX software from the Polycom Web site (www.polycom.com).

Connect Visual Concert FX to the Computer

Simply connect the presenter's computer to the Visual Concert FX unit using the special VGA/Audio/Ethernet cable. You can now immediately enjoy full network connectivity, full audio and video transmit capability, and dual stream presentations.

VGA Display Connection Configurations

Although Visual Concert FX is designed to provide optimum performance regardless of your VGA monitor configuration, some configurations provide better results than others:

- | | |
|---------------|---|
| Best | VGA monitor or projector connected to Visual Concert FX. |
| Better | VGA monitor or projector connected to the ViewStation FX. |
| Good | TV (composite) monitor connected to the ViewStation FX. |

Display Option Settings

Before using Visual Concert FX in a videoconference, take some time to familiarize yourself with the display and configuration options available with your Visual Concert FX.

Set the Presenter's Computer Display Options

Once you have connected the presenter's computer to Visual Concert FX, you must set the computer's display setting to VGA out ("mirror" or "VGA only"). On most laptops, you can switch the display settings by pressing a function + F-key at the same time.

For example, on the Dell Latitude laptop, you can switch the display settings by pressing Alt+F8. However, how you set the display settings depends on the computer manufacturer. On most computers, the following settings are available:

Default	LCD display - display is on the default LCD screen only. This setting does not transmit VGA to Visual Concert FX.
Click Once	Mirror - display is sent to VGA out (Visual Concert FX) and to the LCD screen. This is the preferred method to send VGA to Visual Concert FX.
Click Twice	VGA only - display is sent to VGA out (Visual Concert FX) only. This also sends VGA to Visual Concert FX, but is not the preferred method.

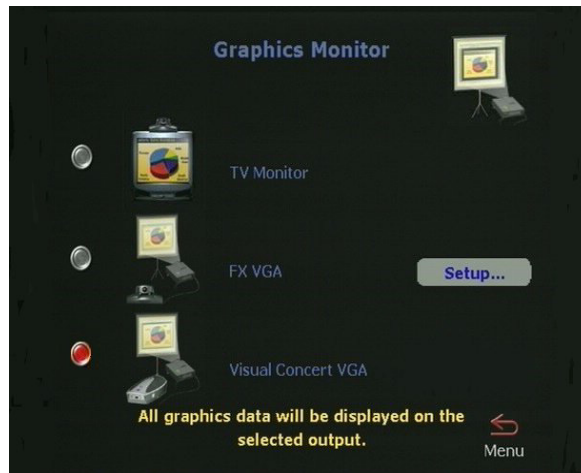
See your computer documentation for your particular settings. This setting is described by different computer manufacturers as "display setting," "VGA out," and "CRT/LCD."

Even though you can change the display settings of the presenter's computer while the Visual Concert FX presentation is running, it is recommended that you first stop the presentation, and then change the display resolution. Finally, restart the Visual Concert FX presentation.

Set the ViewStation FX Display Options

The ViewStation FX automatically selects the best possible display option for your configuration (unless you have connected the VGA monitor directly to the ViewStation FX). The best setup configuration is to connect a VGA monitor directly to the Visual Concert FX, as shown in the *Visual Concert FX QuickStart* card.

If you have an alternate configuration, the ViewStation FX detects your monitor setup configuration, and automatically sets the graphics monitor setting to the best possible display option for your configuration (as the default setting). These settings are accessible in the **Graphics Monitor** screen (*System Info>Admin Setup>Video/Camera>Monitors>Graphics Monitor*).



Possible configurations, their display option settings, and VGA output results are shown below:

- **VGA monitor connected to Visual Concert FX:**
Visual Concert VGA is selected as the default.
VGA output appears on the VGA monitor, whether you are in a call or not.
- **No VGA monitor connected:**
TV Monitor is selected as the default.
VGA output appears on the TV monitor only when you are in a conference.

- **VGA monitor to the ViewStation FX:**
FX VGA must be set manually.
If you have connected the VGA monitor directly to the ViewStation FX, you must set the display option to **FX VGA** manually. Once selected, the system does not change this setting as part of the automatic configuration process. VGA output appears on the VGA monitor connected to the ViewStation FX.

Using Visual Concert FX

This chapter is divided into two main sections:

- Visual Concert FX Operation—Visual Concert FX is simple to operate. Basic operations such as sending and stopping presentations can be accomplished by either using the **Play** and **Stop** buttons on the Visual Concert FX unit or the SLIDES button on the ViewStation FX remote control.
- Visual Concert FX Display Troubleshooting—This section describes how to troubleshoot the Visual Concert FX VGA input and output.

Visual Concert FX Operation

This section covers the following topics:

- How to send and stop presentations (see “Sending and Stopping Presentations,” on page 11)
- How to reset Visual Concert FX (see “Resetting Visual Concert FX,” on page 13)
- Remote control functionality (see “ViewStation FX Remote Control Functionality,” on page 14)

Sending and Stopping Presentations

You can send a presentation whether or not you are in a call. This lets you use Visual Concert FX and the local VGA monitor or projector without having to be in a call. You can also begin and end a presentation at any point in a call.

Either the near site or the far site can send a presentation. Either side can stop the presentation.

The following instructions assume that you have already installed Visual Concert FX (see “Installation Instructions,” on page 5).

1. Load the presentation on the presenter’s computer.
2. Connect the presenter computer to Visual Concert FX using the VGA/Audio/Ethernet cable.

Note Audio and Ethernet connections are recommended, but are not required to send a presentation.

3. To send your presentation to the ViewStation FX, click the **Play** (purple forward arrow) button on the Visual Concert FX unit. The presentation begins transmitting, the **Play** button glows green, and the **PC** icon appears in the top right corner of your near video monitor.
4. To stop sending the presentation to the ViewStation FX, click the **Stop** (blue box) button on the Visual Concert FX unit. When the presentation has been stopped, the **Stop** button glows red.

Note 1 Starting and stopping a presentation can also be accomplished through the following methods:

Remote Control. Press the **SLIDES** button on your remote control.

API Command. You can use the **vcbutton** API command which simulates the Visual Concert FX Play and Stop buttons. This command is programmed into an AMX or Crestron touch panel.

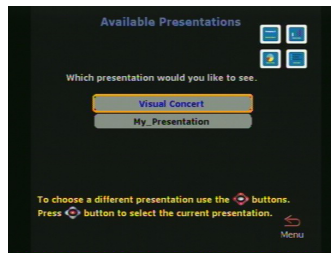
For more information regarding this command and the API, consult the *ViewStation FX and VS4000 ARENA API Programmer's Guide*.

Note 2 Visual Concert FX goes into sleep mode after four minutes of inactivity. The display goes to a no video mode and is usually black or blue.

To wake up the system, press the **Play** button (purple forward arrow) on the Visual Concert FX unit or press the **SLIDES** button on the remote control.

Selecting a Visual Concert FX or a PowerPoint Presentation

If you already have a PowerPoint presentation loaded on your ViewStation FX (via the ViewStation FX Web interface) when you begin the Visual Concert FX presentation, the **Available Presentations** screen is displayed to allow you to select between the Visual Concert FX presentation and the PowerPoint presentation.



To send the presenter's computer display to the ViewStation FX:

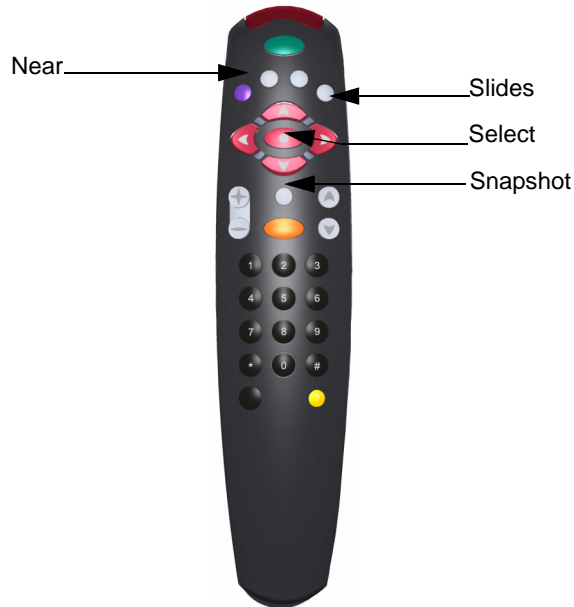
1. Select "Visual Concert" on the Available Presentations screen.
2. Press the **SELECT** button on the remote control.

Resetting Visual Concert FX

To reset Visual Concert FX, hold down the **Stop** and **Play** buttons simultaneously for 2 seconds. The buttons will flash for several seconds while the unit reboots. The **Play** button displays a steady green light when the restart is complete.

ViewStation FX Remote Control Functionality

To provide more flexible interaction with your Visual Concert FX presentation, the ViewStation FX remote control buttons are tasked with specific functions in conjunction with Visual Concert FX.



- | | |
|-----------------|--|
| Near | Provides near camera source control. |
| Snapshot | Allows you to preview and send a still (or snapshot) image of the presenter computer display. |
| Slides | Toggles the presentation display. Press Slides to send the presentation. Press Slides again to stop sending. |
| Select | Selects the highlighted option. |

ViewStation FX Display Troubleshooting

Display Options

There are several display options available while using Visual Concert FX in a point-to-point call, depending on monitor configuration:

Monitors	Visual Concert FX Display
One monitor	Main monitor
Two monitors	Monitor two
Three monitors	Monitor two
Four monitors	Monitor two
VGA connected to ViewStation FX	FX VGA monitor
VGA connected to Visual Concert FX	Visual Concert FX VGA monitor

Troubleshooting the VGA Output Display

VGA Input Calibration

Visual Concert FX automatically analyzes the input signal from your computer and calibrates the VGA output for optimal display characteristics. In some rare instances, it may be necessary to calibrate the VGA input of the Visual Concert FX unit.

To calibrate the VGA input from the Visual Concert FX unit, go to the ViewStation FX **VGA Input Calibration** screen (*System Info>Admin Setup>Video/Camera>VGA Input*) to manually adjust the following calibration parameters:

Phase

The Phase option provides subtle phase adjustment. Adjust this parameter if your display appears slightly out of focus when showing extremely fine images.

Horizontal Position The Horizontal Position option lets you adjust the horizontal screen alignment. Adjust this parameter if your display screen appears out of alignment in the horizontal plane.

Vertical Position The Vertical Position option lets you adjust the vertical screen alignment. Adjust this parameter if your display screen appears out of alignment in the vertical plane.

VGA Output Resolution and Frequency

Standard VGA Resolutions

Approved VGA resolutions and refresh frequencies are listed in the table below:

Resolution	Frequencies
640 x 480	60, 72, 75, 85 Hz
800 x 600	60, 72, 75, 85 Hz
1024 x 768	60, 70, 75, 85 Hz
1280 x 1024	60 Hz

Non-Standard VGA Resolutions

Several computer manufacturers produce VGA output in non-standard resolutions and refresh frequencies. This often leads to unpredictable display results during presentations.

For example, the reported VGA output resolution may be listed in your computer display settings as 1280 X 1024, when the actual VGA output resolution is 1024 x 768, displayed in a 1280 x 1024 sized display “window.” This will lead to unpredictable results during a presentation, without any evident cause.

Unexpected display results with Visual Concert FX are most commonly caused by this kind of non-standard VGA output from the computer. It is a good idea to read your computer documentation or consult technical support to understand how your computer outputs VGA.

Troubleshooting the VGA Output Resolution

1. To troubleshoot the VGA output resolution, you first need to check the VCFX Out Resolution values, as follows:
 - a. Access the **Hardware Information** screen on the ViewStation FX (*System Info>Admin Setup>Software/Hardware>Hardware*). This screen displays the **VCFX In Resolution** and **VCFX Out Resolution** values.
 - b. Make sure that the resolution values:
 - Match the output resolution reported by your computer.
 - Match the approved values.
 - Are equal.
2. If the resolution values do not match or are not equal, change the output resolution and frequency on your computer to the correct values, as follows:
 - a. Disconnect the Visual Concert FX power supply.
 - b. Change the resolution.
 - c. Reconnect Visual Concert FX. Once Visual Concert FX reboots, start the presentation again.
 - d. Check the resolution reported on the **Hardware Information** screen.
3. If the problem persists, reboot Visual Concert FX by holding down the **Stop** and **Play** buttons simultaneously.

Checking the Computer VGA Output Resolution

You can also connect the VGA output from your computer directly to a VGA monitor, and check that the computer's reported output resolution actually matches the output to the monitor. To do this, perform the following steps:

1. Connect the VGA monitor directly to the computer.
2. Set the computer display resolution and the VGA monitor's resolution to the same values.
 - If the display appears correctly, skip to step 3.
 - If the display does not appear correctly, change the VGA output resolution of your computer until the display on the monitor appears correctly.
3. Reconnect the computer and VGA monitor to Visual Concert FX.

