

# Polycom® Vortex® - SoundStation VTX 1000™

## Quick Install Packs

### *Frequently Asked Questions*

#### **Why Polycom?**

Polycom is the only company that can offer both complete table-top conferencing solutions and installed conferencing products.



#### **What comes in the Quick Install Pack?**

There are four different bundles depending on your requirements. All bundles include the Vortex EF2241, a SoundStation VTX 1000™, two loudspeakers, and cables to connect the EF2241 to both a video codec and to the SoundStation VTX 1000.

There are two bundles each with four directional table top microphones and two bundles each with two omni ceiling microphones. For each of these bundles there are two ceiling loudspeaker options, one is a 2'x2' ceiling tile replacement speaker and the other is a ceiling mount 6" circular can speaker.

In summary, the four bundles are

1. Four table top microphones, two 2x2' ceiling tile speakers
2. Four table top microphones, two circular can speakers
3. Two ceiling microphones, two 2'x2' ceiling tile speakers
4. Two ceiling microphones, two circular can speakers

#### **What are the part numbers and the pricing for the Quick Install Packs?**

The part numbers are:

- Boundary Mic package 1 (tile speakers): 2230-10024-001
- Boundary Mic package 2 (can speakers): 2230-10025-001
- Ceiling Mic package 3 (tile speakers): 2230-10026-001
- Ceiling Mic package 4 (can speakers): 2230-10027-001

The bundles all have a list price of \$7,995 in North America.

#### **Do I need to be certified to purchase the Quick Install Pack?**

Yes, you need to have passed the certification tests for both the Vortex line and the SoundStation VTX 1000, but there is no requirement to purchase demonstration equipment separately.



## **Why would I want to use table microphones?**

Table microphones provide the best audio pickup because they are closer to the talker's mouth. Directional table microphones reject sounds and noise that are outside of their pickup pattern to further improve the quality of the audio that is sent to the remote participants. The net result is that table microphones will provide the highest audio conferencing quality. With this bundle you only need one set of microphones for both audio and video conferencing. The same microphones supplied with the quick install bundle will be used for both audio conferencing and video conferencing.

## **Why would I want to use ceiling microphones?**

Ceiling microphones are often used when there is a need for reconfigurable furniture, or when there is a requirement to not have microphones on the table. While ceiling microphones can be quite effective, the increased distance from the talker will increase the amount of reverberation and background noise picked up by the microphone. This can reduce the intelligibility of the local talkers as heard by the remote listeners. Fortunately the noise cancellation of the Vortex will help reduce much of the background noise, but for the highest quality possible, table microphones should be used.

## **Can I add more microphones to the bundle?**

Additional microphones can be added by purchasing additional microphones as well as additional Vortex devices. Additional Vortex devices can be connected to the Vortex EF2241 that is part of the bundle with minimal effort. A Vortex EF2280 will allow 8 additional microphones to be added to the system and a Vortex EF2241 will allow 4 additional microphones to be added to the system.

## **Can I have both ceiling and table microphones in the bundle?**

Each bundle comes with one style of microphone: either table top or ceiling. Mixing the different styles of microphones is possible but would require running Polycom Vortex Conference Composer™ and configuring the system manually. To configure the system manually, you should use the Polycom *InstantDesigner*™ software that is part of Conference Composer and upload the resulting design file to the Vortex. The help file within Conference Composer will provide more information on how to do this.

## **How do I get a recording output from the Vortex?**

A monaural recording output is created by default on output C on the Vortex. While a cable is not provided for this signal, you can make a cable to match the cables supplied for the video codec and the SoundStation VTX 1000 and connect this directly to the recorder input.

## **How do I play back signals from a VCR through the Vortex?**

A monaural playback input is created by default in input C on the Vortex. While a cable is not provided for this signal, you can make a cable to match the cables supplied for the video codec and the SoundStation VTX 1000 and connect this directly to the output of the VCR.

## **Does this bundle allow me to have simultaneous audio and video conferences?**

Yes -- you can have simultaneous voice and video calls. The Vortex EF2241 has an internal mixer that will properly mix the inputs and outputs so that the audio from the video codec is sent the local room and to the SoundStation VTX1000. The audio from the SoundStation VTX1000 is sent to the video codec as well as to the local room audio.

## **How do I connect the Vortex to a video codec?**

The audio for the video codec is connected to inputs/output B on the Vortex EF2241. Connect the output from the codec to input B and connect output B of the Vortex to the RCA microphone input of the codec. The Vortex EF2241 has been preconfigured to support the appropriate mixes of audio so that the audio from the codec is mixed into the SoundStation VTX 1000.

More detailed information about connecting video codecs to the Vortex can be found in the following application note:

[http://www.polycom.com/common/pw\\_item\\_show\\_doc/0,1276,1670,00.pdf](http://www.polycom.com/common/pw_item_show_doc/0,1276,1670,00.pdf)

## **How do I connect the Vortex to a Polycom VSX™ 7000 video conferencing unit?**

Using the supplied cables, connect input B on the Vortex EF2241 to output 1 on the VSX 7000 using either the left or the right audio channel. Connect output B on the Vortex EF2241 to input 1 on the VSX 7000. Next, go to System, Admin Settings, Audio Settings, within the video codec and select NEXT for Page 2. Select the AUDIO MIXER option for the Line Input that is connected to the Vortex Device. Select Monitor-Far Site Audio for the Line Output. For both settings, leave the LEVEL settings at 5.

Next, disable the loudspeaker that is built-in to the VSX console. Go to System, Admin Settings, Audio Settings, and select NEXT, NEXT for Page 3. Select OFF for MIDRANGE SPEAKER. Depending on the type of loudspeakers you are using, you may want to lower and/or disable the Subwoofer. Make those changes in the SUBWOOFER SPEAKER and SUBWOOFER OFFSET sections.

## **What settings do I have to change on the Vortex?**

The Vortex has all the settings built-in that are required to support the different bundles. The only setting required on the Vortex is to select the power-on preset for the particular bundle. To change the power on preset, press the 'home' button on the front panel to change the LCD to the System Settings menu. From there, press 'enter' to see the power on preset (Pwr-on Preset) which has a default value of 0. Press 'enter' and then 'up' to change this number to 2 (for Table microphones), or 3 (for ceiling microphones) and then press 'enter' again to set the value. Now every time the Vortex is powered-on it will go to the preset you selected.

Reboot the Vortex by pressing the 'down' button to reach the reboot menu, and then press 'enter' to reboot the devices. The Vortex is now configured with the appropriate settings for your Quick Install Pack.

## **What if my ceiling doesn't have 2'x 2' tiles?**

If you have 4'x 2' tiles, you can still install the 2'x 2' tile by cutting one of the 4'x2' tiles in half and then adding a support bar (not supplied) to support the 2'x 2' speaker tile and the 2'x 2' portion of the original 4'x2' tile.

The other solution is to use the 6" circular can speakers. These require cutting a hole into the existing ceiling tiles and mounting the loudspeaker according to the directions that come with the loudspeakers.

## **Are the cables plenum rated to allow being run in the ceiling?**

Yes. The speaker and microphone cables are CL2 rated so they can be safely installed into a building plenum that may be used for air return.

## How does this differ from the Vortex EF2280/SoundStation VTX 1000 and Vortex EF2241/SoundStation VTX 1000 bundles?

This bundle includes microphones, microphone cables with the appropriate connections for the Vortex, the appropriate cables to connect to video codecs, a loudspeaker cable and terminators, the loudspeakers, and a pre configured Vortex EF2241 with the appropriate settings for these options.

## How does the SoundStation VTX 1000 achieve wideband performance over a bandwidth-limited telephone circuit?

Two SoundStation VTX 1000 units are required, one at each end of the telephone line. The units perform a "handshaking" sequence to determine that they are connected to another SoundStation VTX 1000, then engage a compression algorithm that compresses the wideband audio from 70Hz to 7000Hz into the established data path between the telephones. At the remote side of the conversation, the signal is converted back to analog, providing 70Hz to 7000Hz audio to both sides of the conversation.

## Can I use the SoundStation VTX 1000 for regular "speakerphone" type calls?

Yes. When the SoundStation VTX 1000 is connected to a traditional telephone or a desktop conferencing unit such it remains in an analog mode and sends telephone audio normally. In this mode of operation, you will have normal telephone bandwidth (300 - 3300Hz).

## Can I use wireless microphones with the Quick Install Pack?

Yes. A wireless microphone can be connected to one of the Vortex microphone inputs. When using the table top microphones, one of the tabletop microphones should be unplugged. From the front panel, navigate to the Input Settings menu and for that particular microphone, turn off Phantom Power, change from Mic to Line mode, change the input gain to 10dB. Now you are ready to plug in the wireless microphone.

## Can I use the phone interface on the Vortex EF2241 and the SoundStation VTX1000 at the same time?

Yes, but only if you have two analog phone lines. One phone line is used with the SoundStation VTX1000 and the second phone line is used with the Vortex EF2241. To dial calls with the Vortex EF2241 phone line, you would need either an analog phone connected to the "phone" connector on the rear panel of the Vortex EF2241, a control system (such as AMX or Crestron) connected to the Vortex EF2241, or use the optional infra-red remote control system.

## Can I use an external amplifier with the Vortex?

Yes. Even though the Vortex EF2241 comes with an internal 10W amplifier, you can connect output D of the Vortex to the input of an external amplifier if you would like to use 70V speakers or power more than the two supplied speakers.

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