

# Polycom® Vortex® EF2241

Acoustic echo/noise canceller with automatic microphone/matrix mixer and phone add



## Benefits

**Versatile telephone connection** – With the Vortex EF2241, add standard (PSTN-based) calls or enjoy wideband audio performance with the Polycom SoundStation VTX 1000™ conference phone

**Hear every word with Polycom's industry-leading acoustic echo and noise cancellation** – Ensures the highest possible audio quality between sites with 20 kHz bandwidth, 270 ms tail length, more than 10 dB of room gain, and a convergence rate of over 40 dB per second on each mic/line channel

**Integrated voice and video solution** – May be linked with additional Vortex Installed Voice products including Vortex EF2201, Vortex EF2210, Vortex EF2211, Vortex EF2241 and Vortex EF2280; Polycom's SoundStation VTX 1000™ wideband conference phone and Polycom's video conferencing systems including the VSX™ 7000 and 8000 product lines

**Easy setup** – Conference Composer™ and Polycom InstantDesigner™ software make configuration fast and simple

**Easy to operate** – Controllable via Crestron®, AMX® or other room control systems, RS-232, the Vortex EF-IR11 infrared controller, or from the unit's front panel; 16 factory presets and 32 user configurable presets allow quick selection of operating parameters

**Adaptable to user requirements** – User-programmable delays on all outputs, 5-band parametric EQ on all inputs and outputs, intelligent Automatic Gain Control, 256 macros, system diagnostics, and other tools ensure the best performance for all room conditions

## Expand the audio capabilities of your installed conferencing facility and easily add phone calls.

The Vortex EF2241 enhances the productivity of conferencing and distance learning installations through industry-leading acoustic echo and noise cancellation, plus a DSP-based telephone interface - with support for up to four microphones.

Designed as a companion to Polycom's Vortex EF2280 model, as well as for standalone applications, the Vortex EF2241 automatically mixes four microphones and other audio, while canceling acoustic echoes and annoying background noise. The Vortex EF2241 includes an interface to the standard (PSTN) telephone network. It provides connections for multiple microphones and auxiliary inputs and includes a 10 Watt power amplifier for driving loudspeakers in the room.

The Vortex EF2241 supports four auxiliary audio sources and automatic mixing of up to four microphones per device. If more microphones or telephone interface channels are needed, additional Vortex units can be linked. Each microphone channel features industry-leading acoustic echo cancellation to prevent received signals from being retransmitted to their original locations. Neural network Automatic Gain Control (AGC) reacts only to valid speech patterns, bringing voices within desired levels. User-adjustable AGC controls for each channel, and settings for the five-band parametric EQ, are offered on all input and output channels.

### The high-quality audio choice for The Polycom Office™

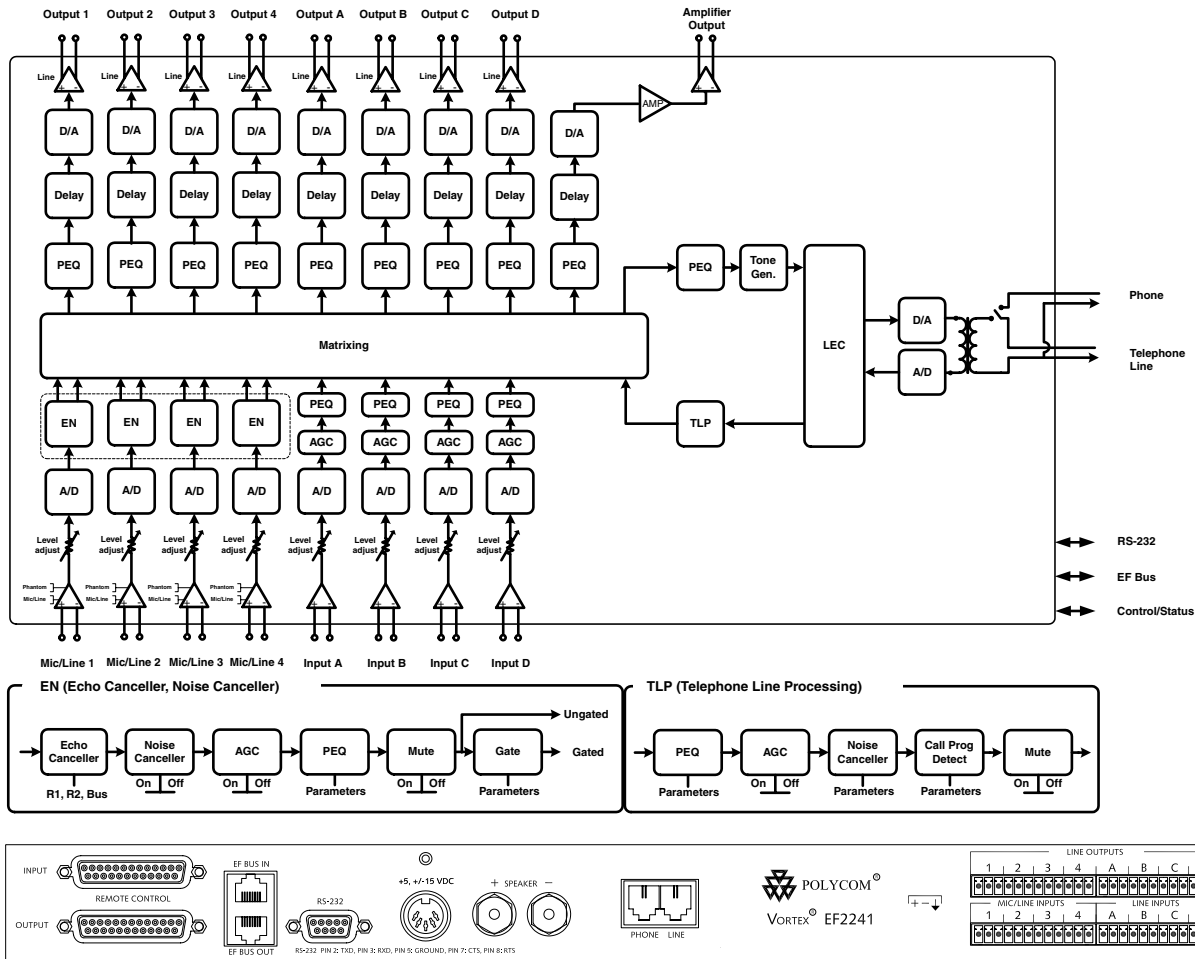
With integrated video, voice, data, and Web capabilities, The Polycom Office is the only solution that offers any size business an easy way to connect, conference, and collaborate any way you want. The Polycom Office is our commitment to making distance communications as natural and interactive as being there. Work faster, smarter, and better with the Polycom Vortex EF2241 and The Polycom Office.



Connect. Any Way You Want.

# Polycom Vortex EF2241 Specifications

## System Block Diagram and Rear Panel



- Dimensions**
  - 19" (483 mm) W x 9.6" (244 mm) L x 1.75" (45 mm) H (one rack unit)
- Weight**
  - 4 lbs. (1.8 kg) dry, 5.5 lbs. (2.5 kg) shipping
- Connectors**
  - RS-232: DB9F
  - EF Bus In/Out: RJ45
  - Telephone Line/Set: RJ11 (2)
  - Control /Status: DB25F
  - Audio: Mini (3.5mm) quick connect terminal blocks
- Power**
  - External supply (provided)
  - Input voltage of 110-240 VAC; 47-63 Hz; power consumption 30 W
- Microphone Input**
  - 30 dBu to +0 dBu/ -66 dBu to -33 dBu, nominal; software selectable
- Phantom Power**
  - 24 V, software selectable

- Line Inputs**
  - 20 dBu to +0 dBu, nominal; software adjustable
- Line Outputs**
  - 20 dBu to +0 dBu, nominal; software adjustable
- Loudspeaker Output**
  - 10 W, 4-16 Ohms
- Input Impedance**
  - >10 k Ohms
- Output Impedance**
  - 50 Ohms (drives 600 Ohms)
- Headroom**
  - 20 dB, nominal
- Signal to Noise Ratio**
  - Line level, 0 dB gain: >85dB
- Frequency Response**
  - 20 Hz - 22 kHz
- Acoustic Echo Cancellation Span**
  - 270 ms

- Total Cancellation**
  - >65 dB
- Convergence Rate**
  - 40 dB/second
- Noise Cancellation**
  - 0-15 dB, software selectable
- Line Echo Canceller (telephone hybrid)**
  - Echo cancellation 40 dB, total >60 dB
  - Convergence 30 dB/second; cancellation span 32 ms
- Operating Temperature**
  - 0 °- 40 °C
- Control Inputs**
  - Contact closure
- Status Outputs**
  - 5 V, 20 mA each

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### Polycom Headquarters:

4750 Willow Road, Pleasanton, CA 94588 (T) 1.800.POLYCOM (765.9266) for North America only.  
For North America, Latin America and Caribbean (T) +1.925.924.6000, (F) +1.925.924.6100

### Polycom EMEA:

270 Bath Road, Slough, Berkshire SL1 4DX, (T) +44 (0)1753 723000, (F) +44 (0)1753 723010

### Polycom Asia Pacific:

Polycom Hong Kong Ltd., Rm 1101 MassMutual Tower, 38 Gloucester Road, Wanchai, Hong Kong, (T) +852.2861.3113, (F)+852.2866.8028

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