

# VCON

## VCON Desktop Systems

Escort 25 \* Cruiser 75 \* Cruiser 150 \* Cruiser 384

### Powerful Desktop Product Family Offers a Variety of Industry-Leading, Cost-Effective Videoconferencing Solutions

VCON's desktop videoconferencing systems deliver the power of large and expensive systems at a fraction of the cost. All of VCON's desktop videoconferencing systems offer advanced Video over IP on personal computers with support for data collaboration. Designed to maximize available bandwidth, VCON's desktop videoconferencing systems operate over an IP network at data rates up to 1.5 Mbps, and offer near-broadcast resolution at 30 frames per second. VCON's desktop products offer more than just videoconferencing: they include VCON PacketAssist™ Architecture that helps eliminate network congestion while optimizing transmission quality and reliability.

- ✕ Interactive Multicast Option
- ✕ Data Rates up to 1.5 Mbps
- ✕ Quality of Service (QoS) with VCON PacketAssist™ Architecture
- ✕ Adaptive Bandwidth Adjustment
- ✕ True Dual-Mode Support for IP and ISDN
- ✕ Advanced Data Collaboration
- ✕ Multi Monitor Support
- ✕ Internet Access
- ✕ Cisco IP/TV Compatibility
- ✕ Microsoft Windows 95, 98 & NT
- ✕ Microsoft ILS Online Directory
- ✕ VCON Development Kit (VDK) for Software Customization



*The VCON desktop product range enables ease of deployment for any desktop need from LAN-only through LAN & ISDN up to multi-networking interfaces (LAN, ISDN, ATM, Satellite, Private Line, xDSL, Cable Modem, etc).*

VCON's advanced solution for networked multimedia provides a complete set of capabilities for two-way, IP-based (H.323) and ISDN (H.320) videoconferencing over existing local area networks (LANs) and wide area networks (WANs).

All VCON Desktop Videoconferencing Systems are single board solutions requiring just one PCI slot. Inexpensive and easy to install, they deliver advanced communication and data sharing capabilities and make videoconferencing as easy as making a phone call.

## Interactive Multicast Technology

Interactive Multicast technology allows users to enjoy, for the first time, streaming video with interaction. It gives the ability to multicast audio and video to participants using VCON endpoints or Cisco IP/TV viewers, while allowing any participant using a VCON endpoint to fully interact during the conference. In essence, the multicast source can be moved amongst the VCON participants, creating a "virtual podium" effect. VCON's Interactive Multicast technology is particularly beneficial in corporate communications, training and distance learning settings. In addition, it allows Cisco IP/TV viewers to participate in "receive mode" during VCON multicasts. VCON's Interactive Multicast uses standard IP multicast technology running on a standard VCON H.323 client to add an interactive component to a formerly one-way only streaming video technology.



## VCON PacketAssist™ Architecture



VCON PacketAssist™ architecture features a suite of tools and capabilities that remove many obstacles to Video over IP deployment. In the past, many companies shied away from using their in-house networks for multimedia applications due to questions about Quality of Service (QoS) and available bandwidth. PacketAssist™ automatically adapts to the network, while ensuring that users experience the best possible audio and video performance. If the system detects the possibility of network congestion, it automatically decreases its data rate to find the "sweet spot" for continued transmission, while optimizing video quality at the lower data rate. VCON PacketAssist™ also provides numerous QoS features including packet ordering, jitter correction and lip sync adjustment. These capabilities, along with IP Precedence, combine to deliver the highest possible conference quality and performance over IP networks.

Key Features	Escort 25	Cruiser 75	Cruiser 150	Cruiser 384	Cruiser 384 Executive
LAN H.323	30 Frames per second at 64 Kbps - 1.5 Mbps				
ISDN H.320	N/A	128 Kbps	128 Kbps	384 Kbps	384 Kbps
ISDN On-Board	N/A	1 BRI	1 BRI	3 BRI	3 BRI
Video Frames Per Second over ISDN	N/A	15 fps	30 fps	30 fps	30 fps
MVIP (for 3 BRI, V.35, ATM)	N/A	N/A	Yes	Yes	Yes
T.120 via NetMeeting™	Yes	Yes	Yes	Yes	Yes
Videoconferencing Hardware Codec	Yes	Yes	Yes	Yes	Yes
Operating System	Win 95,98,NT	Win 95,98,NT	Win 95,98,NT	Win 95,98,NT	Win 95,98,NT
Standard Audio Output	Handset	Handset	Handset	Speaker	Speaker
Standard Audio Input	Camera or via Handset			Camera	Tabletop
Standard Camera (Fixed/Pan-Tilt-Zoom)	Fixed	Fixed	Fixed	Fixed	PTZ
VCR Recording Interface	N/A	N/A	N/A	N/A	Yes
128K Internet Access (NDIS)	No	Yes	Yes	No	No

#### Additional Key Features

- User-friendly conference panel and GUI
- Camera preset positions
- PC-Phone dialer
- Frame Grabber
- Multiple video and audio sources
- Pre-defined phonebook entries with pictures
- Speed dial directory
- Session capabilities monitor
- Far End Camera Control (FECC) according to H.281
- Resizable video windows up to full screen
- Self-view video window
- Moveable Picture-In-Picture (PIP)
- MCU support with chair control (H.243)
- End-user diagnostics
- High-speed remote access to the Internet
- VCON Post-Processing (VPP) algorithm
- Support for International Languages
- MVIP support (Cruiser 384 + Cruiser 150)
- Acoustic Echo Cancellation (AEC)
- Caller ID

#### 3rd Party Network Equipment Support

- VideoServer H.320 MCU
- VideoServer H.323 MCU
- VideoServer H.320/H.323 Gateway
- RADVision H.323 MCU
- RADVision H.320/H.323 Gateway
- Accord H.320 and H.323 MCU
- Cisco IP router
- Cisco Firewall
- Cisco MCM H.323 Gatekeeper and Proxy
- CheckPoint Firewall
- FVC.COM Gateway
- Madge Gateway

#### Escort 25

##### What's In The Box?

- PC Board
- White Handset
- Registration Warranty
- Installation Guide
- Desktop Software
- NTSC/PAL Camera

#### Cruiser 150

##### What's In The Box?

- PC Board
- White Handset
- ISDN Cable
- Audio Cable to Sound Card
- Registration Warranty
- Installation Guide
- Desktop Software
- NTSC/PAL Camera

#### Optional Accessories:

- NTSC/PAL PTZ Camera
- Camera Control Cable
- S.Video Cable
- Table Top Microphone
- VCR Recording Capability (Cruiser 384 executive)

#### Cruiser 75

##### What's In The Box?

- PC Board
- White Handset
- ISDN Cable
- Audio Cable to Sound Card
- Registration Warranty
- Installation Guide
- Desktop Software
- NTSC/PAL Camera

#### Cruiser 384

##### What's In The Box?

- PC Board
- 3 x ISDN Cables
- Speakers
- Registration Warranty
- Installation Guide
- Desktop Software
- NTSC/PAL Camera

#### Minimum PC Requirements

- 200 MHz Pentium with PCI bus
- 64MB RAM
- 30MB free disk space
- PCI SVGA card or chip that supports DirectDraw with 2MB memory

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# System Specifications

## Video

Video compression: H.261 (Px64) & H.263 compatible  
Transmitted resolution: CIF (352x288 pixels) up to 30 frames/sec  
QCIF (176x144 pixels) up to 30 frames/sec  
VGA resolution: All VGA resolutions with 16/32 bits  
Video input: NTSC or PAL camera with analog interface included; Second RCA video input

Special features: Scalable video-in-a-window size, picture-in-picture, self-view, VCON's Post-Processing (VPP) algorithm for enhanced video quality up to CIF 30 frames/sec, mute video

Camera Control H.281 Far End Camera Control (FECC)

## Audio

Audio compression: G.711 - 3.4 KHz at 56 Kbps and 48 Kbps  
G.722 - 7.0 KHz at 56 Kbps and 48 Kbps (Cruiser 384 Only)  
G.722 - 3.4 KHz at 56 Kbps and 48 Kbps (Excluding Cruiser 384)  
G.728 - 3.4 KHz at 16 Kbps

Audio I/O: Telephone handset included (Excluding Cruiser 384)  
Line level output for multimedia speakers  
Line level output for sound card

Automatic Gain Control (AGC): -95 dB to +95 dB  
Software controlled features: Volume control and mute  
Acoustic Echo Cancellation (AEC) on board -30dB ERLE@>200ms

## ISDN (Excluding Escort 25)

1 BRI interface on-board  
3 BRI interface on-board (Only Cruiser 384)  
Supports 56 Kbps up to 384 Kbps (Excluding Cruiser 75)  
Euro-ISDN, Japan, all US and most international switch variants supported  
ITU/TSS H.320 compatible  
BONDING Mode 1 (Cruiser 384)

## LAN

Supports video rates from 64 Kbps up to 1.5 Mbps  
H.323 rev2 compliant  
Requires MS TCP/IP

## Data Conferencing

T.120 support  
LAN data rate at LAN speed  
Support for LSD/HSD/MLP/HMLP  
Microsoft NetMeeting™ included

## Standards

Safety:  
EN60950 (IEC 950)  
ETS 300 047 (Excluding Escort 25)  
EMC EN55022 (Class B), EN50082-1,  
FCC Part 15 (Class B)  
ISDN I-CTR3, NI1, 5ESS, DMS 100,  
BAPT 223 2V25 (German Delta),  
Euro Numerics CSA P10-21A (French Delta),  
NTT (Japan, INS 64) (Excluding Escort 25)

## Approval Certification

CE O188X - Europe  
BZT D129121H - Germany  
Industry Canada 2992 8815 A (CS03 Issue 8)

## Reliability

MTBF 50,000 hours

## Connections

Input: 8-pin mini-DIN video, audio and power connector for Philips NTSC/PAL camera  
Input: 8-pin mini-DIN video, audio and power connector for S.Video camera (Cruiser 384 Only)  
Input: RCA video connector for analog camera or VCR (Cruiser 384 Only)  
Input: RCA audio connector for analog camera or VCR (Cruiser 384 Only)  
Input: 3.5 mm. minijack line level for microphone (Cruiser 384 Only)  
Input: RCA composite audio and video connectors for analog camera or VCR  
Output: RCA audio connector for VCR (for recording) (Cruiser 384 Only)  
Output: RJ22 connector for telephone handset or earpiece (Excluding Cruiser 384)  
Output: 3.5 mm. minijack connector for multimedia speakers  
ISDN "S/T" interface with RJ45 connector (Excluding Escort 25)  
MVIP connector to third-party communication boards (Cruiser 150 & Cruiser 384 Only)  
PCI bus interface for PC connection

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