



TANDBERG EX90

Transform the ordinary desk to an extraordinary personal telepresence and collaboration space with the TANDBERG EX90. The intuitive TANDBERG inTouch interface, flexible collaboration tools and absolute quality make connecting and collaborating simple and natural.



Tandberg inTouch is a revolutionary interface for easy communication control.

- **Absolute Quality** — Meetings come to life with full end-to-end 1080pHD resolution on a full 24" HD display that also functions as a PC screen. The crisp images and bold size makes any meeting more engaging, vibrant and productive.
- **Simple to Use** — The TANDBERG inTouch brings the intuitive touch screen interface of our high end Telepresence T3 and T1 solutions right to the desktop. Scroll through menus and directories with a flick of the finger to quickly and easily manage your meetings.
- **Flexible Collaboration** — Share presentations, documents and multimedia content in full 1080p30/WUXGA or with the Precision HD camera that rotates 90° to function as a document camera. For greater collaboration capability, a second screen can be easily added to expand viewing capacity.
- **Customized Configuration** — Not every EX90 will be used the same way. That's why we've designed it to allow you to add additional cameras, monitor, multimedia devices or other peripherals to create a telepresence experience tailored to your needs.

GET THE MOST FROM YOUR INVESTMENT. WITH **PROFESSIONAL SERVICES**, TANDBERG EXPERTS SUPPORT TANDBERG EX90 DEPLOYMENT AND TRAINING. VISIT WWW.TANDBERG.COM

UNIT DELIVERED COMPLETE WITH:

Fully integrated codec, display, camera, microphone and loudspeakers
TANDBERG InTouch controller including detachable wideband handset
DVI-I-cable, DVI-I to VGA adapter, 3,5 mm jack audio cable, LAN cable, power adapter and power cable

DISPLAY

24" LCD monitor
Resolution: 1920 x 1200 (WUXGA)
Contrast ratio: 1000:1
Viewing angle: 160/160°
Response time: 5ms
Brightness: 300cd/m2
5"-15° tilt

PC AND SECOND SOURCE VIDEO INPUTS

DVI-I
HDMI

SUPPORTED PC INPUT RESOLUTIONS

SVGA (800x600) to WUXGA (1920X1200)

DUAL DISPLAY OUTPUT*

HDMI

CAMERA

TANDBERG PrecisionHD™ design
Document camera mode
1/3" CMOS sensor
2.7 megapixels
Aperture F1.7
1920x1080@60 fps
Optical, motorized zoom
45°-65° horizontal field of view
40°-27° vertical field of view
Auto focus
Mechanical auto iris
Focus distance 0.3m–infinity
Automatic and manual exposure and white balance
Ambient light frequency detection (50/60 Hz)
Integrated privacy shutter

AUDIO SYSTEM

2 stereo front speakers
Integrated subwoofer
Integrated full range microphone
Support for TANDBERG Performance Mic 20 external microphone
1x3.5 mm line in jack for PC or other audio source
2x3.5 mm jack for headset
HDMI audio input/output
Wideband handset
Bluetooth ready

USER INTERFACE

TANDBERG InTouch
8" projected capacitive touch screen
480x800 resolution

BANDWIDTH

H.323/SIP up to 6 Mbps point-to-point

FIREWALL TRAVERSAL

TANDBERG Expressway™ Technology
H.460.18, H.460.19 Firewall Traversal

VIDEO STANDARDS

H.261, H.263, H.263+, H.264

VIDEO FEATURES

16:9 Widescreen
Advanced Screen Layouts
Intelligent Video Management
Local Auto Layout

LIVE VIDEO RESOLUTIONS (ENCODE/DECODE)

176 x 144@30 fps (QCIF)
352 x 288@30 fps (CIF)
512 x 288@30 fps (w288p)
576 x 448@30 fps (448p)
768 x 448@30 fps (w448p)
704 x 576@30 fps (4CIF)
1024 x 576@30 fps (w576p)
640 x 480@30 fps (VGA)
800 x 600@30 fps (SVGA)
1024 x 768@30 fps (XGA)
1280 x 1024@30 fps (SXGA)
1280 x 720@30 fps (720p30)
1280 x 768@30 fps (WXGA)
1920 x 1080@30 fps (1080p30) *
1440 x 900@30 fps (WXGA+) *
1680 x 1050@30 fps (WSXGA+) *
1600 x 1200@30 fps (UXGA) *
1920 x 1200@15 fps (WUXGA) *
512 x 288@60 fps (w288p60) *
768 x 448@60 fps (w448p60) *
1024 x 576@60 fps (w576p60) *
1280 x 720@60 fps (720p60) *

AUDIO STANDARDS

G.711, G.722, G.722.1, 64/128kbps MPEG4 AAC-LD, AAC-LD Stereo

AUDIO FEATURES

CD-quality 20kHz stereo
Acoustic echo cancelling
Automatic gain control
Automatic noise reduction
Active lip synchronization

DUAL STREAM

H.239 (H.323) dual stream
BFCP (SIP) dual stream
Support for resolutions up to 1080p30 in both main stream and dual stream simultaneously

MULTISITE FEATURES*

4-way 720p30 Continuous Presence (CP) MultiSite**
Full individual audio and video transcoding
Individual layouts for all participants (CP layout without self view)
H.323/SIP/VoIP in the same conference
Best Impression (Automatic CP Layouts)
H.264, encryption and dual stream from any site
IP downspeeding
Dial in/Dial out
Conference rates up to 10 Mbps

PROTOCOLS

H.323
SIP

EMBEDDED ENCRYPTION

H.323/SIP point-to-point
Standards-based: H.235 v2 & v3 and AES
Automatic key generation and exchange
Supported in dual stream

IP NETWORK FEATURES

DNS lookup for service configuration
Differentiated Services (QoS)
IP adaptive bandwidth management (including flow control)
Auto gatekeeper discovery
Dynamic playout and lip-sync buffering
H.245 DTMF tones in H.323
Date and time support via NTP
Packet loss based downspeeding
URI dialing
TCP/IP
DHCP
802.1x network authentication
802.1q VLAN

SECURITY FEATURES

Management via HTTPS and SSH
IP administration password
Menu administration password
Disable IP services
Network settings protection

NETWORK INTERFACES

Internal 2 port Ethernet switch
1 x LAN/Ethernet (RJ-45) 10/100/1000 Mbit for PC
1 x LAN/Ethernet (RJ-45) 10/100/1000 Mbit for LAN

OTHER INTERFACES

1x USB device for future applications
2x USB host for future applications
Bluetooth for future applications

SYSTEM MANAGEMENT

Support for the TANDBERG Management Suite
Total management via embedded SNMP, Telnet, SSH, XML, SOAP
Remote software upload: via web server, SCP, HTTP, HTTPS
InTouch interface menu system

DIRECTORY SERVICES

Support for local directories (My Contacts)
Corporate directory
Unlimited entries using server directory supporting LDAP and H.350
Unlimited number for corporate directory (through TMS)
200 number local directory
Received calls
Placed calls
Missed calls with date and time

POWER

Auto-sensing power supply
100–240 VAC, 50/60 Hz
150 watts max

OPERATING TEMPERATURE AND HUMIDITY

0° C to 35° C (32° F to 95° F) ambient temperature
10% to 90% Relative Humidity (RH)

STORAGE AND TRANSPORT TEMPERATURE

-20° C to 60° C (-4° F to 140° F) at RH 10–90% (non-condensing)

APPROVALS

Directive 2006/95/EC (Low-Voltage Directive) — Standard EN 60950-1
Directive 2004/108/EC (EMC Directive) — Standard EN 55022, Class A — Standard EN 55024 — Standard EN 61000-3-2/-3-3
Approved according to UL 60950-1 and CSA 60950-1-07
Complies with FCC15B Class A

TANDBERG EX90 MAIN UNIT DIMENSIONS

Length: 56.7 cm (22.3")
Height: 54.5 cm (21.4")
Depth: 17.3 cm (6.8")
Weight: 11.0 kg (24.2 lbs)

TANDBERG INTOUCH CONTROLLER DIMENSIONS

Length: 22.8 cm (9.0"). 29.0 cm (11.4") with handset
Height: 4.4cm (1.7") cm. 7.7 cm (3.0") with handset
Depth: 14.5 cm (5.7"). 18.7 cm (7.4") with handset
Weight: 0.64 kg (1.4 lbs). 0.94 kg (2.1 lbs) with handset
Cable length: 120 cm (47")

* Requires option

** 3 way MultiSite in first release

All specifications subject to change without notice, system specifics may vary.

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MTBF PRODUCT RELIABILITY/MTBF The predicted reliability is expressed in the expected random Mean Time Between Failures (MTBF) for the electronic components based on the Power On Hours: Power On Hours (POH) > 69 000 hoursUseful Life Cycle > 6 yearsISO 9001 certificate is available upon request

**TANDBERG
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