



TANDBERG Director

Rich media presentation tool for corporate, military and education applications. The Director turns an interactive whiteboard and a video system into a powerful presentation, training and collaboration tool to join multiple locations.



The optional XGA touch panel is ideal for podium or desk presentations.

DESIGN FEATURES

- 67" display with on-screen touch controls
- Integrated mobile stand with electronic annotation markers and storage for multiple peripherals such as a PC and VCR
- Wide angle view camera with extensive zoom, pan and tilt
- Ability to add a laptop with auto-detect switching capability

APPLICATION FEATURES

- Join up to 4 video sites and 1 audio site with embedded MultiSite functionality
- Powerful live presentations through one-step PC plug-in (PC Presenter)
- View presentations and multiple video sites simultaneously on one screen using DuoVideo
- Display images from PCs, DVDs, VCRs, document cameras and other input devices
- Annotate over any PC program and display annotations to all conference participants

PERFORMANCE FEATURES

- Choice of network: IP, ISDN and other external network
- Bandwidth: up to 2 Mbps ISDN / 3 Mbps IP
- Superior video quality incorporating the H.264 standard
- Highest level of standards-based embedded encryption
- Protection against network interruptions with automatic Downspeeding and IPLR

BANDWIDTH

H.320 up to 2 Mbps
H.323 up to 3 Mbps

W.A.V.E (WIDE ANGLE VIEW) II CAMERA

10 x Zoom
1/4" CCD
+15° / -20° tilt
+ / - 95° pan
61° vertical field of view
96° total vertical field of view
77° horizontal field of view
267° total horizontal field of view
460 (PAL), 470 (NTSC) TV lines
Min. illumination 2 Lux (F1.8)
Auto or manual focus / brightness / white balance
Far-end camera control
15 near and far-end camera pre-sets
Voice-activated camera positioning
VSCA camera support

VIDEO STANDARDS

H.261, H.263, H.263+, H.263++ (Natural Video), H.264

VIDEO FEATURES

Intelligent Video Management
8 combined presets
XGA Output Resolution
Optional rear monitor
Frame Rates
15 frames per second @ 56 - 128 kbps
30 frames per second @ 168 kbps - 3 Mbps
60 fields per second @ 768 kbps - 3 Mbps (Natural Video)

VIDEO FORMAT

NTSC or PAL

LIVE VIDEO RESOLUTIONS

NATIVE NTSC:

4SiF (704 x 480 pixels), Digital Clarity
Interlaced SiF (352 x 480 pixels), Natural Video
SiF (352 x 240 pixels)

NATIVE PAL:

4CiF (704 x 576 pixels), Digital Clarity
Interlaced CiF (352 x 576 pixels), Natural Video
CiF (352 x 288 pixels)
QCIF (176 x 144 pixels)
SQCIF (128 x 96 pixels) decode only

NATIVE PC RESOLUTIONS:

SVGA (800 x 600 pixels)
VGA (640 x 480 pixels)
XGA (1024 x 768 pixels)

STILL IMAGE TRANSFER

CIF, 4CIF (H.261 Annex D), 4SiF, VGA, SVGA, XGA

VIDEO INPUTS (5 INPUTS)

2 x PTZ controllable room cameras
1 x RCA / Phono, composite: Document camera
1 x RCA / Phono, composite: VCR / DVD
1 x XGA: PC

VIDEO OUTPUTS (4 OUTPUTS)

1 x XGA Display (Multi Image)
1 x composite: main monitor
1 x composite: local display
1 x touchpanel display (XGA)

XGA INPUT / XGA OUTPUT

Input: 640 x 480 - 1024 x 768
56 - 85 Hz, Auto-detection
Output: 1024 x 768, 60 Hz

AUDIO STANDARDS

G.711, G.722, G.722.1, G.728

AUDIO FEATURES

Four separate acoustic echo cancellers
Audio mixer
Automatic gain control
Automatic noise reduction
VCR ducking

AUDIO INPUTS (6 INPUTS)

3 x microphone, 24V phantom powered, XLR connector
1 x RCA / Phono, Line Level: VCR input
2 x RCA / Phono, Line Level: Auxiliary source inputs

AUDIO OUTPUTS (3 OUTPUTS)

1 x Line Level: Main Audio
2 x RCA / Phono, Line level: VCR out / Aux out
(mixed far and near)

FEATURES

MultiSite
ISDN & IP Downspeeding at call set-up
Dial in / Dial out capabilities
Continuous Presence or Voice Switched
Chair control for host system
5 sites including min. 1 telephone call
Built-in MultiSite audio bridge for up to 5 sites
DuoVideo, Digital Clarity
MULTISITE OVER IP
4 sites @ 768 kbps + 1 telephone call over ISDN
3 sites @ 1 Mbps + 2 telephone calls over ISDN
Point-to-point @ 3 Mbps + 3 telephone calls over ISDN
MULTISITE OVER ISDN PRI E1(T1) AND IP
4 sites @ 512 (384) kbps + 1 telephone call over ISDN
3 sites @ 768 (512) Mbps + 2 telephone calls over ISDN
Point-to-point @ 1.5 (1) Mbps + 3 telephone calls over ISDN
MULTISITE OVER ISDN BRI AND IP
4 sites @ 256 kbps or 3 sites @ 384 kbps
4 sites @ 192 kbps + 1 telephone call over ISDN
3 sites @ 256 kbps + 2 telephone calls over ISDN
Point-to-point @ 512 kbps + 3 telephone calls over ISDN
MULTISITE OVER V.35 AND IP
4 sites (one site on V.35) @ 512 kbps
3 sites (one site on V.35) @ 768 kbps
MULTISITE (H.243) CASCADING
Up to 10 video sites @ 768 kbps + 4 audio sites
Any combination of IP & ISDN connections (transcoding)
DuoVideo available on all networks
DuoVideo available in MultiSite

PRESENTATIONS AND COLLABORATION (ISDN, IP AND LEASED E1/T1)

Natural Presenter Package including:
Digital Clarity
DuoVideo
Streaming (compatible with Apple QuickTime® and RealPlayer® v8 etc)

NETWORK FEATURES

Auto H.320 / H.323 Dialing
H.331 Broadcast mode
Downspeeding
Programmable Network Profiles
Password Protection
Intelligent Call Management
Maximum call length timer
H0 on ISDN-PRI facility
NATO standard KG194 encryptor support
Automatic SPID and Line Number Configuration
(National ISDN, GR-2941-CORE)
SoftMux

EMBEDDED ENCRYPTION

H.320 and H.323 point-to-point and multipoint calls
Standards-based: H.233, H.234, H.235, DES and AES
NIST-validated AES
NIST-validated DES
Automatic key generation and exchange
Supported in DuoVideo

H.323 NETWORK FEATURES

Differentiated Services (DiffServ)
Resource Reservation Protocol (RSVP)
IP precedence
IP type of service (ToS)
Network Address Translation (NAT) support
IP adaptive bandwidth management (including flow control)
Auto gatekeeper discovery
Dynamic playout and lip-sync buffering
Intelligent Packet Loss Recovery (IPLR)
IP Address Conflict Warning*

SECURITY FEATURES

Encrypted IP Password*
Access code
Streaming password
H.243 MCU password
VNC password
Possibility to disable IP services

NETWORK INTERFACES

6 x ISDN BRI (RJ-45), S-interface
1 x E1 / T1 G.703 (RJ-45) for ISDN PRI or leased E1 / T1
1 x E1 / T1 (RJ-45) for ISDN PRI cascading
1 x LAN / (RJ-45) 10/100 Mbit
1 x X.21 / V.35/RS-449 with RS-366 dialing, Leased Line or data triggered mode

ETHERNET / INTERNET / INTRANET CONNECTIVITY

TCP/IP, SNMP, DHCP, ARP, FTP, Telnet, HTTP,
Internal web server
Support for the TANDBERG Management Suite
Internal streaming server
10/100 Mbit full / half duplex (manual or auto detect selection)

OTHER SUPPORTED ITU STANDARDS

H.231, H.241*, H.281, Bonding (ISO 13781), H.320, H.323, H.331

MANAGEMENT

Local System Management
Optional 15" XGA Touchpanel or Optional Smartboard Control
Remote System Management
Management via web browser, Telnet, FTP and SNMP, TMS
Remote/Local diagnostics and upgrades via modem or IP
Local Site Features
External device control using E-Pac or Touch 'N Talk
Password Protection
XGA Presentation

DIRECTORY SERVICES

200 number global directory
99 number local directory

POWER

System power control management
120/240 VAC, 50/60 Hz 10 Amps max.

System features vary depending on network selection and software package. All specifications subject to change without notice.



The TANDBERG 6000 – the foundation for the TANDBERG Director – has been tested in accordance with interoperability criteria set by Cisco Systems, Inc. and is compatible with the Cisco IP/VC 35XX product family and Cisco MCM 12.1 (5) XM3. For full disclaimer see TANDBERG product documentation or the following Web site: www.tandberg.net.

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Winner of the Product of the Year Award from Communications Convergence Magazine and the Standing Ovation Award from Presentations Magazine.

TANDBERG

Director

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