



TANDBERG 6000

For medium- to large-sized meeting rooms and boardrooms. High-end performance features, large monitors and precision audio create a collaborative meeting environment for even the largest groups. Share knowledge simply, quickly and efficiently with any location in the world.



Natural Audio Module™ II (NAMII) adds audio performance and clarity to any videoconference.

DESIGN FEATURES

- Designed for medium to large conference rooms and boardrooms
- Dual monitors (32" NTSC or 33" PAL)
- Mobile cart with spacious cabinet for the integration of peripheral equipment
- Wide angle view camera with extensive zoom, pan and tilt

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) or LAN connection (PC SoftPresenter)
- View presentations and presenter simultaneously with either DuoVideo or H.239 on single or dual monitor setup

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
- Natural Audio Module™ II (NAMII) with amplifier and 3 loudspeakers provides premium quality audio for large group videoconferencing
- Highest level of standards-based embedded encryption
- Protection against network interruptions with automatic Downsampling and IPLR

SYSTEM COMPONENTS

1 or 2 monitors, wireless remote control, Tracker, W.A.V.E. II camera, microphone, Natural Audio Module™II, integrated cabling, cart

MONITOR

32" NTSC or 33" PAL monitor
Optional high-resolution monitors
Other monitors supported

BANDWIDTH

H.323 3 Mbps
H.320 standard 768 kbps, optional 2 Mbps ISDN/V.35

VIDEO STANDARDS

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

VIDEO FEATURES

Picture in Picture (PIP)
Intelligent Video Management

VIDEO INPUTS (5 INPUTS)

1 x MiniDin, S-video: main camera
1 x MiniDin, S-video: auxiliary / document camera
1 x RCA / Phono, composite: document camera / aux
1 x RCA / Phono, composite: VCR
1 x XGA: PC

VIDEO OUTPUTS (5 OUTPUTS)

1 x MiniDin, S-video: main monitor
1 x MiniDin, S-video: dual monitor
1 x RCA / Phono, composite: main monitor or VCR
1 x RCA / Phono, composite: dual monitor or VCR
1 x XGA: main monitor, dual monitor or XGA loop

XGA INPUT / XGA OUTPUT

Input: 640 x 480 – 1024 x 768, 56 - 85 Hz. auto-detection
Output: 640 x 480 – 1024 x 768, 60 Hz

VIDEO FORMAT

NTSC, PAL, VGA, SVGA or XGA

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:

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

STILL IMAGE TRANSFER

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

AUDIO STANDARDS

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

AUDIO FEATURES

Telephone add-on via MultiSite
TANDBERG Natural Audio Module™ II
Four separate acoustic echo cancellers
Audio mixer
Automatic gain control
Automatic noise reduction
Audio level meters
VCR ducking

AUDIO INPUTS (6 INPUTS)

3 x microphone, 24V phantom powered, XLR connector
1 x RCA / Phono, Line Level: audio mixer
1 x RCA / Phono, Line Level: auxiliary
1 x RCA / Phono, Line Level: VCR

AUDIO OUTPUTS (3 OUTPUTS)

1 x RCA / Phono, Line Level: main audio
1 x RCA / Phono, Line Level: auxiliary
1 x RCA / Phono, Line Level: VCR

FRAME RATES – POINT-TO-POINT & MULTISITE

15 frames per second @ 56 - 128 kbps
30 frames per second @ 168 kbps - 3 Mbps
Point-to-point only: 60 fields per second @ 336 kbps - 3 Mbps (Natural Video)

MULTISITE FEATURES

Support for ISDN or IP telephones
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
Built-in MultiSite IP audio bridge for up to 4 sites
DuoVideo, Digital Clarity
MULTISITE (H.243) CASCADING OVER ISDN AND IP
Up to 10 video sites + 4 audio sites
Any combination of IP & ISDN connections (transcoding)

MULTISITE OVER IP

4 sites @ 768 kbps
4 sites @ 512 kbps + 1 telephone call over ISDN
3 sites @ 768 kbps + 2 telephone calls over ISDN
Point-to-point @ 2 Mbps + 3 telephone calls over ISDN

MULTISITE OVER ISDN PRI E1(T1) AND IP

4 sites (2 on ISDN) @ 512 kbps + 1 telephone call over ISDN
3 sites @ 512 kbps (384 kbps) + 2 telephone calls over ISDN

MULTISITE OVER ISDN BRI AND IP

4 sites (1 on ISDN) @ 512 kbps + 1 telephone call over ISDN
4 sites (2 on ISDN) @ 384 kbps
4 sites (2 on ISDN) @ 320 kbps + 1 telephone call over ISDN
4 sites (all on ISDN) @ 256 kbps
4 sites (all on ISDN) @ 192 kbps + 1 telephone call over ISDN
3 sites (all on ISDN) @ 320 kbps + 2 telephone calls over ISDN
Point-to-point @ 512 kbps + 3 telephone calls over ISDN

MULTISITE OVER V.35 AND IP

4 sites (1 on V.35) @ 512 kbps
3 sites (1 on V.35) @ 768 kbps

DUOVIDEO / H.239

Available on all networks

NETWORK FEATURES

Auto H.320 / H.323 dialing
Downspeeding
Programmable network profiles
Intelligent Call Management
HO on ISDN-PRI Facility
Maximum call length timer
Automatic SPID and line number configuration (National ISDN, GR-2941-CORE)
Soft Mux
NATO standard KG194/KIV-7 encryptor support
H.331 Broadcast Mode

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 and H.239

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-synch buffering
Intelligent Packet Loss Recovery (IPLR)
IP Address Conflict Warning

SECURITY FEATURES

Encrypted IP Password
Menu Password
Access code
Streaming password
H.243 MCU password
VNC password
SNMP security alert
Encrypted HTTP 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 G.703 (RJ-45) for ISDN PRI cascading
1 x LAN / Ethernet (RJ-45) 10/100 Mbit (LAN / DSL / cable modem)
1 x X.21 / V.35 / RS-449 with RS-366 dialing, Leased Line or data triggered mode
Ethernet / Internet / Intranet Connectivity
TCP/IP, DHCP, ARP, FTP, Telnet, HTTP
SNMP Enterprise Management
Internal web server
Internal streaming server (streams local and far-end site)
10/100 Mbit full / half duplex (manual or auto detect selection)

OTHER MAJOR ITU STANDARDS SUPPORTED

H.231, H.233, H.234, H.235, H.235 v2&v3, H.239, H.241, H.243, H.281, BONDING (ISO 13871), H.320, H.323, H.331

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
Daisy chain support for up to 4 cameras
VISCA camera support

PRESENTATIONS AND COLLABORATION

Natural Presenter Package including:
PC Presenter
PC SoftPresenter
Digital Clarity
DuoVideo and H.239
T.120 Microsoft® NetMeeting® support via RS-232 (9-pin D-sub)
Streaming (compatible with Cisco IP/TV, Apple QuickTime®, RealPlayer® v8 etc.)

CLOSED CAPTIONING/TEXT CHAT

T.140 standards-based

SYSTEM MANAGEMENT

Support for the TANDBERG Management Suite
Total management via embedded web server, SNMP, Telnet and FTP

Remote software upload: during a call over all networks, via webserver or via FTP server
1 x RS-232 used for main camera control
1 x RS-232 for local software upgrades, local control and diagnostics
Remote control and on-screen menu system

DIRECTORY SERVICES

Searchable server directory* 50,000+ entries supporting LDAP and H.350
400 number global directory
100 number local directory
16 dedicated MultiSite entries

11 SELECTABLE MENU LANGUAGES

Chinese, English, French, German, Italian, Japanese, Norwegian, Portuguese, Russian, Spanish and Swedish

CUSTOMIZED BOOT UP LOGO (JPEG)

POWER

Auto-sensing power supply
100 - 250 VAC, 50 - 60 Hz
65 watts max. for codec and main camera

FOOTPRINT

Width: 41.3" / 105 cm
Depth: 24.6" / 62.5 cm

* Requires TANDBERG Management Suite 9.0 or newer

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



The TANDBERG 6000 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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June 2004