



# TANDBERG Portable 2500

The TANDBERG Portable 2500 is ideal for demonstrations and special events. Its compact case makes it easy to transport and assemble wherever it is needed most. Featuring the extensive functionality of the TANDBERG 2500 video system.



Compact carry case includes codec, microphone, remote control, tracker and wide angle view camera.

#### DESIGN FEATURES

- Designed for use at demonstrations and events
- Compact carry case includes codec, microphone, remote control, tracker and wide angle view camera
- Easy to transport and assemble
- Complete TANDBERG 2500 core technology

#### 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 up to 1.5 Mbps, ISDN up to 384 kbps
- Superior video quality incorporating the H.264 standard
- Highest level of standards-based embedded encryption (AES) is included
- Protection against network interruptions with automatic Downsampling and IPLR

## SYSTEM COMPONENTS

Videoconferencing codec, wireless remote control, Tracker W.A.V.E. II camera, microphone, cables, carrying case

## BANDWIDTH

H.323 up to 1.5 Mbps  
H.320 up to 384 kbps

## 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 RESOLUTION

### 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  
Audio level meters  
Automatic noise reduction  
Two separate acoustic echo cancellers  
Audio mixer  
Automatic gain control  
VCR ducking

## AUDIO INPUTS (4 INPUTS)

2 x microphone, 24V phantom powered, XLR connector  
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 and above  
Point to point only: 60 frames per second at 336 kbps  
and above (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 IP audio bridge for up to 4 sites  
DuoVideo, Digital Clarity

### MULTISITE (H.243) CASCADING OVER ISDN AND IP

Up to 10 video and 4 audio sites  
Any combination of IP & ISDN connections (transcoding)

### MULTISITE OVER IP

4 sites @ 512 kbps + 1 telephone call over ISDN  
3 sites @ 768 kbps + 2 telephone calls over ISDN  
Point-to-point @ 1.5 Mbps + 3 telephone calls over ISDN

### MULTISITE OVER ISDN BRI AND IP

4 sites (1 on ISDN) @ 384 kbps  
4 sites (1 on ISDN) @ 320 kbps + 1 telephone call over ISDN  
3 sites (1 on ISDN) @ 256 kbps + 2 telephone calls over ISDN  
4 sites (2 on ISDN) @ 192 kbps  
4 sites (all ISDN) @ 128 kbps  
3 sites (all ISDN) @ 128 kbps + 2 telephone calls over ISDN  
Point-to-point (ISDN) @ 192 kbps + 3 telephone calls over ISDN

### MULTISITE OVER V.35 AND IP

4 sites (1 on V.35) @ 384 kbps

## DUOVIDEO / H.239

Available on all networks  
Presenter and presentation on single or dual monitor

## NETWORK FEATURES

Auto H.320 / H.323 dialing  
Downspeeding  
Programmable network profiles  
Intelligent Call Management  
Maximum call length timer  
Automatic SPID and line number configuration  
(National ISDN, GR-2941-CORE)  
SoftMux  
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 lipsync 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

3 x ISDN BRI (RJ-45), S-interface  
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, 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

## UNIT DIMENSIONS

Length: 20" / 52cm  
Height: 8" / 21cm  
Depth: 18" / 45cm  
Weight: 33lbs / 15kg

\* 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 Portable 2500 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](http://www.tandberg.net).

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# Portable 2500

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June 2004