INTRODUCTION

Combining the power of video with multimedia tools, the TANDBERG MediaP2 is an integrated video communication system. Incorporating a TANDBERG Edge MXP codec with a high resolution projector, DVD/VCR, and audio system, the Media Plus offers a flexible, interactive solution that is highly durable, mobile, and secure.

Simple to install and set-up, the TANDBERG MediaP2 is designed with ease of mobility to take the system to where it is needed. This complete, integrated, mobile video solution is great for classroom applications or any meeting room.

This USER GUIDE is provided to help you make the best use of your TANDBERG videoconferencing system by addressing the components of the TANDBERG MediaP2.

Design Features

- Designed as a mobile multimedia and video system
- Integrated TANDBERG Edge MXP codec, high-resolution projector, and integrated audio system
- Secured with a lockable LEXAN cover panel to protect the system
- Sturdy base with castor wheels, and secure cable/microphone storage space

Application features

- Join up to 4 video and 3 audio sites with optional embedded MultiSite* functionality – best possible call for each MultiSite participant with rate matching and transcoding.
  
  * optional feature. To check which options are installed, select Control Panel - System Information in the menu
- Powerful live presentations through one-step PC plugin or LAN connection
- View presentations and presenter simultaneously with DuoVideo and H.239 Dual Stream.
- Share images of live video, PCs, DVD/VCR, document cameras, and other input devices

Performance features

- TANDBERG Edge MXP Codec
- Choice of Network*:
  - up to 512 kbps ISDN
  - up to 2 Mbps IP (H.323 or SIP)
  
  * optional feature. To check which options are installed, select Control Panel - System Information in the menu
- PC card slot for wireless LAN connection
- Highest level of embedded encryption as well as H.235 and IEEE 802.1x authentication
- True CD-quality audio
- Protection against network interruptions in point-to-point and multipoint calls with automatic downspeeding and IPLR
- Superior video quality incorporating the H.264 standard
At a Glance: TANDBERG MediaP2

- SECURITY KEY LOCKS (2X)
- TANDBERG PRECISION HD CAMERA ON SWIVEL AND HEIGHT-ADJUSTABLE CAMERA SHELF
- SMALL STORAGE AREA W/ ACCESS TO ONE AC OUTLET
- MICROPHONE
- USB A
- VGA+MINI HEADPHONE PLUG
- SYSTEM CABLE EGRESS/CONNECTIONS
- AC POWER
- NETWORK
- USB B
- LEXAN COVER WITH LIFT HANDLES
- PROJECTOR ON TILT ADJUSTABLE ROCKER
- SPACE FOR OPTIONAL PERIPHERAL DEVICE (USER SUPPLIED DVD, VCR, ETC.)
- PULL-OUT ANGILLARY TRAY
- PORTABLE MEDIA DEVICE HOLDER (USER SUPPLIED IPOD, ZUNE, ETC.)
- RCA CONNECTIONS INSIDE STORAGE AREA FOR OPTIONAL PERIPHERAL DEVICE(S) (USER SUPPLIED DVD, IPOD, ETC.)
- CABLE WRAPPING HOOKS
- LOCKING CART CASTERS (4X)
TANDBERG MediaP2 Overview

This section provides a general overview of the TANDBERG Media P2 videoconferencing system and some of its optional components. The Media P2 system comes in one box.

Unpacking the TANDBERG MediaP2

- TANDBERG Precision HD Camera
- TANDBERG Edge MXP Codec (installed)
- Lockable mobile cart
- Projector
- Amplifier and speakers (installed)

For MediaP2 installation, only the actual projector and HD Camera connections are required. All necessary cables have already been installed in the MediaP2 cart to ease installation.

Inside the MediaP2 cart packaging is an accessory kit which includes:

- Screw for mounting HD Camera to swivel and height-adjustable shelf
- TANDBERG Advanced Remote Control with batteries
- 4 x 15ft. ISDN cables
- Microphone
- Projector mounting screws

TANDBERG Edge MXP Codec

The heart of the TANDBERG MediaP2 videoconferencing system is the codec. The codec is housed in the vertical column of the cart's base.

Please refer to the TANDBERG EDGE MXP CODEC USER GUIDE for how to navigate and operate the codec.

Precision HD Camera

The TANDBERG Edge MXP codec is optimized with the addition of a remote controllable Precision HD camera. It allows users to fully maximize the High Definition experience and provides superior video quality at any bandwidth to provide crystal-clear, true-to-life quality for rich interaction and collaboration.

System Speakers

The mobile cart integrates a pair of amplified speakers that provides quality audio during a multimedia presentation.
Mobile Cart

The mobile cart is designed with durability, security, simplicity, and ease of mobility in mind.

**durability**
- durable Polyethylene cabinet
- steel-frame construction
- wide-base Castor wheel set for stability

**security**
- locking LEXAN cover
- secure ancillary storage area

**simplicity**
- integrated cables for easy system connections
- TANDBERG advanced remote control

**mobility**
- locking castor wheels
- small footprint

In addition, small, practical features have been implemented to enhance user experience:

- slide-out shelf
- height-adjustable camera shelf that also pivots 45° to the left and 45° to the right
- AC outlet
- tilting projector shelf
Microphone

A high-quality, unidirectional table microphone is included with the TANDBERG unit. It is specifically designed to be used on a table during a videoconference. The system will automatically equalize sound levels where loud and soft voices are picked up and transmitted to the far end at approximately the same level.

The ideal location for the microphones is about 2-6 feet from the person speaking, set on a flat surface (i.e. table surface).

Your actual microphone may appear different than the drawings in this manual.

Projector

The high-resolution projector is mounted to the mobile cart and is tilt adjustable.

This projector detects and auto-switches to source to simplify projector configuration.

The projector manual is included for your reference. Please familiarize yourself with the projector so as to prevent damage to the projector, and to extend bulb life.

Refer to the projector manual for optimal specifications for screen types and projections parameters.

Except in emergencies, do not turn off the power switch unless the power indicator is a steady orange. Otherwise, improper cooling of the lamp will reduce the life of the lamp or may damage the lamp.

Your actual projector may appear different than the drawings in this manual.

Remote Control

The TANDBERG remote control is used to control all codec functions of the MediaP2 system. When in range, picking-up or moving the remote control will automatically wake up the system in the event the screen saver or sleep mode is activated.

Refer to the CODEC USER MANUAL on remote control operation.

Computer

A user supplied computer can be connected to the MediaP2 using the provided VGA connection. This enables electronic content to be viewed in a videoconference.

The MediaP2 cart has a built-in sliding shelf for you to place a laptop computer upon. One AC outlet is also provided in the storage space of the cart.

Refer to the section ‘PC Presenter’ in the CODEC USER MANUAL for more information on how to use the PC Presenter.
INSTALLATION

The TANDBERG MediaP² components are: TANDBERG Edge MXP Codec, Precision HD Camera, lockable mobile cart, high resolution projector, and audio system with speaker and microphone.

Refer the following pages for system setup and installation.

Precautions

- Never install telephone wiring during a lightning storm. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electrical shock from lightning.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninstalled telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Do not use the telephone to report a gas leak in the vicinity of the leak.
- The socket outlet shall be installed near to the equipment and shall be easily accessible.
- Never install cables without first switching the power OFF.
- 1TR6 network type is not approved for connection directly to the telecommunications network. This network type is only to be used behind a PABX.
- X.21 network type is not approved for connection directly to the telecommunications network. This network type is only to be used together with already approved equipment, and is not meant for direct connections to the telecommunication networks.
- V.35/RS-449/RS-366 network type is not approved for connection directly to the telecommunications network. This network type is only to be used together with already approved equipment, and is not intended for direct connection to the telecommunication networks.
- This product complies with directives: LVD 73/23/EC, EMC 89/366/EEC, R&TTE 99/5/EEC
Installing the Precision HD Camera

The TANDBERG Precision HD Camera must be mounted to the height-adjustable shelf of the mobile cart. Refer to the following illustration for mounting the camera.

1. Raise the camera shelf.
2. Connect the camera control cable to the HD Camera as shown.
3. Use the included ¼-20 button head HEX screw to secure camera to shelf. Be sure to thread the camera cable through the groove to ensure a flush and secure mount.
Installing Projector

The projector must be mounted to the adjustable projector shelf on the mobile cart. Refer the following illustration as an example for mounting the projector.

* NOTE: Your projector and mounting holes may appear differently from the example shown below.

1. Align the three mounting holes on the bottom of the projector to the corresponding holes on the projector shelf.
2. Secure the projector to the shelf using three thumbscrews*.

* NOTE: The thumbscrews will not tighten completely. This is done to allow you to adjust the feet on the projector to maximize the viewing angle for your particular environment.

3. Once the projector is securely mounted, match the labeled connection cables to the projector:
   a. Projector VGA IN
   b. Power
Cable Connections

The TANDBERG MediaP² provides integrated system cables. The bulk of the cables are found from the vertical trunk of the mobile cart, and RCA connections for any peripheral device are found just inside the storage compartment.

**AC POWER**
Plug the AC POWER CORD into an AC outlet to provide power to the system.

**NETWORK**
Connect the provided Ethernet cable to the network to provide network services to the codec.

*Any network that may be required for an optional computer or other device is not provided directly from the MediaP² cart.*

**MICROPHONE**
The supplied microphone is connected into the MIC 1 input of the codec. The mic should be placed on a flat surface about 2-6 ft from the person speaking.

**USB-A**
Connect the USB A cable to the user supplied computer.

**USB-B**
Connect the USB B cable to the user supplied electronic whiteboard.

**VGA + Mini Headphone Plug**
Connect a computer – Win or Mac – using the VGA connection to show the screen contents of the computer through the Media P² system. Audio can be provided to the presentation from the computer by connecting the mini headphone plug into the headphone/lineout jack on the computer.

*When using a Macintosh computer an adapter may be required.*

**RCA Connection**
The inside of the storage area houses a set of RCA couplers to connect optional peripheral devices such as an iPOD or DVD player. The connecting RCA cables are to be user supplied and may be unique with regard to the connection required by the media device.

*yellow = video; red = right audio; white = left audio*

*A user supplied connector/adapter cable may be needed to connect the device to the RCA connector inputs (female).*
Audio Connections

Video Connections
CONFIGURATION

The codec, projector, and electronic whiteboard must be calibrated in order to properly utilize the MediaP2. The integrated TANDBERG Synch module enables an electronic interactive whiteboard to become an integral part of the video presentation enabling greater learner participation in the classroom and allowing participants to interact with dynamic content.

Currently supported electronic whiteboards:

- Promethean ActivBoard 100
- Promethean ActivBoard 300
- Promethean ActivBoard 300 Pro
- Promethean ActivBoard AC2
- SMART DVIT PX300 Series
- SMART DVIT PX400 Series
- SMART 600 Series*
- SMART 500 Series

* dual touch not supported

**NOTE:**
Configure your MXP CODEC such that DATA 1 is set to 9600, N, 8, 1 in Control mode.

If using an MXP CODEC, set your local computer resolution to 1024x768 @ 60Hz and have the VGA output clone/mirror the laptop display. Do not use the extended desktop feature.

Configure the C-Series CODEC such that COM is set to 38400, N, 8, 1 in Control mode. Set Login to OFF.
Power Up

PROMETHEAN
If the connected computer (Win/Mac) has Promethean ActivManager software installed an ORANGE ICON should be present in the task bar (WIN) or the menu bar (MAC). While Synch is not connected or powered on an “X” is seen on this icon. When Synch is active the “X” will disappear.

SMART
If the connected computer (Win/Mac) has SMART Notebook software (v10) installed a BLUE ICON should be present in the task bar. While Synch is not connected or powered on an “X” is seen on this icon. When Synch is active the “X” will disappear.

The interactive whiteboard is powered from the Synch -- the board LED will be green when operating correctly.

When the system is ready for use an “Initialization Complete” message will be displayed on-screen for a few seconds.

Laptop VGA Output

• Do not use the extended desktop feature.
• When using a Macintosh computer an adapter may be required.

MXP CODECS: It is recommended that the local computer resolution be set to 1024x768 @ 60Hz. Also set the VGA output to clone/mirror the computer’s display.

C-SERIES CODECS: Select the resolution that is optimally appropriate for viewing on the projected display.

CODEC LAYOUT CONFIGURATION

MXP CODECS: It is recommended that the codec is set to POP (Picture-Out-of-Picture) mode with the VGA monitor format to WIDE. These settings allow for the multiple layouts that Synch can utilize.

In the Codec Menus: CONTROL PANEL > GENERAL > SCREEN SETTINGS...

...PICTURE LAYOUT > POP [SAVE]
...VIDEO OUT > VGA MONITOR FORMAT > WIDE [SAVE]

NOTE: Whenever the aspect ratio is changed a recalibration will be required (see CALIBRATION).

C-SERIES CODECS: Navigate to the Codec’s Advanced Configuration and select: VIDEO > LAYOUT > SCALE TO FRAME: STRETCH TO FIT

Set the OSD to DVI OUTPUT 2.

CALIBRATION

Calibrating your interactive whiteboard (Promethean/SMART*) with the connected computer via the Synch device is essential to the proper screen orientation and operation with your TANDBERG system.

* First time SMART Board installs should first run the 12-POINT calibration routine for first time SMART Board installation as instructed in the SMART documentation. Then follow the appropriate set of instructions for CALIBRATION with or without SMART Notebook software.

NOTE: Annotation and interactive software functionality is only possible when the respective whiteboard software is installed on the connected computer. If the appropriate software is not installed on the connected computer, you must calibrate using DIRECT MODE.

SYNCH CALIBRATION: SMART

This must be done while not in a call and requires SMART Notebook software be installed and running on the computer.

1. Set the projector image to fill the whiteboard area with no overlap on the frame. It is acceptable if the image is slightly smaller than the frame.
2. Set the codec image layout to FULL SCREEN and select PC SOURCE using the TANDBERG Remote.
3. On the computer right-click on the blue SMART icon in the taskbar and select CONTROL PANEL > SMART HARDWARE SETTINGS. In the pull-down menu, select ORIENTATION/ALIGNMENT SETTINGS and check the WIDE (12 POINTS) radio button. Press APPLY to save settings.
4. Press ORIENT to display a 12-touch point test pattern. Touch the center of each crosshair on the image displayed on the whiteboard. With Synch connected between the interactive whiteboard and the computer, press the * button quickly on the remote 5 times. The on-screen message “CALIBRATION MODE” will appear.

Pressing the * button 5 times again will cancel the calibration routine.

5. On the SMART Board simultaneously press the KEYBOARD and RIGHT MOUSE BUTTONS to initiate the initial calibration – OR –
On the computer right-click on the blue SMART icon in the taskbar and select ORIENT.
6. If a mistake is made press ESC on the keyboard and * 5 times on the remote to cancel the calibration routine. Then repeat from STEP 3.

The SMART Board is now calibrated with Synch.

SYNCH CALIBRATION: PROMETHEAN

This must be done while not in a call and requires Promethean ActivManager software be installed and running on the computer.

1. Appropriately align the projector image to fill the whiteboard area.
2. Set the codec image layout to FULL SCREEN and select PC SOURCE using the TANDBERG Remote.
3. With Synch connected between the ActivBoard and the computer, press the * button quickly on the remote 5 times. The on-screen message “CALIBRATION MODE” will appear. Pressing the * button 5 times again will cancel the calibration routine.

4. Launch the calibration utility by from the ORANGE ICON in the task bar (WIN) or the menu bar (MAC). The calibration program will prompt you to click on the active area with the pen to begin calibration.

5. Click the pen accurately on the center of each of the successive cross-hairs. When you have clicked on five calibration crosses, the calibration utility will automatically close.

The ActivBoard is now calibrated with Synch.

**DIRECT MODE CALIBRATION**

The Synch must operate in “DIRECT MODE” when using a Promethean ActivBoard or SMART Board where the appropriate software IS NOT installed on the local computer. This procedure enables the interactive whiteboard to behave as a mouse input device for computer control only.

To switch from SMART MODE to DIRECT MODE use the TANDBERG Remote Control to press “#*#*#” (pound-star-pound-star-pound) to initiate DIRECT MODE. Another option to put Synch in to DIRECT MODE is to use a thin object (paper clip) and depress the button found on the front of the Synch box until the DIRECT MODE message is seen.

Press “#*#*#” to toggle between WHITEBOARD and DIRECT modes. An ON-SCREEN MESSAGE will flash to indicate which mode the system is in.

Whenever the Synch module is power-cycled it will revert to the default WHITEBOARD MODE requiring recalibration in Direct Mode.

1. Set the projector image to fill the whiteboard area with no overlap on the frame. It is acceptable if the image is slightly smaller than the frame.

2. Set the codec image layout to full screen and select PC SOURCE using the TANDBERG Remote.

3. With Synch connected between the interactive whiteboard and the computer, press the * button quickly on the remote 5 times. The on-screen message “CALIBRATION MODE” will appear. Pressing the * button 5 times again will cancel the calibration routine.

4. Touch the tip of the mouse cursor on the image displayed on the interactive whiteboard. There are 3 locations to calibrate: top-left, lower right & upper-right. After the upper right calibration has been touched the calibration is complete.
OPERATION

Once Synch has been properly calibrated, the TANDBERG MediaP2 system is ready to use.

When the local computer (PC Source) is shown in the large windows of any layout you will be able to control the computer desktop from the interactive whiteboard.

The above layouts are available on MXP Codecs. The “X” represents the inactive areas of each layout.

All layout areas showing the local computer for the C-Series Codec are active.

Operation without WHITEBOARD software

If the appropriate whiteboard software is not installed on the local computer Synch will only control the local computer desktop from the interactive whiteboard.

Annotation will not be possible.

Operation with WHITEBOARD software

On-screen annotation and use of interactive software will be enabled.
SERVICING

Do not attempt to service the apparatus yourself, otherwise the warranty will be voided. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Damage Requiring Service

Unplug the apparatus from the outlet and refer servicing to qualified personnel under the following conditions:

- When the power cord or plug is damaged or frayed.
- If liquid has been spilled or an object has fallen into the apparatus.
- If the apparatus has been exposed to rain or moisture.
- If the apparatus has been subject to excessive shock by being dropped.
- If the apparatus does not operate normally when following the operating instructions.

NOTE: TANDBERG will provide on request circuit diagrams and component parts list of the system.

For servicing, please call one of the following service centers:

USA
TANDBERG Inc.
1860 Michael Faraday Drive, Ste. 100
Reston, Virginia, USA 20190
Tel: 703-709-4281
Toll free: 800 889 7440
Fax: 703-709-4231
Video: 703 437 6991

Canada
TANDBERG Canada Inc.
6505 Transcanada Highway
Montreal, Quebec
H4T 1S3
Tel: 514 748 5224
Fax: 514 748 1002
Video: 514 748 7790