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1. Introduction

Release Date: 4 February 2002

1.1 Systems

The software is prepared to work on the following systems*:

- TANDBERG 8000
- TANDBERG 7000
- TANDBERG 6000
- TANDBERG 2500
- TANDBERG 1000
- TANDBERG 880
- TANDBERG 800
- TANDBERG 500

* some features may not be available on all systems.

1.2 Software versions

Current software version can be determined from the system boot up screen or by selecting <menu>, <diagnostics>, <system info>.

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2. Networks

2.1 RSVP (IETF RFC 2005)

Requirements:
- Standard on TANDBERG 8000/7000/6000/2500/1000/880/800/500

Restrictions:
- None

The RSVP standard is used by an endpoint to request certain qualities from the network that will transport the video and audio data. This request is made at each node throughout the network and each node must comply or the reservation will fail.

RSVP is a protocol like TCP and UDP. It has no concept of ports and hence it must be some sort of mechanism in the firewall to enable RSVP traffic. To enable RSVP you need to find the RSVP setting and turn it on. Consult the firewalls technical manual to see if there are separate settings for incoming and outgoing RSVP traffic.

2.2 Single DES Encryption (ITU-T H.233, H.234)

Requirements:
- Standard on TANDBERG 8000/7000/6000/2500/1000/880/800/500

Restrictions:
- Available only on H.320 networks (ISDN PRI T1/E1, ISDN BRI, Leased Line PRI T1/E1, V.35/RS449)
- Available in DuoVideo<sup>TF</sup>
- FECC and T.120 Support
- Not available in MultiSite<sup>TF</sup>
- Available at speeds up to 768kbps

The TANDBERG product line now supports Single DES encryption on PRI, BRI, and V.35/RS449 connections. The default setting is ‘ON’ and will automatically encrypt
the call when connected to another video system that supports H.233/H.234 encryption.
The Diffie Hellman protocol allows two users to exchange a secret key over an insecure medium without any prior secrets. This algorithm provides a 512 bit generation of an encrypting key, encrypted exchange of session keys and automatic generation of new random keys for each call.

2.3 802.11b Wireless Ethernet Support (IEEE 802.11)
Requirements:
- Standard on TANDBERG 1000/880
Restrictions:
- Not available on TANDBERG 8000/7000/6000/2500/800/500

The TANDBERG 1000/880 now offer 802.11b Wireless Ethernet support through the use of a PCMCIA card slot at the top/back of the unit. The following Network Interface Cards (NIC) are supported:

- Cisco Aironet 350
- Compaq WL110
- Lucent Orinoco Silver
- Lucent Orinoco Gold
- Enterasys Networks RoamAbout
- Melco Buffalo WL1-PCM-L11G

3. Special Features

3.1 MultiSite\textsuperscript{TF}

3.1.1 IP MultiSite\textsuperscript{TF} Cascade
Requirements:
- MultiSite\textsuperscript{TF} option for 8000/7000/6000/2500/880/800
Restrictions:
- MultiSite\textsuperscript{TF} not available on TANDBERG 1000/500
- Requires manual switching of slave MCU to voice switch mode when cascading using IP
- ‘Request Floor’ is not supported when cascading over IP
- ‘System Name’ is not supported when cascading over IP
- Duo Video\textsuperscript{TF} is not available in a cascaded conference

The MultiSite\textsuperscript{TF} option now allows for cascading of TANDBERG 8000/7000/6000/2500/880/800 MultiSite\textsuperscript{TF} units using ISDN or IP. The cascading feature allows for connection up to 10 sites video sites at 768kbps, using any mix of H323 and H320 MultiSite\textsuperscript{TF}s and endpoints, and 4 audio only sites. The ‘master’ MultiSite\textsuperscript{TF} can be either voice switched or continuous presence. All sites will see the same continuous presence or voice switched image depending on what the ‘master’ MultiSite\textsuperscript{TF} has selected as its preferred display configuration.
Up to 4 audio calls can be added to the 10 site cascaded conference for a total of 14 sites.

3.1.2 MultiSite\textsuperscript{TF} Chair Control

Requirements:
- MultiSite\textsuperscript{TF} option for 8000/7000/6000/2500/880/800

Restrictions:
- MultiSite\textsuperscript{TF} not available on TANDBERG 1000/500
- Feature only available to the system hosting the MultiSite\textsuperscript{TF}

The MultiSite\textsuperscript{TF} host can now make use of chair control commands such as
- Floor to Site (over IP) gives each end-point the ability to broadcast in a MultiSite conference.
3.2 Streaming

3.2.1 Streaming Of Near and Far End Video
Requirements:
- Available on TANDBERG 8000/7000/6000/2500/880/800
Restrictions:
- Not available on TANDBERG 1000/500 (stream outside of call only)
- Not available on a site hosting a MultiSite\textsuperscript{TF} conference
- Not available while using DuoVideo\textsuperscript{TF}

Streaming the far site and local site video during a conference is now possible. There are 3 modes of streaming that allow for a 384kbps stream to be viewed:

- **Local**: Allows the viewer to see the video from the participant of the codec that is streaming. Audio from the local and far end sites will be heard.
- **Remote**: Allows the viewer to see the video from the participant at the far end of the conference. Audio from the local and far end sites will be heard.
- **Auto**: Allows the viewer to see the video from both sites using voice switching. Audio from both sites will be heard.

3.2.2 Streaming Password
Requirements:
- Available on TANDBERG 8000/7000/6000/2500/1000/880/800/500
Restrictions:
- None

This feature provides a separate password for viewing a stream from a conference without giving the viewer control of the web interface of the codec.
4. User Interface

4.1 Quick Key for Voice Switched/Continuous Presence

Requirements:
• MultiSite\textsuperscript{TF} option for 8000/7000/6000/2500/880/800

Restrictions:
• MultiSite\textsuperscript{TF} not available on TANDBERG 1000/500
• Not for use in an external MCU

While in a MultiSite\textsuperscript{TF} call, the \textbf{BLUE} quick key will now offer the option of toggling between Continuous Presence and Voice Switched.

4.2 Sleep Mode Delay

Requirements:
• Standard on TANDBERG 8000/7000/6000/2500/1000/880/800/500

Restrictions:
• None

While the system is not in a call, the \textbf{GREEN} quick key can be pressed to delay the sleep mode of the system for up to 3 hours. This is useful if the system is to be used as a local presentation device while not in a video call.

4.3 White Balance Adjustment

Requirements:
• Standard on TANDBERG 8000/7000/6000/2500/1000/880/800/500

Restrictions:
• None

The ability to adjust the camera white balance has been added to the TANDBERG 1000 user interface.

4.4 MCU/DuoVideo\textsuperscript{TF} Indicators

Requirements:
• Standard on TANDBERG 8000/7000/6000/2500/1000/880/800/500

Restrictions:
• None

The adjustment allows the onscreen indicators to time out and be removed from the screen thereby freeing up the viewing area on the screen. This feature is under the \texttt{<utilities>} menu. The options are:

On: Indicators will be on at all times
Off: Indicators will be off at all times
Auto: Indicators will be on for a short time (i.e. 10 seconds) and then disappear. The indicators will reappear when the remote control is grasped.
5. Dataport

For more details, please consult the dataport user’s guide, document D11943.

5.1 Text Box Display

Requirements:
• Standard on TANDBERG 8000/7000/6000/2500/1000/880/800/500

Restrictions:
• One text box at a time may be displayed

The integrator can now display a text box on the screen using the dispbox command. This box can contain a request for response in which case the integrator is able to present the user with responses using the programmable colored quick keys.

Example:

dispbox <title> <line1> [line2] [line3] [qk1] [qk2] [qk3]

6. Miscellaneous

6.1 Text Chat (ITU-T T.140)

Requirements:
• Available on TANDBERG 8000/7000/6000/2500/1000/880/800/500
• Available in DuoVideoTF

Restrictions:
• Not available in MultiSiteTF

The TANDBERG systems now support standards based Text Chat using the T.140 standard. This feature is available over all networks in a point to point call and when using DuoVideoTF. The text is entered through the web interface of the local codec and displayed on the monitor of the local and far end systems.

6.2 Maximum Call Time

Requirements:
• Available on TANDBERG 8000/7000/6000/2500/1000/880/800/500

Restrictions:
• Maximum value of 999 minutes

The TANDBERG systems now support the ability to set a maximum call time value in minutes. When the max call time is close to being reached (i.e. 60 minutes), an onscreen prompt will ask if the user will like to extend the conference. Using the quick keys, the user can extend the conference by 30 minutes, 60 minutes or 2 hours.
6.3 Access Codes/Account Codes
Requirements:
- Available on TANDBERG 8000/7000/6000/2500/1000/800/500
Restrictions:
- Account codes apply to the TANDBERG Management Suite (TMS)
- Codes may be 16 characters or less (alphanumeric)

The TANDBERG systems now support access codes and account codes (TMS). This feature allows the administrator to password protect the system and prevent use of the system without authorization. If TMS is being used, these codes can be used to keep track of which accounts have used the system for billing purposes.

The codes are stored in a file on the codec called ‘access.txt.’ and can be loaded into the codec through FTP. For more information, please consult the Data Port Users’ Guide D11943

6.4 Password For External MCU (ITU-T H.243)
Requirements:
- Available on TANDBERG 8000/7000/6000/2500/1000/880/800/500
Restrictions:
- Not available on IP (H.243 not supported in H.323)
- Up to 16 characters, alphanumeric

The TANDBERG systems now support H.243 passwords when in password protected conferences through an external MCU. When connected to an external MCU that requires a H.243 password, the TANDBERG system will prompt the user for the password.

This feature makes use of TCS-1.

6.5 Remote Software Upgrade via Web Interface
Requirements:
- Available on TANDBERG 8000/7000/6000/2500/1000/880/800/500
Restrictions:
- B3 or later software on both systems

The TANDBERG systems now support remote software upgrade from any model of TANDBERG to any other model of TANDBERG using the web interface or FTP. This feature is available over all network types the systems. For more information please consult document D10238.
6.6 VNC Password

Requirements:
- TANDBERG 7000/6000/2500/880/800 with NPP
- TANDBERG 1000/500 with PP

Restrictions:
- None

The VNC password in the user menus will now be replaced with ‘*******’ after the password is successfully set. This will prevent another user from seeing the password to the PC, thereby causing a possible security risk.

Software may be downloaded at [http://www.uk.research.att.com/vnc/](http://www.uk.research.att.com/vnc/).

6.7 VoIP using H.323

Requirements:
- Available on TANDBERG 8000/7000/6000/2500/1000/880/800/500

Restrictions:
- None

B4 allows for voice over IP calls using H.323 call setup. When selecting ‘telephone’ as the call quality and dialing a H323 system, all video capabilities will be removed.
### Interoperability

#### 6.8 Multipoint Control Units

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#### 6.9 Gateways

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