TEST REPORT TANDBERG 3000 MXP

GENERAL

TANDBERG 3000 MXP is an upper middle-sized class room system, which is designed for "Medium Meeting Rooms". The device makes video conferences over ISDN up to 512 Kbps and in LAN up to 2 Mbps possible. The tests were carried out with software version F1.2 PAL (in October 2004 version F1.3 was released as well).

The device was tested at the VCC in October 2004.

INSTALLATION AND OPERATION

Besides the camera the standard equipment includes two monitors, a microphone, the remote control, the rack with the codec and all necessary cables. Thus the device is equipped for bandwidths up to 384 Kbps. For the bandwidths mentioned above an extra charge is to be paid. This is also true for the multipoint function and the presenter (DuoVideo and the PC-connection). Unfortunately we did not have a manual or short reference with our test. There is, however, a manual available at the Tandberg homepage. The codec is attached to the rack in a way that the attachment side is invisible in front view. This contributes to the look of the device, but is hindering at the initial operation. This problem, however, is solved after a closer look at the back board of the device, which is held by a strong magnet. :)

The remote control has a dot-asterisk-button. When entering an IP-address it is not necessary to change over to dot-mode, as the “*”-correction in an IP-address is done automatically.

A useful feature is that the input of the dial string is accompanied by an automatic voice. Thus input errors are recognized immediately.

The given PIP-picture can be repositioned into the four screen corners by pressing the PIP-button repeatedly. This works only for a short time (about 4s), as long as the PIP has a yellow frame. As soon as the frame becomes blue, the PIP-button is for switching the PIP on and off.

TEST

Using the TANDBERG 3000 is very easy and intuitively to grasp because of the deliberate menu prompt together with the design colours and the clear structure of the remote control.

Especially felicitous is the possibility to show the menu semi-transparently over the current video picture. Thus the user is able to change the setting or to make status enquiries during a conference.

The dial-up is very fast. Connections to settop systems like VCON MC9000 and Polycom VSX7000 worked satisfactorily and without problems. The system Polycom ViewStation 512 could not be called via IP address in the test. In conferences with desktop systems there were sometimes bigger problems with the video picture. Block forming occured with the Tandberg 3000 in coaction with ViaVideo II and VigoPro as well as with the Escort 25 with fast moving pictures. There was no video reception with the end devices eConf pro/eConf standard, also with Tandberg 3000 video quality was only moderate. In coaction with NetMeeting there was no audio or video reception with NetMeeting and block forming at the Tandberg 3000.
Cooperation with the DFN-MCU (RADVision MCU-100, SW 3.2.38) was extensively without problems and qualitatively convincing. The device VCON Escort25, however, could not be loaded.

The test of a 2 Mbps connection had a very high video quality. This could be recognized especially when the camera was pivoted, which brought quite some blurring. CIF was the best suitable video format. When using 4CIF there were qualitative limitations in the moving pictures.

A negative point is that the length of the dialed number is limited. The input is transmitted correctly only up to 28 characters. Already when loading a new participant to an MCU conference according to the new DFN name convention one has to restrict oneself (e.g. only single-digit supplementation of a conference type, working without a password).

The steering of the far-end-camera was flawed. After the end of the call this steering mode is not quit and again active in the next call.

Especially user-friendly is the direct presentation of the Windows desktop from file contents of a directly connected laptop, from the local network, the internet or from a document camera. The PC to be presented has to be connected directly with a codec.

The device is equipped with an intern MCU, which is able to connect up to six participants.

The remote control to the system via WWW in unlimited function scope is only possible via MS Internet Explorer. By using the https protocol safety is guaranteed with remote access.

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**CONCLUSIONS**

TANDBERG 3000 is a convincing product, close to the high-end-class and with corresponding price. It is intended and absolutely appropriate for the equipment of middle-sized conference rooms.

**Technical Data**

Manufacturer: TANDBERG
Distributor: MVC, FARONETICS

<table>
<thead>
<tr>
<th>Supported General Standards</th>
<th>H.320, H.323</th>
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<tbody>
<tr>
<td>Sound Coding</td>
<td>G.711, G.722, G.722.1, G.728, <strong>MPEG4 AAC-LD</strong> (20 kHz Audio)</td>
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<tr>
<td>Video Compression</td>
<td>H.261, H.263, H.263+, H263++, <strong>H264</strong></td>
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<tr>
<td>Video Inputs</td>
<td>camera, document camera, S-Video, Composite, 1 DVI/SXGA (1280 x 1024)</td>
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<tr>
<td>Video Outputs</td>
<td>1 Monitor inputs (MiniDin, S-Video); 2 outputs for main and dual monitor (RCA/composite) 1 DVIIXGA (640x480 bis 1024x768)</td>
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<tr>
<td>Bandwidths</td>
<td>IP: max. <strong>2 Mbps</strong>; ISDN: max. 512 Kbps</td>
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Thanks to TANDBERG for supplying the test.