## Test report Emblaze VCON HD 3000

### General

<table>
<thead>
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<th><strong>Period</strong></th>
<th>From the middle of September 2005 with new software version</th>
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The device Emblaze VCON HD 3000 is a settop system with an integrated MCU, which enables connections with 4x384 or 3x768 kbps. It is suitable for group conferences up to 10 people.

### Scope of Delivery

Besides the settop system the scope of delivery includes a table microphone, the remote control, an extensive English manual, a Quick Start Guide and various network, audio and video cables.

### Bandwidths

The system makes LAN video conferences up to 4 Mbps possible.

### Miscellaneous

The system features a modern and appealing design.

### Installation

<table>
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<tr>
<th><strong>Setup</strong></th>
<th>Due to the good labelling of the device and the Quick Start Guides that go with it, the installation of the device is quick and without problems.</th>
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<tr>
<td><strong>Configuration</strong></td>
<td>The configuration of the device is easy. The menus are well comprehensible and clearly laid out.</td>
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### Test

| **Operation** | The remote control is identical with that of the former VCON model Falcon IP. One has to get used to handling it, as it does not always follow the intuition of the user. There is a high number of buttons in comparison with other remote controls. It is also important to aim at the infrared interface of the settop device very exactly. The operation concept of the user surface needs getting used to as well, as it can be operated efficiently over the actually hidden menu block of the remote control. |
| **Audio/Video** | Sound and video quality in connection with other H.323 end devices were usually good or excellent. Excluded from this are the VC connections with Microsoft Netmeeting and France Télécom eConf Pro. Unfortunately with these programs no audio/video connections or connections of only a bad quality could be established. Detailed results are to be found in the compatibility matrix. VCON HD3000 is able to transmit video with H.264 up to a bandwidth of 384 kbps. The use of this video standard was achieved with VCON HD4000 and Sony PCS-G70. The quality of the received video of the HD4000 was not convincing. The picture of the Sony PCS-G70 was blurred and the moving pictures were flawed. The quality of the received video of the HD3000 was good in both cases. With Polycom VSX3000 there was no connection to be achieved with which the video standard H.264 could have been used. |
### T.120 / H.239

The so-called HD Dual Stream (H.239) of VCON is carried out with a PC with the HD Data utility software, which makes a connection to the desktop system over its IP. After that the PC screen can be transmitted to the other side. If there is no second monitor attached, the TV displays the PC monitor picture. In the transmission of the PC monitor picture to HD 3000 there are flaws in the display. E.g. if in a PowerPoint presentation the next slide is shown on the PC, it occurs on the HD 3000 monitor only, if the user “swipes clean” the PC screen with the mouse cursor. Unfortunately this error in the image is transmitted to several receivers, e.g. VCON vPointHD. When transmitting an H.239 data stream to a HD4000 there were repeated program crashes at the HD4000. In a both-way transmission of PowerPoint presentations in a video conference with a Sony PCS-G70 font size 16 with a PCS-G70 and 22 with the HD3000 are still readable. However, with the HD3000 the picture is blurred sometimes. The PCS-G70 receives H.239 only with video formats, which are set up beforehand. Summarising it has to be said that the functioning of H.239 is not yet convincing. The T.120 standard is not supported.

### Remote Control of the Camera

The remote control of the camera was always possible in both directions, if there were the technical preconditions on both sides.

### MCU

In video conference connections with the RADVision-MCU of the service DFNVideoConference good sound and video qualities with different bandwidths could be achieved.

### Gatekeepers

The co-operation with the gatekeepers GNU-GK 2.0.7 and CISCO MCM worked without problems.

### Conclusion

The settop system Emblaze VCON HD 3000 is a device of the lower price range, for which its performance is acceptable.

### Documentation

**Producer:** Emblaze VCON

**Standards**

- H.323

**Audio encoding**

- G.711, G.722, G.723.1, G.728, G.729

**Video encoding**

- H.261, H.263, H.263+, H.263++, H.264 at up to 384 kbps

**Video input**

- S-Video, 2x Composite

**Video output**

- S-Video, 2x Composite, XGA