

TANDBERG

Entrypoint™

Software Release Notes

Software Version EP1.0

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DOCUMENT REVISION HISTORY

Revision 1.0	Release of EP1.0, Initial Version
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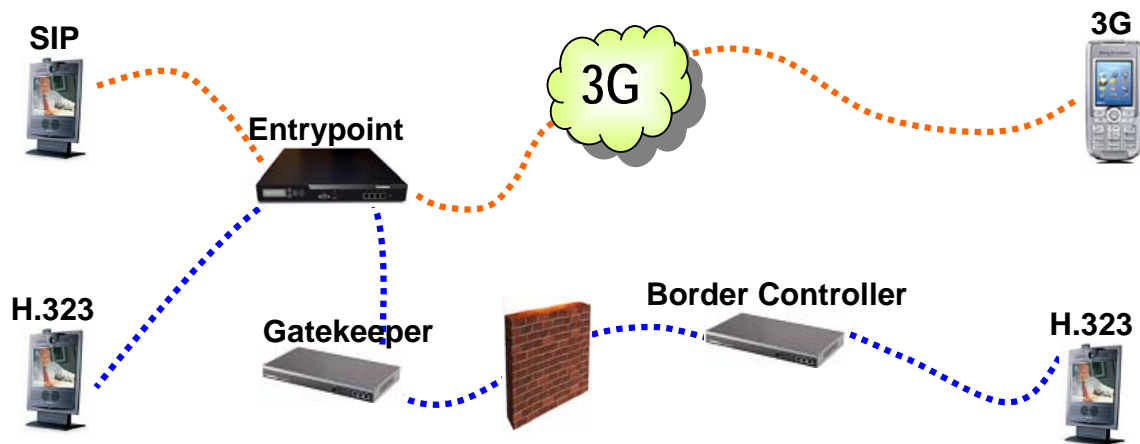
SOFTWARE RELEASE NOTES FOR TANDBERG ENTRYPOINT VERSION EP1.0

Introduction

These release notes describe the features and capabilities included in the TANDBERG Entrypoint software version EP1.0 released on 26 March 2007.

New Product Abstract

TANDBERG Entrypoint simplifies access to an organization through an intuitive, menu driven architecture. Using a single address, URI, number or IP address, remote users can access a completely customized interface, allowing access to network resources in a controlled, completely ad-hoc fashion without requiring any advanced planning between enterprises.



New Features

Dialing Services

Menu

When connecting to the Menu service, an endpoint is then presented with up to five different choices of far end destinations. These destinations, which can be anything from another service on Entrypoint to a telephony system to another endpoint on the network, will then be presented with the call just as though it was coming directly from the system that initiated the connection. The menu service allows an administrator to present an end user, either local or remote to the network, with a user-friendly interface that will allow them to narrow down their call search and ensure they only connect to the proper far end system in an ad-hoc manner without any user intervention.

The call can also be transferred off of Entrypoint if 'Allow Call Forwarding' is enabled. For more information on call forwarding, reference the 'Call Forwarding' section.

Dialplan entry details

Enabled	<input checked="" type="checkbox"/> ?
Name	DemoDialPlan _ Menu ?
Net Type	All ?
Prefix	3000000000030 ?
Suffix	?
Service	Menu ?

Arguments

Allow Forwarding	Yes ?
Entry 1	
Name	Reception ?
Net Type	H323 ?
Service Number	Type number/uri for reception here ?
Entry 2	
Name	Phonebook ?
Net Type	H323 ?
Service Number	3000000000031 ?
Entry 3	
Name	Dial Extension ?
Net Type	H323 ?
Service Number	3000000000032 ?
Entry 4	
Name	Support ?
Net Type	H323 ?
Service Number	3000000000033 ?
Entry 5	
Name	?
Net Type	H324m ?
Service Number	?

Availability	Available for H.323-to-H.323, SIP-to-SIP, H.324m-to-H.323, H.324m-to-SIP, Telephony-to-H.323 and Telephony-to-SIP call routing.
Restrictions	By default, audio only calls will not receive auditory feedback as to the menu being displayed. If this functionality is desired for audio calls, the default welcome sounds will need to be modified to include this information.

Corporate Directory

Entrypoint supports the ability for a connected system to, using a user-friendly graphical interface, search for any resource within the corporate directory that has been assigned to Entrypoint. Once located, the call will then be connected to the far end system without any more user intervention or specific alias dialing. If the search for a specific endpoint fails, Entrypoint will not disconnect the call, but rather allow the end user to search for another endpoint on the network. If, once a selection is made, the far end does not accept the call, Entrypoint will then prompt the end user to search for another entry as well, if they so choose.

The call can also be transferred off of Entrypoint if 'Allow Call Forwarding' is enabled. For more information on call forwarding, reference the 'Call Forwarding' section.

Dialplan entry details

Enabled	<input type="checkbox"/> ?
Name	<input type="text" value="DemoDialPlan _ Phonebook"/> ?
Net Type	<input type="text" value="H323"/> ?
Prefix	<input type="text" value="3000000000031"/> ?
Suffix	<input type="text"/> ?
Service	<input type="text" value="TMS Corporate Directory"/> ?

Arguments

TMS Address	<input type="text" value="10.0.0.50"/> ?
Allow Forwarding	<input type="text" value="Yes"/> ?
Show DTMF Information Screen	<input type="text" value="On"/> ?
AV Mode	<input type="text" value="Auto + fallback to audio"/> ?

Availability	Available for H.323-to-H.323, SIP-to-SIP, H.324m-to-H.323 and H.324m-to-SIP call routing.
Restrictions	Audio only calls will not receive visual or auditory feedback as to what is being displayed. This feature should not be utilized for audio-only call routing.

IVR

TANDBERG Entrypoint supports Interactive Voice and Video Response (IVR) for all calls connecting H.323-to-H323, SIP-to-SIP, H.324m-to-H.323, H.324m-to-SIP, telephony-to-H.323 or telephony-to-SIP. When connected to the number designated to IVR, the endpoint will receive both audio and video response prompting for the remote party’s extension (E.164 Alias). This extension, once entered, will be used by the Entrypoint to route the call to the appropriate endpoint.

The call can also be transferred off of Entrypoint if ‘Allow Call Forwarding’ is enabled. For more information on call forwarding, reference the ‘Call Forwarding’ section.

Dialplan entry details

Enabled	<input checked="" type="checkbox"/> ?
Name	DemoDialPlan _ Dial Extension ?
Net Type	H323 ?
Prefix	3000000000032 ?
Suffix	?
Service	Dial Extension (IVR) ?

Arguments

Net Type	H324m ?
AV Mode	Auto + fallback to audio ?
Prefix	?
Suffix	?
Allow Forwarding	Yes ?
Show DTMF Information Screen	On ?

Availability	Available for H.323-to-H.323, SIP-to-SIP, H.324m-to-H.323, H.324m-to-SIP, Telephony-to-H.323 and Telephony-to-SIP call routing.
Restrictions	None

DID

DID call routing allows for the direct mapping of an assigned number to an endpoint on either an H.323, H.324m or SIP network. When mapped, an incoming call destined for that specific number will then be automatically routed through Entrypoint to the appropriate far end system without any further user intervention.

The call can also be transferred off of Entrypoint if 'Allow Call Forwarding' is enabled. For more information on call forwarding, reference the 'Call Forwarding' section.

Dialplan entry details

Enabled	<input checked="" type="checkbox"/> ?
Name	<input type="text" value="DiD - H324m to H323"/> ?
Net Type	<input type="text" value="H324m"/> ?
Prefix	<input type="text" value="67123123"/> ?
Suffix	<input type="text"/> ?
Service	<input type="text" value="Direct Inwards Dialing"/> ?

Arguments

Net Type	<input type="text" value="H323"/> ?
AV Mode	<input type="text" value="Auto + fallback to audio"/> ?
Prefix	<input type="text" value="320"/> ?
Suffix	<input type="text"/> ?
Use Remainder	<input type="text" value="No"/> ?
Allow Forwarding	<input type="text" value="No"/> ?
Use Sub Number	<input type="text" value="No"/> ?

Availability	Available for H.323-to-H.323, SIP-to-SIP, H.324m-to-H.323, H.324m-to-SIP, Telephony-to-H.323 and Telephony-to-SIP call routing.
Restrictions	None

Call Forwarding

When used in conjunction with the TANDBERG Gatekeeper, Entrypoint can automatically forward a call from any of the dialing services to the far end video system, completely eliminating itself from the call. This feature will then allow point-to-point call quality between the two endpoints

If Entrypoint is registered to a gatekeeper that does not allow for call forwarding, the forwarding feature will not be utilized, regardless of the configuration of the dialing service.

To enable call forwarding, simply select 'Yes' in the drop down menu labeled 'Allow Call Forwarding' for this specific service to be forwarded.



Availability	This feature can be used for all services.
Restrictions	<p>Call Forwarding only works with H.323 calls</p> <p>Call forwarding will not work if the call must be transcoded (e.g. H.324m-to-H.323 calls).</p> <p>In order to support automatic call transfer, Entrypoint must be used in conjunction with a TANDBERG Gatekeeper with software version N5.2 and 'Call Routed' mode enabled.</p>

Secretary Service/Call Transfer

TANDBERG Entrypoint will allow any system, when connected to the far end through the Entrypoint server, to forward the call, using DTMF tones, to another system on the same H.323 network. To forward the call simply type in the alias of the far end system followed by the pound sign, i.e. #, the call will then be forwarded automatically, similar to a transfer feature on a telephony system. This feature will enable an enterprise to utilize video with many of the same features and functionality previously known only to voice deployments.

Availability	This feature can be used with all services.
Restrictions	<p>Call Transfer only works with H.323 calls.</p> <p>The call must still remain on Entrypoint for this feature to function – 'Allow Forwarding' must be turned off.</p>

Networks

H.323-to-H.323 Gateway

TANDBERG Entrypoint can utilize any of the above call routing mechanisms for connection between any two H.323 endpoints. When used in conjunction with the TANDBERG Expressway solution, Entrypoint can serve as the single point of entry into the network, providing user-friendly services that can be customized for any organization. The maximum capacity of the H.323-to-H.323 gateway within this version of software is 60 calls at 384 kbps.

Availability	This feature can be used for all dialing services.
Restrictions	Entrypoint cannot be used as an H.323-to-SIP gateway.

SIP-to-SIP Gateway

TANDBERG Entrypoint can utilize any of the above call routing mechanisms for connection between any two SIP endpoints on a network. The maximum capacity of the SIP-to-SIP gateway within this version of software is 60 calls at 384 kbps.

Availability	This feature can be used for all dialing services.
Restrictions	Entrypoint cannot be used as an H.323-to-SIP gateway.

3G Gateway

TANDBERG Entrypoint can utilize any of the above call routing mechanisms for connection between H.324m endpoints and H.323 or SIP endpoints. The maximum capacity of the 3G gateway within this version of software is 1920 kbps using an E1 PRI, 1472 kbps using a T1 PRI or 512 kbps using 4 BRIs.

Availability	This feature can be used for all dialing services.
Restrictions	None

Telephony Gateway

TANDBERG Entrypoint can utilize many of the above call routing mechanisms for connection between telephony endpoints and H.323 or SIP endpoints. The maximum capacity of the telephony gateway within this version of software is 30 calls an E1 PRI, 23 calls using a T1 PRI or 8 kbps using 4 BRIs.

Availability	This feature can be used for the Menu, IVR and DID services.
Restrictions	In order to take full advantage of the Entrypoint services, the audio files will need to be customized to provide further direction.

Usability

Customizable Posters

The end user experience provided by Entrypoint can be completely customized through the replacement of the default posters presented. Any of the posters within the different dialing services can be customized to provide an organization complete control over the visual aspect of the service. This customization can vary with each dialing profile created, thus providing full flexibility to the entire user experience.

Any of the customized posters can be reverted back to the original by clicking the 'Use Default' button within the dial plan administrative page.

Availability	Available in the IVR, Menu and Corporate Directory services.
Restrictions	Customized posters must be either CIF (352 x 288) or QCIF (176 x 144) resolution and in a valid .jpg file format.

Customizable Audio Clips

The end user experience provided by Entrypoint can be completely customized through the replacement of the default audio clips. Any of the audio files within the different dialing services can be customized to provide an organization complete control over the auditory of the service. This customization can vary with each dialing profile created, thus providing full flexibility to the entire user experience.

Any of the customized audio clips can be reverted back to the original by clicking the 'Use Default' button within the dial plan administrative page.

Availability	Available in the IVR, Menu and Corporate Directory services.
Restrictions	Customized audio files must be encoded using G.711 audio at a 64 kbps bit rate. The files must be a valid .mov file format.

Customizable Movies

In addition to audio and poster customization, the Directory Service provides the ability to present the end user with a customized movie that will be shown to the end user while the search function is proceeding. This customization provides another level of end user interaction, allowing for a number of different possibilities for customer experiences.

Any of the customized movies can be reverted back to the original by clicking the 'Use Default' button within the dial plan administrative page.

Availability	Available in the Corporate Directory service.
Restrictions	Customized movie files must be encoded using H.263 CIF at a 320 kbps bit rate and G.711 audio at a 64 kbps bit rate. The files must be a valid .mov file format.

Management

HTTP(S)

TANDBERG Entrypoint has an embedded web interface for control. This interface offers a user-friendly, graphically-driven method to configure and control the Entrypoint on all features and functionality. The HTTP and HTTPS services are enabled by default.

Note: When both HTTP and HTTPS management protocols are enabled, any web browser that connects to the Entrypoint on HTTP will be automatically re-directed to an HTTPS connection.

You can disable the HTTP and HTTPS services on Entrypoint either through the embedded web interface or through telnet or SSH. To disable it through the embedded web interface, navigate to Configuration, System, uncheck the HTTP(S) services check box, click 'Save' and then click 'Restart'. To disable through the telnet or SSH on the system, connect to the device and issue the command 'xconfiguration http mode: off' or 'xconfiguration https mode: off'. Once confirmed, the unit must be restarted for the change to take effect.

Note: If the Entrypoint is restarted, all active calls will be disconnected.

Telnet

TANDBERG Entrypoint has an embedded telnet server for configuration and administration. By default, the telnet sever on the Entrypoint is disabled, but may be enabled if desired.

You can enable the telnet service on Entrypoint either through the embedded web interface or through the API via an SSH connection. To enable it through the embedded web interface, navigate to Configuration, System, check the Telnet Service check box, click 'Save' and then click 'Restart'. To enable through the SSH on the system, connect to the device and issue the command 'xconfiguration telnet mode: on'. Once confirmed, the unit must be restarted for the change to take effect.

Note: If the Entrypoint is restarted, all active calls will be disconnected.

SSH

TANDBERG Entrypoint has an embedded SSH (Secure Shell) server for configuration and administration. SSH provides a CLI (command line interface) similar to telnet but over a secure, encrypted connection. Enabled by default, the SSH server may be disabled if desired.

You can disable the SSH service on Entrypoint either through the embedded web interface or through telnet connection. To disable it through the embedded web interface, navigate to Configuration, System, uncheck the SSH Service check box, click 'Save' and then click 'Restart'. To disable through telnet, connect to the device and issue the command 'xconfiguration ssh mode: off'. Once confirmed, the unit must be restarted for the change to take effect.

Note: If the Entrypoint is restarted, all active calls will be disconnected.

SNMP

TANDBERG Entrypoint has an embedded SNMP manager for proactive reporting of problems and systems status. Programs such as TANDBERG Management Suite (TMS) and HP OpenView require this feature in order to function properly. The SNMP manager can be disabled if desired. The SNMP service is enabled by default.

You can disable the SNMP service on Entrypoint either through the embedded web interface or through telnet or SSH. To disable it through the embedded web interface, navigate to Configuration, SNMP, and set Mode to 'Off', click 'Save' and then click 'Restart'. To disable through the telnet or SSH, connect to the device and issue the command 'xconfiguration snmp mode: off'. Once confirmed, the unit must be restarted for the change to take effect.

Note: If the Entrypoint is restarted, all active calls will be disconnected.

TMS

In addition to local management, Entrypoint can also be controlled through TANDBERG Management Suite (TMS). TMS provides a single point of management for the entire video network, including a wide array of both TANDBERG and third party gear. For more information on Entrypoint support in TMS, reference the TANDBERG TMS Product Support document.

Front LCD

TANDBERG Entrypoint contains an LCD panel on the front of the device that can be used for initial system setup, including the IP address, subnet mask and gateway. To utilize the front panel, power the system on and wait for the TANDBERG logo to appear on the LCD. Once the logo appears, simply use the up and down arrows, the check mark (accept) and the 'X' mark (cancel) to navigate around the menus and configure the appropriate addressing information. Once configured, the unit must be restarted for the IP information to take effect.

Note: If the Entrypoint is restarted, all active calls will be disconnected.

RS-232 Control

TANDBERG Entrypoint has a single DB-9 serial port that may be used for configuration and administration. The serial port may also be used for initial configuration using the embedded set-up wizard. Software upgrades may also be monitored via the serial port.

In order to connect to the RS-232 port on the unit, a null modem cable will be required between the Entrypoint and the terminal. Any RS-232 emulator can be used, such as Microsoft HyperTerminal. The default connectivity parameters are:

- Baud Rate: 115200 bps
- Start Bits: 8
- Stop Bits: 1
- Parity: None

Supplemental Notes

Hardware Versions

The TANDBERG Entrypoint server is available in three different factory-installed hardware options: IP only, ISDN PRI option and ISDN BRI option. The ISDN options are used for telephony and 3G gateway connectivity. The PRI option allows for a full ISDN PRI to be installed with the system, thereby providing the ability for up to 30 (E1) or 23 (T1) concurrent calls. When the BRI card is installed in the Entrypoint, the system will allow for up to 4 BRIs to be installed, supporting up to 8 concurrent calls. Overall, Entrypoint will support up to 60 calls at 384 kbps.

Getting the Software

Customers should contact their TANDBERG maintenance provider for support and assistance with their TANDBERG products, including release keys and software files.

Installation

Installation of EP1.0 software can be accomplished through the local LAN via HTTP or HTTPS.

References

TANDBERG Website <http://www.tandberg.com>
TANDBERG FTP Site <http://ftp.tandberg.com>

For all documentation, please see the TANDBERG Support Website at <http://www.tandberg.com/support/documentation.php>

Network Support

TANDBERG Entrypoint is both an H.323/SIP IP network device and an H.324m/Telephony ISDN device that is designed to connect the two networks together for those protocols only. The H.323 side of the device is intended to be connected to an 802.3 IP network, while the H.324m side can connect to either an ISDN PRI or up to 4 ISDN BRIs. If IP only operation is desired (e.g. H.323 and/or SIP call routing), the system does not need to be connected to an ISDN network.

Changes and Improvements since Previous Version

Version EP1.0 is the initial software release for TANDBERG Entrypoint.

Known Limitations

TANDBERG

<i>Equipment</i>	<i>Limitations</i>
TANDBERG Entrypoint ver EP1.0	When connected to some switches, DHCP may not negotiate properly. It is recommended that Entrypoint is assigned a static IP address.
TANDBERG Entrypoint ver EP1.0	There is no H.323 information that is present within the syslog level 2 or 3 when pulled from Entrypoint directly.
TANDBERG Entrypoint ver EP1.0	TANDBERG Entrypoint does not support H.261 video.
TANDBERG Entrypoint EP1.0	It is not currently possible to connect a call from a SIP endpoint to an audio-only telephony device.
TANDBERG Classics all versions	TANDBERG Classic endpoints cannot be used to forward calls when connected to Entrypoint as Entrypoint is not able to recognize DTMF tones from the classics.

Codian

<i>Equipment</i>	<i>Limitations</i>
Codian 4220 MCU ver 2.0(1)	3G Gateway calls to and from the Codian MCU connect, but the Codian does not receive any video from the far end.
Codian 4220 MCU ver 2.0(1)	The Codian cannot transmit or receive H.239 dual streams through Entrypoint.

LifeSize

<i>Equipment</i>	<i>Limitations</i>
LifeSize Room/Team ver 2.5.0(34)	LifeSize endpoints will not receive any video when connecting to the Entrypoint server as it does not support RFC 2429 for the packetization of H.263 plus video information.
LifeSize Room/Team ver 2.5.0(34)	It is not possible to transmit H.239 from the LifeSize endpoint through Entrypoint.
LifeSize Room/Team ver 2.5.0(34)	LifeSize endpoints will not receive any video from 3G Gateway calls through Entrypoint as the LifeSize systems do not support H.263 QCIF.

Microsoft

<i>Equipment</i>	<i>Limitations</i>
Microsoft NetMeeting ver 3.01	DTMF tones from Microsoft NetMeeting are not properly recognized by Entrypoint.

Polycom

<i>Equipment</i>	<i>Limitations</i>
Polycom VSX ver 8.5.2	When sending an H.239 dual stream from the VSX through Entrypoint to a TANDBERG MXP, upon termination of the stream from the VSX, the MXP will continue to show a frozen image of the dual stream. If the MXP then sends a dual stream back to the VSX, the VSX will then not be able to re-open a dual stream until either the call is dropped or the call is transferred off of Entrypoint. The call must remain on the Entrypoint server for this issue to exist.
Polycom VSX ver 8.5.2	Once connected to a call through Entrypoint, the Polycom system cannot forward a call using DTMF tones as Entrypoint does not recognize the tones from the VSX system.
Polycom Viewstation ver 7.5.4	When connected to the Entrypoint menu service, the Viewstation will receive the menu in QCIF resolution only.
Polycom Viewstation ver 7.5.4	Calls from a Viewstation to a far end system via the Entrypoint menu service that has 'Allow Forwarding' enabled will fail. The Viewstation will continue to see the Entrypoint welcome screen.
Polycom Viewstation ver 7.5.4	Viewstation endpoints cannot be used to forward calls when connected to Entrypoint as Entrypoint is not able to recognize DTMF tones from the endpoints.
Polycom Viewstation ver 7.5.4	Viewstation endpoints will not receive any audio from audio-only calls through Entrypoint from GSM cell phone networks.

RADVISION

<i>Equipment</i>	<i>Limitations</i>
RADVISION ViaIP 400 MCU	When connecting calls through Entrypoint to and from the ViaIP MCU conferences configured with H.264, some video may not be transmitted correctly to the far end endpoint.
RADVISION ViaIP 400 MCU	No Video will be received by the 3G phone when connecting via Entrypoint to the ViaIP MCU.

Interoperability Testing

The following systems have been tested and verified compatible with this software release.

Gatekeepers/Traversal Servers

<i>Equipment</i>	<i>Software Revision</i>	<i>Comments</i>
TANDBERG Gatekeeper	N5.2, N5.1, N4.1	
TANDBERG Border Controller	Q5.2, Q5.1, Q3.1	Entrypoint does not support either Assent or H.460.18/.19 traversal technology natively. In order to take advantage of the traversal technology, it must be used in conjunction with a TANDBERG Gatekeeper or other traversal client.
Cisco MCM/IOS Gatekeeper	12.3(10), 12.3(13a)	The 'Allow Forwarding' feature is not supported when used in conjunction with the Cisco gatekeeper.
RADVISION ECS	4.1.0.0	The 'Allow Forwarding' feature is not supported when used in conjunction with the RADVISION gatekeeper.

Gateway Interoperability

<i>Equipment</i>	<i>Software Revision</i>	<i>Comments</i>
TANDBERG MPS Gateway	J3.3	
TANDBERG Gateway	G3.2	
RADVISION P20 Gateway	5.0.0.0.22	
RADVISION Scopia 400 MCU	5.1.1.0.6	

MCU Interoperability

<i>Equipment</i>	<i>Software Revision</i>	<i>Comments</i>
TANDBERG MPS	J3.3, J2.4	
TANDBERG MCU	D3.9	
Codian 4210	2.0(1)	
Codian 4505	2.0(1)	
Polycom MGC	8.0.0.27, 7.5.1.7	
RADVISION vialP 400 MCU	4.2.10	

Streaming Servers

<i>Equipment</i>	<i>Software Revision</i>	<i>Comments</i>
TANDBERG Content Server	S2.0, S1.1	

Endpoint Interoperability

<i>Equipment</i>	<i>Software Revision</i>	<i>Comments</i>
TANDBERG MXP	F5.3, F4.2	
TANDBERG Personal Series	L4.2, L3.1	
TANDBERG Classic	E5.3/B10.3, E4.2/B9.2	
Aethra VegaStar Silver	6.0.49	
LifeSize	2.5.2(1)	
Polycom EX	6.0.5	
Polycom FX	6.0.5	
Polycom iPower 9000	6.2.0.1208	
Polycom PVX	8.0.2	
Polycom v500	8.5.3	
Polycom Viewstation	7.5.4	
Polycom VSX	8.5.2	
Sony PCS-1	3.30	
Sony PCS-TL50	2.31	