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High Definition (HD) recording link guidelines

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HIGH DEFINITION (HD) RECORDING LINK GUIDELINES

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International Standard IEC 62546 has been prepared by technical area 9: Audio, video and multimedia applications for end-user network, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this standard is based on the following documents:

CDV	Report on voting
100/1470/CDV	100/1558/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

With the global introduction of High definition (HD) TV services, receivers, and consumer recording equipment, the need has arisen for a universal recording interface to connect receivers and recorders.

This International Standard presents a comprehensive proposal for this interface including content protection [2][3] ¹. The proposal – intended as a guideline – leverages existing standards IEC 62481-1, and [4] in the field, ensuring interoperability between receivers and recorders.



NOTE * HDMI (High-Definition Multimedia Interface)² is a digital interface for the connection between source device and monitor provided by HDMI Licensing, LLC.

Figure 1 – High definition reception and recording

The starting point for the proposal is an in-home configuration depicted in Figure 1. The assumption is that both the receiver (e.g. STB) as well as the recorder (e.g. BD-recorder) are connected to the display via an HDMI interface [4]. The proposed recording interface connects the recorder to the receiver and carries compressed signals only. Obviously, the receiver functionality can be integrated into the display.

The proposed interface recognises the fact that a large amount of content will be made available in the form of a Pay-TV and thus be protected via a Conditional Access (CA) system. The required CA functionality is assumed to be contained in the receiver.

¹ Figures in square brackets refer to the Bibliography.

² HDMI is the trade name of a product supplied by HDMI Licensing, LLC. This information is given for the convenience of users of this document and does not consitute an endorsement by IEC of the product named.

HIGH DEFINITION (HD) RECORDING LINK GUIDELINES

1 Scope

This International Standard specifies the communication protocol between a TV receiver and a video recorder which are connected through a digital interface.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62481-1:2007, Digital living network alliance (DLNA) home networked device interoperability guidelines – Part 1: Architecture and protocols

IEC 62481-2, Digital living network alliance (DLNA) home networked device interoperability guidelines – Part 2: DNLA media formats

ETSI TR 101 211:2004, Digital Video Broadcasting (DVB); Guidelines on Implementation and usage of Service Information (SI)-V1.6.1