Service diagnostic interface for consumer electronics products and networks - Implementation for ECHONET

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

See Eesti standard EVS-EN 62394:2014 sisaldab Euroopa standardi EN 62394:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 62394:2014 consists of the English text of the European standard EN 62394:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 17.01.2014.	Date of Availability of the European standard is 17.01.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 33.160.99, 35.110

EUROPEAN STANDARD

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English version

Service diagnostic interface for consumer electronics products and networks - Implementation for echonet
(IEC 62394:2013)

Interface de diagnostic de service pour produits et réseaux électroniques grand public - Implémentation pour echonet (CEI 62394:2013)

Kundendienst-Diagnoseschnittstelle für Produkte und Netzwerke der Unterhaltungselektronik - Implementierung für Echonet (IEC 62394:2013)

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 100/2182/FDIS, future edition 2 of IEC 62394, 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 was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62394:2014.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-07-31
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-10-31

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62394:2013 was approved by CENELEC as a European Standard without any modification.

CONTENTS

INTRODUCTION

Consumer products are often repaired by service workshops, which service a wide range of products developed by different manufacturers.

For highly complex products, fault diagnosis becomes increasingly difficult and time consuming.

To facilitate diagnosis, manufacturers often develop built-in diagnostic software that communicates with an external diagnostic unit through a service diagnostic interface (SDI).

To avoid the need for a service workshop to purchase several different diagnostic units from different manufacturers for different products, a standardized SDI is proposed for use by all manufacturers of any products requiring a diagnostic interface. The result will be that only one SDI is needed in the service workshops.

The SDI should be suitable for diagnosis in a facilities or household appliances network in which different products from different manufacturers are connected together. The interface should also allow for future development.

The standard SDI should

– be usable in future products,
– be easily connectable to a product or a network,
– be inexpensive,
– not limit product design.

SERVICE DIAGNOSTIC INTERFACE FOR CONSUMER ELECTRONICS PRODUCTS AND NETWORKS – IMPLEMENTATION FOR ECHONET

1 Scope

This International Standard specifies requirements for service diagnostic software to be implemented in products that incorporate a digital interface. It does not specify requirements for carrying out remote diagnosis or for manufacturer-dependent software.

The SDI (Service Diagnostic Interface) requires an external controller (exclusive or general-purpose/PC) into which service diagnostic software can be loaded. Part of the controller software should be standardized while another part of this controller software should be unique to the manufacturer.

To reach a common approach in servicing all products from all manufacturers, it is necessary to standardize specific items to be tested in products and in controllers' diagnostic software.

The SDI is based upon the ECHONET specification version 2.11, ECHONET Lite specification version 1.01 and APPENDIX Detailed Requirements for ECHONET Device objects Release B because this interface will be used in future products. The use of this connection and existing communication protocols enable implementation in products at low cost, with maximum flexibility and efficiency.

The SDI consists of

- specific hardware and software requirements of the device under test (DUT);
- specific requirements of the controller:
  - the service software;
  - an ECHONET interface;
- the connection between the controller and the DUT.

This standard provides the minimal requirements necessary to carry out computerized diagnosis. It covers the standardized software of the controller as well as the standardized software and provisions in the DUT.

2 Normative references

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

(void)

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.