

INTERNATIONAL STANDARD

**MIDI (musical instrument digital interface) specification 1.0
(Abridged Edition, 2015)**



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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	7
4 General	8
4.1 Hardware	8
4.2 Data format.....	10
4.3 Message types.....	11
4.3.1 General	11
4.3.2 Channel messages	11
4.3.3 System messages.....	11
4.4 Data types	12
4.4.1 General	12
4.4.2 Status bytes	12
4.4.3 Data bytes	12
4.5 Channel modes	13
4.6 Power-up default conditions	14
5 MIDI implementation chart instructions	14
5.1 Introduction.....	14
5.2 General.....	14
5.3 Function description.....	14
5.3.1 Basic Channel	14
5.3.2 Mode	14
5.3.3 Note Number	15
5.3.4 Velocity	15
5.3.5 Aftertouch.....	15
5.3.6 Pitch Bend.....	15
5.3.7 Control Change	15
5.3.8 Program Change	15
5.3.9 System Exclusive	15
5.3.10 System Common	15
5.3.11 System Real Time	15
5.3.12 Aux. messages	16
5.3.13 Notes.....	16
Annex A (normative) Summary of MIDI messages.....	17
Annex B (normative) Control Change messages (Data bytes)	20
B.1 Control Change messages and Channel Mode messages	20
B.2 Registered Parameter numbers.....	23
Annex C (normative) System Exclusive messages	25
C.1 System Exclusive messages	25
C.2 Universal System Exclusive messages.....	25
Annex D (normative) MIDI Implementation Chart template	30
Bibliography.....	31

Figure 1 – MIDI standard hardware	9
Figure 2 – Types of MIDI bytes	10
Figure 3 – Types of MIDI messages	10
Figure 4 – Structure of a single message	11
Figure 5 – Structure of System Exclusive message	11
Table 1 – Modes for receiver	13
Table 2 – Modes for transmitter	13
Table A.1 – MIDI Specification 1.0 message summary	17
Table B.1 – Control Changes and Mode Changes (Status bytes 176 to 191)	20
Table B.2 – Registered Parameter numbers	24
Table C.1 – System Exclusive messages	25
Table C.2 – Universal System Exclusive messages	26
Table D.1 – MIDI Implementation Chart template	30

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MIDI (MUSICAL INSTRUMENT DIGITAL INTERFACE) SPECIFICATION 1.0 (Abridged Edition, 2015)

FOREWORD

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International Standard IEC 63035 has been prepared by 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
100/2597/CDV	100/2858/RVC

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

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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

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

INTRODUCTION

IEC 63035 contains the same first 8 pages as in the MIDI 1.0 Detailed Specification (the original core specification text) published by the MIDI Manufacturers Association (MMA). These are included within this standard as Clauses 1 to 4. This specification was submitted to the IEC under the auspices of a special agreement between the IEC and the MMA.

The MMA is a non-profit corporation that serves as a support organization and forum for the advancement and adoption of MIDI technology (along with the Association of Musical Electronics Industry, or AMEI, in Japan).

The MIDI 1.0 technology dates back to 1983 when the protocol and electrical specification comprised 8 pages and the majority of the message identifiers were not yet defined. Over the subsequent years, the MMA and AMEI determined consensus of the worldwide MIDI industry, and defined numerous additional messages (via Confirmation of Approval documents), as well as many Recommended Practices for the use of MIDI technology, all the while maintaining MIDI as "1.0" (meaning that no significant changes were made to the initial specification).

The MMA documentation for MIDI 1.0 now encompasses more than 50 different documents in print or on the World Wide Web. This standard contains the same first 8 pages as in the MMA's MIDI 1.0 Detailed Specification but does not contain all of the subsequent information developed by MMA/AMEI. Rather, this document contains a complete listing (with basic description) of all defined MIDI messages to date, with references to the appropriate MMA documentation. Companies that want to implement MIDI technology are advised to also consult the MMA documentation that is listed in the Biography.

Although the MIDI 1.0 Detailed Specification includes an electrical connection specification ("MIDI-DIN"), other transports (USB, Firewire, etc.) have also been approved by MMA/AMEI for use with MIDI Protocol. For details and documentation of approved physical transports, please contact the MIDI Manufacturers Association.

The term "MIDI" is known all around the world as referring to the technology which is defined in the MMA/AMEI documents, and so should not be used for any other purpose. Companies that implement MIDI technology in their products in compliance with MMA specifications may use the term MIDI to describe their products, but may not use the term to describe any extensions or enhancements that are not defined by MMA/AMEI. Only MMA/AMEI can define the messages, transport payloads, and Recommend Practices which are promoted as "MIDI" so as to prevent any dilution and confusion of the meaning of "MIDI". Implementers of MIDI technology should consult MMA and/or AMEI (depending on the relevant market) for specific trademark usage policies.

MIDI (MUSICAL INSTRUMENT DIGITAL INTERFACE) SPECIFICATION 1.0 (Abridged Edition, 2015)

1 Scope

This International Standard specifies a hardware and software specification which makes it possible to exchange symbolic music and control information between different musical instruments or other devices such as sequencers, computers, lighting controllers, mixers, etc. using MIDI technology (musical instrument digital interface).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60130-9, *Connectors for frequencies below 3 MHz - Part 9: Circular connectors for radio and associated sound equipment*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

velocity

parameter which typically changes the intensity and resultant volume of the note that is being played and varies according to the force applied

Note 1 to entry: Velocity is used as Key Velocity as in a piano key.

3.2

aftertouch

parameter that measures the level of intensity applied to a note after it has been played and continues to be depressed

Note 1 to entry: Typically, Aftertouch is useful for adding vibrato or tremolo effects to a sound in much the same way that a violin can add volume or pitch changes to a sustained note using finger vibrato or additional bowing intensity.

3.3

modulation wheel

wheel controller found on synthesizers that players can use to progressively introduce modulation depth to a sound