**in**

## COLLABORATORS

| | *TITLE* : in | | |
|---|---|---|---|
| *ACTION* | *NAME* | *DATE* | *SIGNATURE* |
| WRITTEN BY | | May 28, 2025 | |

## REVISION HISTORY

| NUMBER | DATE | DESCRIPTION | NAME |
|---|---|---|---|
| | | | |

# Contents

# Chapter 1

# in

## 1.1  ModuleInformation

```
ShowModule v1.10 (c) 1992 $#%!
now showing: "libraries/midi.m"
NOTE: don't use this output in your code, use the module instead.

CONST MIDIVERSION=7,
      RIM_MAXCOUNT=3

(----) OBJECT rimatch
(   0)    flags:CHAR
(   1)    match:substructure
(----) ENDOBJECT      /* SIZEOF=4 */

CONST RIMF_COUNTBITS=3,
      RIMF_EXTID=$40,
      RIMF_EXCLUDE=$80

(----) OBJECT mrouteinfo
(   0)    msgflags:INT
(   2)    chanflags:INT
(   4)    chanoffset:CHAR
(   5)    noteoffset:CHAR
(   6)    sysexmatch:substructure
(  10)    ctrlmatch:substructure
(----) ENDOBJECT      /* SIZEOF=14 */

CONST MMF_CHAN=$FF,
      MMF_NOTEOFF=1,
      MMF_NOTEON=2,
      MMF_POLYPRESS=4,
      MMF_CTRL=8,
      MMF_PROG=16,
      MMF_CHANPRESS=$20,
      MMF_PITCHBEND=$40,
      MMF_MODE=$80,
      MMF_SYSCOM=$100,
      MMF_SYSRT=$200,
      MMF_SYSEX=$400,
      MMF_ALL=$7FF
```

```
(----)  OBJECT mrouteptr
(   0)     mln:substructure
(   8)     route:LONG
(----)  ENDOBJECT      /* SIZEOF=12 */


(----)  OBJECT mroute
(   0)     source:LONG
(   4)     dest:LONG
(   8)     srouteptr:substructure
(  20)     drouteptr:substructure
(  32)     routeinfo:substructure
(----)  ENDOBJECT      /* SIZEOF=46 */


(----)  OBJECT msource
(   0)     ln:substructure
(  14)     image:LONG
(  18)     rplist:substructure
(  30)     userdata:LONG
(  34)     routemsgflags:INT
(  36)     routechanflags:INT
(----)  ENDOBJECT      /* SIZEOF=38 */


CONST NT_MSOURCE=$20,
      NT_RESMSOURCE=$21


(----)  OBJECT mdest
(   0)     ln:substructure
(  14)     image:LONG
(  18)     rplist:substructure
(  30)     destport:LONG
(  34)     userdata:LONG
(  38)     defaultrouteinfo:substructure
(----)  ENDOBJECT      /* SIZEOF=52 */


CONST NT_MDEST=$22,
      NT_RESMDEST=$23


(----)  OBJECT midipacket
(   0)     mn:substructure
(  20)     type:INT
(  22)     length:INT
(  24)     reserved:substructure
(  28)     midimsg:substructure
(----)  ENDOBJECT      /* SIZEOF=32 */


(----)  OBJECT mlistsignal
(   0)     mln:substructure
(   8)     sigtask:LONG
(  12)     sigbit:CHAR
(  13)     flags:CHAR
(----)  ENDOBJECT      /* SIZEOF=14 */


CONST MLSF_SOURCE=1,
      MLSF_DEST=2,
      MS_NOTEOFF=$80,
      MS_NOTEON=$90,
```

```
MS_POLYPRESS=$A0,
MS_CTRL=$B0,
MS_MODE=$B0,
MS_PROG=$C0,
MS_CHANPRESS=$D0,
MS_PITCHBEND=$E0,
MS_SYSEX=$F0,
MS_QTRFRAME=$F1,
MS_SONGPOS=$F2,
MS_SONGSELECT=$F3,
MS_TUNEREQ=$F6,
MS_EOX=$F7,
MS_CLOCK=$F8,
MS_START=$FA,
MS_CONTINUE=$FB,
MS_STOP=$FC,
MS_ACTVSENSE=$FE,
MS_RESET=$FF,
MIDDLEC=$3C,
DEFAULTVELOCITY=$40,
PITCHBENDCENTER=$2000,
MCLKSPERQTR=24,
MCLKSPERSP=6,
MCCENTER=$40,
MC_MODWHEEL=1,
MC_BREATH=2,
MC_FOOT=4,
MC_PORTATIME=5,
MC_DATAENTRY=6,
MC_VOLUME=7,
MC_BALANCE=8,
MC_PAN=10,
MC_EXPRESSION=11,
MC_GENERAL1=16,
MC_GENERAL2=17,
MC_GENERAL3=18,
MC_GENERAL4=19,
MC_SUSTAIN=$40,
MC_PORTA=$41,
MC_SUSTENUTO=$42,
MC_SOFTPEDAL=$43,
MC_HOLD2=$45,
MC_GENERAL5=$50,
MC_GENERAL6=$51,
MC_GENERAL7=$52,
MC_GENERAL8=$53,
MC_EXTDEPTH=$5B,
MC_TREMOLODEPTH=$5C,
MC_CHORUSDEPTH=$5D,
MC_CELESTEDEPTH=$5E,
MC_PHASERDEPTH=$5F,
MC_DATAINCR=$60,
MC_DATADECR=$61,
MC_NRPNL=$62,
MC_NRPNH=$63,
MC_RPNL=$64,
MC_RPNH=$65,
```

```
MM_MAX=$78,
MM_MIN=$79,
MM_RESETCTRL=$79,
MM_LOCAL=$7A,
MM_ALLOFF=$7B,
MM_OMNIOFF=$7C,
MM_OMNION=$7D,
MM_MONO=$7E,
MM_POLY=$7F,
MRP_PBSENS=0,
MRP_FINETUNE=1,
MRP_COURSETUNE=2,
MTCQ_FRAMEL=0,
MTCQ_FRAMEH=16,
MTCQ_SECL=$20,
MTCQ_SECH=$30,
MTCQ_MINL=$40,
MTCQ_MINH=$50,
MTCQ_HOURL=$60,
MTCQ_HOURH=$70,
MTCQ_TYPEMASK=$70,
MTCQ_DATAMASK=15,
MTCH_TYPEMASK=$60,
MTCH_HOURMASK=31,
MTCT_24FPS=0,
MTCT_25FPS=$20,
MTCT_30FPS_DROP=$40,
MTCT_30FPS_NONDROP=$60,
MID_XAMERICA=0,
MID_SEQUENTIAL=1,
MID_IDP=2,
MID_OCTAVEPLATEAU=3,
MID_MOOG=4,
MID_PASSPORT=5,
MID_LEXICON=6,
MID_KURZWEIL=7,
MID_FENDER=8,
MID_AKG=10,
MID_VOYCE=11,
MID_WAVEFRAME=12,
MID_ADA=13,
MID_GARFIELD=14,
MID_ENSONIQ=15,
MID_OBERHEIM=16,
MID_APPLE=17,
MID_GREYMATTER=18,
MID_PALMTREE=20,
MID_JLCOOPER=21,
MID_LOWREY=22,
MID_ADAMSSMITH=23,
MID_EMU=24,
MID_HARMONY=25,
MID_ART=26,
MID_BALDWIN=27,
MID_EVENTIDE=28,
MID_INVENTRONICS=29,
MID_CLARITY=31,
```

```
MIDX_DIGITALMUSIC=7,
MIDX_IOTA=8,
MIDX_IVL=11,
MIDX_SOUTHERNMUSIC=12,
MIDX_LAKEBUTLER=13,
MIDX_DOD=16,
MIDX_PERFECTFRET=20,
MIDX_OPCODE=22,
MIDX_SPATIALSOUND=24,
MIDX_KMX=25,
MIDX_AXXES=$20,
MID_PASSAC=$20,
MID_SIEL=$21,
MID_SYNTHAXE=$22,
MID_HOHNER=$24,
MID_TWISTER=$25,
MID_SOLTON=$26,
MID_JELLINGHAUS=$27,
MID_SOUTHWORTH=$28,
MID_PPG=$29,
MID_JEN=$2A,
MID_SSL=$2B,
MID_AUDIOVERITRIEB=$2C,
MID_ELKA=$2F,
MID_DYNACORD=$30,
MID_KAWAI=$40,
MID_ROLAND=$41,
MID_KORG=$42,
MID_YAMAHA=$43,
MID_CASIO=$44,
MID_MORIDAIRA=$45,
MID_KAMIYA=$46,
MID_AKAI=$47,
MID_JAPANVICTOR=$48,
MID_MEISOSHA=$49,
MID_HOSHINOGAKKI=$4A,
MID_FUJITSU=$4B,
MID_SONY=$4C,
MID_NISSHINONPA=$4D,
MID_SYSTEMPRODUCT=$4F,
MID_NC=$7D,
MID_NRT=$7E,
MID_RT=$7F
```