

**in**

**COLLABORATORS**

	<i>TITLE :</i> in		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		February 12, 2023	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>in</b>	<b>1</b>
1.1	ModuleInformation . . . . .	1

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# Chapter 1

## in

### 1.1 Module Information

ShowModule v1.10 (c) 1992 \$#%!

now showing: "devices/cd.m"

NOTE: don't use this output in your code, use the module instead.

```
(----) OBJECT qcode
(  0)  ctladr:CHAR
(  1)  track:CHAR
(  2)  index:CHAR
(  3)  zero:CHAR
(  4)  trackposition:lsnmsf (or ARRAY OF lsnmsf)
(  8)  diskposition:lsnmsf (or ARRAY OF lsnmsf)
(----) ENDOBJECT      /* SIZEOF=12 */

(----) OBJECT cdtoc
(  0)  summary:tocsummary (or ARRAY OF tocsummary)
(  0)  entry:tocentry (or ARRAY OF tocentry)
(----) ENDOBJECT      /* SIZEOF=6 */

(----) OBJECT tocentry
(  0)  ctladr:CHAR
(  1)  track:CHAR
(  2)  position:lsnmsf (or ARRAY OF lsnmsf)
(----) ENDOBJECT      /* SIZEOF=6 */

(----) OBJECT tocsummary
(  0)  firsttrack:CHAR
(  1)  lasttrack:CHAR
(  2)  leadout:lsnmsf (or ARRAY OF lsnmsf)
(----) ENDOBJECT      /* SIZEOF=6 */

(----) OBJECT cdxl
(  0)  node:mln (or ARRAY OF mln)
(  8)  buffer:PTR TO CHAR
( 12)  length:LONG
( 16)  actual:LONG
( 20)  intdata:LONG
( 24)  intcode:LONG
(----) ENDOBJECT      /* SIZEOF=28 */
```

```
(----) OBJECT lsnmsf
( 0)   lsn:LONG
( 0)   msf:rmsf (or ARRAY OF rmsf)
(----) ENDOBJECT      /* SIZEOF=4 */

(----) OBJECT rmsf
( 0)   reserved:CHAR
( 1)   minute:CHAR
( 2)   second:CHAR
( 3)   frame:CHAR
(----) ENDOBJECT      /* SIZEOF=4 */

(----) OBJECT cdinfo
( 0)   playspeed:INT
( 2)   readspeed:INT
( 4)   readxlspeed:INT
( 6)   sectorsize:INT
( 8)   xlecc:INT
(10)   ejectreset:INT
(12)   reserved1[4]:ARRAY OF INT
(20)   maxspeed:INT
(22)   audioprecision:INT
(24)   status:INT
(26)   reserved2[4]:ARRAY OF INT
(----) ENDOBJECT      /* SIZEOF=34 */

CONST CDERR_BADDATATYPE=$24,
      CDERR_BADDRIVETYPE=$21,
      CD_GETDRIVETYPE=18,
      CDERR_BADLENGTH=-4,
      CD_REMOVE=12,
      CDERR_SELFTEST=-7,
      CD_WRITE=3,
      CD_CHANGENUM=13,
      ADR_UPC=2,
      CD_FLUSH=8,
      CDMODE_NORMAL=0,
      CD_PLAYTRACK=$25,
      CD_START=7,
      CDERR_BADSECHDR=27,
      CDERR_NOSECHDR=21,
      CTL_COPY=$20,
      CD_PAUSE=$28,
      CD_FORMAT=11,
      CD_PROTSTATUS=15,
      ADR_HYBRID=5,
      CD_PLAYLSN=$27,
      CTL_DATA=$40,
      CDERR_NOMEM=31,
      CDSTSF_SPIN=4,
      CDSTSB_SPIN=2,
      CDERR_INVALIDSTATE=$25,
      CDERR_BADSECID=23,
      CD_CHANGESTATE=14,
      CD_UPDATE=4,
      CDERR_BADADDRESS=-5,
```

```
CDERR_OPENFAIL=-1,
TAGCD_READXLSPEED=3,
TAGCD_READSPEED=2,
TAGCD_PLAYSPEED=1,
CTLADR_ADRMASK=15,
CTL_COPYMASK=$20,
CTL_CTLMASK=$D0,
CTLADR_CTLMASK=$F0,
CTL_4AUD=$80,
CDSTSF_CDROM=16,
CDSTSB_CDROM=4,
CDERR_ABORTED=-2,
CD_STOP=6,
CDSTSF_PAUSED=$40,
CDSTSF_PLAYING=$20,
CDSTSB_PAUSED=6,
CDSTSB_PLAYING=5,
CD_EJECT=23,
CDMODE_FFWD=1,
CDSTSF_SEARCH=$80,
CDSTSB_SEARCH=7,
CD_SEARCH=$29,
CDERR_BADHDRSUM=24,
CD_PLAYMSF=$26,
ADR_POSITION=1,
CDSTSF_DIRECTION=$100,
CDSTSB_DIRECTION=8,
CD_CLEAR=5,
TAGCD_EJECTRESET=6,
CDERR_POSTRESET=$23,
CD_RESET=1,
CDERR_TOOFEWSECS=26,
CTL_2AUD=0,
TAGCD_XLECC=5,
CTL_4AUDEMPH=$90,
CTL_2AUDEMPH=16,
CDERR_SEEKERROR=30,
CD_QCODELSN=$2B,
CD_SEEK=10,
CD_GETNUMTRACKS=19,
CDSTSF_TOC=8,
CDSTSB_TOC=3,
CDERR_NOTSPECIFIED=20,
CDMODE_FREV=2,
CD_INFO=$20,
CD_GETGEOMETRY=22,
CD_ATTENUATE=$2C,
CDERR_WRITEPROT=28,
CDERR_UNITBUSY=-6,
CD_MOTOR=9,
CDERR_BADUNITNUM=$20,
CD_QCODEMSF=$2A,
CD_TOCLSN=$23,
CDERR_BADSECPREAMBLE=22,
CD_REMFRAMEINT=$2E,
CD_ADDFRAMEINT=$2D,
CD_REMCHANGEINT=21,
```

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```
CD_ADDCHANGEINT=20,  
CDERR_BADSECSUM=25,  
CDERR_PHASE=$2A,  
CD_READ=2,  
CDERR_NOCMD=-3,  
CDSTSF_CLOSED=1,  
CDSTSB_CLOSED=0,  
CDSTSF_DISK=2,  
CDSTSB_DISK=1,  
CDERR_NODISK=29,  
CD_TOCMSF=$22,  
CDERR_DRIVEINUSE=$22,  
ADR_ISRC=3,  
CD_READXL=$24,  
TAGCD_SECTORSIZE=4,  
CD_CONFIG=$21,  
CDERR_NOBOARD=$32
```

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