MDS-E12/E11/E52
RS-232C Interface Manual -ADDITIONAL INFORMATION-

This is additional information of RS-232C interface manual for MDS-E12/E11/E52.
This is informed by 3 component as follows.

*Addition : Regarding additional functions
*Modification : Regarding modified points
*Command Reference
: Latest Command reference that modified points are incorporated.

ATTENTION

This information is adopted on MDS-E12/ **1** or later version, which is modified to SCMS free and have a Select-able Copy Bit function.

<Addition>

6-44 REPEAT OFF
Function: To cancel the REPEAT MODE
Data length: 2 Bytes
Data: *02H, A0H*
Details of function:
This command makes REPEAT MODE to REPEAT OFF status.
Example of transmission packet:
7EH,07H,05H,47H,02H,A0HFFH

6-45 ALL REPEAT
Function: To set the REPEAT MODE up to ALL REPEAT
Data length: 2 Bytes
Data: *02H, A1H*
Details of function:
This command makes REPEAT MODE to ALL REPEAT status.
Example of transmission packet:
7EH,07H,05H,47H,02H,A1H,FFH

6-46 1 TRACK REPEAT
Function: To set the REPEAT MODE up to 1 TRACK REPEAT
Data length: 2 Bytes
Data: *02H, A2H*
Details of function:
This command makes REPEAT MODE to 1 TRACK REPEAT status.
Example of transmission packet:
7EH,07H,05H,47H,02H,A2H,FFH

<Modification>

7-11 STATUS DATA

Function: Internal status

Data length: 7 Bytes

Data: *20H,20H,*Data1,Data2,Data3,*01H,*Track#

♦Data1:

b7,b6 (Fixed)	b5 (Disc)	b4 (Power)	b3,b2,b1,b0
00	0: Exist	0:On	0000:STOP
			0001:PLAY
			0010:PAUSE
			0011:OPEN(EJECT)
	1:Non	1:Off	0100:REC PLAY
			0101:REC PAUSE
			0110:Rehearsal
			0111-1110:Reserved
			1111:Cannot PLAY

♦Data2:

b7 (TOC Read)	b6 (Fixed)	b5 (REC)	b4,b3 (REPEAT MODE)	b2-b0 (PLAY MODE)
0:Not yet	0	0: Disable	00:REPEAT OFF	000(Fixed)
			01:ALL REPEAT	
1:Done		1: Enable	10:1Tr REPEAT	
			-	

♦Data3:

b7	b6 (COPY)	b5 (DIN)	b4,b3 (Fixed)	b2,b1,b0 (INPUT)
0:Stereo	0: Enable	0: Lock	00	001:ANALOG
				010:Reserved
				011:OPTICAL (E52only)
1:Monaural	1: Disable	1: Unlock		100:Reserved
				101:COAXIAL
				000,110,1111:Reserved

♦Track#: 0*(00H)*～99*(63H)*

Details of function:

Indicates the MDS's internal status.
When MDS receives "STATUS REQ" command, it outputs these data.
Also when the lower 4 bits of Data1 changes, MDS outputs this data automatically.

When INPUT SELECT switch o the unit is in DIGITAL, check if it is copiable or not in the REC PAUSE mode and also input is locked before start recording.
It is only in the recording mode that copiable bit and lock bit take significant value in the mode of REC PAUSE.
When INPUT SELECT switch on the unit is DIGITAL, data enters Din unlock state since digital data is not synchronized with input signal immediately right after MDS entered the REC PAUSE mode from the stop mode.

If digital input is done correctly, digital data is synchronized with input signal in 200mSec at least. So send "STATUS REQ" command in 200mSec after sending "REC" command and check if input is locked. Then start recording

Example of transmission packet: Internal status at the start of playback.

6FH,0CH,05H,47H,20H,20H,01H,A0H,01H,01H,00H,FFH

8.2.7 PC to MDS data

5th byte	6th byte	After 7th byte
00H	FF/REW OFF	
01H	POWER control	
	02H	POWER on
	03H	POWER off
02H	Mecha-control	
	01H	PLAY
	02H	STOP
	03H	PAUSE ON/OFF
	06H	PAUSE ON
	13H	REW（Necessary: OFF/REW OFF）
	14H	FF (Necessary: OFF/REW CODE)
	15H	PREV TRACK
	16H	NEXT TRACK
	21H	REC
	28H	TIME MACHINE REC
	40H	EJECT
	80H	AUTO PAUSE Off
	81H	AUTO PAUSE On
03H	10KEY	
	42H	TRACK PLAY
		01H + TrackNo.(hex)
	43H	TRACK PAUSE
		01H + TrackNo. (hex)
07H	ERAPSED TIME control	
	10H	ELAPSED TIME On
	11H	ELAPSED TIME Off
0AH	EDIT	
	01H	DIVIDE MODE REQ.
	02H	DIVIDE REQ.
	03H	EDIT MODE CANCEL
	04H	ERASE REQ.
		TrackNo. (hex) 00 is all tracks(ALL ERASE)
	05H	MOVE REQ.
		TrackNo.(hex) before move +
		TrackNo.(hex) after move

		06H (MDS-E11)	COMBINE MODE REQ. Latter TrackNo. To combine
		07H (MDS-E11)	COMBINE REQ Latter TrackNo. To combine
		08H	DIVIDE ADJUST POSITION (-128 to +127)
		09H (MDS-E12)	COMBINE 2Track REQ Former Track No.+ Latter Track No.
		0AH (MDS-E12)	COMBINE 2Ttack EXE Former Track No. + Latter Track No.
		11H	UNDO REQ.
	10H	REMOTE MODE control	
		03H	REMOTE MODE On
		04H	REMOTE MODE Off
	20H	INFORMATION	
		01H	NAME CANCEL
		10H	MODEL REQUEST
		20H	STATUS REQ.
		21H	DISC DATA REQ.
		22H	MODEL NAME REQ.
		24H	REC DATE REQ. +TrackNo.(hex)
		44H	TOC DATA REQ. +01H
		45H	TRACK TIME REQ. +01H+ TrackNo. (hex)
		48H	DISC NAME REQ. +01H
		4AH	TRACK No. NAME REQ. +TRACKNO.(hex)
		4CH	ALL NAME REQ. +01H
		54H	REC REMAIN REQ. +01H
		55H	NAME REMAIN REQ. +00H + TrackNo.(hex) (or Disc, in case of 00)
		70H	DISC NAME WRITE FIRST

		+01H + ASCII DATA x 16byte (the last data is *00h*)
	71H	DISC WRITE CONTINUED +Packet No.(02-) + ASCII DATA x 16byte(the last data is *00h*)
	72H	TRACK NAME WRITE FIRST + TrackNo. + ASCII DATA x 16byte(the last data is *00h*)
	73H	TRACK WRITE CONTIUNED +Packet No.(02-) + ASCII DATA x16byte(the last data is *00h*)

8.2.8 MDS to PC data

5th byte	6th byte	After 7th byte
01H	POWER control	
	02H	POWER On
	03H	POWER Off
02H	Mecha control	
	01H	PLAY
	02H	STOP
	03H	PAUSE
	21H	REC
	25H	REC
		PAUSE
	40H	EJECT
10H	SUB	
	03H	REMOTE On
	04H	REMOTE Off
20H	INFORMATION	
	10H	MODEL DATA
		01H + FEATURE FEATURE：b7 to b2 000000 (Fixed) b1:Time-ac hine REC 0:Not available 1:Available b0: REC function 0: not equipped 1: equipped

	20H	STATUS DATA		
		DATA1 +DATA2 +DATA3 +01H +TrackNo.		
		DATA1:	b7b6:	00(Fixed)
			b5:	0:Exist a Disc
				1:NO DISC
			b4:	0:POWER ON
				1:POWER OFF
			b3b2b1b0:	0000: STOP
				0001: PLAY
				0010: PAUSE
				0011: EJECT
				0100: REC PLAY
				0101: REC PAUSE
				0110:rehearsal
				0111-1110: reserved
				1111: Cannot Play
		DATA2:	b7:	0: TOC read not yet
				1: TOC read done
			b6:	0(Fixed)
			b5:	0: REC Disable
				1: REC Enable
			b4b3:	00: REPEAT OFF
				01: ALL REPEAT
				10: 1Tr REPEAT
				11: Reserved
			b2b1b0	000(Fixed)
		DATA3:	b7:	0:Stereo
				1:Mono
			b6:	0:COPY possible
				1:COPY impossible
			b5:	0:Din Lock
				1:Din unlock
			b4b3:	00(Fixed)
			b2b1b0:	001:Analog
				011:Optical(E52only)
				101:Coaxial
				000,010,100,010,11
				0:Reserved
		TrackNo. :	(hex)	
	21H	DISC DATA		

	00H + DiscData + 00H + 00H + 00H DISC Information: b7 to b4: 0000(fixed) b3: 0:No error 1:Disc error b2: 0:No Protect 1:Protected b1b0: 00:reserved 01:NO 10:Pre Master 11:reserved
22H	MODEL NAME ASCII DATA x 14byte (remaining is filled with 00)
24H	REC DATE DATA + TrackNo. + Year 1byte + Month + Day + Hour(24-hour count) +Min + Sec
48H	DISC NAME 01H + ASCII DATA x 16byte (the last data is *00h*)
49H	DISC NAME CONTINUED Packet No.(02-) + ASCII DATA x 16byte (the last data is *00h*)
4AH	TRACK NAME Track No.+ ASCII DATA x 16byte (the last data is *00h*)
4BH	TRACK NAME CONTINUED Packet No.(02-) + ASCII DATA x 16byte (the last data is *00h*)
4CH	ALL NAME END
51H	ELPASED TIME(in case of seconds changes during playback) Track No.+ 01H + Min + Sec
54H	REC REMAIN DATA 01H + MIN + SEC
55H	NAME REMAIN DATA + 00H + Track No. (or DISC, in case of 00) + Remain (2byte)

	60H	TOC DATA (claims if EDIT, REC etc. change) 01H + FirstTrackNo.+ LastTrackNo.+ Min +Sec + 00H
	62H	TRACK TIME DATA 01H + 00H + Min + Sec
	82H	DISC EXIST
	83H	1 TRACK END
	85H	NO DISC NAME
	86H	NO TRACK NAME
	87H	WRITE PACKET RECEIVED
	89H	NO TOC DATA
	8BH	ENTER DIVIDE MODE
	8CH	ENTER COMBINE MODE
	8DH	EDIT COMPLETE
	8EH	DIVIDE POINT DATA +DIVIDE POINT DATA(-128 to +127)
40H	Message	
	01H	UNDEFINED COMMAND
	03H	IMPOSSIBLE