ELITE

VSX-45TX

RS-232C Protocol

Physical Cable Connection

Connector

RS232C DB9 Male

Pin	AV Receiver
1	*1
2	RXD
3	TXD
4	*1
5	GND
6	*1
7	RTS(BUSY)
8	NC
9	NC

*1 Pin 1&4&6 are shorted each other.

PC Control Connector (D-Sub 9P)

To TxD of PC
To RxD of PC
To GND of PC

1 2 3 4 5
6 7 8 9

To CTS of PC
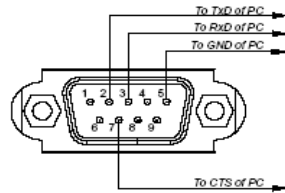
Communication

Communication Speed : 9600bps

Protocol type : 8data bits,1stop bit,no parity

VSX-45TX RS-232C Commands List

Automatic Feedback

When the input or function status is changed using knobs on the front panel or the remote control of the receiver,
the receiver will send it's new status automatically. (VOLXX,PQRX,MUTX,FUNXX,SRXXXX,LMXXX

   (For example) The user changes a function on the front panel.
Receiver sends: FUNXX<CR+LF>

X:Argument:ASCⅡ code

Status Request Commands

Command	Command Name	Argument	operation	Answer
?V<CR>	VOLUME LEVEL STATUS REQUEST		Return the VOLUME LEVEL	VOLXX<CR+LF> *1
?P<CR>	POWER STATUS REQUEST		Return the POWER status	PWRX<CR+LF> *2
?M<CR>	MUTE STATUS REQUEST		Return the MUTE status	MUTX<CR+LF> *2
?F<CR>	FUNCTION MODE REQUEST		Return the FUNCTION MODE	FUNXX<CR+LF> *3
?S<CR>	LISTENING MODE SETTING REQUEST		Return the L.M SETTING	SRXXXX<CR+LF> *4
?L<CR>	LISTENING MODE REQUEST		Return the L.M	LMXXX<CR+LF> *5

Operation Commands

Command	Command Name	Argument	Operation	Answer
VU<CR>	VOLUME UP		VOLUME UP	VOLXX<CR+LF> *1
VD<CR>	VOLUME DOWN		VOLUME DOWN	VOLXX<CR+LF> *1
XXVL<CR>	VOLUME SET	00-93 *1	Set the VOLUME level	VOLXX<CR+LF> *1
PO<CR>	POWER ON		POWER ON	PWRX<CR+LF> *2
PF<CR>	POWER OFF		POWER OFF	PWRX<CR+LF> *2
MO<CR>	MUTE ON		MUTE ON	MUTX<CR+LF> *2
MF<CR>	MUTE OFF		MUTE OFF	MUTX<CR+LF> *2
XXFN<CR>	FUNCTION MODE SET	*3	Set the FUNCTION MODE	FUNXX<CR+LF> *3
FU<CR>	FUNCTION MODE UP		Change the FUNCTION MODE	FUNXX<CR+LF> *3
XXX(X)SR<CR>	LISTENING MODE SET	*4	Change the LISTENING MODE	SRXXX(X)<CR+LF> *4

Error message

Error Message	Error Name	Meaning
E04<CR+LF>	COMMAND ERROR	Inappropriate Command line detected
E06<CR+LF>	ARGUMENT ERROR	Inappropriate Factor

Explanation of arguments

   *1 **VOLUME LEVEL** [2byte]

93VL<CR>	+12dB
81VL<CR>	0dB
01VL<CR>	-80dB
00VL<CR>	-- (same as mute)

   Example1
Command ?V<CR>   Request Volume Level.
Answer VOL93<CR+LF>   Volume is set to +12dB.

   *2 **ON/OFF** Status Reply [1byte]

0	ON
1	OFF

   Example2
Command ?M<CR>   Request Mute Status.
Answer MUT0<CR+LF>   Mute is On.

   *3 **FUNCTION MODE Command NO.** [2byte]

00FN<CR>	PHONO
01FN<CR>	CD
02FN<CR>	TUNER
03FN<CR>	CDR
04FN<CR>	DVD
05FN<CR>	TV
07FN<CR>	VCR1
08FN<CR>	VCR2
10FN<CR>	VIDEO or VIDEO1

11FN<CR>	USB
12FN<CR>	MD

   Example3
Command 04FN<CR>   Change to source 04(DVD).
Answer FUN04<CR+LF>

   Example4
Command in respect of "?F<CR>"   Request Current Source.
Answer FUN04<CR+LF>   Source 04 is selected(DVD).

*4 **LISTENING MODE SET**,**LISTENING MODE SETTING REQUEST** [4byte]
When you set the "Listening Mode"with the receiver's front panel keys and knobs,
you use the "LISTENING MODE SELECTOR" knob along with "LISTENING CH SELECT"button.
Depending on the source signal there are some modes which are not available. There is
automatic detection for 2ch and 6.1ch, but that too is source dependent (flags) and may not appear to work properly

With the "**SR**" command, you can select whichever mode you wish.
Also, you can confirm your selection with the "**SR**" command by using "**?S**" command query.

When a LISTENING MODE is changed, the set will dispatch an ANSWER to let the controller know the current set status
automatically without receiving a LISTENING MODE SETTING REQUEST. (Automatic Feedback)

[2-4byte]:data for mode setting.
Below the are the commands for selecting a LISTENING MODE.

STANDARD

0000SR<CR>	PRO LOGIC Ⅱ MOVIE 5.1

0128SR<CR>	PRO LOGIC Ⅱ MUSIC 5.1
0001SR<CR>	PRO LOGIC 5.1
0002SR<CR>	Neo:6 CINEMA 5.1
0129SR<CR>	Neo:6 MUSIC 5.1
0003SR<CR>	PRO LOGIC Ⅱ MOVIE 7.1
0130SR<CR>	PRO LOGIC Ⅱ MUSIC 7.1
0004SR<CR>	PRO LOGIC 7.1
0005SR<CR>	Neo:6 CINEMA 7.1
0131SR<CR>	Neo:6 MUSIC 7.1
0006SR<CR>	PRO LOGIC Ⅱ MOVIE AUTO
0132SR<CR>	PRO LOGIC Ⅱ MUSIC AUTO
0007SR<CR>	PRO LOGIC AUTO
0008SR<CR>	Neo:6 CINEMA AUTO
0133SR<CR>	Neo:6 MUSIC AUTO

ADVANCED CINEMA

0032SR<CR>	ACTION 5.1
0033SR<CR>	SCIFI 5.1
0034SR<CR>	DRAMA 5.1
0035SR<CR>	MUSICAL 5.1
0036SR<CR>	MONOFILM 5.1
0037SR<CR>	5D−THEATER 5.1
0038SR<CR>	ACTION 7.1
0039SR<CR>	SCIFI 7.1
0040SR<CR>	DRAMA 7.1
0041SR<CR>	MUSICAL 7.1
0042SR<CR>	MONOFILM 7.1
0043SR<CR>	5D−THEATER 7.1
0044SR<CR>	ACTION AUTO
0045SR<CR>	SCIFI AUTO
0046SR<CR>	DRAMA AUTO
0047SR<CR>	MUSICAL AUTO
0048SR<CR>	MONOFILM AUTO
0049SR<CR>	XD−THEATER AUTO

THX

0064SR<CR>	THX CINEMA
0065SR<CR>	THX SURR. EX
0066SR<CR>	THX AUTO

ADVANCED CONCERT

0096SR<CR>	CLASSICAL 5.1
0097SR<CR>	CHAMBER 5.1
0098SR<CR>	JAZZ 5.1
0099SR<CR>	ROCK 5.1
0100SR<CR>	DANCE 5.1
0101SR<CR>	5CH−STEREO 5.1
0102SR<CR>	CLASSICAL 7.1
0103SR<CR>	CHAMBER 7.1
0104SR<CR>	JAZZ 7.1
0105SR<CR>	ROCK 7.1
0106SR<CR>	DANCE 7.1
0107SR<CR>	7CH−STEREO 7.1
0108SR<CR>	CLASSICAL AUTO
0109SR<CR>	CHAMBER AUTO
0110SR<CR>	JAZZ AUTO
0111SR<CR>	ROCK AUTO
0112SR<CR>	DANCE AUTO
0113SR<CR>	XCH−STEREO AUTO

STEREO

0192SR<CR>	STEREO
0193SR<CR>	DIRECT

MULTI-CH

0512SR<CR>	MULTI-CH INPUT

*5 **LISTENING (DECODE) MODE REQUEST** [3byte]

Below is the list Indicating the combination of the LISTENING MODE selected by "SR" command and
the LISTENING MODE determined by the input source signal.

When the LISTENING MODE is set and the format for the source signal is confirmed, the receiver will send an ANSWER
COMMAND to the controller to let it know the LISTENING MODE status. It replies automatically and does not need to receive
a LISTENING MODE REQUEST.
(Automatic Feedback)
LISTENING MODE shows the current signal format the receiver is detecting or the surround mode which has been added to the original signal
LM***

STEREO

LM128	STEREO
LM129	DIRECT
LM130	96KHz STEREO
LM131	96KHz DIRECT
LM132	88KHz STEREO
LM133	88KHz DIRECT

STANDARD

LM002	PRO LOGIC
LM000	PRO LOGIC II MOVIE
LM001	PRO LOGIC II MUSIC
LM003	Neo:6 CINEMA
LM004	Neo:6 MUSIC

LM031	PCM

LM016	DOLBY DIGITAL
LM017	DOLBY DIGITAL EX

LM019	DTS
LM020	DTS-ES
LM021	DTS-SX
LM022	DTS-ES DISC 6.1
LM023	DTS-ES MTRX 6.1
LM030	DTS 96/24

LM027	MPEG-2 AAC
LM028	MPEG-2 AAC EX

LM029	DTS 88KHz

VIRTUAL SURROUND BACK

LM018	Neo:6+V. SB
LM024	DOLBY DIGITAL+V. SB
LM025	DTS+V. SB
LM026	MPEG2 AAC+V. SB

ADVANCED CINEMA

LM032	ACTION
LM033	SCIFI
LM034	DRAMA
LM035	MUSICAL
LM036	MONOFILM
LM037	5D-THEATER
LM043	7D-THEATER

LM044	ACTION+V.SB
LM045	SCIFI+V.SB
LM046	DRAMA+V.SB
LM047	MUSICAL+V.SB
LM048	MONOFILM+V.SB
LM049	5D-THEATER+V.SB

ADVANCED CONCERT

LM096	CLASSICAL
LM097	CHAMBER
LM098	JAZZ
LM099	ROCK
LM100	DANCE
LM101	5CH-STEREO
LM107	7CH-STEREO

LM108	CLASSICAL+V.SB
LM109	CHAMBER+V.SB
LM110	JAZZ+V.SB
LM111	ROCK+V.SB
LM112	DANCE+V.SB
LM113	5CH-STEREO+V.SB

THX

LM080	THX CINEMA
LM081	THX SURROUND EX

LM082	DTS-ES+THX
LM083	ES MTRX6.1+THX
LM084	ES DISC6.1+THX

MULTI-CH

LM200	MULTI-CH IN