
S P E C F I L E



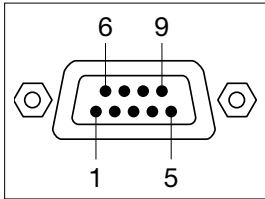
Product Number : **PT-VX400NT**

Product Name : LCD Projector

Serial connector

The serial connector complies with RS-232C. To control the projector from a personal computer, commands must be input through communication software, based on the format and satisfying the communication conditions shown below.

Pin assignments and signal names



D-sub 9-pin (male)
Serial input

No.	Signal name	Description	No.	Signal name	Description
1	-	NC	6	-	NC
2	TXD	Send data	7	-	NC
3	RXD	Receive data	8	-	NC
4	-	NC	9	-	NC
5	GND	Ground			

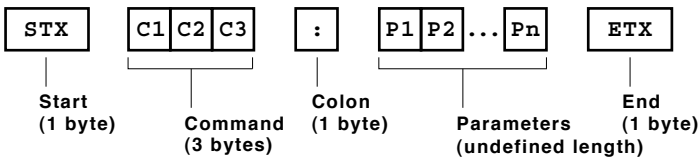
Communication conditions (factory setting)

Signal level	RS-232C-compliant
Synchronization method	Start-stop synchronization
Baud rate	19,200 bps
Parity	None

Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

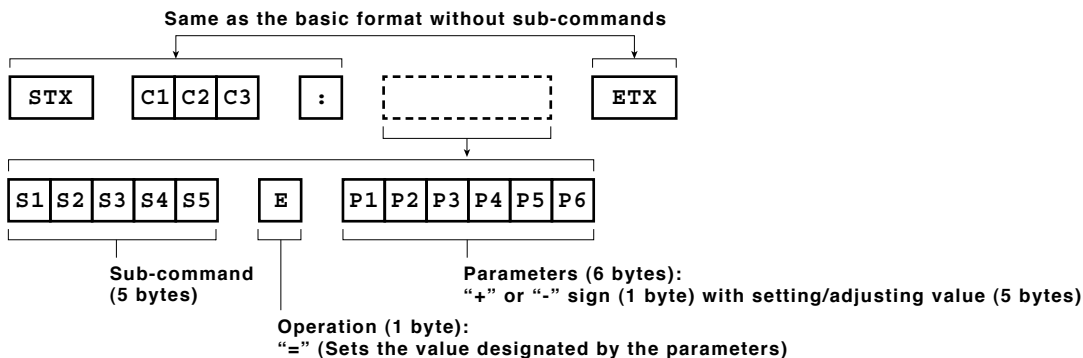
Basic format

Transmission from the computer begins with STX, then command, parameter, and ETX are sent in this order. Add parameters according to the details of control.



NOTE: When sending commands without parameters, a colon (:) is not necessary.

Basic format with sub-commands

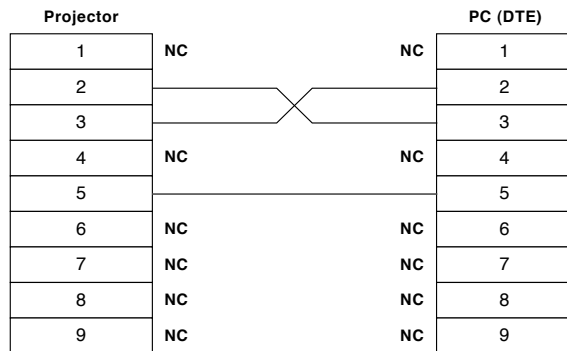


NOTE: When sending sub-commands that require no parameters, operation (E) and parameters are not necessary.

CAUTION

- It may not be possible to send or receive commands for about 10 to 60 seconds when the lamp is first turned on. If this occurs, wait for 60 seconds, then try sending or receiving again.
- When sending multiple commands, be sure to wait for at least 0.5 second after receiving a response from the projector before sending the next command.
- Additional time is sometimes required for response due to processing inside the projector. Set the time-out period for command response to 10 seconds or more.

Cable specifications



Control commands

Command: <Parameter>	Function	Callback: <Parameter>	Parameter value	
			Min	Max
PON*1/*2	Power on (standby mode on)	PON	-	-
POF*1	Power off (standby mode off)	POF	-	-
AVL:<p1>	Volume control	AVL:<p1>	0	63
IIS:<input signal>	Input signal selection	IIS:<input signal>	-	-
OFZ:<off on>	Freeze	OFZ:<off on>	0	1
VPM:STD	Picture mode: Standard	VPM:STD	-	-
VPM:DYN	Picture mode: Dynamic	VPM:DYN	-	-
VPM:CIN	Picture mode: Cinema	VPM:CIN	-	-
VPM:REA	Picture mode: Real	VPM:REA	-	-
VPM:BBD	Picture mode: Blackboard	VPM:BBD	-	-
VPM: CBD	Picture mode: Colorboard	VPM: CBD	-	-
VPM:IM1	Picture mode: Image 1	VPM:IM1	-	-
VPM:IM2	Picture mode: Image 2	VPM:IM2	-	-
VPM:IM3	Picture mode: Image 3	VPM:IM3	-	-
VPM:IM4	Picture mode: Image 4	VPM:IM4	-	-
AUU	Volume up	AUU	-	-
AUD	Volume down	AUD	-	-
OSH*1	AV mute	OSH	-	-
DZU	Digital zoom: Enlargement	DZU	-	-
DZD	Digital zoom: Reduction	DZD	-	-

*1 Do not send PON, POF, or OSH commands continuously in a short period of time. Doing so may burst the lamp or shorten the lamp replacement cycle.

*2 These commands are effective when the standby mode is set to eco. (Other commands are not effective.)

Status request commands

Command	Description	Callback <Parameter>
QPW	Standby power status	<power condition>
Q\$S	Lamp status	<lamp condition>
QIN	Input signal status	<input signal>
QAV	Volume adjustment value	<p1>
QPM	Picture mode status	Standard
		Dynamic
		Cinema
		Real
		Blackboard
		Colorboard
		Image 1
		Image 2
		Image 3
	Image 4	
QFZ	Freeze status	<off on>
Q\$L	Lamp run time	<acctch>
QSH	AV mute function status	<off_on>

NOTE: If a wrong command is received, the projector will send an ER401 command to the computer.

Parameter format

Parameter format	Size (Byte)	Definition
<p1>	3 (1 or 2 bytes also possible when under control)	Decimal without signs: 0 to 999 (000, 001, 002...999) Decimal with signs: -99 to +99 (-99...-01, +00, +01, +02...+99) Callback from the projector is 3 Byte.
<off on>	1	0 = off, 1 = on
<input signal>	3	HD1 = HDMI, RG1 = computer 1, RG2 = computer 2, VID = video, SVD = S-Video
<power condition>	3	000 = power off (standby mode off), 001 = power on (standby mode on)
<lamp condition>	1	0 = standby, 1 = lamp on under control, 2 = lamp on, 3 = lamp off under control
<acctch>	4	Decimal without signs: 0000-9999 hours

NOTE: If a wrong command is received, the projector will send an ER401 command to the computer.

Command example

To set the volume to +30, send the command as shown below.



NOTE: When sending commands without parameters, a colon (:) is not necessary.