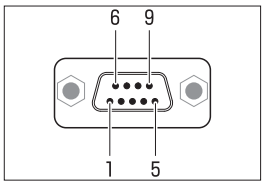
Panasonic Projector RS-232C Control Specifications

PT-AE2000

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

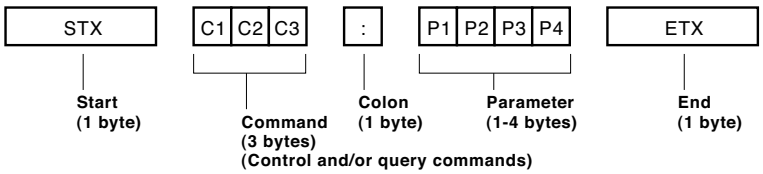
No.	Signal name	Description	No.	Signal name	Description
1	–	NC	6	–	NC
2	TXD	Send data	7	RTS	Connected internally
3	RXD	Receive data	8	CTS	Connected internally
4	–	NC	9	–	NC
5	GND	Ground			

Communication conditions (factory setting)

Signal level	RS-232C-compliant
Synchronization method	Start-stop synchronization
Baud rate	9,600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

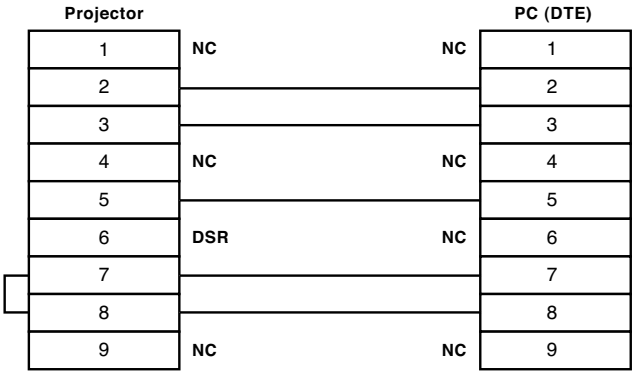
Basic format

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



CAUTIION
When sending multiple commands, be sure to send the next command after receiving a response from the projector.

Cable specifications



Control commands

Command: <Parameter>	Function	Callback: <Parameter>	Parameter value Min	Parameter value Max
PON*	Power on (standby mode on)	PON		
POF*	Power off (standby mode off)	POF		
IIS:<input signal>	Input signal selection	IIS:<input signal>	–	–
OFZ:<off_on>	Freeze	OFZ:<off_on>	0	1
OEN	Enter	OEN		
VPM:<picture mode>	Picture mode	VPM:<picture mode>	–	–
<NOR>	Normal	<NOR>	–	–
<DYN>	Dynamic	<DYN>	–	–
<CN1>	Cinema 1	<CN1>	–	–
<CN2>	Cinema 2	<CN2>	–	–
<CN3>	Cinema 3	<CN3>	–	–
<CL1>	Colour 1	<CL1>	–	–
<CL2>	Colour 2	<CL2>	–	–
OMN	Menu	OMN	–	–
OCU	Cursor up	OCU		
OCD	Cursor down	OCD		
OCL	Cursor left	OCL		
OCR	Cursor right	OCR		
OSH*	Shutter	OSH		
OST	The same function as “DEFAULT” button	OST		
OVM	The same function as “PICTURE MODE” button	OVM		
VS1	The same function as “ASPECT” button	VS1		
OBK	The same function as “RETURN” button	OBK		
OLE	The same function as “LENS” button	OLE		
OOT:<off_timer>	Off timer	OOT:<off_timer>	0	7
OWM:<x>	Waveform monitor activate/off	OWM:<x>	0	8

* 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.

Status asking commands

Command	Description		Callback <Parameter>
QPW	Standby power status		<power condition>
QIN	Input signal status		<input signal>
QPM	Picture mode status	Normal	<NOR>
		Dynamic	<DYN>
		Cinema 1	<CN1>
		Cinema 2	<CN2>
		Cinema 3	<CN3>
		Colour 1	<CL1>
		Colour 2	<CL2>
QFZ	Freeze status		<off_on>
QOT	Off timer status		<off_timer>
QSH	Shutter function status		<off_on>
QWM	Waveform monitor status		<x>

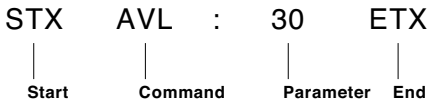
Parameter format

Parameter format	Size (Byte)	Difinition
<off_on>	1	0 = off, 1 = on
<input signal>	3	VID = video, SVD = S-video, RG1 = computer, CP1 = component 1, CP2 = component 2, HD1 = HDMI 1, HD2 = HDMI 2, HD3 = HDMI 3
<power condition>	3	000 = power on (standby mode on), 001 = power off (standby mode off)
<off_timer>	1	0 = off, 1 = 60 min, 2 = 90 min, 3 = 120 min, 4 = 150 min, 5 = 180 min, 6 = 210 min, 7 = 240 min
<x>	1	0 = off, 1 = full scan (Y), 2 = full scan (R), 3 = full scan (G), 4 = full scan (B), 5 = single line (Y), 6 = single line (R), 7 = single line (G), 8 = single line (B)

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.