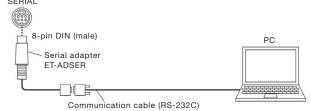
Panasonic Projector	RS-232C	Control	Specific	ations
	PT-AX20	0		

Serial connector

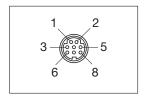
The serial connector complies with RS-232C. To control the projector from a personal computer, commands must be input through communication software, based on the format and satisfying the communication conditions shown below.

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Be sure to see that an optional serial adapter ET-ADSER and a RS-232C communication cable match the PC to be connected.



Pin assignments and signal names



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

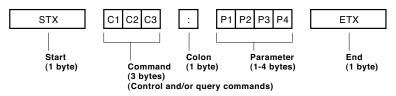
Mini DIN 8-pin

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

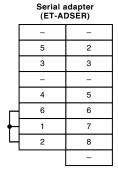
Transmission from the computer begins with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.



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

Cable specifications



Projector		PC (DTE)
1	NC N	C 1
2		2
3		3
4	NC N	C 4
5		- 5
6	DSR N	C 6
7		7
8		- 8
9	NC N	C 9

Control commands

Command: <parameter></parameter>	Function	Callback: <parameter></parameter>	Param	eter value
			Min	Max
PON*	Power on (standby mode on)	PON	-	-
POF*	Power off (standby mode off)	POF	-	-
IIS: <input signal=""/>	Input signal selection	IIS: <input signal=""/>	-	-
OST	The same function as "DEFAULT" button	OST	-	-
OFZ: <off_on></off_on>	Freeze	OFZ: <off_on></off_on>	0	1
OEN	Enter	OEN	-	-
VPM: <picture mode=""></picture>	Picture mode	VPM: <picture mode=""></picture>	-	-
< NOR>	Normal	< NOR >	-	-
<dyn></dyn>	Dynamic	<dyn></dyn>	-	-
<cn1></cn1>	Cinema 1	<cn1></cn1>	-	-
< CN 2 >	Cinema 2	< CN 2 >	-	-
<vcn></vcn>	Vivid cinema	<vcn></vcn>	-	-
<gam></gam>	Game	<gam></gam>	-	-
< NAT >	Natural	< NAT >	-	-
OMN	Menu	OMN		
ocu	Cursor up	ocu		
OCD	Cursor down	OCD		
OCL	Cursor left	OCL		
OCR	Cursor right	OCR		
OOT: <off_timer></off_timer>	Off timer	OOT: <off_timer></off_timer>	0	7
OSH*	Shutter	OSH		
OVM	The same function as "PICTURE MODE" button	OVM		
VS1	The same function as "ASPECT" button	VS1		
OBK	The same function as "RETURN" button	ОВК		

⁻ 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></parameter>
QPW	Standby power status		<pre><power condition=""></power></pre>
QIN	Input signal status		<input signal=""/>
QPM	Picture mode status	Normal	< NOR >
		Dynamic	<dyn></dyn>
		Cinema 1	<cn1></cn1>
		Cinema 2	< CN2 >
		Vivid cinema	<vcn></vcn>
		Game	< GAM >
		Natural	<nat></nat>
QFZ	Freeze status		<off_on></off_on>
QOT	Off timer status		<off_timer></off_timer>
QSH	Shutter function status		<off on=""></off>

Parameter format

Parameter format	Size (Byte)	Difinition
<off_on></off_on>	1	0 = off, 1 = on
<input signal=""/>	3	VID = video, SVD = S-video, RG1 = computer, YUV = YPBPR,
		HD1 = HDMI 1, HD2 = HDMI 2
<pre><power condition=""></power></pre>	3	000 = power on (standby mode on), 001 = power off (standby mode off)
<off_timer></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

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.