

S P E C F I L E



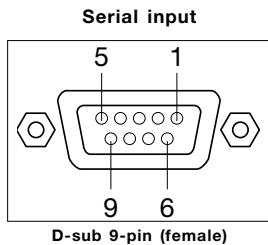
Product Number : **PT-EX12K**

Product Name : LCD Projector

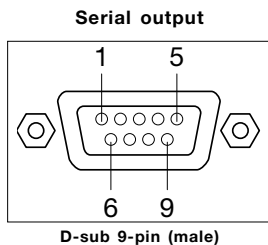
Serial connector

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



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



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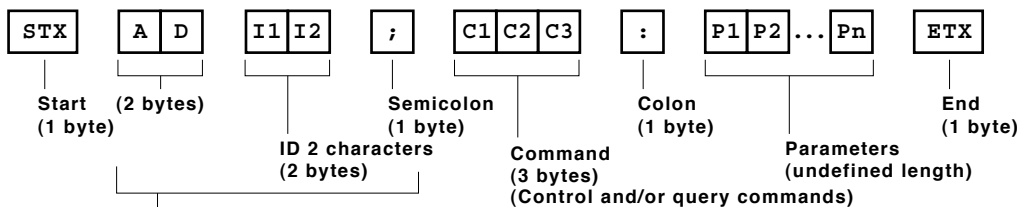
Communication conditions (factory setting)

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

* 9,600 bps when "AMX D.D." is set to ON.

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.



ID designator:
 01 to 06: Projector ID number
 ZZ: All units (ID ALL)

NOTE: STX and ETX are character codes. Expressed in hexidecimals, STX is 02 and ETX is 03.

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.
- When using two or more units, set different IDs for each unit.

Cable specifications

Projector		PC (DTE)	
1	NC	NC	1
2			2
3			3
4	NC	NC	4
5			5
6	NC	NC	6
7			7
8			8
9	NC	NC	9

Control commands

Command : Parameter	Function		Callback
PON	Standby power	On	PON
POF		Off	POF
IIS:HD1	Input	Input 1 [HDMI]	IIS:HD1
IIS:DVI		Input 1 [DVI (PC)]	IIS:DVI
IIS:DVI		Input 1 [DVI (AV HDCP)]	IIS:DVI
OED:1			OED:1
IIS:RG1		Input 1 [RGB (PC)]	IIS:RG1
IIS:SCT		Input 1 [RGB (Scart)]	IIS:SCT
IIS:RG2		Input 2 [RGB]	IIS:RG2
IIS:RG2		Input 2 [RGB(Y·P _B (C _B)·P _R (C _R))]	IIS:RG2
ORF:1			ORF:1
IIS:VID		Input 2 [Video]	IIS:VID
IIS:SVD	Input 2 [S-Video]	IIS:SVD	
IIS:AU1, SD1		Input 3 [SDI1] * with the ET-MD16SD1 only	IIS:AU1, SD1
IIS:AU1, SD2		Input 3 [SDI2] * with the ET-MD16SD1 only	IIS:AU1, SD2
IIS:AU2, SD1		Input 4 [SDI1] * with the ET-MD16SD1 only	IIS:AU2, SD1
IIS:AU2, SD2		Input 4 [SDI2] * with the ET-MD16SD1 only	IIS:AU2, SD2
LPM:0	Lamp mode	Two lamps	LPM:0
LPM:1		Single lamp (auto)	LPM:1
LPM:2		Single lamp (lamp 1)	LPM:2
LPM:3		Single lamp (lamp 2)	LPM:3
OLP:2	Lamp power	Auto	OLP:2
OLP:0		Normal	OLP:0
OLP:3		Eco 1	OLP:3
OLP:4		Eco 2	OLP:4
OSH:0	Shutter	Off	OSH:0
OSH:1		On	OSH:1
OFZ:1	Freeze	On	OFZ:1
OFZ:0		Off	OFZ:0
OAS	Auto setup		OAS
VSE:0	Screen (aspect)	Normal	VSE:0
VSE:6		Full	VSE:6
VSE:2		Wide (16:9)	VSE:2
VSE:40		Zoom	VSE:40
VSE:5		Real	VSE:5
VSE:50		Custom	VSE:50
VPM:STD	Picture	Standard	VPM:STD
VPM:DYN		Dynamic	VPM:DYN
VPM:CIN		Cinema	VPM:CIN
VPM:REA		Real	VPM:REA

*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 When a command that cannot be executed during standby mode is sent, the projector will send an ER401 command in reply.

Status request commands

Command:Parameter	Function	Callback	Description
QPW	Main power status	000	Off
		001	On
QIN	Input signal status	HD1	Input 1 [HDMI]
QIN		DVI	Input 1 [DVI (PC)]
QED		2	
		DVI	Input 1 [DVI (AV HDCP)]
QIN		1	
		RG1	Input 1 [RGB (PC)]
QIN		SCT	Input 1 [RGB (Scart)]
		RG2	Input 2 [RGB]
QED		0	
		RG2	Input 2 [RGB(Y·P _B (C _B)·P _R (C _R))]
QIN		1	
		VID	Input 2 [Video]
QSL	Lamp operation mode status	SVD	Input 2 [S-Video]
		AU1, SD1	Input 3 [SDI1] * with the ET-MD16SD1 only
		AU1, SD2	Input 3 [SDI2] * with the ET-MD16SD1 only
		AU2, SD1	Input 4 [SDI1] * with the ET-MD16SD1 only
		AU2, SD2	Input 4 [SDI2] * with the ET-MD16SD1 only
		0	Two lamps
QLP	Lamp power mode status	1	Single lamp (auto)
		2	Single lamp (lamp 1)
		3	Single lamp (lamp 2)
		4	Eco 2
QSH	Shutter function status	2	Auto
		0	Normal
QFZ	Freeze function status	3	Eco 1
		1	On
QSE	Aspect mode status	0	Off
		6	Full
		2	Wide (16:9)
		40	Zoom
		5	Real
		50	Custom
QPM	Picture mode status	0	Normal
		6	Full
		DYN	Dynamic
		CIN	Cinema
QST	Projector run time	REA	Real
		p1p2p3p4p5	00000 – 99999 hours
Q\$L: 1	Lamp 1 run time	p1p2p3p4	0000 – 9999 hours
Q\$L: 2	Lamp 2 run time	p1p2p3p4	0000 – 9999 hours
Q\$L: 3	Lamp 3 run time	p1p2p3p4	0000 – 9999 hours
Q\$L: 4	Lamp 4 run time	p1p2p3p4	0000 – 9999 hours
QTM: 0	Temperature status	p1p2p3p4/p5p6p7p8 *1	Air intake
QTM: 2		p1p2p3p4/p5p6p7p8 *1	Panel section

*1 p1p2p3p4 = Celsius (°C), p5p6p7p8 = Fahrenheit (°F)

NOTE: If a wrong command is received, the projector will send an ER401 or ER402 command to the computer.

Command example

To set the shutter function on, send the command as shown below.



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