

RS-232C Protocol Manual For

LCD Projectors

PT-L711, PT-L701, PT-L701SD,

PTL511, and PT-L501

Version 1.0

Revision List

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1 Introduction

This document describes the commands and data formats to control by RS-232C, from a controller to the Panasonic projector.

This document should be used in conjunction with the Operation Instructions.

Information furnished in this document, is believed to be accurate and reliable. However, no responsibility is assumed for its use.

2 Connection

2.1 Communication Parameters

Signal Level	RS-232C
Sync Method	Asynchronous
Data Speed	9600 bps
Data length	8bit
Parity	None
Stop bit	1
X Parameter	None
S Parameter	None
Code (command)	JIS X 0201 (Capital Letters Only)

The device controlling the projector must match the above parameters. There is no capability to change the settings of the projector.

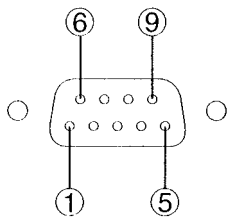
2.2 Address level

The address level of this Projector corresponds to address level 0 within the MIS standard. This unit does not support multiple machine control from a single communication port.

Address level 0 only one projector and the address information is eliminated

2.3 RS-232C Connection

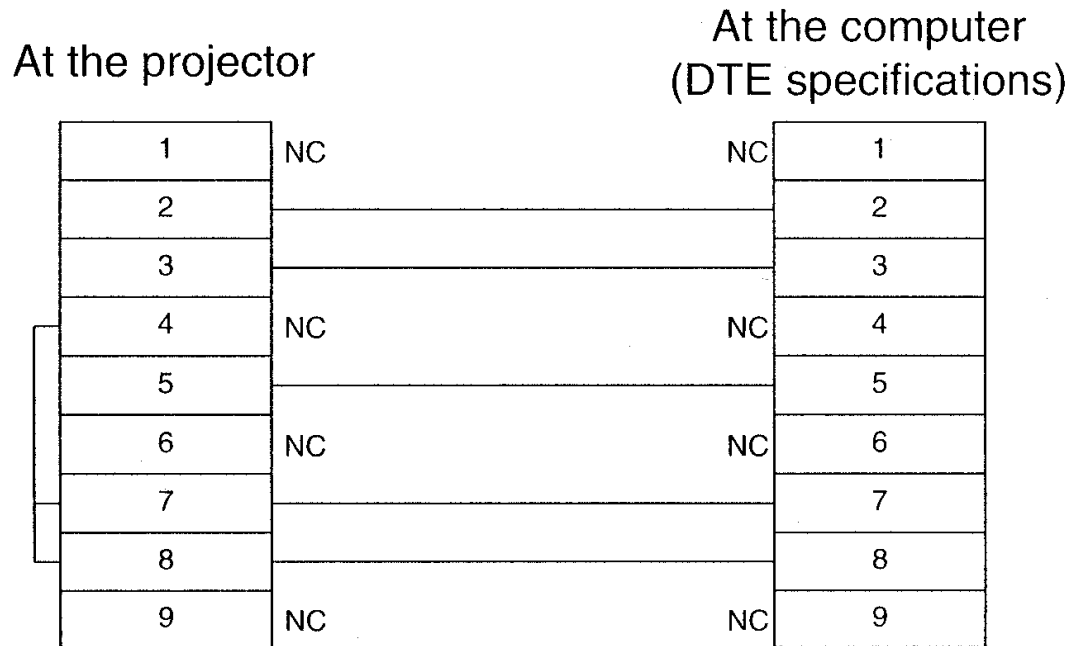
Connector is Dsub 9pin (Female) as seen from the outside



Pin #	Signal	Comment
1		No connection
2	TXD	
3	RXD	
4		Connected Internally
5	GRD	
6		No connection
7	CTS	Connected Internally
8	RTS	
9		No connection

2.4 Cable Specifications

Use a RS-232C 9 pin to 9 pin straight cable. Pins 4,7 and 8 are internally shorted together in the projector.



3 Communication

3.1 Command Format

Implement commands that are to be sent to the projector in the following manner.

[STX] COM1:P1P2P3P4 [ETX]

Head identifier - Send [STX] (Hex'02' or Ctrl B for ASCII), at the beginning of the command string. This will allow the projector to receive the following command.

Command (COM1) – The Command is written by 3 characters. The Letters are capitalized. . See the command tables in Section 5 for details.

Parameter (P1P2P3P4) - The Parameter data is required by certain commands. The parameter data information can be 1 to 4 bytes in length, which is dependant on the individual commands. If no parameter is required by the specific command, then this information does not need to be transmitted. See the command tables in Section 5 for details.

End identifier - Send [ETX] (Hex'03' or CTRL C for ASCII) at the end of command string.

Command and its parameter should be separated by a ":" colon (Hex'3A'). When a command that does not require parameters is sent, then the separating colon can be eliminated.

Example of a command string

:

[STX]	I	I	S	:	V	I	D	[ETX]
02	49	49	53	3A	56	49	44	03

Command with Parameter

[STX]	P	O	N	[ETX]
02	50	4F	4E	03

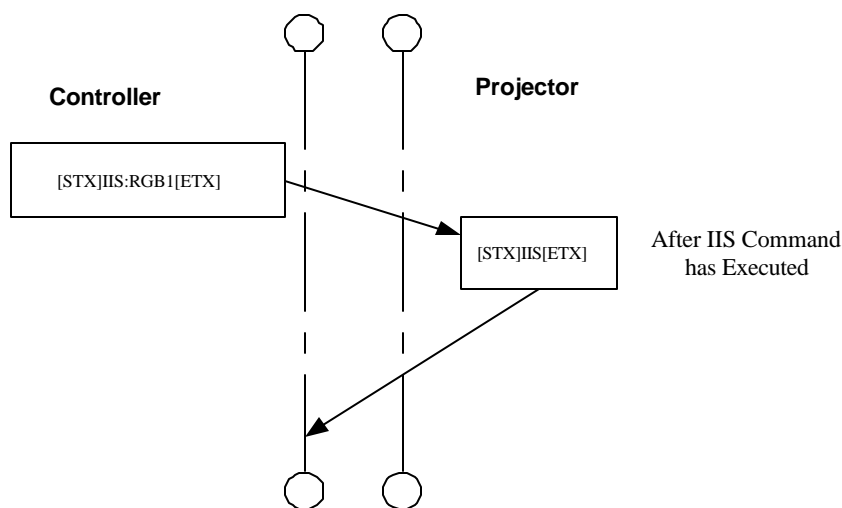
Command without Parameter

3.2 Replies

When commands are sent to projector, the projector will respond in the following manner.

- 1) Normal command receiving
When the command is in the proper format and correct communications has been established between the controlling device and the projector, the projector will reply with the response information.
- 2) Command receiving error (NO Response)
If no response is transmitted from the projector, then check the communication settings and the cable configuration. The command string must start with a [STX] Start of Text message. This will alert the projector to start receiving commands. An [ETX] End of Text message must end the command string or the projector will not execute the command.
- 3) Command Receiving Error [STX]ER401[ETX]
If this error is transmitted from the projector, the projector did not recognize the command that was sent from the control device. Check the command list to ensure that the command is valid, and the characters are capitalized.
- 4) Command Receiving Error [STX]ER402[ETX]
If this command is transmitted from the projector, the projector did not recognize the parameter that was sent from the control device. Check the command list for the appropriate parameter data that is to be sent with the appropriate command to the projector.
- 5) Query Responses
If a command such as [STX]Q\$L[ETX] Query Lamp Operation Time is sent. The projector will send the reply of [STX]Q\$L:0000[ETX]. Parameter information will be replied only in the case of a Question type command. Check the command list for the specific information.

Example of Commands sent to the Projector.



4 The Command List

No	The Command	Command Description
1	AUD	Volume Down
2	AUU	Audio Volume Up
3	AVL:	Audio Volume Set
4	CPK	Control Panel
5	DZD	Digital Zoom Down
6	DZU	Digital Zoom Up
7	IIS	Input Select
8	KST	Keystone
9	OAK	Auto Keystone
10	OAR	Auto RGB Input
11	OAS	Auto Set-up
12	OAY	Auto YPbPr
13	OBC	Background Color
14	OCD	Cursor Down
15	OCL	Cursor Left
16	OCR	Cursor Right
17	OCU	Cursor Up
18	OEN	Enter
19	OFC	Function 1
20	OFZ	Freeze
21	OGS	Gamma Set
22	OID	Input Display

No	The Command	Command Description
23	OIL	Installation
24	OIX	Index Window
25	OKS	Keystone
26	OLG	Language
27	OLP	Lamp Power
28	ORF	RGB Format
29	OMN	Menu
30	ORZ	Resizing
31	OSH	Shutter
32	OST	Standard
33	POF	Power Off
34	PON	Power On
35	QAK	Query Auto Keystone
36	QAR	Query Auto RGB Input
37	QAS	Query Auto Set-up
38	QAV	Query Volume Level
39	QAY	Query Auto YPbPr
40	QBC	Query Background Color
41	QCP	Query Clock Phase Level
42	QDC	Query Dot Clock Level
43	QDI	Query Input Display
44	QFC	Query Function
45	QFH	Query Horizontal Frequency
46	QFV	Query Vertical Frequency
47	QFZ	Query Freeze

No	The Command	Command Description
48	QHP	Query H-Position Level
49	QIN	Query Input Signal
50	QIX	Query Index Window
51	QKS	Query Keystone
52	QLG	Query Language
53	QLP	Query Lamp Power
54	QPM	Query Picture Mode
55	QPW	Query Power Condition
56	QRF	Query RGB Format
57	QRZ	Query Resizing
58	QSG	Query Signal Mode
59	QSH	Query Shutter
60	QSP	Query Installation
61	QVB	Query Brightness
62	QVC	Query Color Level
63	QVP	Query V-Position Level
64	QVR	Query Contrast Level
65	QVS	Query Sharpness Level
66	QVT	Query Tint Level
67	QVZ	Query Video Size Level
68	QWB	Query White Balance Blue
69	QWG	Query White Balance Green
70	QWR	Query White Balance Red
71	Q\$L	Query Lamp on Time
72	Q\$\$	Query Lamp On Condition

No	The Command	Command Description
72	VBR	Brightness
73	VCN	Contrast
74	VCO	Color
75	VCP	Clock Phase
76	VDC	Dot Clock
77	VHP	H-Position
78	VPM	Picture Mode
79	VSG	Signal Mode Set
80	VSR	Sharpness
81	VSZ	Video Size
82	VS1	S1 Signal
83	VTN	Tint
84	VVP	V-Position
85	VWB	White Balance Blue
86	VWG	White Balance Green
87	VWR	White Balance Red

5 Command Explanation

The following tables are the layout for the individual command explanations.

5.1 Details of Notation in Command Tables

Name	This indicates the name of the command.
Syntax	This indicates the syntax of the command. Parameters are also notated when they are necessary. The starting symbols in the command are [STX], and the concluding symbols in the command are [ETX], the symbols [and] are used for ease of explanation and are not to be sent to the player.
Function	This explains the function of the command.
Parameters	This explains the parameters if parameters are required by the syntax of the command.
Response	This is the response character string from the AV device or from the interface. In query commands, etc., this explains the meaning of the response.
Interrupt Processing	This indicates other commands that can be issued while the AV equipment is processing the command.
Examples of Use	This presents an example of actual notation
Notes	Other information that is helpful concerning this command.

Projector Model to Command Compatibility

Model Number	PT-L711U	PT-L701U	PT-L701SDU	PT-L501U	PT-L511U
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.2 Audio Volume Down (AUD)

Name	Audio Volume Down
Syntax	[STX]AUD[ETX]
Function	This command will step the Audio Volume down one notch
Parameters	None
Response	[STX]AUD[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]AUD[ETX]
Notes	If you want to step 5 steps the command must be sent 5 times. The range is from 0 to 63

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.3 Audio Volume UP (AUU)

Name	Audio Volume Up
Syntax	[STX]AUU[ETX]
Function	This command will step the Audio Volume up one notch
Parameters	None
Response	[STX]AUU[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]AUU[ETX]
Notes	If you want to step 5 steps the command must be sent 5 times. The range is from 0 to 63

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.4 Audio Volume Set (AVL)

Name	Audio Volume Set
Syntax	[STX]AVL:p1p2p3[ETX]
Function	This command set the Audio Volume to a set level.
Parameters	000 – 063 Volume Adjustment Range
Response	[STX]AVL[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]AVL:047[ETX]
Notes	The adjustment range value 000 would be no volume and 063 would be maximum volume.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.5 Control Panel (CPK)

Name	Control Panel						
Syntax	[STX]CPK:p1[ETX]						
Function	This command will enable or disable the controls on the top of the projector.						
Parameters	<table> <tr> <th><u>Code</u></th><th><u>Description</u></th></tr> <tr> <td>0</td><td>Disabled</td></tr> <tr> <td>1</td><td>Enabled</td></tr> </table>	<u>Code</u>	<u>Description</u>	0	Disabled	1	Enabled
<u>Code</u>	<u>Description</u>						
0	Disabled						
1	Enabled						
Response	[STX]CPK[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]CPK:0[ETX] will disable the Control Panel						
Notes	Commands can still be used to control the projector. Sending CPK:0 can disable the buttons						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.6 Digital Zoom Down (DZD)

Name	Digital Zoom Down
Syntax	[STX]DZD[ETX]
Function	This command enables the Digital Zoom Function.
Parameters	None
Response	[STX]DZD[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]DZD[ETX]
Notes	Sending the DZD Command will start the digital zoom mode. Cursor Commands (OCU, OCD, OCR, and OCL) can be used to set the position. The Enter Command (OEN) is used to expand the image. The Digital Zoom Up (DZU) and Digital Zoom Down (DZD) can be used to increase or decrease the amount of zoom. The Menu Command (OMN) can be used to cancel the Zoom Mode.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.7 Digital Zoom Up (DZU)

Name	Digital Zoom Up
Syntax	[STX]DZU[ETX]
Function	This command enables the Digital Zoom Function.
Parameters	None
Response	[STX]DZU[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]DZU[ETX]
Notes	Sending the DZD Command will start the digital zoom mode. Cursor Commands (OCU, OCD, OCR, and OCL) can be used to set the position. The Enter Command (OEN) is used to expand the image. The Digital Zoom Up (DZU) and Digital Zoom Down (DZD) can be used to increase or decrease the amount of zoom. The Menu Command (OMN) can be used to cancel the Zoom Mode.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.8 Input Select (IIS)

Name	Input Select
Syntax	[STX]IIS:p1p2p3[ETX]
Function	This command will allow selection of the various inputs.
Parameters	<u>Code</u> <u>Description</u> VID - Video SVD - Svideo RG1 - RGB 1 RG2 - RGB 2
Response	[STX]IIS[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]IIS:RG1[ETX] will select the RGB1 Input
Notes	If an unused input is selected the Background will be displayed.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.9 Keystone (KST)

Name	Keystone Adjustment
Syntax	[STX]KST[ETX]
Function	Adjust Keystone.
Parameters	None
Response	[STX]KST[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]KST[ETX]
Notes	Send this command to enable the Keystone Adjustment and use the Cursor Left and Cursor Right commands to make the actual adjustments. Send the Menu Command to escape the Keystone Adjustment Mode.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.10 Auto Keystone (OAK)

Name	Automatic Keystone						
Syntax	[STX]OAK:p1[ETX]						
Function	Sets the Auto Keystone Mode for the Auto Set-up feature.						
Parameters	<table> <tr> <th><u>Code</u></th><th><u>Description</u></th></tr> <tr> <td>0</td><td>Auto Keystone Off</td></tr> <tr> <td>1</td><td>Auto Keystone On</td></tr> </table>	<u>Code</u>	<u>Description</u>	0	Auto Keystone Off	1	Auto Keystone On
<u>Code</u>	<u>Description</u>						
0	Auto Keystone Off						
1	Auto Keystone On						
Response	[STX]OAK[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OAK[ETX]						
Notes	This command will Enable or Disable the Automatic Keystone Adjustment when the Auto Set-up (OAS) is done.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.11 Auto RGB Input (OAR)

Name	Automatic RGB Input						
Syntax	[STX]OAR:p1[ETX]						
Function	Sets the Auto RGB Input Mode for the Auto Set-up feature.						
Parameters	<table> <tr> <th><u>Code</u></th><th><u>Description</u></th></tr> <tr> <td>0</td><td>Auto RGB Input Off</td></tr> <tr> <td>1</td><td>Auto RGB Input On</td></tr> </table>	<u>Code</u>	<u>Description</u>	0	Auto RGB Input Off	1	Auto RGB Input On
<u>Code</u>	<u>Description</u>						
0	Auto RGB Input Off						
1	Auto RGB Input On						
Response	[STX]OAR[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OAR[ETX]						
Notes	This command will Enable or Disable the Automatic RGB Input Adjustment when the Auto Set-up (OAS) is done.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.12 Auto Set-up (OAS)

Name	Auto Set-up
Syntax	[STX]OAS[ETX]
Function	This command will perform an Auto Set-up of the projector.
Parameters	None
Response	[STX]OAS[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OAS[ETX]
Notes	If the Auto options are on such as Auto RGB, Auto Keystone, Auto YPbPr, Auto RGB Input the projector will adjust itself to the input. If any one of the Auto options is set to Off, that item will be skipped.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.13 Auto YPbPr (OAY)

Name	Automatic YPbPr						
Syntax	[STX]OAY:p1[ETX]						
Function	Sets the Auto YPbPr Mode for the Auto Set-up feature.						
Parameters	<table> <tr> <th><i>Code</i></th><th><i>Description</i></th></tr> <tr> <td>0</td><td>Auto YPbPr Off</td></tr> <tr> <td>1</td><td>Auto YPbPr On</td></tr> </table>	<i>Code</i>	<i>Description</i>	0	Auto YPbPr Off	1	Auto YPbPr On
<i>Code</i>	<i>Description</i>						
0	Auto YPbPr Off						
1	Auto YPbPr On						
Response	[STX]OAY[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OAY[ETX]						
Notes	This command will Enable or Disable the Automatic YPbPr Adjustment when the Auto Set-up (OAS) is done.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.14 Background Color (OBC)

Name	Background Color						
Syntax	[STX]OBC:p1[ETX]						
Function	This command will set the color of the background.						
Parameters	<table> <tr> <th><i>Code</i></th><th><i>Description</i></th></tr> <tr> <td>0</td><td>Blue Background</td></tr> <tr> <td>1</td><td>Black Background</td></tr> </table>	<i>Code</i>	<i>Description</i>	0	Blue Background	1	Black Background
<i>Code</i>	<i>Description</i>						
0	Blue Background						
1	Black Background						
Response	[STX]OBC[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OBC[ETX]						
Notes	The background will be displayed when no input signal is applied or selected.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.15 Cursor Down (OCD)

Name	Cursor Down
Syntax	[STX]OCD[ETX]
Function	Functions like the Down Button on the IR Remote and the Control Panel.
Parameters	None
Response	[STX]OCD[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OCD[ETX]
Notes	This command is used to Navigate Menus and for some Adjustments

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.16 Cursor Left (OCL)

Name	Cursor Left
Syntax	[STX]OCL[ETX]
Function	Functions like the Left Button on the IR Remote and the Control Panel.
Parameters	None
Response	[STX]OCL[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OCL[ETX]
Notes	This command is used to Navigate Menus and for some Adjustments

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.17 Cursor Right (OCR)

Name	Cursor Right
Syntax	[STX]OCR[ETX]
Function	Functions like the Right Button on the IR Remote and the Control Panel.
Parameters	None
Response	[STX]OCR[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OCR[ETX]
Notes	This command is used to Navigate Menus and for some Adjustments

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.18 Cursor Up (OCU)

Name	Cursor Up
Syntax	[STX]OCU[ETX]
Function	Functions like the Up Button on the IR Remote and the Control Panel.
Parameters	None
Response	[STX]OCU[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OCU[ETX]
Notes	This command is used to Navigate Menus and for some Adjustments

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.19 Enter (OEN)

Name	Enter
Syntax	[STX]OEN[ETX]
Function	Functions like the Enter Button on the IR Remote and the Control Panel.
Parameters	None
Response	[STX]OEN[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OEN[ETX]
Notes	This command is used to Navigate Menus and for some Adjustments

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.20 Function 1 (OFC)

Name	Function 1						
Syntax	[STX]OFC:p1[ETX]						
Function	This command will select the condition of the Function 1 Key.						
Parameters	<table> <tr> <th><i>Code</i></th><th><i>Description</i></th></tr> <tr> <td>0</td><td>Index Window</td></tr> <tr> <td>1</td><td>Keystone</td></tr> </table>	<i>Code</i>	<i>Description</i>	0	Index Window	1	Keystone
<i>Code</i>	<i>Description</i>						
0	Index Window						
1	Keystone						
Response	[STX]OFC[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OFC:1[ETX]						
Notes	This assigns the function to the F1 button of the ET-RM100 wireless remote control unit.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.21 Freeze (OFZ)

Name	Freeze						
Syntax	[STX]OFZ:p1[ETX]						
Function	This command will enable or disable the Freeze Function.						
Parameters	<table> <tr> <th><u>Code</u></th><th><u>Description</u></th></tr> <tr> <td>0</td><td>Freeze Off</td></tr> <tr> <td>1</td><td>Freeze On</td></tr> </table>	<u>Code</u>	<u>Description</u>	0	Freeze Off	1	Freeze On
<u>Code</u>	<u>Description</u>						
0	Freeze Off						
1	Freeze On						
Response	[STX]OFZ[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OFZ:1[ETX] will select the Freeze On.						
Notes	This command will capture a still image and display it.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.22 Gamma Set (OGS)

Name	Gamma Set						
Syntax	[STX]OGS:p1[ETX]						
Function	This command is to set the Gamma						
Parameters	<table> <tr> <th><i>Code</i></th><th><i>Description</i></th></tr> <tr> <td>0</td><td>Default Data Read</td></tr> <tr> <td>1</td><td>EEPROM Data Read</td></tr> </table>	<i>Code</i>	<i>Description</i>	0	Default Data Read	1	EEPROM Data Read
<i>Code</i>	<i>Description</i>						
0	Default Data Read						
1	EEPROM Data Read						
Response	[STX]OGS[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OGS[ETX]						
Notes	This command is used for the service and adjustment of the unit and should only be done by a qualified trained technician.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.23 Input Display (OID)

Name	Input Display						
Syntax	[STX]OID:p1[ETX]						
Function	This command will turn On or Off the On-Screen-Display when the inputs are changed.						
Parameters	<table> <tr> <th><u>Code</u></th><th><u>Description</u></th></tr> <tr> <td>0</td><td>Display Off</td></tr> <tr> <td>1</td><td>Display On</td></tr> </table>	<u>Code</u>	<u>Description</u>	0	Display Off	1	Display On
<u>Code</u>	<u>Description</u>						
0	Display Off						
1	Display On						
Response	[STX]OID:0[ETX] turns off the OSD						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OID[ETX]						
Notes	This command will only disable the Input Selection from displaying on the screen. Warnings, Freeze and others will still be shown.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.24 Installation (OIL)

Name	Installation										
Syntax	[STX]OIL:p1[ETX]										
Function	Sets the screen to projector relationship.										
Parameters	<table> <tr> <th><i>Code</i></th><th><i>Description</i></th></tr> <tr> <td>0</td><td>Front/ Desk</td></tr> <tr> <td>1</td><td>Rear/ Desk</td></tr> <tr> <td>2</td><td>Front/ Ceiling</td></tr> <tr> <td>3</td><td>Rear/ Ceiling</td></tr> </table>	<i>Code</i>	<i>Description</i>	0	Front/ Desk	1	Rear/ Desk	2	Front/ Ceiling	3	Rear/ Ceiling
<i>Code</i>	<i>Description</i>										
0	Front/ Desk										
1	Rear/ Desk										
2	Front/ Ceiling										
3	Rear/ Ceiling										
Response	[STX]OIL[ETX]										
Interrupt Processing	The Projector must be powered on for this command to be effective.										
Examples of Use	[STX]OIL[ETX]										
Notes											

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.25 Index Window (OIX)

Name	Index Window
Syntax	[STX]OIX[ETX]
Function	This command will access the Index Window Function.
Parameters	None
Response	[STX]OIX[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OIX[ETX]
Notes	Sending the command OIX will toggle the Index Window Function On and Off. Also Cursor Up (OCU) and Down (OCD) will change the size. Cursor Left (OCL) and Right (OCR) will switch panels of moving and still pictures.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.26 Keystone (OKS)

Name	Keystone Adjustment
Syntax	[STX]OKS:p1p2p3[ETX]
Function	Adjusts the Keystone.
Parameters	-32 to 31 0 is center default p1p2p3 will reflect a value between -31 to 31 Positive numbers will have a Space in the p1 data.
Response	[STX]OKS[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OKS:-05[ETX]
Notes	If the parameter is in the negative direction the bottom becomes narrow. If in a positive the top of the picture become narrow. Normal is 0.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.27 Language (OLG)

Name	Language
Syntax	[STX]OLG:p1p2p3[ETX]
Function	This command will select the Language of the On-Screen Menus.
Parameters	<u>Code</u> <u>Description</u> ENG - English DEU - Germany FRA - French ESP - Spanish ITL - Italian JPN - Japanese CHI - Chinese
Response	[STX]OLG[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OLG:ENG[ETX] All menus will show in English.
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.28 Lamp Power (OLP)

Name	Lamp Power						
Syntax	[STX]OLP:p1[ETX]						
Function	Selects the Lamp Power Mode.						
Parameters	<table> <tr> <th><u>Code</u></th><th><u>Description</u></th></tr> <tr> <td>0</td><td>Low</td></tr> <tr> <td>1</td><td>Standard</td></tr> </table>	<u>Code</u>	<u>Description</u>	0	Low	1	Standard
<u>Code</u>	<u>Description</u>						
0	Low						
1	Standard						
Response	[STX]OLP[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]OLP[ETX]						
Notes	In Low Mode the Brightness will decrease and the Fan Speed will decrease. In the Low Mode the life of the Lamp will increase.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.29 Menu (OMN)

Name	Menu
Syntax	[STX]OMN[ETX]
Function	Functions like the Menu Button on the IR Remote and the Control Panel.
Parameters	None
Response	[STX]OMN[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OMN[ETX]
Notes	This command is used to bring up the Menu.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.30 RGB Format (ORF)

Name	RGB Format						
Syntax	[STX]ORF:p1[ETX]						
Function	Selects the signal format for the RGB Input.						
Parameters	<table> <tr> <th><i>Code</i></th><th><i>Description</i></th></tr> <tr> <td>0</td><td>RGB</td></tr> <tr> <td>1</td><td>YPbPr</td></tr> </table>	<i>Code</i>	<i>Description</i>	0	RGB	1	YPbPr
<i>Code</i>	<i>Description</i>						
0	RGB						
1	YPbPr						
Response	[STX]ORF[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]ORF:0[ETX] will set to RGB type signal.						
Notes	This command will select the signal type of the RGB input. RGB setting is mainly for Computers and YPbPr is for HDTV type signals. If the Auto RGB or Auto YPbPr is on this command may not be accessible.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.31 Resizing (ORZ)

Name	Resizing						
Syntax	[STX]ORZ:p1[ETX]						
Function	Command will turn On or Off the Resizing Function.						
Parameters	<table> <tr> <th><i>Code</i></th><th><i>Description</i></th></tr> <tr> <td>0</td><td>Resizing Off</td></tr> <tr> <td>1</td><td>Resizing On</td></tr> </table>	<i>Code</i>	<i>Description</i>	0	Resizing Off	1	Resizing On
<i>Code</i>	<i>Description</i>						
0	Resizing Off						
1	Resizing On						
Response	[STX]ORZ[ETX]						
Interrupt Processing	The Projector must be powered on for this command to be effective.						
Examples of Use	[STX]ORZ[ETX]						
Notes	With Resizing On the Input signal resolution will be converted to the same resolution as the LCD Panels.						

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.32 Shutter (OSH)

Name	Shutter
Syntax	[STX]OSH[ETX]
Function	Turns the Shutter On and Off.
Parameters	None
Response	[STX]OSH[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OSH[ETX]
Notes	This command will Mute the Image and the Audio. Also the fan speed will decrease. If you send the command the first time the projector will mute. If you send the command again, the projector will unmute.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.33 Standard (OST)

Name	Standard
Syntax	[STX]OST[ETX]
Function	This command will reset all adjustments back to factory standard.
Parameters	None
Response	[STX]OST[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]OST[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.34 Power Off (POF)

Name	Power Off
Syntax	[STX]POF[ETX]
Function	It turns off the power supply of the Projector.
Parameters	None
Response	After the power supply is turned off [STX]POF[ETX] is returned. If the power supply is already off, the projector will just return [STX]POF[ETX].
Interrupt Processing	
Examples of Use	[STX]POF[ETX]
Notes	When this command is sent the Fan will continue to operate until the Lamp has cooled down. Then the unit will go into the Standby Mode.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.35 Power On (PON)

Name	Power On
Syntax	[STX]PON[ETX]
Function	This command will Power On the projector
Parameters	None
Response	[STX]PON[ETX]
Interrupt Processing	
Examples of Use	[STX]PON[ETX]
Notes	If a Power On command is received while the cooling fan is operating (a POF command is sent), the lamp will not turn on immediately. This is done to protect the Lamp.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.36 Query Auto Keystone (QAK)

Name	Query Auto Keystone
Syntax	[STX]QAK[ETX]
Function	Questions the state of the Auto Keystone.
Parameters	None
Response	[STX]p1[ETX] 0 = Off 1 = On
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QAK[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.37 Query Auto RGB Input (QAR)

Name	Query Auto RGB Input
Syntax	[STX]QAR[ETX]
Function	Questions the state of the Auto RGB Input.
Parameters	None
Response	[STX]p1[ETX] 0 = Off 1 = On
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QAR[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.38 Query Auto Set-up (QAS)

Name	Query Auto Set-up
Syntax	[STX]QAS[ETX]
Function	Questions the state of the Auto Set-up.
Parameters	None
Response	[STX]p1[ETX] 0 = Auto Set-up in progress 1 = Auto Set-up in stop
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QAS[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.39 Query Volume Level (QAV)

Name	Query Volume Level
Syntax	[STX]QAV[ETX]
Function	Questions the Audio Level.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QAV[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.40 Query Auto YPbPr (QAY)

Name	Query Auto YPbPr
Syntax	[STX]QAY[ETX]
Function	Questions the state of the Auto YPbPr.
Parameters	None
Response	[STX]p1[ETX] 0 = Off 1 = On
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QAY[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.41 Query Background Color (QBC)

Name	Query Background Color
Syntax	[STX]QBC[ETX]
Function	Questions the color of the background.
Parameters	None
Response	[STX]p1[ETX] 0 = Blue 1 = Black
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QBC[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.42 Query Clock Phase Level (QCP)

Name	Query Clock Phase Level
Syntax	[STX]QCP[ETX]
Function	Questions the level of the Clock Phase.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QCP[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.43 Query Dot Clock Level (QDC)

Name	Query Dot Clock Level
Syntax	[STX]QDC[ETX]
Function	Questions the level of the Dot Clock.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QDC[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.44 Query Input Display (QDI)

Name	Query Input Display
Syntax	[STX]QDI[ETX]
Function	Questions the state of the Input Display.
Parameters	None
Response	[STX]p1[ETX] 0 = Display Off 1 = Display On
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QDI[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.45 Query Function (QFC)

Name	Query Function
Syntax	[STX]QFC[ETX]
Function	Questions the state of the Function Key.
Parameters	None
Response	[STX]p1[ETX] 0 = Index Window 1 = Keystone
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QFC[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.46 Query Horizontal Frequency (QFH)

Name	Query Horizontal Frequency
Syntax	[STX]QFH[ETX]
Function	Questions the current Horizontal Frequency.
Parameters	None
Response	[STX]p1[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QFH[ETX]
Notes	The response from the projector is in kHz.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.47 Query Vertical Frequency (QFV)

Name	Query Vertical Frequency
Syntax	[STX]QFV[ETX]
Function	Questions the current Vertical Frequency.
Parameters	None
Response	[STX]p1[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QFV[ETX]
Notes	The response from the projector is in Hz.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.48 Query Freeze (QFZ)

Name	Query Freeze
Syntax	[STX]QFZ[ETX]
Function	Questions the state of the Freeze Function.
Parameters	None
Response	[STX]p1[ETX] 0 = Freeze Off 1 = Freeze On
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QFZ[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.49 Query H-Position Level (QHP)

Name	Query H-Position Level
Syntax	[STX]QHP[ETX]
Function	Questions the level of the Horizontal Position.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 255
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QHP[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.50 Query Input Signal (QIN)

Name	Query Input Signal
Syntax	[STX]QIN[ETX]
Function	Questions the current Input that is selected.
Parameters	None
Response	[STX]p1p2p3[ETX] VID - Video SVD - Svideo RG1 - RGB 1 RG2 - RGB 2
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QIN[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.51 Query Index Window (QIX)

Name	Query Index Window
Syntax	[STX]QIX[ETX]
Function	Questions the status of the Index Window Function.
Parameters	None
Response	[STX]p1[ETX] 0 Index Window Off 1 Index Window On (50%) 2 Index Window On (75%) 3 Index Window On (100%)
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QIX[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.52 Query Keystone (QKS)

Name	Query Keystone
Syntax	[STX]QKS[ETX]
Function	Questions the level of the Keystone.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between -31 to 31 Positive numbers will have a Space in the p1 data.
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QKS[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.53 Query Language (QLG)

Name	Query Language
Syntax	[STX]QLG[ETX]
Function	Questions the language of the Menus.
Parameters	None
Response	[STX]p1p2p3[ETX] ENG - English DEU - Germany FRA - French ESP - Spanish ITL - Italian JPN - Japanese CHI - Chinese
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QLG[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.54 Query Lamp Power (QLP)

Name	Query Lamp Power
Syntax	[STX]QLP[ETX]
Function	Questions the status of the Lamp Power.
Parameters	None
Response	[STX]p1[ETX] 0 = Low 1 = Standard
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QLP[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.55 Query Picture Mode (QPM)

Name	Query Picture Mode
Syntax	[STX]QPM[ETX]
Function	Questions the present Picture Mode.
Parameters	None
Response	[STX]p1p2p3[ETX] NAT = Natural DYN = Dynamic
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QPM[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.56 Query Power Condition (QPW)

Name	Query Power Condition
Syntax	[STX]QPW[ETX]
Function	Questions the current power status.
Parameters	None
Response	[STX]p1p2p3[ETX] 000 = Power Off 001 = Power On
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QPW[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.57 Query RGB Format (QRF)

Name	Query RGB Format
Syntax	[STX]QRF[ETX]
Function	Questions the state of the RGB Input.
Parameters	None
Response	[STX]p1[ETX] 0 = RGB 1 = YPbPr
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QRF[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.58 Query Resizing (QRZ)

Name	Query Resizing
Syntax	[STX]QRZ[ETX]
Function	Questions the state of the Resizing Feature.
Parameters	None
Response	[STX]p1[ETX] 0 = Resizing Off 1 = Resizing On
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QRZ[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.59 Query Signal Mode (QSG)

Name	Query Signal Mode
Syntax	[STX]QSG[ETX]
Function	Questions the condition of the Signal Mode setting.
Parameters	None
Response	[STX]p1p2p3[ETX] AT1 - Auto 1 (Video) AT2 - Auto 2 (Video) NTS - NTSC (Video) N44 - NTSC 443 (Video) PAL - PAL (Video) PAN - N-PAL (Video) PAM - M-PAL (Video) SEC - SECAM (Video) AUT - AUTO (RGB) U01 - User 1 (RGB) U02 - User 2 (RGB) U03 - User 3 (RGB)
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QSG[ETX]
Notes	The response from the projector will be the present signaled displayed.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.60 Query Shutter (QSH)

Name	Query Shutter
Syntax	[STX]QSH[ETX]
Function	Questions the state of the Shutter.
Parameters	None
Response	[STX]p1[ETX] 0 = Shutter Off 1 = Shutter On
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QSH[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.61 Query Installation (QSP)

Name	Query Installation
Syntax	[STX]QSP[ETX]
Function	Questions the state of the Installation of the Projector.
Parameters	None
Response	[STX]p1[ETX] 0. Front/ Desk 1. Rear/ Desk 2. Front/ Ceiling 3. Rear/ Ceiling
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QSP[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.62 Query Brightness (QVB)

Name	Query Brightness
Syntax	[STX]QVB[ETX]
Function	Questions the Brightness Level.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QVB[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.63 Query Color Level (QVC)

Name	Query Color Level
Syntax	[STX]QVC[ETX]
Function	Questions the Color Level.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QVC[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.64 Query V-Position Level (QVP)

Name	Query V-Position Level
Syntax	[STX]QVP[ETX]
Function	Questions the level of the Vertical Position.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 127
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QVP[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.65 Query Contrast Level (QVR)

Name	Query Contrast Level
Syntax	[STX]QVR[ETX]
Function	Questions the Contrast Level.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QVR[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.66 Query Sharpness Level (QVS)

Name	Query Sharpness Level
Syntax	[STX]QVS[ETX]
Function	Questions the Sharpness Level.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 031
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QVS[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.67 Query Tint Level (QVT)

Name	Query Tint Level
Syntax	[STX]QVT[ETX]
Function	Questions the Tint Level.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QVT[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.68 Query Video Size Level (QVZ)

Name	Query Video Size Level
Syntax	[STX]QVZ[ETX]
Function	Questions the status of the Video Size level.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QVZ[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.69 Query White Balance Blue (QWB)

Name	Query White Balance Blue
Syntax	[STX]QWB[ETX]
Function	Questions the level of the Blue White Balance.
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QWB[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.70 Query White Balance Green (QWG)

Name	Query White Balance Green
Syntax	[STX]QWG[ETX]
Function	Questions the level of the Green White Balance..
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QWG[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.71 Query White Balance Red (QWR)

Name	Query White Balance Red
Syntax	[STX]QWR[ETX]
Function	Questions the level of the Red White Balance..
Parameters	None
Response	[STX]p1p2p3[ETX] p1p2p3 will reflect a value between 000 to 063
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]QWR[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.72 Query Lamp On Time (Q\$L)

Name	Query Lamp On Time
Syntax	[STX]Q\$L[ETX]
Function	This command will return the total number of hours that the lamp has been on.
Parameters	None
Response	[STX]p1p2p3p4[ETX] p1p2p3p4 will be displayed in hours from 0000 to 2000. At the 2000 hour point the lamp must be replaced.
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]Q\$L[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.73 Query Lamp On Condition (Q\$S)

Name	Query Lamp On Condition
Syntax	[STX]Q\$S[ETX]
Function	Questions the present condition of the lamp.
Parameters	None
Response	[STX]P1[ETX] 0 = Standby 1 = Lamp On Control Active 2 = Lamp On 3 = Lamp Off Control Active
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]Q\$S[ETX]
Notes	If the lamp is in Standby the projector is powered off If the Lamp is in Lamp-On Control Active the lamp is turned on and is warming up but has not displaying an image yet. If the lamp is Lamp On the lamp is on and displaying an image. If the lamp is Lamp Off Control Active the unit is in the process of powering off.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.74 Brightness (VBR)

Name	Brightness
Syntax	[STX]VBR:p1p2p3[ETX]
Function	This command will adjust the Brightness Level.
Parameters	000 – 063 Brightness Adjustment Range
Response	[STX]VBR[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VBR:031[ETX]
Notes	This command is available for all inputs.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.75 Contrast (VCN)

Name	Contrast
Syntax	[STX]VCN:p1p2p3[ETX]
Function	This command adjusts the Contrast Level.
Parameters	000 – 063 Contrast Adjustment Range
Response	[STX]VCN[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VCN:031[ETX]
Notes	This command is available for all input signals

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.76 Color (VCO)

Name	Color
Syntax	[STX]VCO:p1p2p3[ETX]
Function	This command will adjust the Color Level.
Parameters	000 – 063 Color Adjustment Range
Response	[STX]VCO[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VCO:031[ETX]
Notes	This command is for the S-Video, Video and YPbPr inputs.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.77 Clock Phase (VCP)

Name	Clock Phase
Syntax	[STX]VCP:p1p2p3[ETX]
Function	This command will adjust the Clock Phase.
Parameters	000 – 063 Adjustment Range
Response	[STX]VCP[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VCP:031[ETX]
Notes	This command is available for the RGB signal only.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.78 Dot Clock (VDC)

Name	Dot Clock
Syntax	[STX]VDC:p1p2p3[ETX]
Function	This command will adjust the Dot Clock.
Parameters	000 – 063 Dot Clock Adjustment Range
Response	[STX]VDC[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VDC:031[ETX]
Notes	This command is available for the RGB signal only.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.79 H-Position (VHP)

Name	H-Position
Syntax	[STX]VHP:p1p2p3[ETX]
Function	This command will shift the picture horizontally.
Parameters	000 – 255 H-Position Adjustment Range
Response	[STX]VHP[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VHP:098[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.80 Picture Mode (VPM)

Name	Picture Mode
Syntax	[STX]VPM:p1p2p3[ETX]
Function	This command will set the Picture Mode.
Parameters	p1p2p3 Description NAT - Natural DYN - Dynamic
Response	[STX]VPM[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VPM:NAT[ETX]
Notes	It is recommended that Natural be used for Video and HDTV sources and Dynamic be used for Computer sources.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.81 Signal Mode Set (VSG)

Name	Signal Mode Set
Syntax	[STX]VSG:p1p2p3[ETX]
Function	This command will set the signal mode.
Parameters	<p><u>Code</u> <u>Description</u></p> <p>AT1 - Auto 1 (Video/S-Video) AT2 - Auto 2 (Video/S-Video) NTS - NTSC (Video/S-Video) N44 - NTSC 443 (Video/S-Video) PAL - PAL (Video/S-Video) PAN - N-PAL (Video/S-Video) PAM - M-PAL (Video/S-Video) SEC - SECAM (Video/S-Video) AUT - AUTO (RGB) U01 - User 1 (RGB) U02 - User 2 (RGB) U03 - User 3 (RGB)</p>
Response	[STX]VSG[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VSG:NTS[ETX] Will set the Video NTSC Format.
Notes	In Auto Mode the Projector will auto detect the input.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.82 Sharpness (VSR)

Name	Sharpness
Syntax	[STX]VSR:p1p2p3[ETX]
Function	This command will adjust the Sharpness Level.
Parameters	000 – 031 Sharpness Adjustment Range
Response	[STX]VSR[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VSR:008[ETX]
Notes	This command is available for all inputs.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.83 Video Size (VSZ)

Name	Video Size
Syntax	[STX]VSZ:p1p2p3[ETX]
Function	This command will adjust the size of the video..
Parameters	000 – 063 Video Size Adjustment Range
Response	[STX]VSZ[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VSZ:009[ETX]
Notes	This command is for the S-Video and Video inputs only. This will make the picture larger or smaller.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.84 S1 Signal (VS1)

Name	S1 Signal																
Syntax	[STX]VS1:p1[ETX]																
Function	This will set the Aspect Ratio of the Projector.																
Parameters	<table> <tr> <th>Code</th><th>Description</th></tr> <tr> <td>0</td><td>4:3 (Video/RGB)</td></tr> <tr> <td>1</td><td>16:9 (Video/RGB)</td></tr> <tr> <td>2</td><td>S4:3 (Video/RGB)</td></tr> <tr> <td>0</td><td>Auto (S-Video)</td></tr> <tr> <td>1</td><td>4:3 (S-Video)</td></tr> <tr> <td>2</td><td>16:9 (S-Video)</td></tr> <tr> <td>3</td><td>S4:3 (S-Video)</td></tr> </table>	Code	Description	0	4:3 (Video/RGB)	1	16:9 (Video/RGB)	2	S4:3 (Video/RGB)	0	Auto (S-Video)	1	4:3 (S-Video)	2	16:9 (S-Video)	3	S4:3 (S-Video)
Code	Description																
0	4:3 (Video/RGB)																
1	16:9 (Video/RGB)																
2	S4:3 (Video/RGB)																
0	Auto (S-Video)																
1	4:3 (S-Video)																
2	16:9 (S-Video)																
3	S4:3 (S-Video)																
Response	[STX]VS1[ETX]																
Interrupt Processing	The Projector must be powered on for this command to be effective.																
Examples of Use	[STX]VS1[ETX]																
Notes	This command is only valid for Video, S-Video and YPbPr signals. In the Auto Mode the S-Video Signal must contain the wide signal on the Chroma channel.																

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.85 Tint (VTN)

Name	Tint
Syntax	[STX]VTN:p1p2p3[ETX]
Function	This command will adjust the Tint of the picture.
Parameters	000 – 063 Tint Adjustment Range
Response	[STX]VTN[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VTN[ETX]
Notes	This command is only available for the S-Video and Video inputs that are NTSC and NTSC 4.43 only.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.86 V-Position (VVP)

Name	V-Position
Syntax	[STX]VVP:p1p2p3[ETX]
Function	This command will shift the picture vertically.
Parameters	000 – 127 V-Position Adjustment Range
Response	[STX]VVP[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VVP:088[ETX]
Notes	

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.87 White Balance Blue (VWB)

Name	White Balance Blue
Syntax	[STX]VWB:p1p2p3[ETX]
Function	This command will adjust the Blue level to achieve White Balance.
Parameters	000 – 063 White Balance Adjustment Range
Response	[STX]VWB[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VWB:031[ETX]
Notes	This adjustment is for RGB only. Adjust the Blue signal up or down, so that the white portions of the screen appear white.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.88 White Balance Green (VWG)

Name	White Balance Green
Syntax	[STX]VWG:p1p2p3[ETX]
Function	This command will adjust the Green level to achieve White Balance..
Parameters	000 – 063 White Balance Adjustment Range
Response	[STX]VWG[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VWG:031[ETX]
Notes	This adjustment is for RGB only. Adjust the Green signal up or down, so that the white portions of the screen appear white.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

5.89 White Balance Red (VWR)

Name	White Balance Red
Syntax	[STX]VWR:p1p2p3[ETX]
Function	This command will adjust the Red level to achieve White Balance..
Parameters	000 – 063 White Balance Adjustment Range
Response	[STX]VWR[ETX]
Interrupt Processing	The Projector must be powered on for this command to be effective.
Examples of Use	[STX]VWR:031[ETX]
Notes	This adjustment is for RGB only. Adjust the Red signal up or down, so that the white portions of the screen appear white.

Projector Model to Command Compatibility

Model Number	PT-L711U PT-L711XU	PT-L701U PT-L701XU	PT-L701SDU PT-L701XSDU	PT-L511U PT-L511XU	PT-L501U PT-L501XU
Command Acceptance	Yes	Yes	Yes	Yes	Yes

(Yes if Command can be used, No if command cannot be used)

6. ASCII CODE TABLE

Symbol	HEX	Binary	Description
NUL	00	0000 0000	NUL or all zeros (Ctrl-@)
SOH	01	0000 0001	Start of Header (Ctrl-A)
STX	02	0000 0010	Start of Text (Ctrl-B)
ETX	03	0000 0011	End of Text (Ctrl-C)
EOT	04	0000 0100	End of Transmission (Ctrl-D)
ENQ	05	0000 0101	Enquiry (Ctrl-E)
ACK	06	0000 0110	Acknowledge (Ctrl-F)
BEL	07	0000 0111	Bell or Alarm (Ctrl-G)
BS	08	0000 1000	Backspace (Ctrl-H)
HT	09	0000 1001	Horizontal Tabulation (Ctrl-I)
LF	0A	0000 1010	Line Feed (Ctrl-J)
VT	0B	0000 1011	Vertical Tabulation (Ctrl-K)
FF	0C	0000 1100	Form Feed (Ctrl-L)
CR	0D	0000 1101	Carriage Return (Ctrl-M)
SO	0E	0000 1110	Shift Out (Ctrl-N)
SI	0F	0000 1111	Shift In (Ctrl-O)
DLE	10	0001 0000	Data Link Escape (Ctrl-P)
DC1	11	0001 0001	Device Control 1 (Ctrl-Q)
DC2	12	0001 0010	Device Control 2 (Ctrl-R)
DC3	13	0001 0011	Device Control 3 (Ctrl-S)
DC4	14	0001 0100	Device Control 4 (Ctrl-T)
NACK	15	0001 0101	Negative Acknowledge (Ctrl-U)
SYN	16	0001 0110	Synchronous Idle (Ctrl-V)
ETB	17	0001 0111	End of Transmission Block (Ctrl-W)
CAN	18	0001 1000	Cancel (Ctrl-X)
EM	19	0001 1001	End of Medium (Ctrl-Y)
SUB	1A	0001 1010	Substitute (Ctrl-Z)
ESC	1B	0001 1011	Escape (Ctrl-[)
FS	1C	0001 1100	File Separator (Ctrl-\)
GS	1D	0001 1101	Group Separator (Ctrl-])
RS	1E	0001 1110	Record Separator (Ctrl-^)
US	1F	0001 1111	Unit Separator (Ctrl-_)

Symbol	HEX	Binary	Description
SP	20	0010 0000	Space
!	21	0010 0001	
"	22	0010 0010	
#	23	0010 0011	
\$	24	0010 0100	
%	25	0010 0101	
&	26	0010 0110	
'	27	0010 0111	
(28	0010 1000	
)	29	0010 1001	
*	2A	0010 1010	
+	2B	0010 1011	
,	2C	0010 1100	
-	2D	0010 1101	
.	2E	0010 1110	
/	2F	0010 1111	
0	30	0011 0000	
1	31	0011 0001	
2	32	0011 0010	
3	33	0011 0011	
4	34	0011 0100	
5	35	0011 0101	
6	36	0011 0110	
7	37	0011 0111	
8	38	0011 1000	
9	39	0011 1001	
:	3A	0011 1010	
;	3B	0011 1011	
<	3C	0011 1100	
=	3D	0011 1101	
>	3E	0011 1110	
?	3F	0011 1111	
@	40	0100 0000	
A	41	0100 0001	

Symbol	HEX	Binary	Description
B	42	0100 0010	
C	43	0100 0011	
D	44	0100 0100	
E	45	0100 0101	
F	46	0100 0110	
G	47	0100 0111	
H	48	0100 1000	
I	49	0100 1001	
J	4A	0100 1010	
K	4B	0100 1011	
L	4C	0100 1100	
M	4D	0100 1101	
N	4E	0100 1110	
O	4F	0100 1111	
P	50	0101 0000	
Q	51	0101 0001	
R	52	0101 0010	
S	53	0101 0011	
T	54	0101 0100	
U	55	0101 0101	
V	56	0101 0110	
W	57	0101 0111	
X	58	0101 1000	
Y	59	0101 1001	
Z	5A	0101 1010	
[5B	0101 1011	
\	5C	0101 1100	
]	5D	0101 1101	
^	5E	0101 1110	
_	5F	0101 1111	
`	60	0110 0000	
a	61	0110 0001	
b	62	0110 0010	
c	63	0110 0011	

Symbol	HEX	Binary	Description
d	64	0110 0100	
e	65	0110 0101	
f	66	0110 0110	
g	67	0110 0111	
h	68	0110 1000	
i	69	0110 1001	
j	6A	0110 1010	
k	6B	0110 1011	
l	6C	0110 1100	
m	6D	0110 1101	
n	6E	0110 1110	
o	6F	0110 1111	
p	70	0111 0000	
q	71	0111 0001	
r	72	0111 0010	
s	73	0111 0011	
t	74	0111 0100	
u	75	0111 0101	
v	76	0111 0110	
w	77	0111 0111	
x	78	0111 1000	
y	79	0111 1001	
z	7A	0111 1010	
{	7B	0111 1011	
	7C	0111 1100	
}	7D	0111 1101	
~	7E	0111 1110	
DEL	7F	0111 1111	Delete

7 List of Signals

Mode	Display Resolution	Horizontal Scanning Frequency (kHz)	Vertical Scanning Frequency (Hz)	Format
VGA 400	640 X 400	24.825	56.422	RGB
	640 X 400	31.469	70.086	RGB
VGA 480	640 X 480	31.469	59.940	RGB
	640 X 480	35.000	66.667	RGB
	640 X 480	37.861	72.809	RGB
	640 X 480	37.500	75.000	RGB
	640 X 480	43.269	85.008	RGB
SVGA	800 X 600	32.118	51.144	RGB
	800 X 600	35.156	56.250	RGB
	800 X 600	37.879	60.317	RGB
	800 X 600	48.077	72.188	RGB
	800 X 600	46.875	75.000	RGB
	800 X 600	53.674	85.061	RGB
MAC16	832 X 624	49.725	74.550	RGB
XGA	1024 X 768	48.363	65.000	RGB
	1024 X 768	56.476	75.000	RGB
	1024 X 768	60.023	78.750	RGB
	1024 X 768i	65.549	86.000	RGB
	1024 X 768	68.678	94.500	RGB
	1024 X 768	35.520	44.897	RGB
	1024 X 768	80.030	105.000	RGB
	1024 X 768	96.726	130.000	RGB
MXGA	1120 X 760	50.108	60.153	RGB
	1152 X 864	63.995	71.184	RGB

Mode	Display Resolution	Horizontal Scanning Frequency (kHz)	Vertical Scanning Frequency (Hz)	Format
	1152 X 864	67.500	74.917	RGB
	1152 X 864	76.705	85.038	RGB
MAC21	1152 X 870	68.681	75.062	RGB
SXGA	1280 X 1024	52.350	87.948	RGB
	1280 X 1024	63.981	108.000	RGB
	1280 X 1024	72.338	125.000	RGB
	1280 X 1024	78.160	135.060	RGB
	1280 X 1024	79.977	135.001	RGB
	1280 X 1024i	46.433	78.750	RGB
	1280 X 1024i	47.600	80.730	RGB
UXGA	1600 X 1200	75.000	60.000	RGB
	1600 X 1200	87.500	70.000	RGB
	1600 X 1200	93.750	75.000	RGB
480i	720 X 480i	15.734	59.940	YPbPr
625i	720 X 576i	15.625	50.000	YPbPr
480p	720 X 483	31.469	59.940	YPbPr
720p	1280 X 720	45.000	60.000	YPbPr
HDTV	1920 X 1080i	33.750	60.000	YPbPr/RGB
NTSC/M-NTSC/PAL-M	768 X 480i	15.734	59.940	Video/S-Video
PAL/PAL-N/SECAM	768 X 576i	15.625	50.000	Video/S-Video

