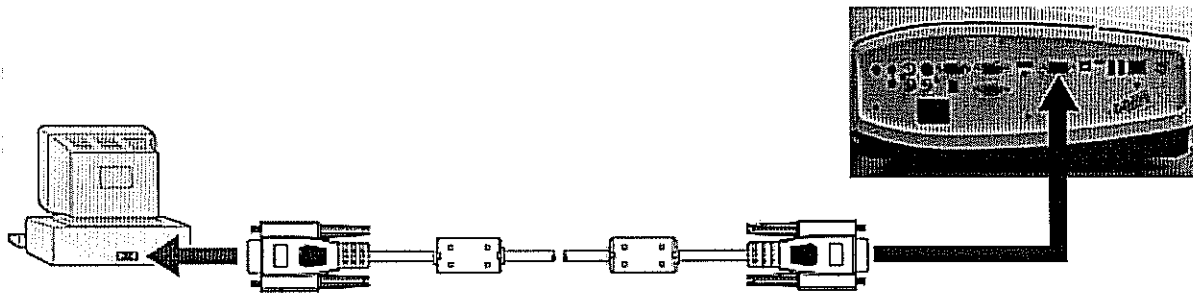


14	Digital Zoom In	Zoom In	0x18
15	Digital Zoom Out	Zoom Out	0x19
16	Page Up	Page Up Key for Emulation of Keyboard	0x05
17	Page Down	Page Down Key for Emulation of Keyboard	0x06
18	Timer On	Enable/Disable "Presentation Timer" Function	0x25
19	Timer Set Up	Enter "Presentation Timer" Setting	0x26

2. RS232 code table

2.1 Connection:

Below shows the illustration of connection between PC and Projector.

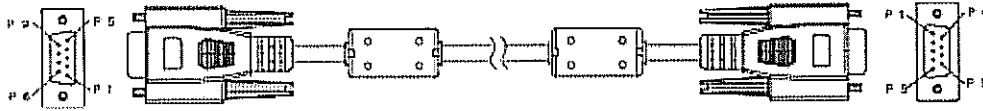


<CAUTION>

- ◆ Make sure that your computer and projector are turned off before connection.
- ◆ Power on the computer first, and then plug the power cord of the projector. (It may cause Com port incorrect function, if you do not follow this instruction)
- ◆ Adapters may be necessary depending on the PC connected to this projector. Please contact with your dealer for further details.

2.2 Hardware connection

<Download cable part number/diagram>



D-Sub 9 pin

1	1 CD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

Wire List

C1	COLOR	C2
1	Black	1
2	Brown	3
3	Red	2
4	Orange	4
5	Yellow	5
6	Green	6
7	Blue	8
8	Purple	7
9	White	9
SHELL	DW	SHELL

Baud Rate: 115200
Parity Bit: none
Data Bit: 8
Stop Bit: 1
Assign Port: COM1

2.3 Command Category

Function	Type	Operation	ASCII
Power	Write	Power On	<CR>*pow=on#<CR>
	Write	Power off	<CR>*pow=off#<CR>
	Read	Power Status	<CR>*pow=?#<CR>
Source Selection	Write	COMPUTER/YPbPr	<CR>*sour=RGB#<CR>
	Write	COMPUTER 2/YPbPr2	<CR>*sour=RGB2#<CR>
	Write	Component	<CR>*sour=ypbr#<CR>
	Write	DVI-A	<CR>*sour=dviA#<CR>
	Write	DVI-D	<CR>*sour=dvid#<CR>
	Write	HDMI	<CR>*sour=hdmi#<CR>
	Write	HDMI 2	<CR>*sour=hdmi2#<CR>
	Write	Composite	<CR>*sour=vid#<CR>
Write	S-Video	<CR>*sour=svid#<CR>	

	Read	Current source	<CR>*sour=?#<CR>
Audio Control	Write	Mute On	<CR>*mute=on#<CR>
	Write	Mute Off	<CR>*mute=off#<CR>
	Read	Mute Status	<CR>*mute=?#<CR>
	Write	Volume +	<CR>*vol=+#<CR>
	Write	Volume -	<CR>*vol=-#<CR>
	Read	Volume Status	<CR>*vol=?#<CR>
Picture Mode	Write	Dynamic	<CR>*appmod=dynamic#<CR>
	Write	Presentation	<CR>*appmod=preset#<CR>
	Write	sRGB	<CR>*appmod=srgb#<CR>
	Write	Cinema	<CR>*appmod=cine#<CR>
	Write	Standard	<CR>*appmod=std#<CR>
	Write	User1	<CR>*appmod=user1#<CR>
	Write	User2	<CR>*appmod=user2#<CR>
	Read	Picture Mode	<CR>*appmod=?#<CR>
Picture Setting	Write	Contrast +	<CR>*con=+#<CR>
	Write	Contrast -	<CR>*con=-#<CR>
	Read	Contrast value	<CR>*con=?#<CR>
	Write	Brightness +	<CR>*bri=+#<CR>
	Write	Brightness -	<CR>*bri=-#<CR>
	Read	Brightness value	<CR>*bri=?#<CR>
	Write	Color +	<CR>*color=+#<CR>
	Write	Color -	<CR>*color=-#<CR>
	Read	Color value	<CR>*color=?#<CR>
	Write	Sharpness +	<CR>*sharp=+#<CR>
	Write	Sharpness -	<CR>*sharp=-#<CR>
	Read	Sharpness value	<CR>*sharp=?#<CR>
	Write	Aspect 4:3	<CR>*asp=4:3#<CR>
	Write	Aspect 16:9	<CR>*asp=16:9#<CR>
	Write	Aspect Auto	<CR>*asp=AUTO#<CR>
	Write	Aspect Real	<CR>*asp=REAL#<CR>
	Write	Aspect Letterbox	<CR>*asp=LBOX#<CR>
	Write	Aspect Wide	<CR>*asp=WIDE#<CR>
	Write	Zoom In	<CR>*zoomI#<CR>
	Write	Zoom out	<CR>*zoomO#<CR>
Write	Auto	<CR>*auto#<CR>	
Baud Rate	Write	2400	<CR>*baud=2400#<CR>
	Write	4800	<CR>*baud=4800#<CR>
	Write	9600	<CR>*baud=9600#<CR>

	Write	14400	<CR>*baud=14400#<CR>
	Write	19200	<CR>*baud=19200#<CR>
	Write	38400	<CR>*baud=38400#<CR>
	Write	57600	<CR>*baud=57600#<CR>
	Write	115200	<CR>*baud=115200#<CR>
	Read	Current Baud Rate	<CR>*baud=?#<CR>
Lamp Control	Read	Lamp Hour	<CR>*ltim=?#<CR>
	Write	Normal mode	<CR>*lampm=lnor#<CR>
	Write	Economic mode	<CR>*lampm=eco#<CR>
	Read	Lamp Mode Status	<CR>*lampm=?#<CR>
Miscellaneous	Write	Blank On	<CR>*blank=on#<CR>
	Write	Blank Off	<CR>*blank=off#<CR>
	Read	Blank Status	<CR>*blank=?#<CR>
	Write	Freeze On	<CR>*freeze=on#<CR>
	Write	Freeze Off	<CR>*freeze=off#<CR>
	Read	Freeze Status	<CR>*freeze=?#<CR>
	Write	Menu On	<CR>*menu=on#<CR>
	Write	Menu Off	<CR>*menu=off#<CR>
	Write	Up	<CR>*up#<CR>
	Write	Down	<CR>*down#<CR>
	Write	Right	<CR>*right#<CR>
	Write	Left	<CR>*left#<CR>
	Write	Enter	<CR>*enter#<CR>

3. DDC Data

BYTES OF EDID CODE:

128 0 1 2 3 4 5 6 7 8 9

0		00	FF	FF	FF	FF	FF	FF	00	09	D1
10		01	CA	01	00	00	00	18	14	01	03
20		0E	00	00	78	0A	9F	98	A0	5B	56
30		91	25	11	4F	5D	BD	EF	80	81	FC
40		45	7C	61	7C	61	C0	81	80	95	00
50		90	40	A9	40	9E	20	00	90	51	20
60		1F	30	48	80	36	00	00	00	00	00
70		00	1C	00	00	00	FD	00	30	78	1F

BenQ Confidential
KYang
2010/10/12
1024 X 768 @ 70Hz (VESA)
1024 X 768 @ 75Hz (VESA)
1280x1024 @ 75Hz (VESA)

BenQ Confidential
KYang
2010/10/12

BenQ Confidential
KYang
2010/10/12

(37) Manufacturer's Reserved Timing:
1152 X 870 @ 75Hz (Mac II)

(38-53) Standard Timing Identification:

1024 X 768 @120Hz

1024 X 576 @60Hz

BenQ Confidential
KYang
2010/10/12
1280 X 1024 @60Hz
1280 X 800 @120Hz
800 X 600 @120Hz

BenQ Confidential
KYang
2010/10/12

BenQ Confidential
KYang
2010/10/12

1440 X 900 @60Hz

1400 X 1050 @60Hz

1600 X 1200 @60Hz

(54-71) Detailed Timing / Descriptor Block 1:

1280x800 Pixel Clock: 83.50 MHz

BenQ Confidential
KYang
2010/10/12
Horizontal Image Size: 0 mm
Refreshed Mode: Non-Interlaced

BenQ Confidential
KYang
2010/10/12
Vertical Image Size: 0 mm
Normal Display - No Stereo

BenQ Confidential
KYang
2010/10/12

Horizontal:

Active Time: 1280 pixels

Sync Offset: 72 pixels

Border: 0 pixels

Blanking Time: 400 pixels

Sync Pulse Width: 128 pixels

Frequency: 48.36 KHz

Vertical:

BenQ Confidential
KYang
2010/10/12
Active Time: 800 lines
Sync Offset: 3 lines
Border: 0 lines

BenQ Confidential
KYang
2010/10/12
Blanking Time: 31 lines
Sync Pulse Width: 6 lines

BenQ Confidential
KYang
2010/10/12

Frequency: 60.00 Hz

Digital Separate, Horizontal Polarity (-) Vertical Polarity (-)

(72-89) Detailed Timing / Descriptor Block 2:

BenQ Confidential
KYang
2010/10/12
Monitor Serial Number: 1

BenQ Confidential
KYang
2010/10/12

BenQ Confidential
KYang
2010/10/12

(90-107) Detailed Timing / Descriptor Block 3:

BenQ Confidential / KYang 2010/10/12
 Monitor Range Limits:
 Min Vertical Freq - 48 Hz
 Max Vertical Freq - 120 Hz
 Min Horiz. Freq - 31 KHz
 Max Horiz. Freq - 99 KHz
 Pixel Clock - 170 MHz
 Secondary GTF – Not Supported

BenQ Confidential / KYang 2010/10/12

BenQ Confidential / KYang 2010/10/12

(108-125) Detailed Timing / Descriptor Block 4:
 BenQ Confidential / KYang 2010/10/12
 Monitor Name: MP780ST

BenQ Confidential / KYang 2010/10/12

BenQ Confidential / KYang 2010/10/12

- (126) No Extension EDID Block(s)
- (127) CheckSum OK

BenQ Confidential / KYang 2010/10/12

BenQ Confidential / KYang 2010/10/12

BenQ Confidential / KYang 2010/10/12

BenQ Confidential / KYang 2010/10/12

BenQ Confidential / KYang 2010/10/12

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