

Projection Display Serial Interface Specification

D851, D853W, D855ST, D857WT, D859

V Code

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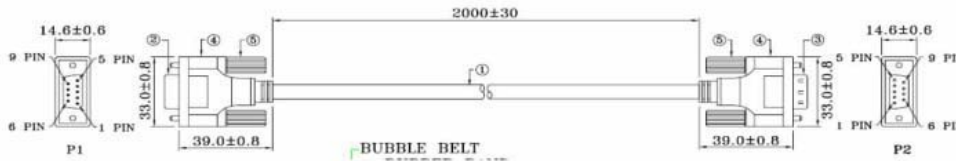
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1. RS-233 Setting

Baud Rate	9600
Parity Check	None
Data Bit	8
Stop Bit	1
Flow Control	None

Required Null cable
Minimum delay for next command: 1ms

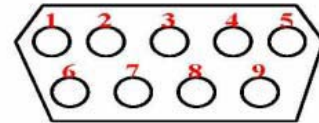


WIRE ARRANGEMENT		
P1	COLOR	P2
1	BLACK	1
2	BROWN	3
3	RED	2
4	ORANGE	4
5	YELLOW	5
6	GREEN	6
7	BLUE	7
8	PURPLE	8
9	GRAY	9
CASE	DRAIN WIRE	CASE

(to be checked)

RS232 pin assignment

Pin	Description	Pin	Description
1	NC	2	RXD
3	TXD	4	NC
5	GND	6	NC
7	RTS	8	CTS
9	NC		



2. Control Command Structure

The Command is structured by the Header code, ID code, Command code, Data code, and End code. Most of the commands are structured except some for the compatibility issue with other projectors

	Header Code	ID Code	Command Code	Data Code	End Code
ASCII	'V'	XX	Command	Data	<CR>

Note:

XX = 00-98, Projector's ID, XX = 99 is for all projectors

Return Result: P = Pass / F = Fail

n: 0: Disable / 1: Enable / Value (0~9999)

3. Command Group 00

Command Group 00			
ASCII	Function	Description	Result Return
VXXS0001	Power On		P/F
VXXS0002	Power Off		P/F
VXXS0003	Resync		P/F
VXXG0004	Get Lamp Hours		Pn/F
VXXS0006	System Reset		P/F
VXXG0007	Get System Status	0: Reset 1: Standby 2: Operation 3: Cooling	Pn/F
VXXG0008	Get F/W Version		Pn/F

4. Command Group 01

Command Group 01			
ASCII	Function	Description	Result Return
VXXG0101	Get Brightness	n=0~100	Pn/F
VXXS0101n	Set Brightness	n=0~100	P/F
VXXG0102	Get Contrast	n=0~100	Pn/F
VXXS0102n	Set Contrast	n=0~100	P/F
VXXG0103	Get Color	n=0~100	Pn/F
VXXS0103n	Set Color	n=0~100	P/F
VXXG0104	Get Tint	n=0~100	Pn/F
VXXS0104n	Set Tint	n=0~100	P/F
VXXG0105	Get Sharpness	n=0~31	Pn/F
VXXS0105n	Set Sharpness	n=0~31	P/F
VXXG0106	Get Color Temperature	0: Cold 1: Normal 2: Warm	Pn/F
VXXS0106n	Set Color Temperature	0: Cold 1: Normal 2: Warm	P/F
VXXS0107	Get Gamma	0: PC 1: MAC 2: Video 3: Chart 4: B&W	Pn/F
VXXG0107n	Get Gamma	0: PC 1: MAC 2: Video 3: Chart 4: B&W	P/F

5. Command Group 02

Command Group 02			
ASCII	Function	Description	Result Return
VXXS0201	Select RGB		P/F
VXXS0202	Select RGB 2		P/F
VXXS0203	Select DVI		P/F
VXXS0204	Select Video		P/F
VXXS0205	Select S-Video		P/F
VXXS0206	Select HDMI		P/F
VXXG0220	Get Current Source	1: RGB 2: RGB 2 3: DVI 4: Video 5: S-Video 6: HDMI	Pn/F

6. Command Group 03

Command Group 03			
ASCII	Function	Description	Result Return
VXXG0301	Get Aspect	0: Fill 1: 4:3 2: 16:9 3: Letterbox 4: Native	Pn/F
VXXS0301n	Set Aspect	0: Fill 1: 4:3 2: 16:9 3: Letterbox 4: Native	P/F
VXXG0302	Blank Status	0: Off 1: On	Pn/F
VXXS0302n	Set Blank	0: Off 1: On	P/F
VXXG0303	Auto Keystone Status	0: Off 1: On	Pn/F
VXXS0303n	Set Auto Keystone	0: Off 1: On	P/F
VXXG0304	Freeze Status	0: Off 1: On	Pn/F
VXXS0304n	Set Freeze	0: Off 1: On	P/F
VXXG0305	Get Volume	n=0~8	Pn/F
VXXS0305n	Set Volume	n=0~8	P/F

Command Group 03 Continue			
ASCII	Function	Description	Result Return
VXXG0308	Projection Mode Status	0: Front 1: Rear 2: Ceiling 3: Rear + Ceiling	Pn/F
VXXS0308n	Set Projection Mode	0: Front 1: Rear 2: Ceiling 3: Rear + Ceiling	P/F
VXXG0309	Get Vertical Keystone	n= -30~30	Pn/F
VXXG0309n	Set Vertical Keystone	n= -30~30 n: Must be even #	P/F
VXXG0311	Get Electronic Zoom	n= -10~10	Pn/F
VXXS0311n	Set Electronic Zoom	n= -10~10	P/F

7. Command Group 04

Command Group 04 (Remote Control)			
ASCII	Function	Description	Result Return
VXXS0401	Up Arrow ▲		P/F
VXXS0402	Down Arrow ▼		P/F
VXXS0403	Left Arrow ◀		P/F
VXXS0404	Right Arrow ▶		P/F
VXXS0405	Power		P/F
VXXS0406	Exit		P/F
VXXS0407	Input		P/F
VXXS0408	Auto		P/F
VXXS0409	Keystone +		P/F
VXXS0410	Keystone -		P/F
VXXS0411	Menu		P/F
VXXS0412	Status		P/F
VXXS0413	Mute		P/F
VXXS0414	Zoom +		P/F
VXXS0415	Zoom -		P/F
VXXS0416	Blank		P/F
VXXS0417	Freeze		P/F
VXXS0418	Volume +		P/F
VXXS0419	Volume -		P/F
VXXS0420	Enter		P/F

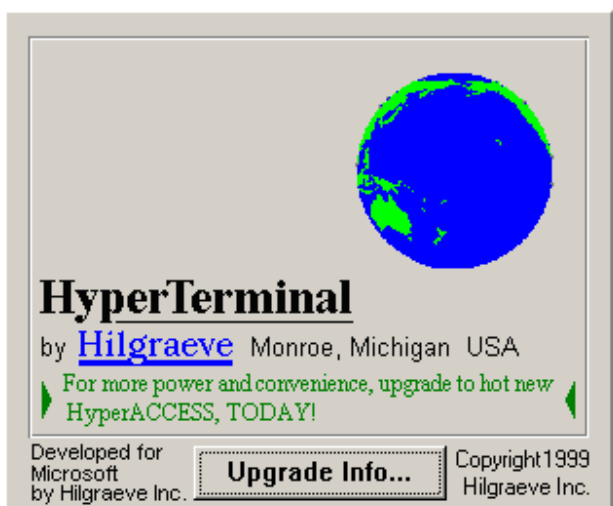
8-9. Hyper Terminal setting guide

8-9-1 Connect the RS232 Cable between your computer and Projector.

8-9-2 Open HyperTerminal

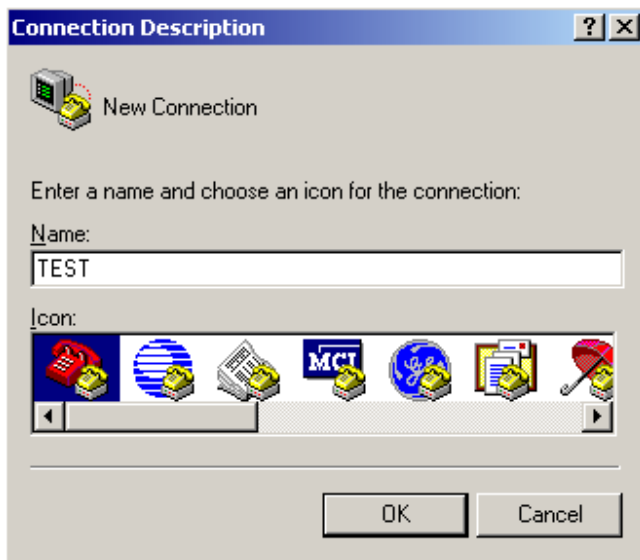
Window2000/XP HyperTerminal path :

Start \ Programs \ Accessories \ Communications \ HyperTerminal ◦



8-9-3 Setting the HyperTerminal parameter :

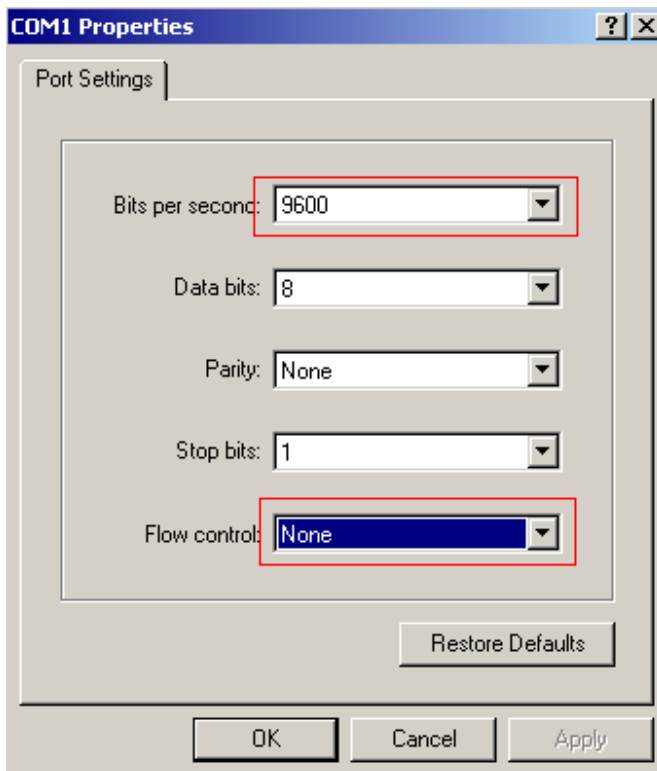
Step 1. Type the connection name .



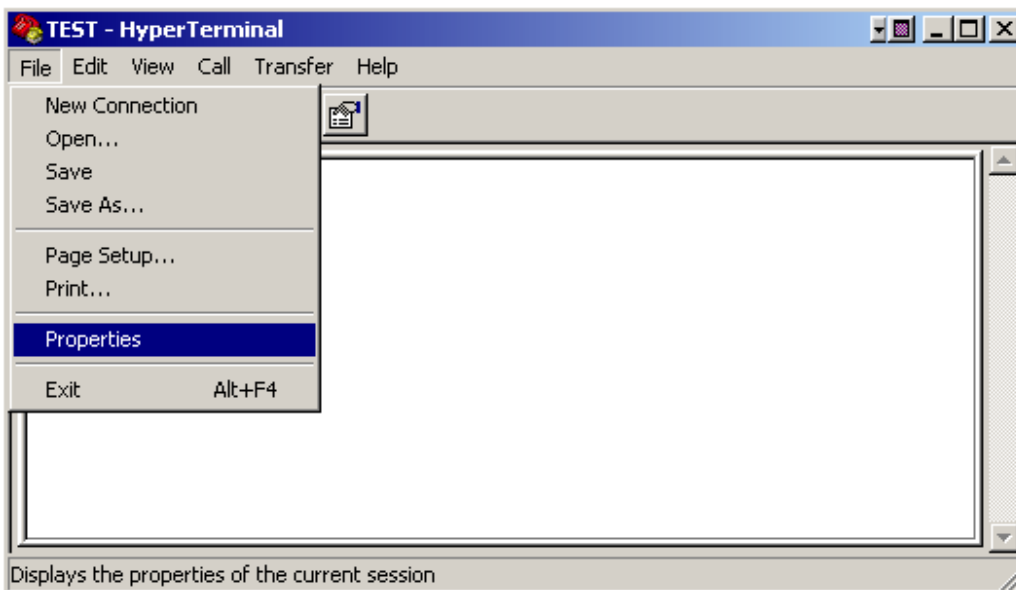
Step2. Choose the COM port for your RS232 Cable connected to.



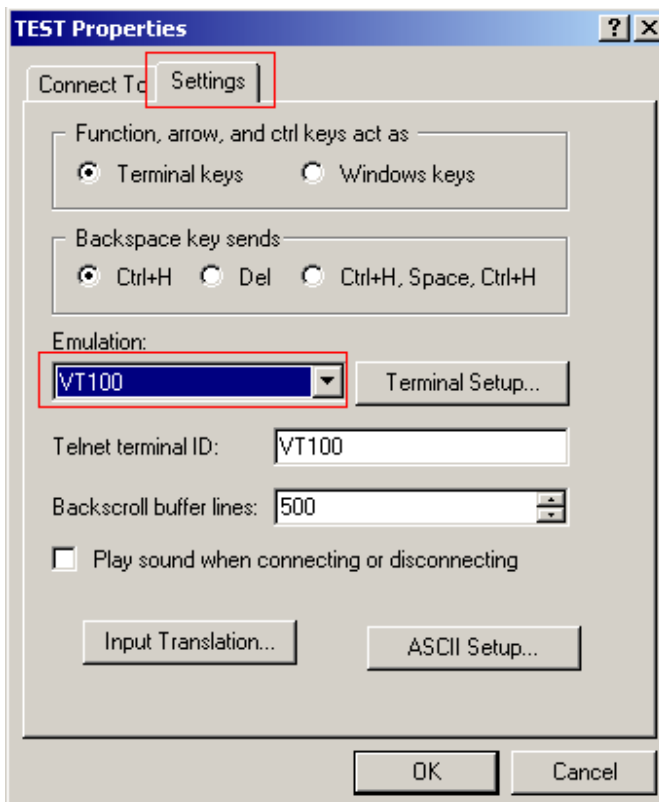
Step3. In Bits per second choose " 9600 " and in Flow control choose " None " .



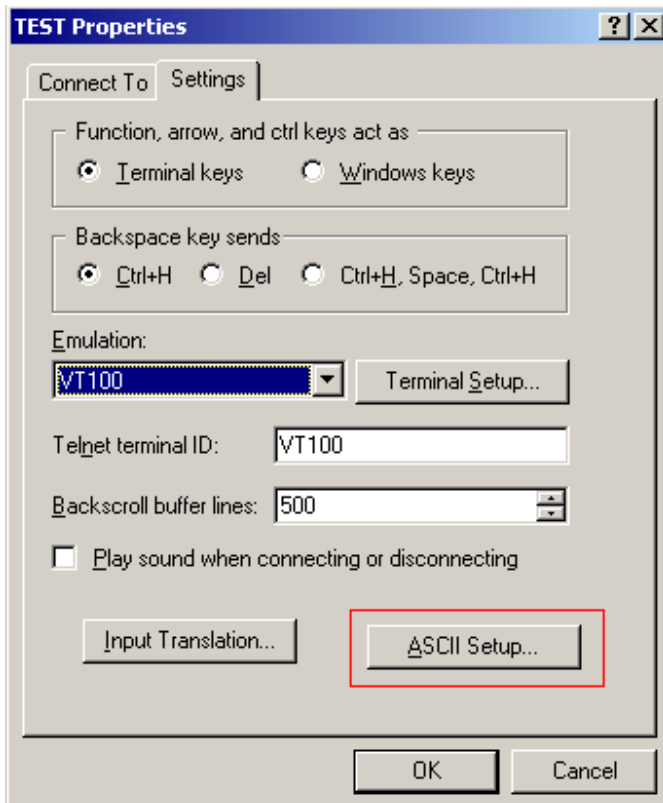
Step4. Click the File and choose Properties to setting Keyboard parameter .



Step5. In Setting page , choose Emulation type for your keyboard.



Step6. Click ASCII Setting icon to setup ASCII code parameter.



Step7. Mark Send Line ends with line feeds and Echo typed characters locally and click OK bottom to complete setting.

