SHINYBOW™

MULTIMEDIA AUDIO AND VISUAL

Instruction Manual

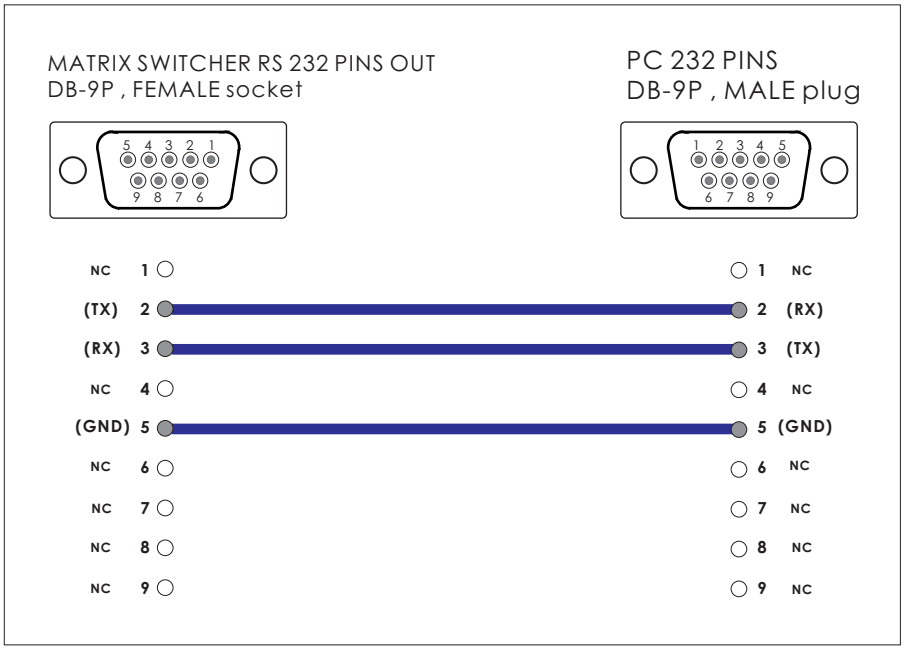
RS-232 PROTOCOL

Matrix / Routing Switcher Series RS-232 Protocol Table

Thank you for purchasing SHINBOW Matrix/Routing Switcher. You will find this unit easy to install and highly reliable but it is essential that you read this manual throughly before attempting to use Matrix / Routing switcher.

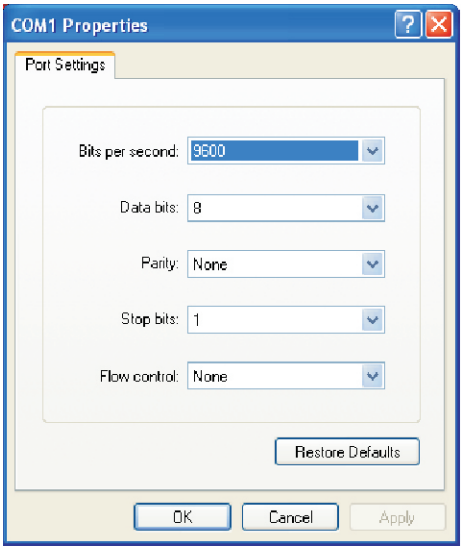
Part No.: ENCL00RS23200A0

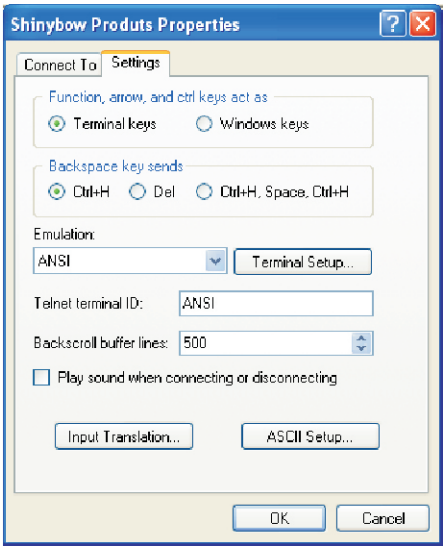
RS232-Cable Pin Lines

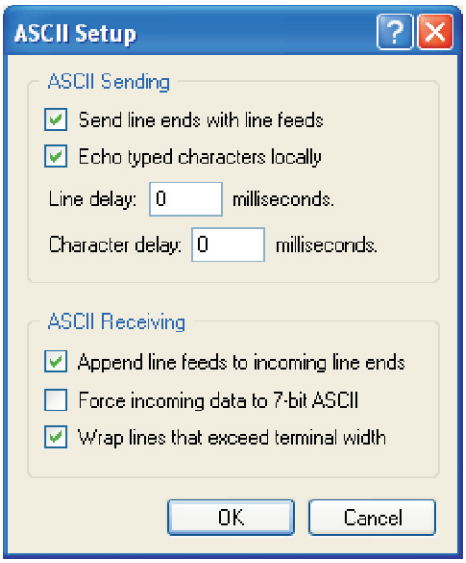


1. Transmission rate: 9600bps
2. Data format: 8 data bits, No parity, 1 start bit and 1 stop bit
3. Flowing control: None

Also know as 9600,8,n,1







Data String Format :

The Data String contains four elements.

[Command][ ][Data][;]

The format is:
1. Command
2. Space
3. Data
4. ;

There is a single space after the Command and before the Data string.
The data string must conclude with an ";" (without the quotes).
All text is full ASCII Code and is NOT case sensitive. You can use either capital letters or small letters and get the same result.

The LINK command must be sent first. This establishes a communications "link" between an external controller (or computer) and the device you wish to control. When you have an established link, communication via the IR port is disabled. The front panel remains operational.

The format is
LINK 01; This will establish the link
Your commands
LINK 00;This will terminal the link

Devices that are firmware version x.x or higher will return a status.
Status is command dependent.
For example: Response : [SKU][ ][Status][;]
The Status is a two digit numerical code.
See further in this document for specific details.

Commands

Note: not all commands are supported on all devices.

Item	Command	Description
1	Link	Establish or disable data link between controller and device.
2	Power	Set/Check the status of Power
3	Output[dd]	Set/Check the state of single outputs
4	ActiveSource	Check the status of an Input for a signal present
5	OutputAll	Set/Check the state of all outputs
6	Recall	Recall a saved matrix configuration from memory
7	Recall[mm]	Check the data of memory address
8	Memory	Save the current matrix configuration to memory
9	Lock	Set/Check the status of Lock
10	EDID	Set/Check EDID (HDMI only)
11	SignalFormat	Sets V+A, V only, A only

1.Link

Function	Command	Response	Description
Leave	Link 00;	SB5688 00;	Leave
		SB5688 01;	UN-KNOW Command
Link	Link 01;	SB5688 00;	Link
		SB5688 01;	UN-KNOW Command
Check Link Condition	Link ?;	Link 00;	System Leave
		Link 01;	System Link

2.Power

Function	Command	Response	Description
Power OFF	Power 00;	SB5688 00;	Power OFF
		SB5688 01;	UN-KNOW Command
Power ON	Power 01;	SB5688 00;	Power ON
		SB5688 01;	UN-KNOW Command
Check the Status of Condition	Power ?;	Power 00;	Power OFF
		Power 01;	Power ON

3. Output[dd]

Function	Command	Variables
OFF source	OUTPUT xx 00;	xx = Output Channel

Command	Response	Description
OUTPUT04 00;	SB5688 00;	Output 4 is OFF
	SB5688 01;	UNKNOW Command

Function	Command	Variables
Set channel atatus	OUTPUT xx yy;	xx = Output Channel yy = Input Channel

Command	Response	Description
OUTPUT01 03;	SB5688 00;	Set output 1 to input 3
	SB5688 01;	UNKNOW Command

Function	Command	Variables
Check Output status	Output xx?;	xx = Output Channel yy = Input Channel

OUTPUT01 ?;	Output01 01;	Output 1 to input 1
	Output01 02;	Output 1 to input 2
	Output01 03;	Output 1 to input 3
	Output01 04;	Output 1 to input 4
	Output01 05;	Output 1 to input 5
	Output01 06;	Output 1 to input 6
	Output01 07;	Output 1 to input 7
	Output01 08;	Output 1 to input 8

4. ActiveSource

Function	Command	Response	Description
Check the status of a signal presence on an Input port	ACTIVESOURCE ?;	ActiveSource 0100;	Input 1=01 so the signal is active.
			Input 2=00 so the signal is inactive.
		ActiveSource 0101;	Input 1=01 so the signal is active.
			Input 2=01 so the signal is active.
		ActiveSource 0000;	Input 1=00 so the signal is inactive.
			Input 2=00 so the signal is inactive.

Note: this does not validate if the signal is within proper format (ex: 1VPP Video), only that one is present and active.

5. OutputAll

Function	Command	Variables
OFF all output	Outputall xx;	xx = Source number

Command	Response	Description
OUTPUTALL 00;	SB5688 00;	Unlock
	SB5688 01;	UNKNOW Command

Function	Command	Variables
Set all outputs to one source	Outputall xx;	xx = Source number

Command	Response	Description
OUTPUTALL 03;	SB5688 00;	Set all output to Source 3
	SB5688 01;	UNKNOW Command

Function	Command	Variables
Check the status of all ouputs	Outputall xx?;	xx = Dercoption

Command	Response	Description
OUTPUTALL ?;	OutputALL 0102030405060708; Response all outputs status	Output1=01 so the output1 to input1
		Output2=02 so the output2 to input2
		Output3=03 so the output3 to input3
		Output4=04 so the output4 to input4
		Output5=05 so the output5 to input5
		Output6=06 so the output6 to input6
		Output7=07 so the output7 to input7
		Output8=08 so the output8 to input8

6. Recall

Function	Command	Variables
Recall a saved configuration from memory	Recall xx;	xx = Memory number

Command	Response	Description
RECALL 00;	SB5688 00;	Recall a saved from memory00
	SB5688 01;	UNKNOW Command

7. Recall[mm]

Function	Command	Variables
Check the data of memory address	Recall xx?;	xx = Memory number

Command	Response	Description
RECALL 01?;	RECALL01 0102030405060708; Note : "RECALL01" means recall from the memory address 2. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
		Output2=02 so the output2 to input2
		Output3=03 so the output3 to input3
		Output4=04 so the output4 to input4
		Output5=05 so the output5 to input5
		Output6=06 so the output6 to input6
		Output7=07 so the output7 to input7
		Output8=08 so the output8 to input8

8.Memory

Function	Command	Variables
Save current matrix configuration to memory address	Memory xx;	xx = Memory number

Command	Response	Description
MEMORY 01;	SB5688 00;	Save at memory address 01
	SB5688 01;	UNKNOW Command

9. Lock

Function	Command	Response	Description
Unlock	LOCK 00;	SB5688 00;	Unlock
		SB5688 01;	UNKNOW Command
Lock	LOCK 01;	SB5688 00;	Lock
		SB5688 01;	UNKNOW Command
Check the status of lock	LOCK ?;	Lock 00;	System Unlock
		Lock 01;	System Lock

10. EDID

Function	Command	Response	Description
Set EDID	EDID00 ;	SB5688 00;	Set EDID to FSS
		SB5688 01;	UNKNOW Command
	EDID01 ;	SB5688 00;	Set EDID to H24-3D
		SB5688 01;	UNKNOW Command
	EDID02 ;	SB5688 00;	Set EDID to H24M-3D
		SB5688 01;	UNKNOW Command
	EDID03 ;	SB5688 00;	Set EDID to H36-No3D
		SB5688 01;	UNKNOW Command
	EDID04 ;	SB5688 00;	Set EDID to H36M-No3D
		SB5688 01;	UNKNOW Command
	EDID05 ;	SB5688 00;	Set EDID to H36-3D
		SB5688 01;	UNKNOW Command
	EDID06 ;	SB5688 00;	Set EDID to H36-3DF
		SB5688 01;	UNKNOW Command
	EDID07 ;	SB5688 00;	Set EDID to Auto
		SB5688 01;	UNKNOW Command

Hex Decimal

Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal
00	0	10	16	20	32	30	48	40	64	50	80	60	96
01	1	11	17	21	33	31	49	41	65	51	81	61	97
02	2	12	18	22	34	32	50	42	66	52	82	62	98
03	3	13	19	23	35	33	51	43	67	53	83	63	99
04	4	14	20	24	36	34	52	44	68	54	84	64	100
05	5	15	21	25	37	35	53	45	69	55	85		
06	6	16	22	26	38	36	54	46	70	56	86		
07	7	17	23	27	39	37	55	47	71	57	87		
08	8	18	24	28	40	38	56	48	72	58	88		
09	9	19	25	29	41	39	57	49	73	59	89		
0A	10	1A	26	2A	42	3A	58	4A	74	5A	90		
0B	11	1B	27	2B	43	3B	59	4B	75	5B	91		
0C	12	1C	28	2C	44	3C	60	4C	76	5C	92		
0D	13	1D	29	2D	45	3D	61	4D	77	5D	93		
0E	14	1E	30	2E	46	3E	62	4E	78	5E	94		
0F	15	1F	31	2F	47	3F	63	4F	79	5F	95		