

HIGH RESOLUTION DIGITAL PRESENTER

RS-232C REFERENCE

SDP Series

SDP900DXA SDP950DXA/STA SDP990DXA

Before attempting to operate this product, Please read the instructions carefully. www.samsungpresenter.com

RS232C PC-side FlowChart

- BaudRate: 9600bps
- Parity Bit: No Parity
- Stop Bit Length: 1-bit
- Character Length: 8-bit
- Start Code: 0xB0
- Stop Code: 0xBF
- Command Code: 4-byte

Basic Flow Send 6-byte to MICOM [start_code(0xB0)+command code (4-byte)+stop_code(0xBF)] Receive 6-byte from MICOM (1st Rx data==0xB0) NC &(6th Rx data==0xBF) Yes (1) (2nd Rx data==0x80) No Yes End Application Flow Send Message State Check Command [0xB0 0x64 0x00 0x00 0x00 0xBF] Receive 6-byte from MICOM No (2nd Rx data == 0x80) Yes Send User (AWC, etc) Command END **RS232C Cable Connection**

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PC-side

(Note1 2nd Rx data == 0x80)

What the 2nd-Rx-data ("ACK data") is not 0x80 means that the system is doing other operation. (Check up page 6)

With the command "Message-Status", you can check up current status of the system and send the user command. (AWC, etc)

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SDP-side

Command	PC	Transmit D	Data to MIC	ОМ	PC Receive Data from MICOM				Remark
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	Remark
AWC	0 x 01	0 x 00	0 x 05	0 x 00	0 x 01	"ACK data"	0 x 05	0 x 00	
AF	0 x 02	0 x 00	0 x 05	0 x 00	0 x 02	"ACK data"	0 x 05	0 x 00	
Upper Lamp		0 x 00	0 x 05	0 x 00	0 x 03	"ACK data"	0 x 05	0 x 00	
Lower Lamp	0 x 03	0 x 00	0 x 08	0 x 00		"ACK data"	0 x 08	0 x 00	
Lamp OFF		0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Internal		0 x 00	0 x 05	0 x 00	0 x 04	"ACK data"	0 x 05	0 x 00	
External 1	0 x 04	0 x 00	0 x 08	0 x 00		"ACK data"	0 x 08	0 x 00	
External 2		0 x 00	0 x 0A	0 x 00		"ACK data"		0 x 00	1
Positive	0 x 05	0 x 00	0 x 05	0 x 00	0 x 05	"ACK data"	0 x 05	0 x 00	
Negative		0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
NTSC	0 x 08	0 x 00	0 x 05	0 x 00	0 x 08	"ACK data"	0 x 05	0 x 00	
PAL		0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Aperture ON	0 x 09	0 x 00	0 x 05	0 x 00	0 x 09	"ACK data"	0 x 05	0 x 00	
Aperture OFF	0 X 09	0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Power ON	0 x 0F	0 x 00	0 x 05	0 x 00	0 x 0F	"ACK data"	0 x 05	0 x 00	
Power OFF	UXUF	0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Rotate OFF	0 x 11	0 x 00	0 x 05	0 x 00	- 0 x 11	"ACK data"	0 x 05	0 x 00	
Rotate 90°		0 x 00	0 x 08	0 x 00		"ACK data"	0 x 08	0 x 00	
Rotate 180°		0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Rotate 360°		0 x 00	0 x 0D	0 x 00		"ACK data"	0 x 0D	0 x 00]

Command -	PC	Transmit D	Data to MIC	ОМ	PC Receive Data from MICOM				Remark
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	- Remark
Freeze ON	0 x 12	0 x 00	0 x 05	0 x 00	0 x 12	"ACK data"	0 x 05	0 x 00	
Freeze OFF		0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Image Save	0 x 13	0 x 00	Number	0 x 00	0 x 13	"ACK data"	Number	0 x 00	Range:"1~8"
Image Recall	0 x 14	0 x 00	Number	0 x 00	0 x 14	"ACK data"	Number	0 x 00	Range:"1~8"
¹⁾ Image Divide	0 x 15	0 x 00	Number	0 x 00	0 x 15	"ACK data"	Number	0 x 00	Range:"1~9"
Image Shift	0 x 16	0 x 00	0 x 05	0 x 00	0 x 16	"ACK data"	0 x 05	0 x 00	
Preset Save	0 x 17	0 x 00	Number	0 x 00	0 x 17	"ACK data"	Number	0 x 00	-Range:"1~4"
Preset Exe	0 x 18	0 x 00	Number	0 x 00	0 x 18	"ACK data"	Number	0 x 00	
Recall, divide, 3x3 multi-screen Cancel	0 x1F	0 x 00	0 x 05	0 x 00	0 x 1F	"ACK data"	0 x 05	0 x 00	
Iris Up	0 x 21	0 x 00	0 x 05	0 x 00	0 x 21	"ACK data"	0 x 05	0 x 00	
Iris Down	U X 21	0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Red Up	0 x 23	0 x 00	0 x 05	0 x 00	0 x 23	"ACK data"	0 x 05	0 x 00	
Red Down		0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Blue Up	0 x 24	0 x 00	0 x 05	0 x 00	0 x 24	"ACK data"	0 x 05	0 x 00	
Blue Down		0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	

[Note 1] Transmitting number "9" in image divide command, the system executes 3X3 multi-screen mode.

Command -	PC	Transmit [Data to MIC	ОМ	PC	Bomork			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	Remark
Focus Far	0 x 25	0 x 00	0 x 05	0 x 00	0 x 25	"ACK data"	0 x 05	0 x 00	
Focus Near		0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Zoom Tele	0 x 26	0 x 00	0 x 05	0 x 00	0 x 26	"ACK data"	0 x 05	0 x 00	
Zoom Wide	U X 20	0 x 00	0 x 0A	0 x 00		"ACK data"	0 x 0A	0 x 00	
Iris Target	0 x 41	0 x 00	0 x 00	"data"	0 x 41	"ACK data"	0 x 00	"data"	Range: "1~120"
Red Target	0 x 43	0 x 00	0 x 00	<u>"data"</u>	0 x 43	"ACK data"	0 x 00	"data"	Range: "1~200"
Blue Target	0 x 44	0 x 00	0 x 00	<u>"data"</u>	0 x 44	"ACK data"	0 x 00	"data"	Range: "1~200"
Focus Target	0 x 45	0 x 00	"MSB data"	"LSB data"	0 x 45	"ACK data"	"MSB data"	"LSB data"	(1)Range: "0~2225"
Zoom Target	0 x 46	0 x 00	"MSB data"	"LSB data"	0 x 46	"ACK data"	"MSB data"	"LSB data"	Range: "0~1812"
Focus/Zoom	0 x 47	0 x 05	"zoom MSB"	"zoom LSB"	0 x 47	"ACK data"	"zoom MSB"	"zoom LSB"	(1) Focus: "0~2225"
concurrent Target		0 x 0A	"focus MSB"	"focus LSB"	0 X 47	"ACK data"	"focus MSB"	"focus LSB"	Zoom: "0~1812"
²⁾ Drive Stop	0 x 2F	0 x 00	0 x 05	0 x 00	0 x 2D	"ACK data"	0 x 05	0 x 00	

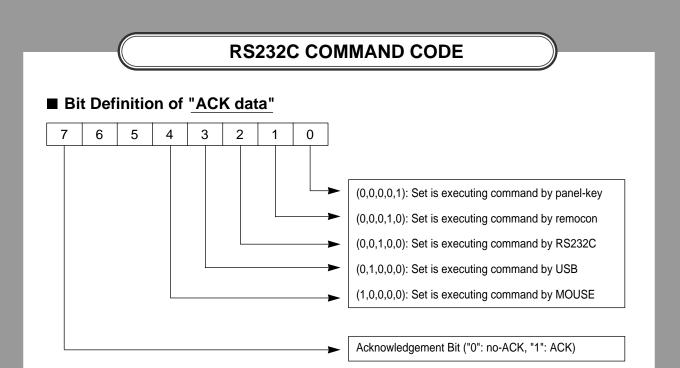
[Note 1] Depending of the zoom amount, the range of focus data will be changed. You can figure it out to see page 4. ("Focus-Status[Max]", "Focus-Status[Min]")

[Note 2] Above 10 Command (Iris up/down ,Red up/down, Blue up/down, Focus far/near, Zoom tele/wide) will go to all the way once you execute it.

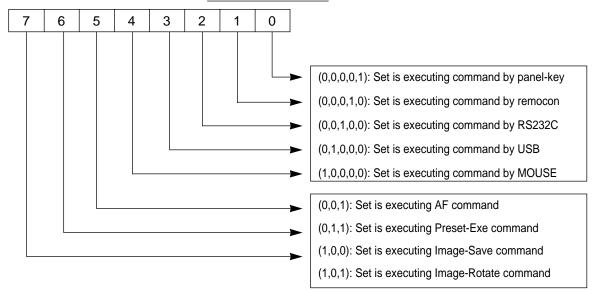
"Drive Stop" can stop those command in certain point that you want.

Command -	PC	Transmit D	Data to MIC	ОМ	PC	Domork			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	Remark
Set-Status(Normal)	0 x 61	0 x 00	0 x 00	0 x 00	0 x 61	"ACK data"	Status(MSB)	Status(LSB)	Bit definition of Status represents Page 5, 6, 7
Set-Status(Digital)	0 x 62	0 x 00	0 x 00	0 x 00	0 x 62	"ACK data"	Status(MSB)	Status(LSB)	
Message-Status	0 x 64	0 x 00	0 x 00	0 x 00	0 x 64	"ACK data"	Status(MSB)	Status(LSB)	
Iris-Status	0 x 65	0 x 00	0 x 00	0 x 00	0 x 65	"ACK data"	0 x 00	Status	Range:"1~120"
Red-Status	0 x 67	0 x 00	0 x 00	0 x 00	0 x 67	"ACK data"	0 x 00	Status	Range:"1~200"
Blue-Status	0 x 68	0 x 00	0 x 00	0 x 00	0 x 68	"ACK data"	0 x 00	Status	Range:"1~200"
Zoom-Status	0 x 69	0 x 00	0 x 00	0 x 00	0 x 69	"ACK data"	Status(MSB)	Status(LSB)	Range:"0~1904"
Focus-Status	0 x 6A	0 x 00	0 x 00	0 x 00	0 x 6A	"ACK data"	Status(MSB)	Status(LSB)	Range:"0~2225"
⁽¹⁾ Focus-Status(Max)	0 x 6B	0 x 00	0 x 05	0 x 00	0 x 6B	"ACK data"	Status(MSB)	Status(LSB)	Range:"648~2225"
⁽¹⁾ Focus-Status(Min)		0 x 00	0 x 0A	0 x 00		"ACK data"	Status(MSB)	Status(LSB)	Range:"0~1383"

[Note 1] This command returns focus maximum/minimum data at current zoom position.

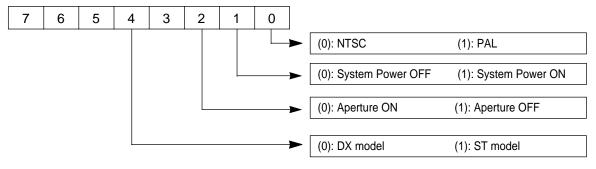


Status Bit Definition by Message-Status Command



RS232C Command Code Status Bit Definition by Set-Status Command - LSB 8bit 7 6 5 4 3 2 1 0 (0): lamp all Off (0,1): upper lamp ON (1,0): lower lamp ON (0,0,0): internal input (1,0,1): NO SYNC (EXT1) (1,0,1): NO SYNC (EXT2) (1,1,0): external 1 input (1,1,1): external 2 input (0): positive mode (1): negative mode

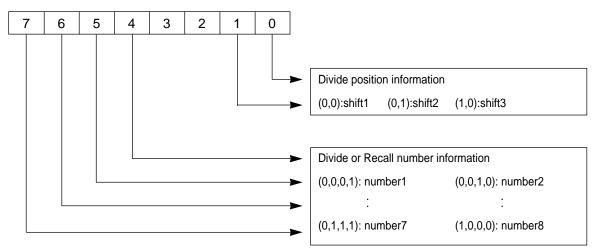
- MSB 8bit



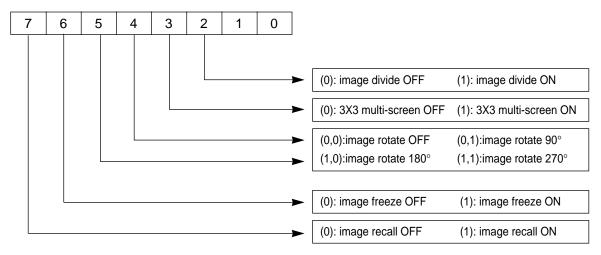
RS232C COMMAND CODE

■ Status Bit Definition by <u>Set-Status(Digital)</u> Command

- LSB 8bit



- MSB 8bit



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