

# PS4661T and PS5561T RS232 User Guide

Copyright © 30 Jul 2014 by Planar Systems, Inc. All rights reserved.

Contents of this publication may not be reproduced in any form without permission of Planar Systems, Inc.

#### Trademark Credits

Windows™ is a trademark of Microsoft Corp.

All other names are trademarks or registered trademarks of their respective companies.

#### Disclaimer

The information contained in this document is subject to change without notice. Planar Systems, Inc. makes no warranty of any kind with regard to this material. While every precaution has been taken in the preparation of this manual, the Company shall not be liable for errors or omissions contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Part Number: 020-1272-00

# RS232 Codes

RS232 control is not necessary for operation, but is a convenient way to control displays from a computer at a distance. Most things you can do with the remote, you can do with RS232 commands. Plus, you can send inquiries to the displays and find out the current settings and values.

## 1 RS232 Command Format

**STX** (1 byte) + **IDT** (1byte) + **Type** (1byte) + **CMD** (3bytes) + [**Value/Reply** (1byte)] + **ETX** (1 byte)

STX: Start byte = **07**

IDT: **00** (Hex Num) for broadcast mode (no announcing, only for video wall),  
**01~19** (Hex Num) for single control mode.

Type: Read or Write command, **01**: read/action, **02**: write; **00**: return to host (from monitor)

CMD: As shown in the table on the following pages

Value: Setting Value of Write Command

Reply: Return Value of monitor

ETX: End byte = **08**

### Transmit from PC (Host)

Read/Action command: 07 IDT 01 CMD 08 (7bytes)

Write/Setting command: 07 IDT 02 CMD VAL 08 (8 bytes)

**Return from Monitor:** Return CMD is the same with received CMD, the return command will be sent after action. In broadcast mode, no return will be sent.

Return command: 07 IDT 00 CMD REP 08 (8 bytes)

## 2 Serial Port Setting

Baud Rate	Data Bit	Parity Bit	Stop Bit
19200	8	None	1

**Note:** Baud rate can be set to 115200, 38400, 19200 or 9600 to match the monitor baud rate setting. 19200 is the default baud rate setting.

Main Item	Control Item	CMD	Type	Value (DEC)	Reply (DEC)	Content	CMD (HEX)	Notes	
Power Control and Input Source	Power Control	POW	W/R	00	00	Off (soft power)	50 4F 57	**	
				01	01	On (soft power)		**	
	Input Source	MIN	W/R	00	00	VGA	4D 49 4E		
				01	01	Digital DVI			
	Input Source	MIN	W/R	09	09	HDMI 1			
				13	13	Displayport			
Display Adjustment	Display Adjustment	BRI	W/R	0~100	Current value	Back Light Brightness		42 52 49	
		BRL		0~100	Current value	Digital Brightness Level		42 52 4C	
		BLC		00	00	Off (Back Light)	42 4C 43		
			01	01	On (Back Light)				
		CON	W/R	0~100	Current value	Contrast	43 4F 4E		
		HUE		0~100	Current value	Hue	48 55 45		
	SAT	0~100		Current value	Saturation	53 41 54			
	COT	W/R	00	00	User	43 4F 54			
			01	01	6500K				
			02	02	9300K				
			06	06	5000K				
			07	07	7500K				
	GAC	W/R	00	00	Off (Gamma)	47 41 43			
			01	01	2.2 (Gamma)				
	Adjustment	PHA	W/R	0~63	Current value	Phase	50 48 41		
		CLO	W/R	0~100	Current value	Clock	43 4C 4F		
		HOR	R		Current value	Horizontal Position	48 4F 52		
					Current value	Vertical Position	56 45 52		
		ADJ	W	00	00	Auto Adjust	41 44 4A		
	Video Mode	SHA	W/R	0-8	Current value	Sharpness	53 48 41		

Main Item	Control Item	CMD	Type	Value (DEC)	Reply (DEC)	Content	CMD (HEX)	Notes
Display Adjustment	Scaling	ASP	W/R	01	01	Full Screen	41 53 50	
				02	02	Pillar Box		
				04	04	Auto		
	Baud Rate Adjustment	BRA	W/R	00	00	115200	42 52 41	
		WFS		01	01	38400		
				02	02	19200		
				03	03	9600		
Other Control	Wakeup from Sleep	WFS	W/R	0	0	Set VGA_ONLY	57 46 53	
				1	1	Set VGA_DIGITAL_RS232		
				2	2	Set Never_Sleep		
	Other Control	RCU	W	00	00	MENU Key	52 43 55	
				01	01	INFO Key		
				02	02	UP Key		
				03	03	DOWN Key		
				04	04	LEFT Key		
				05	05	RIGHT Key		
				06	06	ENTER Key		
				07	07	EXIT Key		
		ALL	W	00	00	Reset all	41 4C 4C	
		KLC	W/R	00	00	Un-lock keys	4B 4C 43	
				01	01	Lock keys		
		SER	R		13 bytes	Read Serial Number	53 45 52	
		MNA			13 bytes	Read Model Name	4D 4E 41	
	GVE			6 bytes	Read Firmware Version	47 56 45		
	RTV			Current value	Read RS232 table Version	52 54 56		
	Audio	VOL	W/R	0~100	Current value	Volume	56 4F 4C	
		MUT		00	00	Mute Off	4D 55 54	
				01	01	Mute On		

Main Item	Control Item	CMD	Type	Value (DEC)	Reply (DEC)	Content	CMD (HEX)	Notes
Scheme Selection	Scheme Selection	SCM	W/R	00	00	User	53 43 4D	SCM
				01	01	Sport		
				02	02	Game		
				03	03	Cinema		
				04	04	Vivid		
RTC	Current Time Adjustment	RTY	W/R	0~99	0~99	Year	52 54 59	
		RTM		0~12	0~12	Month	52 54 4D	
		RTD		1~31	1~31	Day	52 54 44	
		RTH		0~23	0~23	Hour	52 54 48	
		RTN		0~59	0~59	Minute	52 54 4E	
RTC	Timer Mode	TMS	W/R	0	0	All	54 4D 53	
				1	1	Work Days		
				2	2	User		
	Alarm Enable	AEN	W/R	1	1	Sunday	41 45 4E	
				2	2	Monday		
				4	4	Tuesday		
				8	8	Wednesday		
				16	16	Thursday		
				32	32	Friday		
				64	64	Saturday		
	Alarm Disable	AEF	W/R	1	1	Sunday	41 45 46	
				2	2	Monday		
				4	4	Tuesday		
8				8	Wednesday			
16				16	Thursday			
32				32	Friday			
64				64	Saturday			
RTC	Sunday	SNH	W/R	0~23	0~23	Sunday On Hour	49 4E 48	
		SNM		0~59	0~59	Sunday On Minute	53 4E 4D	
		SFH		0~23	0~23	Sunday Off Hour	53 46 48	
		SFM		0~59	0~59	Sunday Off Minute	53 46 4D	

Main Item	Control Item	CMD	Type	Value (DEC)	Reply (DEC)	Content	CMD (HEX)	Notes
RTC	Monday	NNH	W/R	0~23	0~23	Monday On Hour	4E 4E 48	
		NNM		0~59	0~59	Monday On Minute	4E 4E 4D	
		NFH		0~23	0~23	Monday Off Hour	4E 46 48	
		NFM		0~59	0~59	Monday Off Minute	4E 46 4D	
	Tuesday	ENH	W/R	0~23	0~23	Tuesday On Hour	45 4E 48	
		ENM		0~59	0~59	Tuesday On Minute	45 4E 4D	
		EFH		0~23	0~23	Tuesday Off Hour	45 46 48	
		EFM		0~59	0~59	Tuesday Off Minute	45 46 4D	
	Wednesday	DNH	W/R	0~23	0~23	Wednesday On Hour	44 4E 48	
		DNM		0~59	0~59	Wednesday On Minute	44 4E 4D	
		DFH		0~23	0~23	Wednesday Off Hour	44 46 48	
		DFM		0~59	0~59	Wednesday Off Minute	44 46 4D	
	Thursday	UNH	W/R	0~23	0~23	Thursday On Hour	55 4E 48	
		UNM		0~59	0~59	Thursday On Minute	55 4E 4D	
		UFH		0~23	0~23	Thursday Off Hour	55 46 48	
		UFM		0~59	0~59	Thursday Off Minute	55 46 4D	
	Friday	INH	W/R	0~23	0~23	Friday On Hour	49 4E 48	
		INM		0~59	0~59	Friday On Minute	49 4E 4D	
		IFH		0~23	0~23	Friday Off Hour	49 46 48	
		IFM		0~59	0~59	Friday Off Minute	49 46 4D	
	Saturday	TNH	W/R	0~23	0~23	Saturday On Hour	54 4E 48	
		TNM		0~59	0~59	Saturday On Minute	54 4E 4D	
		TFH		0~23	0~23	Saturday Off Hour	54 46 48	
		TFM		0~59	0~59	Saturday Off Minute	54 46 4D	

\*\* Valid command on Power saving/off mode (The setting of "Wake Up From Sleep" must be VGA, Digital, RS232.

The following are examples of different RS232 commands as shown in the previous table.

### Power Control and Input Source

#### **Turn (01) monitor power off [CMD: POW]**

[Transmit] : 07 01 02 50 4F 57 00 08

[Return] : 07 01 00 50 4F 57 **00** 08

#### **Turn (01) monitor power on [CMD: POW]**

[Transmit] : 07 **01** 02 50 4F 57 01 08

[Return] : 07 01 00 50 4F 57 **01** 08

#### **Read Power Status from (01) monitor [CMD: POW]**

[Transmit] : 07 01 01 50 4F 57 08

[Return] : 07 01 00 50 4F 57 **XX** 08

**XX** = 0, the set is off. **XX** = 1, the set is on.

### Display Adjustment

#### **Read back light from (15) monitor [CMD: BRI]** (If the setting of back light is **80**)

[Transmit] : 07 0F 01 42 52 49 08

[Return] : 07 0F 00 42 52 49 **50** 08

#### **Set back light 80 to (15) monitor [CMD: BRI]**

[Transmit] : 07 0F 02 42 52 49 **50** 08

[Return] : 07 0F 00 42 52 49 **50** 08

#### **Set Contrast 30 to (02) monitor [CMD: CON]**

[Transmit] : 07 **02** 02 43 4F 4E **1E** 08

[Return] : 07 02 00 43 4F 4E **1E** 08

#### **Read Contrast from (02) monitor [CMD: CON]** (If the monitor contrast setting is **50**)

[Transmit] : 07 **02** 01 43 4F 4E 08

[Return] : 07 02 00 43 4F 4E **32** 08

### PIP and Scaling Adjustment

#### **Set (25) monitor PIP to large [CMD: PSC]**

[Transmit] : 07 19 02 50 53 43 03 08

[Return] : 07 19 00 50 53 43 **03** 08

#### **Set (25) monitor to Pillar box [CMD: ASP]**

[Transmit] : 07 19 02 41 53 50 02 08

[Return] : 07 19 00 41 53 50 **02** 08



Other Control**Adjust up to (02) monitor [CMD: RCU]**

[Transmit] : 07 02 02 52 43 55 02 08

[Return] : 07 02 00 52 43 55 **02** 08

**Reset all to (02) monitor [CMD: ALL]**

[Transmit] : 07 02 02 41 4C 4C 00 08

[Return] : 07 02 00 41 4C 4C **00** 08

**Read serial number (01) monitor [CMD: SER]**

[Transmit] : 07 01 01 53 45 52 08

[Return] : 07 01 00 53 45 52 S(0) S(12) 08, S(0) ~ S(12): serial number in ASCII

**Read firmware version (01) monitor [CMD: GVE]**

[Transmit] : 07 01 01 47 56 45 08

[Return] : 07 01 00 47 56 45 S(0) S(5) 08, S(0) ~ S(5): firmware version in ASCII

# Accessing Planar's Technical Support Website

- 1 Go to [www.planar.com/support](http://www.planar.com/support)
- 2 You can access downloadable utility software, new firmware and user manuals.

## Downloading Utility Software

- 1 Go to <http://partners.planarcontrolroom.com>
- 2 Enter your login and password information.
- 3 Navigate to the section that contains software updates and then look for PS4661T and PS5561T.
- 4 From the list of available software, click on the tool you need.