

EP Series Ultra HD LCD Displays



- EP5024K
- EP5024K-T
- EP5824K
- EP5824K-T
- EP6524K
- EP6524K-T
- EPX100
- EPX100-T

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RoHS Compliance Statement

The Planar EP Series is fully RoHS compliant.

Part Number: 020-1347-01D

Table of Contents

| | |
|---|----|
| RS232 Codes | 4 |
| 1. RS232 Command Format..... | 4 |
| 2. Serial Port Setting | 5 |
| 3. Command Tables | 6 |
| 4. Example | 20 |
| Accessing Planar’s Technical Support Website | 22 |

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

STX: Start byte = 07

IDT: Don't care

Type: Read or Write command, 01: read, 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 command: 07 IDT 01 CMD 08 (7bytes)

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

Return from Monitor: Sent after receiving any valid command. The response CMD is the same as the received CMD.

2. Serial Port Setting

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

Baud rate can be set to 115200, 38400, 19200, or 9600 to match the monitor baud rate setting.

Baud rate 19200 is the default setting.

The display's RS232 connector is wired in the straight through configuration, with the pinout as follows:

- Pin 2: Tx out
- Pin 3: Rx in
- Pin 5: Ground
- Shell: Ground
- All other pins: No connect

Note: RS232 commands over LAN can be achieved by opening a TCP connection to Port 23 to the display.

Explanation of symbols

▲: Valid command on Power saving/ off mode (The setting of "Power Saving Config" must be Wake on All).

3. Command Tables

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

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|--------------------------------|--------------------|-------|------|--------------------------|----------------------|--------------------------|----------------------|----------|
| Power Control and Input Source | Power Control | POW | W/R | 0 | 00 | Off (soft power) | 50 4F 57 | ▲ |
| | | | | 1 | 01 | On (soft power) | | ▲ |
| | OPS Power | IPC | W/R | 0 | 00 | Off | 49 50 43 | |
| | | | | 1 | 01 | On | | |
| | Input Source | MIN | W/R | 0 | 00 | VGA | 4D 49 4E | |
| | | | | 13 | 0D | DP1 | | |
| | | | | 16 | 10 | DP2 | | |
| | | | | 14 | 0E | OPS | | |
| | | | | 9 | 9 | HDMI1 | | |
| | | | | 10 | 0A | HDMI2 | | |
| | | | | 11 | 0B | HDMI3 | | |
| | | | | 12 | 0C | HDMI4 | | |
| | Display Adjustment | Color | BRI | W/R | 0~100 | 00~64 | Backlight Brightness | 42 52 49 |
| BRL | | | W/R | 0~100 | 00~64 | Digital Brightness Level | 42 52 4C | |
| BLC | | | W/R | 0 | 00 | Off (Backlight) | 42 4C 43 | |
| | | | | 1 | 01 | On (Backlight) | | |
| CON | | | W/R | 0~100 | 00~64 | Contrast | 43 4F 4E | |
| SHA | | | W/R | 0~10 | 00~0A | Sharpness | 53 48 41 | |
| HUE | | | W/R | 0~100 | 00~64 | Hue | 48 55 45 | |
| SAT | | | W/R | 0~100 | 00~64 | Saturation | 53 41 54 | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|--------------------|-------------------|-------------|------|--------------------------|----------------------|--------------|--------------|--------|
| Display Adjustment | Scheme | SCM | W/R | 0 | 00 | User | 53 43 4D | |
| | | | | 1 | 01 | Sport | | |
| | | | | 2 | 02 | Game | | |
| | | | | 3 | 03 | Cinema | | |
| | | | | 4 | 04 | Vivid | | |
| | Color Temperature | COT | W/R | 0 | 00 | User | 43 4F 54 | |
| | | | | 1 | 01 | 6500K | | |
| | | | | 2 | 02 | 9300K | | |
| | | | | 3 | 03 | 3200K | | |
| | | | | 6 | 06 | 5000K | | |
| | | | | 7 | 07 | 7500K | | |
| | Gamma | GAC | W/R | 0 | 00 | Off (Gamma) | 47 41 43 | |
| | | | | 1 | 01 | 1.85 (Gamma) | | |
| | | | | 2 | 02 | 1.9 (Gamma) | | |
| | | | | 3 | 03 | 1.95 (Gamma) | | |
| | | | | 4 | 04 | 2.0 (Gamma) | | |
| | | | | 5 | 05 | 2.05 (Gamma) | | |
| | | | | 6 | 06 | 2.15 (Gamma) | | |
| 7 | | | | 07 | 2.15 (Gamma) | | | |
| 8 | | | | 08 | 2.2 (Gamma) | | | |
| 9 | | | | 09 | 2.25 (Gamma) | | | |
| 10 | | | | 0A | 2.3 (Gamma) | | | |
| 11 | | | | 0B | 2.35 (Gamma) | | | |
| 12 | 0C | 2.4 (Gamma) | | | | | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|--------------------|----------------|-------------------------|------|--------------------------|----------------------|----------------------|--------------|----------|
| Display Adjustment | Gamma | GAC | W/R | 13 | 0D | 2.45 (Gamma) | 47 41 43 | |
| | | | | 14 | 0E | 2.5 (Gamma) | | |
| | | | | 15 | 0F | 2.55 (Gamma) | | |
| | | | | 16 | 10 | 2.6 (Gamma) | | |
| | Gain & Offset | USR | W/R | 0~100 | 00~64 | Red Gain (0~100) | 55 53 52 | |
| | | USG | W/R | 0~100 | 00~64 | Green Gain (0~100) | 55 53 47 | |
| | | USB | W/R | 0~100 | 00~64 | Blue Gain (0~100) | 55 53 42 | |
| | | UOR | W/R | 0~100 | 00~64 | Red Offset (0~100) | 55 4F 52 | |
| | | UOG | W/R | 0~100 | 00~64 | Green Offset (0~100) | 55 4F 47 | |
| | | UOB | W/R | 0~100 | 00~64 | Blue Offset (0~100) | 55 4F 42 | |
| | VGA Adjustment | PHA | W/R | 0~100 | 00~64 | Phase | 50 48 41 | |
| | | CLO | W/R | 0~100 | 00~64 | Clock | 43 4C 4F | |
| | | HOR | W/R | 0~100 | 00~64 | Horizontal Position | 48 4F 52 | |
| | | VER | W/R | 0~100 | 00~64 | Vertical Position | 56 45 52 | |
| | | ADJ | W | 0 | 00 | Auto Adjust | 41 44 4A | |
| | RTC | Current Time Adjustment | RTY | W/R | 0~99 | 00~63 | Year | 52 54 59 |
| RTM | | | W/R | 1~12 | 01~0C | Month | 52 54 4D | |
| RTD | | | W/R | 1~31 | 01~1F | Day | 52 54 44 | |
| RTH | | | W/R | 0~23 | 00~17 | Hour | 52 54 48 | |
| RTN | | | W/R | 0~59 | 00~3B | Minute | 52 54 4E | |
| Timer Mode | | TMS | W/R | 0 | 00 | Everyday Mode | 54 4D 53 | |
| | | | | 1 | 01 | Workday Mode | | |
| | | | | 2 | 02 | User Mode | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|-----------|--------------|-----|------|--------------------------|----------------------|---|--------------|--------|
| RTC | Enable | AEN | W/R | 0~127 | 00~7F | In User Mode: Set bit0 to 1: Sunday Enable Set bit1 to 1: Monday Enable Set bit2 to 1: Tuesday Enable Set bit3 to 1: Wednesday Enable Set bit4 to 1: Thursday Enable Set bit5 to 1: Friday Enable Set bit6 to 1: Saturday Enable In Everyday Mode: Set any bit0~6 to 1: Mon.~Sun. Enable In Workday Mode: Set bit0 to 1: Sunday Enable Set any bit1~5 to 1: Mon.~Fri. Enable Set bit6 to 1: Saturday Enable | 41 45 4E | |
| | Disable | AEF | W/R | 0~127 | 00~7F | In User Mode: Set bit0 to 1: Sunday Disable Set bit1 to 1: Monday Disable Set bit2 to 1: Tuesday Disable Set bit3 to 1: Wednesday Disable Set bit4 to 1: Thursday Disable Set bit5 to 1: Friday Disable Set bit6 to 1: Saturday Disable In Everyday Mode: Set any bit0~6 to 1: Mon.~Sun. Disable | 41 45 46 | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|-----------|--------------|-----|------|--------------------------|----------------------|--|--------------|--------|
| RTC | Disable | AEF | W/R | 0~127 | 00~7F | In Workday Mode: Set bit 0 to 1: Sunday Disable Set any bit1~5 to 1: Mon.~Fri. Disable Set bit 6 to 1: Saturday Disable | 41 45 46 | |
| | Sunday | SNH | W/R | 0~23 | 00~17 | Sunday On Hour | 53 4E 48 | |
| | | SNM | W/R | 0~59 | 00~3B | Sunday On Minute | 53 4E 4D | |
| | | SFH | W/R | 0~23 | 00~17 | Sunday Off Hour | 53 46 48 | |
| | | SFM | W/R | 0~59 | 00~3B | Sunday Off Minute | 53 46 4D | |
| | Monday | NNH | W/R | 0~23 | 00~17 | Monday On Hour | 4E 4E 48 | |
| | | NNM | W/R | 0~59 | 00~3B | Monday On Minute | 4E 4E 4D | |
| | | NFH | W/R | 0~23 | 00~17 | Monday Off Hour | 4E 46 48 | |
| | | NFM | W/R | 0~59 | 00~3B | Monday Off Minute | 4E 46 4D | |
| | Tuesday | ENH | W/R | 0~23 | 00~17 | Tuesday On Hour | 45 4E 48 | |
| | | ENM | W/R | 0~59 | 00~3B | Tuesday On Minute | 45 4E 4D | |
| | | EFH | W/R | 0~23 | 00~17 | Tuesday Off Hour | 45 46 48 | |
| | | EFM | W/R | 0~59 | 00~3B | Tuesday Off Minute | 45 46 4D | |
| | Wednesday | DNH | W/R | 0~23 | 00~17 | Wednesday On Hour | 44 4E 48 | |
| | | DNM | W/R | 0~59 | 00~3B | Wednesday On Minute | 44 4E 4D | |
| | | DFH | W/R | 0~23 | 00~17 | Wednesday Off Hour | 44 46 48 | |
| | | DFM | W/R | 0~59 | 00~3B | Wednesday Off Minute | 44 46 4D | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|-----------|------------------------|-----|------|--------------------------|----------------------|----------------------|--------------|--------|
| RTC | Thursday | UNH | W/R | 0~23 | 00~17 | Thursday On Hour | 55 4E 48 | |
| | | UNM | W/R | 0~59 | 00~3B | Thursday On Minute | 55 4E 4D | |
| | | UFH | W/R | 0~23 | 00~17 | Thursday Off Hour | 55 46 48 | |
| | | UFM | W/R | 0~59 | 00~3B | Thursday Off Minute | 55 46 4D | |
| | Friday | INH | W/R | 0~23 | 00~17 | Friday On Hour | 49 4E 48 | |
| | | INM | W/R | 0~59 | 00~3B | Friday On Minute | 49 4E 4D | |
| | | IFH | W/R | 0~23 | 00~17 | Friday Off Hour | 49 46 48 | |
| | | IFM | W/R | 0~59 | 00~3B | Friday Off Minute | 49 46 4D | |
| | Saturday | TNH | W/R | 0~23 | 00~17 | Saturday On Hour | 54 4E 48 | |
| | | TNM | W/R | 0~59 | 00~3B | Saturday On Minute | 54 4E 4D | |
| | | TFH | W/R | 0~23 | 00~17 | Saturday Off Hour | 54 46 48 | |
| | | TFM | W/R | 0~59 | 00~3B | Saturday Off Minute | 54 46 4D | |
| Audio | Volume | VOL | W/R | 0~100 | 00~64 | volume | 56 4F 4C | |
| | Bass | BAS | W/R | 0~12 | 00~0C | Bass (-6 ~ 6) | 42 41 53 | |
| | Treble | TRE | W/R | 0~12 | 00~0C | Treble (-6 ~ 6) | 54 52 45 | |
| | Balance | BAL | W/R | 0~12 | 00~0C | Balance (-6 ~ 6) | 42 41 4C | |
| | Audio Source Select | AUS | W/R | 0 | 00 | Audio In | 41 55 53 | |
| | | | | 1 | 01 | Main Source | | |
| | | | | 2 | 02 | Source 2 | | |
| | | | | 3 | 03 | Source 3 | | |
| | | | | 4 | 04 | Source 4 | | |
| | Internal Speaker | INS | W/R | 0 | 00 | Internal Speaker Off | 49 4E 53 | |
| | | | | 1 | 01 | Internal Speaker On | | |
| | Mute | MUT | W/R | 0 | 00 | Mute Off | 4D 55 54 | |
| 1 | | | | 01 | Mute On | | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|-----------|---------------|-----|----------|--------------------------|-----------------------|--|--------------|--------|
| OSD | Transparency | OST | W/R | 0~10 | 00~0A | OSD Transparency | 4F 53 54 | |
| | H Position | OSH | W/R | 0~100 | 0~64 | OSD H Position | 4F 53 48 | |
| | V Position | OSV | W/R | 0~100 | 0~64 | OSD V Position | 4F 53 56 | |
| | OSD Rotation | OSR | W/R | 0 | 00 | Landscape | 4F 53 52 | |
| | | | | 1 | 01 | Portrait | | |
| | OSD Language | OSL | W/R | 0 | 00 | English | 4F 53 4C | |
| | | | | 1 | 01 | French | | |
| | | | | 2 | 02 | German | | |
| | | | | 13 | 0D | Italian | | |
| | | | | 15 | 0F | Portuguese | | |
| | | | | 16 | 10 | Spanish | | |
| | | | | 18 | 12 | Chinese (Traditional) | | |
| | | | | 19 | 13 | Chinese (Simplified) | | |
| | 20 | 14 | Japanese | | | | | |
| | OSD Timeout | OSO | W/R | 5, 10, 20, 30, 60 | 05, 0A, 14, 1E, 2C | OSD Timeout (5, 10, 20, 30, 60 sec) | 4F 53 4F | |
| | Splash Screen | SPS | W/R | 0 | 00 | Off | 53 50 53 | |
| | | | | 1 | 01 | On | | |
| | Message Box | MSB | W/R | 0 | 00 | Off | 4D 53 42 | |
| | | | | 1 | 01 | On | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark | |
|-----------|--------------|----------------------------|------|--------------------------|----------------------|------------|--------------|----------|--|
| EDID | HDMI 1 | EH1 | W/R | 0 | 00 | 1080P | 45 48 31 | | |
| | | | | 1 | 01 | 4K30Hz | | | |
| | HDMI 2 | EH2 | W/R | 0 | 00 | 1080P | 45 48 32 | | |
| | | | | 1 | 01 | 4K30Hz | | | |
| | HDMI 3 | EH3 | W/R | 0 | 00 | 1080P | 45 48 33 | | |
| | | | | 1 | 01 | 4K30Hz | | | |
| | | | | 2 | 02 | 4K60Hz | | | |
| | HDMI 4 | EH4 | W/R | 0 | 00 | 1080P | 45 48 34 | | |
| | | | | 1 | 01 | 4K30Hz | | | |
| | | | | 2 | 02 | 4K60Hz | | | |
| | OPS | EH5 | W/R | 0 | 00 | 1080P | 45 48 35 | | |
| | | | | 1 | 01 | 4K30Hz | | | |
| | | | | 2 | 02 | 4K60Hz | | | |
| | DP1 | ED1 | W/R | 0 | 00 | 1080P | 45 44 31 | | |
| | | | | 1 | 01 | 4K30Hz | | | |
| | | | | 2 | 02 | 4K60Hz | | | |
| | DP2 | ED2 | W/R | 0 | 00 | 1080P | 45 44 32 | | |
| | | | | 1 | 01 | 4K30Hz | | | |
| | | | | 2 | 02 | 4K60Hz | | | |
| | Multi-Source | Multi- Source Views Adjust | PSC | W/R | 0 | 00 | OFF | 50 53 43 | |
| | | | | | 1 | 01 | PIP Small | | |
| 2 | | | | | 02 | PIP medium | | | |
| 3 | | | | | 03 | PIP large | | | |
| 4 | | | | | 04 | Dual View | | | |
| 7 | | | | | 07 | Quad View | | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark | |
|--------------|-----------------------------|---------|------|--------------------------|-----------------------|--|--------------|----------|--|
| Multi-Source | PIP source selection | PIN | W/R | (refer to MIN) | (refer to MIN) | Select the input source of sub window 1 (refer to MIN) | 50 49 4E | | |
| | | PIO | W/R | (refer to MIN) | (refer to MIN) | Select the input source of sub window 2 (refer to MIN) | 50 49 4F | | |
| | | PIP | W/R | (refer to MIN) | (refer to MIN) | Select the input source of sub window 3 (refer to MIN) | 50 49 50 | | |
| | PIP position | PPO | W/R | 0 | 00 | PIP Position Bottom-left | 50 50 4F | | |
| | | | | 1 | 01 | PIP Position Bottom-right | | | |
| | | | | 2 | 02 | PIP Position Top-left | | | |
| | | | | 3 | 03 | PIP Position Top-right | | | |
| | PIP/Main Swap | SWA | W | 0 | 00 | Swap main and PIP | 53 57 41 | | |
| | Multi-Source Presets Recall | PRC | W | 0 | 00 | Preset1 Recall | 50 52 43 | | |
| | | | | 1 | 01 | Preset2 Recall | | | |
| | | | | 2 | 02 | Preset3 Recall | | | |
| | | | | 3 | 03 | Preset4 Recall | | | |
| | Other Control | Scaling | ASP | W/R | 0 | 00 | Native | 41 53 50 | |
| | | | | | 1 | 01 | Full Screen | | |
| 2 | | | | | 02 | 4:3 | | | |
| 3 | | | | | 03 | Letterbox | | | |
| PAS | | | W/R | 1 | 01 | Full Screen | 50 41 53 | | |
| | | | | 2 | 02 | 4:3 | | | |
| | | | | 3 | 03 | Letterbox | | | |
| ZOM | | W/R | 0~10 | 00~0A | Adjust overscan ratio | 5A 4F 4D | | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|------------------|--------------------------|-----|------|--------------------------|--------------------------------|---------------------------------|--------------|--------|
| Other Control | Baud Rate Adjustment | BRA | W/R | 0 | 00 | 115200 | 42 52 41 | |
| | | | | 1 | 01 | 38400 | | |
| | | | | 2 | 02 | 19200 | | |
| | | | | 3 | 03 | 9600 | | |
| | Power Saving Config | WFS | W/R | 0 | 00 | Standby Mode | 57 46 53 | |
| | | | | 1 | 01 | Wake on All | | |
| | | | | 2 | 02 | Always On | | |
| | | | | 3 | 03 | Networked Standby | | |
| | Auto Scan | ATS | W/R | 0 | 00 | Off | 41 54 53 | |
| | | | | 1 | 01 | Main | | |
| | | | | 2 | 02 | Multi | | |
| | | | | 3 | 03 | All | | |
| | Pixel Orbit | IRF | W/R | 0 | 00 | Off | 49 52 46 | |
| | | | | 1 | 01 | On | | |
| | Smart Light Control | SLC | W/R | 0 | 00 | Off | 53 4C 43 | |
| | | | | 1 | 01 | DCR | | |
| | | | | 2 | 02 | Light Sensor | | |
| | Power LED | LED | W/R | 0 | 00 | Off | 4C 45 44 | |
| | | | | 1 | 01 | On | | |
| | DisplayPort 1 Version | DPM | W/R | 0 | 00 | DP 1.1 | 44 50 4D | |
| | | | | 1 | 01 | DP 1.2 | | |
| | DisplayPort 2 Version | DPN | W/R | 0 | 00 | DP 1.1 | 44 50 4E | |
| | | | | 1 | 01 | DP 1.2 | | |
| | OPS Power Down Check | OPC | W/R | 0 | 00 | Disable OPS power down check | 4F 50 43 | |
| 1 | | | | 01 | Enable OPS power down check | | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|------------------|--------------------|-----------|------|--------------------------|----------------------|---------------|--------------|----------|
| Other Control | RGB Color Range | HCR | W/R | 0 | 00 | Auto Detect | 48 43 52 | |
| | | | | 1 | 01 | Full Range | | |
| | | | | 2 | 02 | Limited Range | | |
| | Gamut | GMT | W/R | 0 | 00 | Native | 47 4D 54 | See Note |
| | | | | 1 | 01 | REC709 | | |
| | | | | 2 | 02 | SMPTE C | | |
| | | | | 3 | 03 | EBU | | |
| | Touch Control | TOC | W/R | 0 | 00 | Auto | 54 4F 43 | |
| | | | | 1 | 01 | OPS | | |
| | | | | 2 | 02 | External | | |
| | MEMC | MEM | W/R | 00 | 00 | MEMC :Off | 4D 45 4D | |
| | | | | 01 | 01 | MEMC :Low | | |
| | | | | 02 | 02 | MEMC :Medium | | |
| | | | | 03 | 03 | MEMC :High | | |
| | Remote Control | RCU | W | 14 | 0E | MENU Key | 52 43 55 | |
| 4 | | | | 04 | INFO Key | | | |
| 2 | | | | 02 | UP Key | | | |
| 25 | | | | 19 | DOWN Key | | | |
| 1 | | | | 01 | LEFT Key | | | |
| 3 | | | | 03 | RIGHT Key | | | |
| 18 | | | | 12 | ENTER Key | | | |
| 5 | | | | 05 | EXIT Key | | | |
| 7 | | | | 07 | VGA Key | | | |
| 9 | | | | 09 | HDMI1 Key | | | |
| 12 | 0C | HDMI2 Key | | | | | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|------------------|-------------------|--------------------------|------|--------------------------|----------------------|----------------|--------------|--------|
| Other Control | Remote Control | RCU | W | 16 | 10 | HDMI3 Key | 52 43 55 | |
| | | | | 22 | 16 | HDMI4 Key | | |
| | | | | 8 | 08 | DP1 Key | | |
| | | | | 11 | 0B | DP2 Key | | |
| | | | | 21 | 15 | OPS Key | | |
| | | | | 15 | 0F | SOURCE Key | | |
| | | | | 19 | 13 | P-SOURCE Key | | |
| | | | | 17 | 11 | PIP Key | | |
| | | | | 26 | 1A | P-POSITION Key | | |
| | | | | 6 | 06 | SWAP Key | | |
| | | | | 20 | 14 | SCALING Key | | |
| | | | | 67 | 43 | FREEZE Key | | |
| | | | | 0 | 00 | MUTE Key | | |
| | | | | 23 | 17 | BRIGHT Key | | |
| | | | | 24 | 18 | CONTRAST Key | | |
| | | | | 30 | 1E | AUTO Key | | |
| | | | | 29 | 1D | VOLUME+ Key | | |
| | | | | 27 | 1B | VOLUME- Key | | |
| | | | | 32 | 20 | Preset1 Recall | | |
| | | | | 33 | 21 | Preset2 Recall | | |
| 34 | 22 | Preset3 Recall | | | | | | |
| 35 | 23 | Preset4 Recall | | | | | | |
| 36 | 24 | Audio Source Main Key | | | | | | |
| 37 | 25 | Audio Source 2 Key | | | | | | |
| 38 | 26 | Audio Source 3 Key | | | | | | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|---------------|--------------------|-----|------|--------------------------|----------------------|--|--------------|--------|
| Other Control | Remote Control | RCU | W | 39 | 27 | Audio Source 4 Key | 52 43 55 | |
| | | ALL | W | 0 | 00 | Reset all | 41 4C 4C | |
| | | KLC | W/R | 0 | 00 | Unlock keys | 4B 4C 43 | |
| | | | | 1 | 01 | Lock keys | | |
| | | SER | R | 13 bytes | 13 bytes | Read Serial Number | 53 45 52 | |
| | | MNA | R | 13 bytes | 13 bytes | Read Model Name | 4D 4E 41 | |
| | | GVE | R | 6 bytes | 6 bytes | Read Firmware Version | 47 56 45 | |
| | | RTV | R | 0~255 | 00~FF | Read RS232 table Version | 52 54 56 | |
| | Network Enable | NWE | W/R | 0 | 00 | Off | 4E 57 45 | |
| | | | | 1 | 01 | On | | |
| | Dynamic IP | DIP | W/R | 0 | 00 | Disable | 44 49 50 | |
| | | | | 1 | 01 | Enable | | |
| | Default | LDS | W | 0 | 00 | Load default settings (About 15 seconds.) | 4C 44 53 | |
| | E-Mail Alert | PSA | W/R | 0 | 00 | Off(Power Status Alert) | 50 53 41 | |
| | | | | 1 | 01 | On(Power Status Alert) | | |
| | | SSA | W/R | 0 | 00 | Off(Source Status Alert) | 53 53 41 | |
| | | | | 1 | 01 | On(Source Status Alert) | | |
| | | SLA | W/R | 0 | 00 | Off (Signal Lost Alert) | 53 4C 41 | |
| | | | | 1 | 01 | On (Signal Lost Alert) | | |
| | Static IP Settings | IP1 | W/R | 0~255 | 00~FF | Static IP Address 1 | 49 50 31 | |
| | | IP2 | W/R | 0~255 | 00~FF | Static IP Address 2 | 49 50 32 | |
| | | IP3 | W/R | 0~255 | 00~FF | Static IP Address 3 | 49 50 33 | |
| | | IP4 | W/R | 0~255 | 00~FF | Static IP Address 4 | 49 50 34 | |
| | | MK1 | W/R | 0~255 | 00~FF | Subnet Mask 1 | 4D 4B 31 | |
| | | MK2 | W/R | 0~255 | 00~FF | Subnet Mask 2 | 4D 4B 32 | |

| Main Item | Control Item | CMD | Type | Value/Reply (Decimal) | Value/Reply (Hex) | Content | CMD (HEX) | Remark |
|----------------|--------------------|-----|------|--------------------------|----------------------|-------------------------|--------------|-------------|
| Ethernet Setup | Static IP Settings | MK3 | W/R | 0~255 | 00~FF | Subnet Mask 3 | 4D 4B 33 | |
| | | MK4 | W/R | 0~255 | 00~FF | Subnet Mask 4 | 4D 4B 34 | |
| | | GW1 | W/R | 0~255 | 00~FF | Gateway 1 | 47 57 31 | |
| | | GW2 | W/R | 0~255 | 00~FF | Gateway 2 | 47 57 32 | |
| | | GW3 | W/R | 0~255 | 00~FF | Gateway 3 | 47 57 33 | |
| | | GW4 | W/R | 0~255 | 00~FF | Gateway 4 | 47 57 34 | |
| | | FD1 | W/R | 0~255 | 00~FF | DNS Address 1 | 46 44 31 | |
| | | FD2 | W/R | 0~255 | 00~FF | DNS Address 2 | 46 44 32 | |
| | | FD3 | W/R | 0~255 | 00~FF | DNS Address 3 | 46 44 33 | |
| | | FD4 | W/R | 0~255 | 00~FF | DNS Address 4 | 46 44 34 | |
| | | SNS | W | 0 | 00 | Save Static IP Settings | 53 4E 53 | |
| | | MAC | W | 0~255 | 00~FF | Querying MAC ID #0~#5 | 4D 41 43 | See Example |

Note: The gamut command is only valid for model EP6524K & EP6524K-T

4. Example

Power Control and Input Source

Turn monitor power off [CMD: POW]

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

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

Turn monitor power on [CMD: POW]

[Transmit] : PC → 07 01 02 50 4F 57 01 08 → Monitor

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

Read Power Status from monitor [CMD: POW]

[Transmit] : PC → 07 01 01 50 4F 57 08 → Monitor

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

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

Display Adjustment

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

[Transmit] : PC → 07 0101 42 52 49 08 → Monitor

[Return] : Monitor → 07 01 00 42 52 49 **50** 08 → PC

Set back light 80 to monitor [CMD: BRI]

[Transmit] : PC → 07 01 02 42 52 49 **50** 08 → Monitor

[Return] : Monitor → 07 01 00 42 52 49 **50** 08 → PC

Set Contrast 30 to monitor [CMD: CON]

[Transmit] : PC → 07 01 02 43 4F 4E **1E** 08 → Monitor

[Return] : Monitor → 07 01 00 43 4F 4E **1E** 08 → PC

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

[Transmit] : PC → 07 0101 43 4F 4E 08 → Monitor

[Return] : Monitor → 07 01 00 43 4F 4E **32** 08 → Monitor

Scaling Adjustment

Set monitor to Pillar box [CMD: ASP]

[Transmit] : PC → 07 01 02 41 53 50 02 08 → Monitor

[Return] : Monitor → 07 01 00 41 53 50 **02** 08 → PC

Acquiring MAC address

Read MAC data byte 0 [CMD: MAC]

[Transmit] : PC → 07 01 02 4D 41 43 00 08 → Monitor

[Return] : Monitor → 07 01 00 4D 41 43 ## 08 → PC

Read MAC data byte 5 [CMD: MAC]

[Transmit] : PC → 07 01 02 4D 41 43 05 08 → Monitor

[Return] : Monitor → 07 01 00 4D 41 43 ## 08 → PC

Other Control

Adjust up to monitor [CMD: RCU]

[Transmit] : PC → 07 01 02 52 43 55 02 08 → Monitor

[Return] : Monitor → 07 01 00 52 43 55 **02** 08 → PC

Reset all to monitor [CMD: ALL]

[Transmit] : PC → 07 01 02 41 4C 4C 00 08 → Monitor

[Return] : Monitor → 07 01 00 41 4C 4C**00** 08 → PC

Read serial number monitor [CMD: SER]

[Transmit] : PC → 07 01 01 53 45 52 08 → Monitor

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

Read firmware version monitor [CMD: GVE]

[Transmit] : PC → 07 01 01 47 56 45 08 → Monitor

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

Accessing Planar's Technical Support Website

Go to www.planar.com/support to locate the following support documents and resources:

- User Guide
- RS232 User Manual
- Touchscreen drivers
- Standard warranties
- Planar support hotline number and email