

EP910 RS232 Command Table V1.0

1_25_06

Communication Settings

| | |
|--------------|------|
| Baud Rate | 9600 |
| Data Bits | 8 |
| Parity | N |
| Stop Bits | 1 |
| Flow Control | None |

Command Structure

[Header][Package Size(n)][Command(c)] [Data 1]... [Data d]
Header: 2Bytes, "IR" fixed
Package Size: 2Bytes, Hexadecimal alphabets, n =c+d
Command: 3 Bytes, Hexadecimal alphabets
Data: d Bytes, d=0~248

PC send to Projector

Projector Response to PC

| Command | Description | Response | Description |
|---|--|--|--|
| (Invalid Command or Command Failed) | | IR0500000 IR0500001 IR0500002 | Response "IR0500000" after the projector received a invalid or failed command Response "IR0500001" if the projector is cooling. Response "IR0500002" if the value out of range |
| IR04002n IR04002? | AV Mute, n=0~1 n=0: AV Mute OFF n=1: AV Mute | IR03002 IR03002 IR03002 IR04002n | Response "IR03002" after command send succeeded |
| IR03003 | sync Re-sync | IR03003 | |
| IR04004n IR04004? | Freeze, n=0~1 n=0: Unfreeze n=1: Freeze | IR03004 IR03004 IR03004 IR04004n | |
| IR04005n IR04005? | Blanking Color, n=0~1 n=0: Blue n=1: Black | IR03005 IR03005 IR03005 IR04005n | |
| IR04006n IR04006? | Source Detect, n=0~2 n=0, Auto n=1, NA n=2, Manual | IR03006 IR03006 IR03006 IR03006 IR04006n | |
| IR04008n IR04008? | Mute, n=0~1 n=0: Mute OFF n=1: Mute ON | IR03008 IR03008 IR03008 IR04008n | |
| IR03009 | Source | IR03009 | |
| IR04010n IR03010? | Degamma, n=0~3 | IR03010 IR04010n | |
| IR04011n IR04011? | Zoom, n=0~3 n=0: Off n=1: Zoom 1 n=2: Zoom 2 | IR03011 IR04011n | |
| IR05012nn IR04012? | Zoom Value, nn=F6~FF-00-01~0A(Hex Value) | IR03012 IR05012nn | User input value is from -10 to +10 |
| IR03013 IR03014 IR03015 IR03016 IR03017 IR03018 IR03019 IR0301A IR0301B | Menu Left Right Up Down Enter Keystone Display Format Display Mode | IR03013 IR03014 IR03015 IR03016 IR03017 IR03018 IR03019 IR0301A IR0301B | |
| IR04020n IR04020? | Source Select, n=0~9 n=0: D-sub Analog RGB n=1: D-sub Component n=2: D-sub SCART n=3: DVI-Digital RGB n=4: DVI-Analog RGB n=5: NA n=6: NA n=7: Component n=8: S-video n=9: Composite Video | IR03020 IR03020 IR03020 IR03020 IR03020 IR03020 IR03020 IR03020 IR03020 IR03020 IR04020n | |

PC send to Projector

Projector Response to PC

| Command | Description | Response | Description |
|--|---|---|--|
| IR04030n IR04030? | Display Format, n=0~3 n=0: 4:3 n=1: 16:9 n=2: Window n=3: Native | IR03030 IR03030 IR03030 IR03030 IR04030n | |
| IR04031n IR04031? | Display Mode, n=0~4 n=0: PC n=1: Movie n=2: Game n=3: sRGB n=4: User | IR03031 IR03031 IR03031 IR03031 IR03031 IR04031n | |
| IR04032n IR04032? | Color Temperature, n=0~2 n=0: Low n=1: Medium n=2: High | IR03032 IR03032 IR03032 IR03032 IR05032nn | |
| IR04041n | PIP Size, n=0~2 n=0: Small n=1: Normal n=2: Large | IR03041 | |
| IR04042n | PIP Location, n= 0~4 n=0: Left-Top n=1: Right-Top n=2: NA n=3: Left-Bottom n=4: Right-Bottom | IR03042 | |
| IR03045 | Swap | IR03045 | |
| IR04046n IR04041? IR04042? IR04046? | Screen, n=0~2 n=0: Single n=1: PIP Window n=2: Split POP Screen | IR03046 IR04041n IR04042n IR04046n | PIP Size, n=0-3 PIP Location, n= 0-4 Screen, n=0-2 |
| IR05050nn | V. Keystone, nn = D8 ~ FF-00 ~ 28 (Hex Value) | IR03050 | User input value is from -40 to +40 |
| IR05051nn | H. Keystone, nn = D8 ~ FF-00 ~ 28 (Hex Value) | IR03051 | User input value is from -40 to +40 |
| IR04053n | Projection, n=0~3 n=0: Ceiling n=1: Rear Ceiling n=2: Front n=3: Rear Front | IR03053 | |
| IR04054n | Brite Mode, n=0~1 n=0: OFF n=1: ON | IR03054 | |
| IR04055n | Image Shift, n=0~2 n=0: OFF n=1: Position 1 n=2: Position 2 | IR03055 | |
| IR04056n | Auto Shutdown, n=0~6 n=0: OFF n=1: 1 min n=2: 3 min n=3: 5 min n=4: 10 min n=5: 20 min n=6: 30 min | IR03056 | |
| IR05057nn | Language, nn = 00~0D nn=00: English nn=01: French nn=02: German nn=03: Spanish nn=04: Italian nn=05: Russian nn=06: Portuguese nn=07: Polish nn=08: Dutch nn=09: Traditional Chinese nn=0A: Simplified Chinese nn=0B: Japanese nn=0C: Korean nn=0D: Swedish | IR03057 | |

PC send to Projector

Projector Response to PC

| Command | Description | Response | Description |
|-------------------------|--|-----------------|--|
| IR07058nnnn | V. Image Shift, nnnn = FF7D~FFFF-0000-0001~0083(Hex Value) | IR04058 | User input value is from -131 to +131 |
| IR04050? | | IR05050nn | V. Keystone, nn = D8 ~ FF-00 ~ 28 (Hex Value) |
| IR04051? | | IR05051nn | H. Keystone, nn = D8 ~ FF-00 ~ 28 (Hex Value) |
| IR04053? | | IR04053n | Projection, n = 0~4 |
| IR04054? | | IR04054n | Brite Mode, n = 0~1 |
| IR04055? | | IR04055n | Image Shift, n = 0~2 |
| IR04056? | | IR04056n | Auto Shutdown, n = 0~6 |
| IR04057? | | IR05057nn | Language, n = 0~D |
| IR04058? | | IR07058nnnn | V. Image Shift, nn = FF7D~FFFF-0000-0001~0083(Hex Value) |
| IR04061n | White Peaking, n=0~A (Hex Value) | IR04061n | |
| IR05070nn | Volume, nn = 00~14 (Hex Value) | IR03070 | |
| IR04070? | | IR05070nn | Volume, nn = 00~64 (Hex Value) |
| IR05071nn | Treble, nn = 00~0F (Hex Value) | IR03071 | |
| IR04071? | | IR05071nn | Treble, nn = 00~64 (Hex Value) |
| IR05072nn | Bass, nn = 00~0F (Hex Value) | IR03072 | |
| IR04072? | | IR05072nn | Bass, nn = 00~64 (Hex Value) |
| IR04073n | Stereo/Mono, n=0~1 n=0: Mono n=1: Stereo | IR03073 | |
| IR04073? | | IR03073 | |
| | | IR03073 | |
| | | IR04073n | Stereo/Mono, n = 0 or 1 |
| IR05080nn | Brightness, nn = 00~64 (Hex Value) | IR03080 | |
| IR05081nn | Contrast, nn = 00~64 (Hex Value) | IR03081 | |
| IR05082nn | Color, nn = 00~64 (Hex Value) | IR03082 | |
| IR05083nn | Tint, nn = 00~64 (Hex Value) | IR03083 | |
| IR05084nn | Sharpness, nn = 00~06 (Hex Value) | IR03084 | |
| IR05085nn | Frequency, nn = 00~64 (Hex Value) | IR03085 | |
| IR05086nn | Tracking, nn = 00~64 (Hex Value) | IR03086 | |
| IR05087nn | H. Position, nn = 00~64 (Hex Value) | IR03087 | |
| IR05088nn | V. Position, nn = 00~64 (Hex Value) | IR03088 | |
| IR04080? | | IR05080nn | Brightness, nn = 00~64 (Hex Value) |
| IR04081? | | IR05081nn | Contrast, nn = 00~64 (Hex Value) |
| IR04082? | | IR05082nn | Color, nn = 00~64 (Hex Value) |
| IR04083? | | IR05083nn | Tint, nn = 00~64 (Hex Value) |
| IR04084? | | IR05084nn | Sharpness, nn = 00~64 (Hex Value) |
| IR04085? | | IR05085nn | Frequency, nn = 00~64 (Hex Value) |
| IR04086? | | IR05086nn | Tracking, nn = 00~64 (Hex Value) |
| IR04087? | | IR05087nn | H. Position, nn = 00~64 (Hex Value) |
| IR04088? | | IR05088nn | V. Position, nn = 00~64 (Hex Value) |
| POWER ON and OFF | | | |
| IR04090n | Power, n=0~1 n=0: Power OFF n=1: Power ON | IR03090 | |
| IR04090? | | IR03090 | |
| | | IR04090n | |
| IR07092nnnn | Set ID, nnnn=0~9999 | IR03092 | |
| IR04092? | | IR07092nnnn | |
| IR03093 | Lamp Reset | IR03093 | |
| IR04094n | Lamp Reminding, n=0~1 n=0: OFF n=1: ON | IR03094 | |
| IR04094? | | IR03094 | |
| | | IR04094n | |
| IR04095? | Read F/W Version | IR07095nnnn | Response command string and 4 alphabets |
| IR04096? | Read ID | IR07096nnnn | Response command string and 4 digitals |
| IR04097? | Read LampHour | IR07097nnnn | Response command string and 4 digitals |
| IR04098? | Read Projector Status 1 | IR1F098nnnn...n | Response command string and 28 digitals |
| IR04099? | Read Projector Status 2 | IR31099nnnn...n | Response command string and 34 digitals |
| IR07100nnnn | Gain Red, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) | IR03100 | |
| IR07101nnnn | Gain Green, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) | IR03101 | |
| IR07102nnnn | Gain Blue, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) | IR03102 | |
| IR07103nnnn | Offset Red, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) | IR03103 | |
| IR07104nnnn | Offset Green, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) | IR03104 | |
| IR07105nnnn | Offset Blue, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) | IR03105 | |
| IR04100? | | IR07100nnnn | Gain Red, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) |
| IR04101? | | IR07101nnnn | Gain Green, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) |
| IR04102? | | IR07102nnnn | Gain Blue, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) |
| IR04103? | | IR07103nnnn | Offset Red, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) |
| IR04104? | | IR07104nnnn | Offset Green, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) |
| IR04105? | | IR07105nnnn | Offset Blue, nnnn = FF9C~FFFF-0000-0001~0064(Hex Value) |

| Projector Send to Network Module (IRxx9xx...) | | Network Module Response to Projector | |
|---|---|--------------------------------------|---|
| Command | Description | Response | Description |
| IR04901? | Request IP Configuration | IR25901n | n=AAAAAAAAANNNNNNNNGGGGGGGDDDDDDPC A: IP Address from MSB to LSB(ex. 10.0.21.22->0A001516) N: Subnet Mask G: Gateway D: DNS P: DHCP Mode(0/1: Off/ON) C: RJ-45 Connector State(0/1: Disconnect/Connect) |
| IR0A902nnnnnn | Send Email Alert Byte1: Error State(0/1/2/3/4/5: Normal/Thermal Switch Error/Fan Lock/Over Temperature/Lamp Hours Running Out/Lamp Fail) Byte2~5: Lamp Hour 4 bytes Hex. string Byte6~7: Temperature 2 bytes Hex. string | IR03902 IR0500010 | Response "IR0500010" SMTP not ready |
| IR03903 | Set Network Module to Default | IR03903 | |
| IR22904n | Setting IP Configuration n=AAAAAAAAANNNNNNNNGGGGGGGDDDDDDDD A: IP Address from MSB to LSB(ex. 10.0.21.22->0A001516) N: Subnet Mask G: Gateway D: DNS | IR03904 | |
| IR04905n | Setting DHCP Mode, n=1/0 : DHCP ON/OFF | IR03905 | |

Additional Resources

(IR04098?)Projector status bytes description

| | | |
|------------------------|---|-----------|
| Byte1: Power State | 0/1/2: Power OFF/Power ON/Cooling 0/1/2/3/4/5: Normal/Thermal Switch Error/Fan Lock/ Over Temperature/Lamp Hours Running Out/Lamp Fail | IR04090n |
| Byte2: Error State | String 4 digitals, (MSB~LSB) | |
| Byte3~6: Lamp Hour | 0~9: D-sub Analog RGB~Composite Video | |
| Byte7: Current Source | 0/1/2/3: 4:3/16:9/Window/Native | |
| Byte8: Display Format | 0/1/2/3/4: PC/Movie/Game/sRGB/User | |
| Byte9: Display Mode | 0/1: OFF/ON | |
| Byte10: Digital Source | 00~14 (Hex Value) | IR05070nn |
| Byte11~12: Volume | 00~0F (Hex Value) | IR05071nn |
| Byte13~14: Treble | 00~0F (Hex Value) | IR05072nn |
| Byte15~16: Bass | 00~64 (Hex Value) | IR05080nn |
| Byte17~18: Brightness | 00~64 (Hex Value) | IR05081nn |
| Byte19~20: Contrast | 00~64 (Hex Value) | IR05082nn |
| Byte21~22: Color | 00~64 (Hex Value) | IR05083nn |
| Byte23~24: Tint | 0/1: AV Mute OFF/AV Mute | |
| Byte25: AV Mute | 0/1: Unfreeze/Freeze | |
| Byte26: Freeze | 0/1: OFF/ON | |
| Byte27: Mute | 0/1: Mono/Stereo | IR04073n |
| Byte28: Stereo/Mono | 0/1: Fail/Success | |
| Byte29: Lamp Litted | | |

(IR04099?)Projector status 2, bytes description

| | | |
|------------------------------|---|---------------------------------------|
| Byte1: Screen | 0/1/2: Single/PIP Window/Split Screen | |
| Byte2: PIP Size | 0/1/2: Small/Normal/Large | |
| Byte3: PIP Location | 0/1/2/3/4: Left-Top/Right-Top/Center/Left-Bottom/Right-Bottom | |
| Byte4: Projection Mode | 0/1/2/3/4: Ceiling/Rear Ceiling/Front/Rear Front | |
| Byte5: Auto Shutdown | 0/1/2/3/4/5/6: OFF/1 min/3 min/4 min/10 min/20 min/30 min | |
| Byte6: Brite Mode | 0/1: OFF/ON | |
| Byte7: Image Shift | 0/1/2: OFF/Position 1/Position 2 | |
| Byte8~11: V. Image Shift | FF7D~FFFF-0000-0001~0083(Hex Value) | User input value is from -131 to +131 |
| Byte12~13: Zoom Value | F6~FF-00-01~0A(Hex Value) | User input value is from -10 to +10 |
| Byte14: White Peaking | 0~A (Hex Value) | IR04061n |
| Byte15: Blanking Color | 0/1: Blue/Black | |
| Byte16: Lamp Reminding | 0/1: OFF/ON | |
| Byte17~18: Language | 00~0D | IR05067nn |
| Byte19~20: Sharpness | 00~06 (Hex Value) | IR05084nn |
| Byte21~22: Frequency | 00~64 (Hex Value) | IR05085nn |
| Byte23~24: Tracking | 00~64 (Hex Value) | IR05086nn |
| Byte25~26: V. Position | 00~64 (Hex Value) | IR05088nn |
| Byte27~28: H. Position | 00~64 (Hex Value) | IR05087nn |
| Byte29~30: Color Temperature | 00/01/02: Low/Medium/High | IR04032n |
| Byte31~32: V. Keystone | D8 ~ FF-00 ~ 28 (Hex Value) | User input value is from -40 to +40 |
| Byte33~34: H. Keystone | D8 ~ FF-00 ~ 28 (Hex Value) | User input value is from -40 to +40 |
| Byte35: Degamma | 0~3 (Hex Value) | |
| Byte36: Zoom | 0/1/2: OFF/Zoom 1/Zoom 2 | |