# SP-HDPOC1X4 Tesira Command Sheet

For Tesira Command String blocks · Version 1.0.4

**Every command the SP-HDPOC1X4 takes over the network, as fixed strings for Tesira Command String blocks.** The unit is controlled on its own control port (TCP 8001); no other KanexPro software is needed. The same strings, with their bytes, are in `KanexPro-SP-HDPOC1X4-Tesira-Command-Sheet-1.0.4.csv` for copying.

> **Before you start —** the Tesira server must reach the SP-HDPOC1X4 on TCP port 8001. Give the unit a fixed IP address (or a DHCP reservation).

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## 1. CONNECTION

| HOW THE UNIT IS CONTROLLED | |
|---|---|
| **Transport** | TCP, port 8001 (the unit's control port) |
| **Line ending** | "!" (hex `21`), after every string |
| **Pacing** | One string at a time. The unit answers within about 1.5 s; wait for the answer before the next string. |
| **A refused string** | The unit answers with an error line. |

## 2. USING THE STRINGS

1. Point the Command String block at the unit's IP address, TCP port 8001.
2. Add one command per row of section 3: its string, then the line ending (hex `21`).
3. Wire each command to the control that should send it. The Bytes column is the whole string as it goes on the wire, to compare with a network capture.

Settings that only the unit's own web page has (its network, logins and firmware) stay on that page.

## 3. COMMANDS

26 strings.

| # | Command | String | Bytes (hex, with the line ending) |
|---|---|---|---|
| 1 | **Picture: CAT out 1: Send a picture on** | `s cat 1 stream 1` | `73 20 63 61 74 20 31 20 73 74 72 65 61 6D 20 31 21` |
| 2 | **Picture: CAT out 1: Send a picture off** | `s cat 1 stream 0` | `73 20 63 61 74 20 31 20 73 74 72 65 61 6D 20 30 21` |
| 3 | **Picture: CAT out 2: Send a picture on** | `s cat 2 stream 1` | `73 20 63 61 74 20 32 20 73 74 72 65 61 6D 20 31 21` |
| 4 | **Picture: CAT out 2: Send a picture off** | `s cat 2 stream 0` | `73 20 63 61 74 20 32 20 73 74 72 65 61 6D 20 30 21` |
| 5 | **Picture: CAT out 3: Send a picture on** | `s cat 3 stream 1` | `73 20 63 61 74 20 33 20 73 74 72 65 61 6D 20 31 21` |
| 6 | **Picture: CAT out 3: Send a picture off** | `s cat 3 stream 0` | `73 20 63 61 74 20 33 20 73 74 72 65 61 6D 20 30 21` |

| | | | |
|---|---|---|---|
| 7 | Picture: CAT out 4: Send a picture on | `s cat 4 stream 1` | `73 20 63 61 74 20 34 20 73 74 72 65 61 6D 20 31 21` |
| 8 | Picture: CAT out 4: Send a picture off | `s cat 4 stream 0` | `73 20 63 61 74 20 34 20 73 74 72 65 61 6D 20 30 21` |
| 9 | Picture: HDMI loop out picture on | `s hdmi stream 1` | `73 20 68 64 6D 69 20 73 74 72 65 61 6D 20 31 21` |
| 10 | Picture: HDMI loop out picture off | `s hdmi stream 0` | `73 20 68 64 6D 69 20 73 74 72 65 61 6D 20 30 21` |
| 11 | Picture: CAT out 1: Cable length mode = Normal (default) | `s cat 1 dsc mode 1` | `73 20 63 61 74 20 31 20 64 73 63 20 6D 6F 64 65 20 31 21` |
| 12 | Picture: CAT out 1: Cable length mode = 35 m cable | `s cat 1 dsc mode 2` | `73 20 63 61 74 20 31 20 64 73 63 20 6D 6F 64 65 20 32 21` |
| 13 | Picture: CAT out 1: Cable length mode = 70 m cable | `s cat 1 dsc mode 3` | `73 20 63 61 74 20 31 20 64 73 63 20 6D 6F 64 65 20 33 21` |
| 14 | Picture: CAT out 2: Cable length mode = Normal (default) | `s cat 2 dsc mode 1` | `73 20 63 61 74 20 32 20 64 73 63 20 6D 6F 64 65 20 31 21` |
| 15 | Picture: CAT out 2: Cable length mode = 35 m cable | `s cat 2 dsc mode 2` | `73 20 63 61 74 20 32 20 64 73 63 20 6D 6F 64 65 20 32 21` |
| 16 | Picture: CAT out 2: Cable length mode = 70 m cable | `s cat 2 dsc mode 3` | `73 20 63 61 74 20 32 20 64 73 63 20 6D 6F 64 65 20 33 21` |
| 17 | Picture: CAT out 3: Cable length mode = Normal (default) | `s cat 3 dsc mode 1` | `73 20 63 61 74 20 33 20 64 73 63 20 6D 6F 64 65 20 31 21` |
| 18 | Picture: CAT out 3: Cable length mode = 35 m cable | `s cat 3 dsc mode 2` | `73 20 63 61 74 20 33 20 64 73 63 20 6D 6F 64 65 20 32 21` |
| 19 | Picture: CAT out 3: Cable length mode = 70 m cable | `s cat 3 dsc mode 3` | `73 20 63 61 74 20 33 20 64 73 63 20 6D 6F 64 65 20 33 21` |
| 20 | Picture: CAT out 4: Cable length mode = Normal (default) | `s cat 4 dsc mode 1` | `73 20 63 61 74 20 34 20 64 73 63 20 6D 6F 64 65 20 31 21` |
| 21 | Picture: CAT out 4: Cable length mode = 35 m cable | `s cat 4 dsc mode 2` | `73 20 63 61 74 20 34 20 64 73 63 20 6D 6F 64 65 20 32 21` |
| 22 | Picture: CAT out 4: Cable length mode = 70 m cable | `s cat 4 dsc mode 3` | `73 20 63 61 74 20 34 20 64 73 63 20 6D 6F 64 65 20 33 21` |
| 23 | Sound: Mute the audio outputs on | `s audio mute 1` | `73 20 61 75 64 69 6F 20 6D 75 74 65 20 31 21` |
| 24 | Sound: Mute the audio outputs off | `s audio mute 0` | `73 20 61 75 64 69 6F 20 6D 75 74 65 20 30 21` |
| 25 | Power: Power On | `s power 1` | `73 20 70 6F 77 65 72 20 31 21` |
| 26 | Power: Power Standby | `s power 0` | `73 20 70 6F 77 65 72 20 30 21` |

## 4. READING THE UNIT BACK

Send these to read the unit back (on a timer, or after a change).

| # | String | Bytes (hex) | The reply gives |
|---|---|---|---|
| 1 | `r power` | `72 20 70 6F 77 65 72 21` | Power |
| 2 | `r link in` | `72 20 6C 69 6E 6B 20 69 6E 21` | Source connected |
| 3 | `r cat 1 stream` | `72 20 63 61 74 20 31 20 73 74 72 65 61 6D 21` | Send a picture |

| | | | |
|---|---|---|---|
| 4 | `r cat 2 stream` | `72 20 63 61 74 20 32 20 73 74 72 65 61 6D 21` | Send a picture |
| 5 | `r cat 3 stream` | `72 20 63 61 74 20 33 20 73 74 72 65 61 6D 21` | Send a picture |
| 6 | `r cat 4 stream` | `72 20 63 61 74 20 34 20 73 74 72 65 61 6D 21` | Send a picture |
| 7 | `r hdmi stream` | `72 20 68 64 6D 69 20 73 74 72 65 61 6D 21` | HDMI loop out picture |
| 8 | `r cat 1 dsc mode` | `72 20 63 61 74 20 31 20 64 73 63 20 6D 6F 64 65 21` | Cable length mode |
| 9 | `r cat 2 dsc mode` | `72 20 63 61 74 20 32 20 64 73 63 20 6D 6F 64 65 21` | Cable length mode |
| 10 | `r cat 3 dsc mode` | `72 20 63 61 74 20 33 20 64 73 63 20 6D 6F 64 65 21` | Cable length mode |
| 11 | `r cat 4 dsc mode` | `72 20 63 61 74 20 34 20 64 73 63 20 6D 6F 64 65 21` | Cable length mode |
| 12 | `r audio mute` | `72 20 61 75 64 69 6F 20 6D 75 74 65 21` | Mute the audio outputs |
| 13 | `r fw version` | `72 20 66 77 20 76 65 72 73 69 6F 6E 21` | Firmware |

## 5. TROUBLESHOOTING

**Nothing happens.**
Check the unit's IP address and that TCP 8001 is open between the Tesira server and the unit (same network or VLAN, or routed; no firewall in between). Check the line ending is sent after each string.

**The unit answers with an error.**
The string or its value is not one it takes, or the unit is in standby: turn it on first.