

## Rotel X430 RS232 / IP ASCII Controller Command List

| Date       | Version | Update Description     |
|------------|---------|------------------------|
| 04/21/2026 | 1.00    | Original Specification |
| 5/15/2026  | 1.01    | Add ARC Command Code   |

The X430 supports an ASCII based RS232 and IP protocol. The RS232 hardware does not support flow control so care needs to be taken when sending and receiving data to avoid packet loss.

All commands sent to the attached Rotel device must have a terminating “!” character.

**Example Command:** power\_on!

**Note:** Do not include any spaces in the command, and do not include a carriage return or line feed after the command, only the “!” terminating character.

Status information from the attached Rotel product will have a terminating “\$” character. It is up to the sending/receiving control application to properly parse and process the packets.

### Connection Settings

| Baud Rate | Parity | Valid Data Bits | Stop Bit Value | Handshaking | Data Type |
|-----------|--------|-----------------|----------------|-------------|-----------|
| 115200    | N      | 8               | 1              | None        | String    |

### IP Control Settings

The X430 will accept and respond to IP control commands if the product is connected to a local network and has a valid IP address.

Commands will be accepted via TCP port 9596, and the unit will send responses back via the same port. The command and response format is identical to the serial commands.

### Communication Protocol

Command and response messages are included on the following pages. Automatic status update information can be enabled/disabled using the “rs232\_update\_on” and “rs232\_update\_off” commands.

With RS232 update set to ON, any status changes to the unit will be transmitted via RS232. With RS232 update set to OFF, the unit will not send any feedback unless polled by the controller.

## Section 1: Control Command List

| X430 ASCII                         | Command Description             | Unit Response        |
|------------------------------------|---------------------------------|----------------------|
| <b>POWER &amp; VOLUME COMMANDS</b> |                                 |                      |
| power_on!                          | Power On                        | power=on\$           |
| power_off!                         | Power Off                       | power=standby\$      |
| power_toggle!                      | Power Toggle                    | power=on/standby\$   |
| vol_up!                            | Volume Up                       | volume=##\$          |
| vol_dwn!                           | Volume Down                     | volume=##\$          |
| vol_nn!                            | Set Volume to level n (00 - 96) | volume=##\$          |
| mute!                              | Mute Toggle                     | mute=on/off\$        |
| mute_on!                           | Mute On                         | mute=on\$            |
| mute_off!                          | Mute Off                        | mute=off\$           |
| <b>SOURCE SELECTION COMMANDS</b>   |                                 |                      |
| cd!                                | Source CD                       | source=cd\$          |
| coax1!                             | Source Coax 1                   | source=coax1\$       |
| coax2!                             | Source Coax 2                   | source=coax2\$       |
| coax3!                             | Source Coax 3                   | source=coax3\$       |
| opt1!                              | Source Optical 1                | source=opt1\$        |
| opt2!                              | Source Optical 2                | source=opt2\$        |
| opt3!                              | Source Optical 3                | source=opt3\$        |
| aux!                               | Source Aux                      | source=aux\$         |
| tuner!                             | Source Tuner                    | source=tuner\$       |
| phono!                             | Source Phono                    | source=phono\$       |
| bluetooth!                         | Source Bluetooth                | source=bluetooth\$   |
| bal_xlr!                           | Source XLR                      | source=bal_xlr\$     |
| pcusb!                             | Source PC-USB                   | source=pcusb\$       |
| arc!                               | Source ARC                      | source=arc\$         |
| <b>SOURCE CONTROL COMMANDS</b>     |                                 |                      |
| play!                              | Play Source                     | n/a                  |
| stop!                              | Stop Source                     | n/a                  |
| pause!                             | Pause Source                    | n/a                  |
| trkf!                              | Track Forward/Tune Up           | n/a                  |
| trkb!                              | Track Backward/Tune Down        | n/a                  |
| <b>TONE CONTROL COMMANDS</b>       |                                 |                      |
| bypass_on!                         | Tone Bypass On                  | bypass=on\$          |
| bypass_off!                        | Tone Bypass Off                 | bypass=off\$         |
| bass_up!                           | Bass Up                         | bass=000/+##/-##\$   |
| bass_down!                         | Bass Down                       | bass=000/+##/-##\$   |
| bass_-nn!                          | Set Bass to -n (n = 01-10)      | bass=-##\$           |
| bass_000!                          | Set Bass to 0                   | bass=000\$           |
| bass_+nn!                          | Set Bass to +n (n = 01-10)      | bass=+##\$           |
| treble_up!                         | Treble Up                       | treble=000/+##/-##\$ |

| X430 ASCII                      | Command Description                | Unit Response         |
|---------------------------------|------------------------------------|-----------------------|
| treble_down!                    | Treble Down                        | treble=000/+##/-##\$  |
| treble_-nn!                     | Set Treble to -n (n = 01-10)       | treble=-##\$          |
| treble_000!                     | Set Treble to 0                    | treble=000\$          |
| treble_+nn!                     | Set Treble to +n (n = 01-10)       | treble=+##\$          |
| <b>BALANCE CONTROL COMMANDS</b> |                                    |                       |
| balance_r!                      | Balance Right                      | balance=000/l##/r##\$ |
| balance_l!                      | Balance Left                       | balance=000/l##/r##\$ |
| balance_lnn!                    | Set Balance to left n (n = 01-15)  | balance=l##\$         |
| balance_000!                    | Set Balance to 0                   | balance=000\$         |
| balance_rnn!                    | Set Balance to right n (n = 01-15) | balance=r##\$         |
| <b>SPEAKER COMMANDS</b>         |                                    |                       |
| speaker_a!                      | Toggle Speaker A Output            | speaker=a/a_b/off\$   |
| speaker_b!                      | Toggle Speaker B Output            | speaker=b/a_b/off\$   |
| <b>RS232 FEEDBACK COMMANDS</b>  |                                    |                       |
| rs232_update_on!                | Set RS232 Update to Auto (On)      | update_mode=auto\$    |
| rs232_update_off!               | Set RS232 Update to Manual (Off)   | update_mode>manual\$  |

## Section 2: Feedback Request Command List

|                            |                              |
|----------------------------|------------------------------|
| <b>Command:</b>            | power?                       |
| <b>Description:</b>        | Request current power status |
| <b>Return String(s):</b>   | power=on\$ / power=standby\$ |
| <b>Return Description:</b> | Current power status         |
| <b>Example:</b>            | power=on\$                   |

|                            |   |
|----------------------------|---|
| <b>Command:</b>            | source?   |
| <b>Description:</b>        | Request current source  |
| <b>Return String(s):</b>   | source=cd\$ / source=coax1\$ / source=coax2\$ / source=coax3\$ source=opt1\$ / source=opt2\$ / source=opt3\$ / source=tuner\$ / source=phono\$ / source=aux\$ / source=pc_usb\$ / source=bal_xlr\$ / source=bluetooth\$ |
| <b>Return Description:</b> | Current source  |
| <b>Example:</b>            | source=usb\$  |

|                            |  |
|----------------------------|--|
| <b>Command:</b>            | name?  |
| <b>Description:</b>        | Request current source name                    |
| <b>Return String(s):</b>   | name=custom_input_name\$                       |
| <b>Return Description:</b> | Current source's name – default or custom name |
| <b>Example:</b>            | name=custom_input_name\$                       |

|                            |                              |
|----------------------------|------------------------------|
| <b>Command:</b>            | volume?                      |
| <b>Description:</b>        | Request current volume value |
| <b>Return String(s):</b>   | volume=###\$                 |
| <b>Return Description:</b> | 2 digit current volume level |
| <b>Example:</b>            | volume=40\$                  |

|                            |                             |
|----------------------------|-----------------------------|
| <b>Command:</b>            | mute?                       |
| <b>Description:</b>        | Request current mute status |
| <b>Return String(s):</b>   | mute=on\$ / mute=off\$      |
| <b>Return Description:</b> | Current mute status         |
| <b>Example:</b>            | mute=off\$                  |

|                            |                                   |
|----------------------------|-----------------------------------|
| <b>Command:</b>            | bypass?                           |
| <b>Description:</b>        | Request current tone bypass state |
| <b>Return String(s):</b>   | bypass=on\$ / bypass=off\$        |
| <b>Return Description:</b> | Current tone bypass state         |
| <b>Example:</b>            | bypass=off\$                      |

|                            |                                   |
|----------------------------|-----------------------------------|
| <b>Command:</b>            | bass?                             |
| <b>Description:</b>        | Request current bass level        |
| <b>Return String(s):</b>   | bass=####\$ (+01-10, -01-10, 000) |
| <b>Return Description:</b> | Current tone control bass level   |
| <b>Example:</b>            | bass=+02\$                        |

|                            |                                     |
|----------------------------|-------------------------------------|
| <b>Command:</b>            | treble?                             |
| <b>Description:</b>        | Request current treble level        |
| <b>Return String(s):</b>   | treble=####\$ (+01-10, -01-10, 000) |
| <b>Return Description:</b> | Current tone control treble level   |
| <b>Example:</b>            | treble=-01\$                        |

|                            |                                      |
|----------------------------|--------------------------------------|
| <b>Command:</b>            | balance?                             |
| <b>Description:</b>        | Request current balance setting      |
| <b>Return String(s):</b>   | balance=####\$ (l01-15, r01-15, 000) |
| <b>Return Description:</b> | Current balance setting              |
| <b>Example:</b>            | balance=r03\$                        |

|                            |   |
|----------------------------|---|
| <b>Command:</b>            | speaker?  |
| <b>Description:</b>        | Request current active speaker outputs                    |
| <b>Return String(s):</b>   | speaker=a\$ / speaker=b\$ / speaker=a_b\$ / speaker=off\$ |
| <b>Return Description:</b> | Current active speaker outputs                            |
| <b>Example:</b>            | speaker=a\$   |

|                          |  |
|--------------------------|--|
| <b>Command:</b>          | freq?  |
| <b>Description:</b>      | Request current frequency for digital source input                           |
| <b>Return String(s):</b> | freq=off\$ / freq=32\$ / freq=44.1\$ / freq=48\$ / freq=88.2\$ / freq=96\$ / |

|                            |   |
|----------------------------|---|
|                            | freq=176.4\$ / freq=192\$ / freq=384\$ / freq=2.8m / freq=not_support |
| <b>Return Description:</b> | Current frequency for digital source input                            |
| <b>Example:</b>            | freq=48\$   |

|                            |                                   |
|----------------------------|-----------------------------------|
| <b>Command:</b>            | pcusb?                            |
| <b>Description:</b>        | Request current PC-USB class      |
| <b>Return String(s):</b>   | pcusb_class=1\$ / pcusb_class=2\$ |
| <b>Return Description:</b> | Current PC-USB class              |
| <b>Example:</b>            | pcusb_class=2\$                   |

|                            |                                      |
|----------------------------|--------------------------------------|
| <b>Command:</b>            | version?                             |
| <b>Description:</b>        | Request the current software version |
| <b>Return String:</b>      | version=#.##\$                       |
| <b>Return Description:</b> | Rotel current software version       |
| <b>Example:</b>            | version=1.53\$                       |

|                            |                                     |
|----------------------------|-------------------------------------|
| <b>Command:</b>            | pc_version?                         |
| <b>Description:</b>        | Request the PC-USB software version |
| <b>Return String:</b>      | pc_version=#.##\$                   |
| <b>Return Description:</b> | Rotel PC-USB software version       |
| <b>Example:</b>            | pc_version=1.13\$                   |

|                            |                                       |
|----------------------------|---------------------------------------|
| <b>Command:</b>            | ip?                                   |
| <b>Description:</b>        | Request the IP address of the product |
| <b>Return String:</b>      | ipaddress=###.###.###.###\$           |
| <b>Return Description:</b> | Current IP address                    |
| <b>Example:</b>            | ipaddress =192.168.100.8\$            |

|                            |  |
|----------------------------|--|
| <b>Command:</b>            | mac?                                   |
| <b>Description:</b>        | Request the MAC address of the product |
| <b>Return String:</b>      | mac=#####\$                            |
| <b>Return Description:</b> | MAC address (uppercase characters)     |
| <b>Example:</b>            | mac=0CEFAF90125E\$                     |

|                            |                          |
|----------------------------|--------------------------|
| <b>Command:</b>            | model?                   |
| <b>Description:</b>        | Request the model number |
| <b>Return String:</b>      | model=text\$             |
| <b>Return Description:</b> | Rotel model number       |
| <b>Example:</b>            | model=X430\$             |

|                            |   |
|----------------------------|---|
| <b>Command:</b>            | discover?   |
| <b>Description:</b>        | Request the device to identify itself on the network    |
| <b>Return String:</b>      | discover=ip=###.###.###.### port=##### mac=#####\$      |
| <b>Return Description:</b> | Device's IP address, port number and MAC address        |
| <b>Example:</b>            | discover=ip=192.168.100.25 port=9596 mac=0cefaf90125e\$ |