



Advanced IP Configuration for

RVW130



Appendix A

Advanced IP configurations

These configurations require knowledge about IP networking protocols and multicasting!

Do not attempt to run any commands, modify files, or change any other settings apart from the specific configurations documented in this addendum from the CLI interface! Doing so will void the warranty!

The CLI can be accessed either via RS-232 or IP (using telnet).

Connect using RS-232

Connect to the «Serial 1» interface of the transmitter or receiver device using the included DB9 to RJ11 cable. Use the following serial settings:

Baudrate: 115 200 bps

Data bits: 8 bits

Parity: even

stop bits: 1

Flow control: none

or

Connect over IP

Telnet to device IP on port 24 (port 24 is for the serial control purpose)

```
telnet xxx.xxx.xxx.xxx 24
```

Use "root" to login

Optional:

Connect with RS232 over IP (port 6752 is for the serial extension purpose)

```
telnet xxx.xxx.xxx.xxx 6752
```

Basic settings

To list hostnames and IP information for all connected MediaCento IPX devices run:

```
node_list
```

To view all current configured parameters run:

```
astparam dump
```

To reset to factory default run:

```
reset_to_default.sh
```

To change baudrate of the serial interface use the following command (replace X with baudrate):
`stty X -F /dev/ttyS0`

To make the configuration easier, it may be helpful disabling the link to avoid unwanted debug information while doing the configuration. This must be done after every reboot with every device:

To disable the link:

```
ast_send_event -1 e_stop_link
```

To re-enable link, reboot or run this command.

```
ast_send_event -1 e_reconnect
```

IP settings

Auto: The default setting. In auto mode the devices will rely on the zeroconf protocol to automatically assign available IP addresses in the private IP domain 169.154.xxx.xx. Using these addresses ensures there is no risk for IP conflicts.

DHCP client: The device will get IP addresses assigned from a local DHCP server.

Static: Use static IP addressing. The address and netmask must be assigned using the serial CLI interface.

To configure IP mode use the following command:

```
astparam s ip_mode <mode>
```

Replace <mode> with one of the following: autoip, dhcp or static.

Save changes

```
astparam save
```

Reboot device:

```
reboot
```

If “static” is selected use the following commands to configure IP address and netmask and save settings:

Configure address, netmask and save settings:

```
astparam s ipaddr xxx.xxx.xxx.xxx
```

```
astparam s netmask xxx.xxx.xxx.xxx
```

```
astparam save
```

Reboot device:

```
reboot
```

Multicast group settings (ID)

Pre-defined multicast addresses can be selected by using the rotary switch buttons on the devices (recommended). See table for complete overview of the full address for each channel:

	Multicast address				Channel ID
	B0	B1	B2	B3	ID
225.0.	0.	0	0	0	0
225.0.	1.	0	0	0	1
225.0.	0.	1	0	0	2
225.0.	1.	1	0	0	3
225.0.	0.	0	1	0	4
225.0.	1.	0	1	0	5
225.0.	0.	1	1	0	6
225.0.	1.	1	1	0	7
225.0.	0.	0	0	1	8
225.0.	1.	0	0	1	9
225.0.	0.	1	0	1	A
225.0.	1.	1	0	1	B
225.0.	0.	0	1	1	C
225.0.	1.	0	1	1	D
225.0.	0.	1	1	1	E
225.0.	1.	1	1	1	F

The multicast addresses can also be defined manually from the CLI. Manual settings in the CLI will override the rotary switch configurations. The settings needs to be applied to transmitter and all receiver devices.

Transmitter

Change the multicast group IP (B0-B3 refers to the bits in the table above):

```
astparam s multicast_ip 225.0.B0.B1B2B3
```

Change the hostname ID of the transmitter (B0-B3 refers to the bits in the table above):

```
astparam s hostname_id B0B1B2B3
```

Trigger hostname change:

```
ast_send_event -1 e_chg_hostname
```

To avoid settings being lost after reboot, disable reset on boot:

```
astparam s reset_ch_on_boot_n
```

Save changes:

```
astparam save
```

Reboot device:

```
reboot
```

Receiver

Change the multicast group IP (B0-B3 refers to the bits in the table above):

```
astparam s multicast_ip 225.0.B0.B1B2B3
```

Select the multicast group transmitter to connect to (B0-B3 refers to the bits in the table above):

```
astparam s ch_select B0B1B2B3
```

To avoid settings being lost after reboot, disable reset on boot:

```
astparam s reset_ch_on_boot_n
```

Save changes:

```
astparam save
```

Reboot device:

```
reboot
```