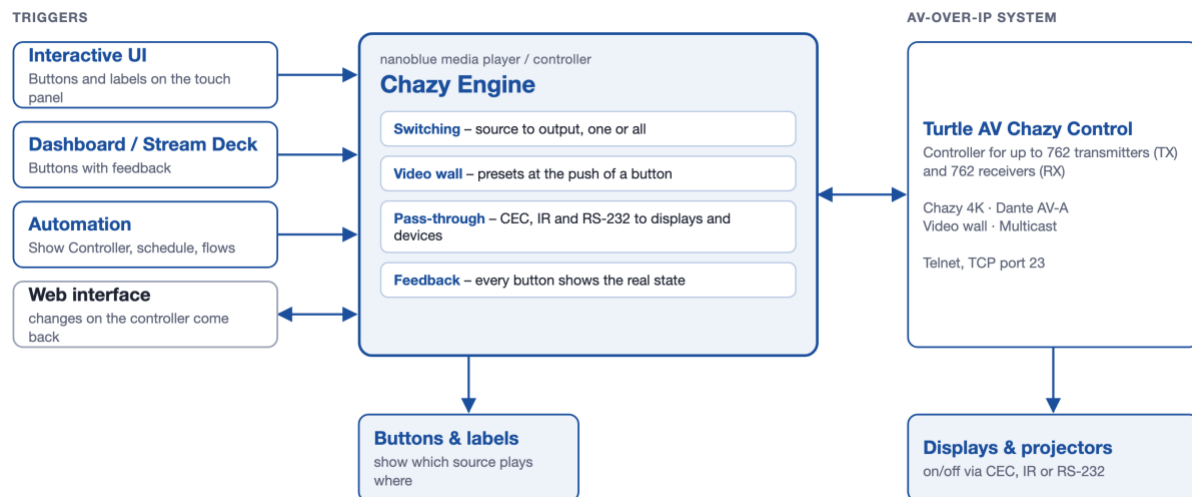


nanobblue® Turtle AV Chazy Control

Operate AV over IP with Chazy 4K and Dante AV-A – switch sources, recall video wall presets, control displays and connected devices



Overview: touch panel, buttons and automation trigger functions. The Chazy Engine translates them for the Chazy Control and shows on every button which source is playing where.

What it is about

With AV over IP from Turtle AV, video, audio, USB and control signals run over the network: a transmitter (TX) picks up a source, e.g. a laptop, media player or camera, and a receiver (RX) outputs it on the display. Which receiver shows which transmitter is decided by the **Chazy Control**. This lets meeting rooms, lecture halls, bars and video walls be routed flexibly.

In daily use, the operator wants to see very little of this: a button “Laptop to screen”, one for “all displays off” and a display of what is currently playing.

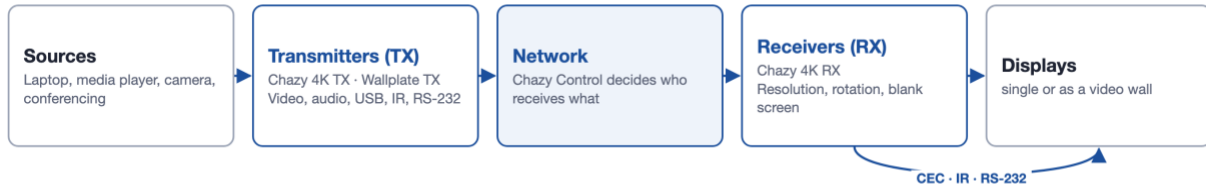
nanobblue Turtle AV Chazy is a ready-made building block for the nanobblue media player and controller. It talks to the Chazy Control through its open command interface (**Telnet, TCP port 23**) and makes every function available as a button or display in the **Interactive UI**. Nothing has to be programmed for a new project: the function is defined by the ID of the control element.

The engine runs directly on the nanobblue device in the local network of the installation. It reacts instantly and needs no internet connection.

Key features

What can be controlled

The system consists of transmitters, receivers and the controller between them. All of it can be controlled:



Each receiver shows exactly one transmitter – or, as part of a video wall, a section of it.

Structure: source → transmitter → network → receiver → display. The receiver also controls the display via CEC, IR or RS-232.

Area	Functions
Switching	Transmitter to receiver – one, several or all at once; receiver without source
Individual signal paths	Assign video, audio, IR, RS-232, USB and CEC separately, e.g. audio always from the conferencing system
Receiver output	HDMI on / off, blank screen, on-screen display (OSD), resolution (pass-through up to 2160p60), rotation by 90°, 180°, 270°
Video wall	Recall presets with one press, switch receivers between full image and wall section
Displays	On / standby via CEC – no extra cabling, over the HDMI cable at the receiver
Connected devices	Send IR codes and RS-232 commands to projectors, displays or cameras, device response comes back
Relays	Switch relay contacts on transmitters and receivers, e.g. for a projection screen or lighting
Status	Which source plays where, output, blank screen, video wall preset, firmware, connection
Free command	Send any command of the Chazy Control interface – for special functions

Operation in the Interactive UI

The ID of a control element also defines its function. In UI Studio, a button or label is created and given the matching ID – done. Feedback returns to the same ID. The size of the installation does not matter.

Element	ID (example)	Effect
Button	chazy__route__3__1	Transmitter 3 to receiver 1, lit while it is playing there
Button	chazy__route__3__0	Transmitter 3 to all receivers
Button	chazy__mute__1	Blank screen on / off, lit when blanked
Buttons	chazy__output__1__on / __off	HDMI output fixed on / off
Buttons	chazy__display__1__on / __off	Display at receiver 1 on / standby (CEC)
Button	chazy__wall__1__2	Video wall 1 preset 2, lit while active
Button	chazy__res__1__1080p60	Resolution of receiver 1
Label	chazy__src__1__txt	shows which transmitter is playing on receiver 1
Label	chazy__online__txt	shows whether the controller is reachable

- **Source buttons** behave like radio buttons: the active one lights up, the others go dark.
- **Custom commands:** for buttons with RS-232 or IR commands, e.g. “Projector on”, there is an additional small table in the flow. It holds the command, baud rate and receiver.
- **Sync:** whatever is switched from the touch panel is shown on the buttons immediately. Changes made elsewhere, e.g. in the web interface of the controller, are picked up by nanobluet at the regular sync (default: every minute) or with a “Refresh” button.

- **Dashboard and other interfaces:** the state is also available as plain on/off values, e.g. for dashboard buttons or a Stream Deck.

Switching a source – how it works

One press switches video, audio, USB, IR, RS-232 and CEC of the receiver to the new source together. Individual signal paths that are assigned separately stay unchanged.



Several receivers at once, or all of them, work the same way – with one button.

Example: "Laptop to display 1". The controller confirms the command; only then does the button light up.

Video wall

The Chazy Control manages up to nine video walls with nine presets each. A preset defines which source plays on which part of the wall – e.g. one large image across all displays or four sources side by side. The button of the active preset lights up.

Displays and connected devices

- **CEC:** switch displays at the receiver on and off over the HDMI cable – no separate control line.
- **IR:** the receiver sends IR codes in the common Pronto format, e.g. to displays without a network connection.
- **RS-232:** commands as text or hex to projectors, displays or cameras. Baud rate and format are set per command, the device response comes back.

Operation from other processes

- **Show Controller and schedule:** cues or appointments trigger functions, e.g. all displays on and video wall preset "Welcome" in the morning, all displays to standby in the evening.
- **Other flows:** every flow in the nanoblue Editor can send commands, e.g. put the camera on the screen when a video conference starts.

Setup

- **In the nanoblue Editor:** Turtle AV Chazy is a ready-made flow. Only the IP address and – if needed – credentials and the default RS-232 baud rate are entered.
- **In the Chazy Control:** transmitters and receivers are set up in the controller as usual. Their numbers there are the numbers in the IDs.
- **Test mode:** an included test mode simulates a Chazy Control with transmitters and receivers. Interface and processes can be prepared before the system is on site.
- **Persistent:** the configuration is stored on the device and survives restarts and flow updates.
- **First commissioning:** the first run on the real controller is done together with the operator.

Reliable in operation

- **Self-contained:** control and feedback run on the nanoblue device in the local network – even without internet.

- **Confirmed, not assumed:** a button only lights up once the controller has confirmed the command. If it reports an error, e.g. an unknown receiver, the previous state remains.
- **In order:** commands are processed one after another. Even quick sequences of button presses are not lost.
- **Self-healing:** each command opens its own connection. If the controller restarts, operation continues afterwards without intervention; in the meantime the display shows “offline”.

Security

The command interface of the Chazy Control is intended for closed technical networks and transmits unencrypted. The controller is therefore only operated in the local network or a dedicated VLAN of the installation and not exposed to the internet. Remote maintenance of the nanoblue device runs encrypted via the nanoblue VPN as usual.

Supported devices

Device	Connection	Functions	Status
Turtle AV Chazy Control with Chazy 4K TX / RX and Wallplate TX (Dante AV-A)	Telnet, TCP 23	all functions in this overview	implemented and tested in test mode; verified during commissioning
Turtle AV Chazy Control Pro	Telnet / SSH	similar command set with extensions	in preparation
Turtle AV Darwin Control (Darwin HD)	Telnet	same command structure as Chazy Control	on request

Technology at a glance

- Chazy Engine as a flow in the nanoblue Editor on the nanoblue media player or controller.
- Command interface of the Chazy Control via Telnet (TCP port 23, configurable on the controller), one connection per command.
- Up to 762 transmitters and 762 receivers, 9 video walls with 9 presets each.
- Integration with Interactive UI, Dashboard, Show Controller, schedule and all flows in the nanoblue Editor.

Typical applications

- Meeting rooms: laptop, camera and media player to screen and displays at the push of a button.
- Lecture halls and training rooms: one source on all displays, audio fixed from the sound system.
- Hospitality and sports bars: choose programmes per area, video wall presets for events.
- Reception and showroom: video wall with fixed presets via the schedule, displays off at night.

In preparation

Display in the nanoblue connection monitor · ready-made example page for the Interactive UI with source matrix and video wall · installation via the nanoblue flow catalogue · support for Chazy Control Pro.