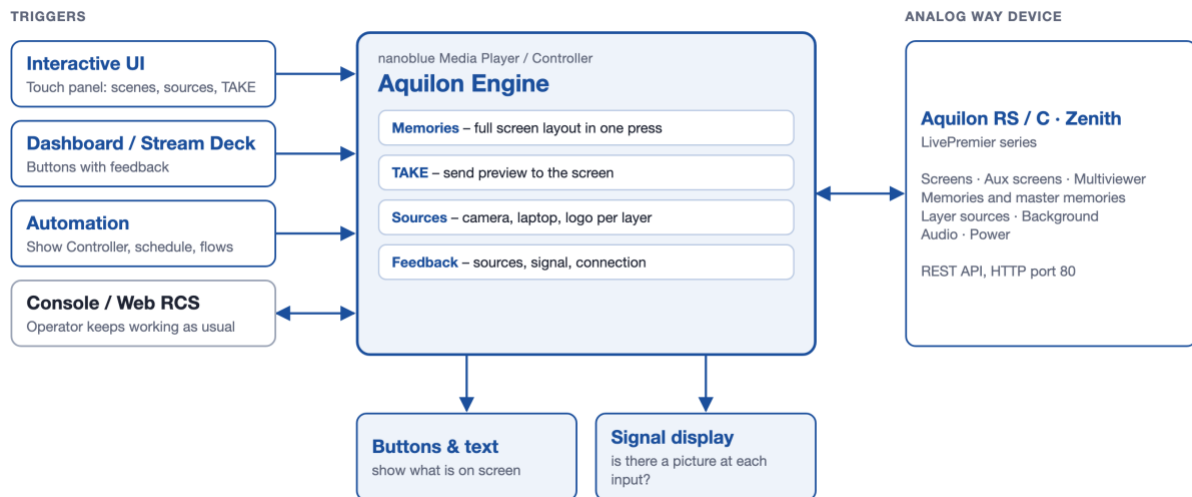


# //nanoblue

## nanoblue® Analog Way Control

Operate LivePremier image processors (Aquilon RS / C, Zenith) – memories, TAKE, sources, background and audio with live feedback



Overview: touch panels, buttons and automation trigger functions. The Aquilon Engine translates them for the image processor and shows what is currently on screen.

## What it is about

Analog Way's LivePremier image processors – Aquilon RS, Aquilon C and Zenith – drive large projection screens, LED walls and projection setups in congress centres, hotels, churches, corporate headquarters and at events. They mix cameras, laptops and playback devices into one picture, with picture-in-picture, logos and smooth transitions.

Day to day, this usually needs a trained operator at the console or in the web interface (Web RCS). Many rooms, however, should work without a technician: start the keynote, put the laptop on screen, show the break slide.

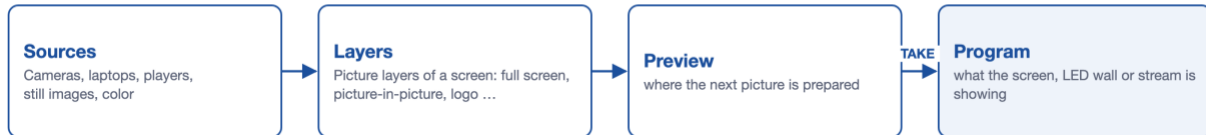
nanoblue Analog Way is a ready-made building block for the nanoblue Media Player and Controller. It connects to the image processor through the manufacturer's official interface (**REST API, HTTP port 80**) and makes every function available as a button or display in the **Interactive UI**. No programming is needed for a new project: the function is defined by the ID of the control element.

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

# Key features

## What can be controlled

In the Aquilon, a picture is built in four stages:



A memory stores the complete layer setup of a screen. A master memory recalls memories on several screens at once.

Picture path in the device: sources → layers → preview → TAKE → program. Memories store the layout of a screen.

| Area                     | Functions                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------|
| Memories                 | Recall a stored screen layout (up to 1000 per device) – straight to the screen or to preview |
| Master memories          | Switch several screens at once, e.g. main screen, side screens and stage monitor             |
| TAKE                     | Send preview to the screen – for all screens together or per screen                          |
| Layer sources            | Choose a source per picture layer: input (camera, laptop ...), still image, color or off     |
| Background               | Change the background of a screen (up to 8 background sets)                                  |
| Aux screens, multiviewer | Memories for auxiliary outputs (recording, stream, stage monitor) and multiviewer layouts    |
| Audio                    | Mute or unmute the sound of an output                                                        |
| Device                   | Reboot, shut down and power on over the network (Wake-on-LAN); type, name and firmware       |
| Free command             | Any REST API command – e.g. audio routing, Dante channels, multiviewer widgets               |

Memories are recalled by number or by a name stored during setup, e.g. “Keynote” or “Panel discussion”. Sources get meaningful names such as “Camera 1” or “Lectern laptop”.

## Two ways of working

Depending on the room, setup defines how the buttons act:

- **Room control without an operator:** pressing “Keynote” switches the screen immediately. Ideal for meeting rooms, lecture halls and churches where users operate the system themselves.
- **Show with an operator:** buttons first load the picture to preview. The operator checks it on the multiviewer and sends it to the screen with TAKE – just like on the Analog Way console, but on a freely designed touch panel.



Without an operator (room control) step 3 is skipped: the engine recalls the memory straight to program.

Example with an operator: load the “Panel discussion” memory to preview, check, TAKE. The buttons show what is on screen.

## Operation in the Interactive UI

The ID of a control element also defines its function. In UI Studio, create a button or text and give it the matching ID – done. Feedback is sent back to the same ID.

| Control   | ID (example)                       | Effect                                             |
|-----------|------------------------------------|----------------------------------------------------|
| Button    | aw__s1_mem3                        | Memory 3 on screen 1, lit while it is on screen    |
| Button    | aw__s1_mem3__preview               | Memory 3 to preview, lit while it is there         |
| Button    | aw__master_1                       | Master memory 1 (several screens)                  |
| Button    | aw__take                           | TAKE – preview to screen                           |
| Button    | aw__s1_l1_cam1                     | Camera 1 on layer 1, lit while it is shown there   |
| Button    | aw__s1_l1_off                      | Hide layer 1                                       |
| Button    | aw__out1_mute                      | Mute output 1 on / off                             |
| Text      | aw__s1_mem_txt                     | Name of the current picture, e.g. “3 Laptop large” |
| Indicator | aw__in1_valid / aw__in1_signal_txt | is there a signal at input 1?                      |
| Text      | aw__system_txt                     | Device type, name and firmware                     |

- **Source buttons** of a layer behave like radio buttons: the active one is lit, the others go off.
- **Signal display:** if a laptop is not plugged in properly or a camera is off, the touch panel shows it before anyone switches to a black picture.
- **Dashboard and other interfaces:** the main functions also have ready-made inputs and outputs with plain on/off, e.g. for dashboard buttons or a Stream Deck.

## Control from other automation

- **Show Controller and schedule:** cues or time slots trigger functions, e.g. the welcome screen in the morning, the break memory at lunch, shut down in the evening and power on over the network the next morning.
- **Room scenes:** together with lighting, audio, projectors and displays in one sequence – pressing “Keynote” dims the lights, opens the microphone and puts the lectern on screen.
- **Other flows:** any flow in the nanoblue Editor can send commands.

## What the feedback shows

Through its interface, the Aquilon continuously reports which source is on which layer, whether there is a signal at the inputs, whether audio is muted and whether the device is reachable. nanoblue displays these values directly.

Which memory is currently active is not reported by the interface. nanoblue therefore remembers what was recalled from the touch panel. If an operator switches on the console at the same time, nanoblue detects it from the changed sources: the memory button then goes off instead of showing a wrong state.

## Setup

- **In the nanoblue Editor:** Analog Way is a ready-made flow. You enter the IP address, the screens, memory names, sources and the way of working (direct, or with preview and TAKE).
- **Password:** if the device’s Web RCS is password-protected, nanoblue logs in by itself.
- **Test mode:** a built-in test mode simulates an Aquilon. This lets you prepare the interface and automation before the device is on site.
- **Persistent:** the configuration is stored on the device and survives reboots and flow updates.
- **Commissioning:** the first run on the real device 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.

- **Alongside the console:** console, Web RCS and other control systems stay fully usable. nanoblue syncs with the device every few seconds.
- **Robust:** commands are sent one after another. The engine bridges short network dropouts by retrying; the device is only considered “offline” after several failed attempts.
- **Clear error messages:** if an empty memory or a non-existent screen is recalled, the engine reports it instead of silently doing nothing.

## Security

The Aquilon interface works unencrypted over HTTP and is intended for closed AV networks. The image processor is therefore only operated in the local network or a dedicated VLAN of the installation and is 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                                                             |
|-------------------------------------------|-------------------|--------------------------------|--------------------------------------------------------------------|
| Aquilon RS alpha, RS1–RS6                 | REST API, HTTP 80 | all functions in this overview | implemented and tested in test mode; verified during commissioning |
| Aquilon C, C+, CMAX                       | REST API, HTTP 80 | all functions in this overview | implemented and tested in test mode; verified during commissioning |
| Zenith                                    | REST API, HTTP 80 | all functions in this overview | implemented; verified during commissioning                         |
| Midra 4K (Pulse, Eikos, QuickVu), Alta 4K | AWJ               | presets, TAKE, sources         | on request                                                         |
| LiveCore (Ascender, NeXtage)              | TCP               | presets, TAKE, sources         | on request                                                         |

Requires LivePremier firmware version 4.0 or later.

## Technology at a glance

- Aquilon Engine as a flow in the nanoblue Editor on the nanoblue Media Player or Controller.
- Analog Way LivePremier REST API (official manufacturer documentation v4.0) over Ethernet, HTTP port 80, optional login.
- Regular sync of layer sources, input signals and audio (adjustable interval).
- Wake-on-LAN to power on from standby.
- Connects to Interactive UI, Dashboard, Show Controller, schedule and all flows in the nanoblue Editor.

## Typical applications

- Conference and congress centres: speakers operate the main screen themselves, the technician only steps in when needed.
- Churches and parish halls: lyrics, camera and the preacher’s laptop via touch panel, no expert knowledge required.
- Corporate headquarters and showrooms: LED walls with fixed layouts, controlled by schedule or room scenes.
- Events: a freely designed operator panel with preview and TAKE in addition to the Analog Way console.

## Coming soon

Input thumbnails on the touch panel (the interface provides them) · display in the nanoblue Connection Monitor · ready-made example page for the Interactive UI · Midra 4K and Alta 4K · installation from the nanoblue Flow Catalog.