

AKIZU Direct

An operator cockpit where time is visible



Direct Cockpit · visualisation, not a manufactured product

Direct displays only frames with a known age. If it cannot guarantee this, it shows a neutral screen with the reason instead of a frozen frame. Each command carries the frame number the operator just saw, so the drone knows how old the image was on which the command was based.

0.3 ms

receiver: frame → GPU, p50 ⓘ

≤ 2.72 ms

switch to neutral screen ⓘ

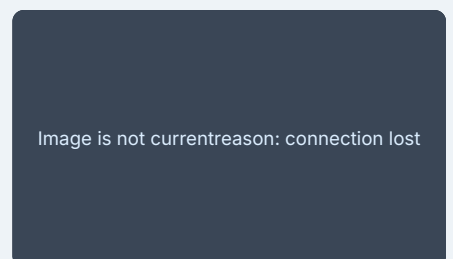
240 Hz

panel, 480 Hz in research ⓘ

64.6 ms

complete chain over WiFi, p50 ⓘ

Three image states



Interface example. 64.6 ms is an internal measurement using a phone as a temporary transmitter.

Command loop



VARIANTS

Direct Desktop	Chrome browser, WebCodecs, WebGPU I
Direct Cockpit	seated cockpit with curved panel, visualisation P

IMAGE

Decoding	HEVC, no queue at the receiver D
Panel	240 Hz, 480 Hz in research D
Target frame age	≤ 50 ms LET-1, ≤ 25 ms KVAL-1 T

SAFETY

Guard	frame age and integrity check at panel refresh rate D
Failure	neutral screen with reason within 2.72 ms I
Commands	carry a frame number; not executed after the deadline D
Age in metres	uncertainty box based on speed D

STATUS

Development	browser-based receiver prototype; cockpit concept P
-------------	--

Why it matters

At 20 m/s, a drone travels one metre in 50 ms. With a 300 ms-old image, it is six metres further on than the operator thinks.

Note

Measurements marked I are internal, with no independent optical verification to date (planned for Q4 2026). The cockpit shown is a visualisation, not a manufactured product.

I measured internally · M stated by manufacturer (not verified by AKIZU) · D AKIZU design proposal · T target · P plan · E estimate · U currently unknown

