



BROADCAST SIGNAL INTELLIGENCE

The complete toolkit for broadcast engineers

Signal monitoring, 24/7 OFCOM-compliant recording, and voice-activated studio production — three professional tools that work independently or together, all controlled from a single browser.

- Linux
- macOS
- Windows

24/7 CONTINUOUS RECORDING	5 Hz LIVE LEVEL UPDATES	90 days SIGNAL HISTORY	3 PRODUCTS, ONE ECOSYSTEM
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THE PLATFORM

Three products. One ecosystem.

Built by a broadcast engineer for broadcast engineers — every feature exists because it solves a real problem in a real station. Self-hosted on your own hardware, controlled entirely from a web browser.



Monitoring

Real-time FM, DAB, RTP & HTTP signal monitoring with silence detection, chain fault location and AI anomaly detection.



Logger COMPLIANCE LOGGING

Compliance

Continuous 24/7 recording with compliance dashboard, legal hold, audit trail and instant clip export. OFCOM-ready.



Director CONTROL. PRODUCE.

Production

Voice-activated camera switching for vMix — automatically cuts to whoever is speaking. ISO recording & streaming control.

WHY STATIONS CHOOSE SIGNALSCOPE



One screen for your whole estate

A single hub aggregates unlimited remote sites. Live level bars update in real time across every transmitter and stream simultaneously.



Know exactly where it failed

Model your signal path as a chain. When something breaks, SignalScope pinpoints the first failed node — so at 3am you know precisely where to look.



Your data stays yours

Fully self-hosted. Recordings, audit trail and metadata live on your hardware and never leave your network. GDPR-friendly by design.



No software to install


Every product is controlled from a web browser — desktop, tablet or phone. Nothing to install on control or playback machines.

SignalScope

BROADCAST SIGNAL MONITORING

Continuous, intelligent monitoring of every signal you broadcast — over the air and over IP. Catch faults before your listeners do, and diagnose them in seconds, not hours.

 Linux

 macOS

Raspberry Pi

RTL-SDR off-air



FM Monitoring via RTL-SDR

Tunes the transmitter over the air. Full RDS decoding (PS, RadioText, PI, TP/TA), RF level, SNR, stereo pilot and L/R balance. Distinguishes studio, STL and transmitter faults.



DAB Digital Radio

Monitors individual DAB services — ensemble lock, SNR, bitrate and DLS text. Detects service dropouts and audio faults independently of carrier presence.



RTP, HTTP & Sound Card

Livewire / AES67 RTP multicast with packet-loss and jitter metrics, any ffmpeg-decodable HTTP/HTTPS stream, plus local ALSA / PulseAudio devices.



Broadcast Chain Fault Location

Order your monitoring points into a chain; SignalScope identifies the first failed link automatically — pointing you straight at the problem.



AI Anomaly Detection

Each stream trains its own local model over 24 hours, then flags hiss, distortion, noise bursts and clipping. Entirely on-device — no internet required.



Silence Detection & Alerting

Configurable silence floor and duration with composite fault diagnosis. Alerts via email, Microsoft Teams, Slack, Pushover or webhook.



EBU R128 Loudness & Metrics

Momentary, short-term and integrated LUFS plus true-peak. 90 days of history in SQLite with per-stream SLA tracking and automated Morning Reports.



Multi-Site Hub & Map

One dashboard for your entire estate, with a live geographic map of every site colour-coded by status. Remote clients push live data at 5 Hz.




SignalScope **Logger**

BROADCAST COMPLIANCE RECORDING



Designed for OFCOM compliance. UK radio licensees are required to retain broadcast recordings (typically 42 days). Logger captures every second automatically, with the integrity and audit trail to defend any regulatory request — out of the box.

 Linux

 macOS

 Windows



Continuous 24/7 Recording

Clock-aligned segments rolling round the clock — no gaps, no manual intervention. Indexed automatically and searchable by date, time and input.



Compliance Dashboard

Per-input coverage with a calendar heatmap, daily coverage bars, gap minutes, silence percentage and status badges. Demonstrate retention at a glance.



Legal Hold

Apply a named hold to any recording by input and date. Held days are protected from retention cleanup; every hold and release is written to the audit trail.



Audit Trail & Integrity

Every play, export, hold and verify is logged with user, timestamp and IP. SHA-256 integrity verification proves recordings are unaltered.



Timeline Playback

24-hour timeline with pinch-to-zoom, silence indicators, track bands and a calendar date picker. Click any segment to jump straight to it.



Instant Clip Export

Select any range and export as MP3, WAV, AAC or Opus — directly in the browser. Every export is recorded in the audit trail.



Metadata & Track Logging

Integrates with Zetta playout and generic now-playing APIs. Logs every track change alongside the audio — search by artist, title or time.



Multi-User Access Control

Three roles — Admin, User and Viewer — give engineers, producers and compliance staff exactly the right level of access.




SignalScope Director

VOICE-ACTIVATED STUDIO PRODUCTION

Director listens to your presenters and automatically cuts your vMix cameras to whoever is speaking — letting your team focus on the show, not the vision mixer.

 Linux

 macOS

 Windows

Installs as a service

Browser-based control



Voice-Activated Switching

Monitors each camera's microphone and cuts to the active speaker. Configurable sensitivity, minimum on-air time and switch hold for real studios.



Deep vMix Integration

Two-way control via the vMix HTTP API and TCP feed — reads input names, triggers cuts/fades, and controls recording and streaming in real time.



Web-Based Control

Production view, camera tiles, cue list and panic controls from any device on the network — tablet, phone or desktop. Nothing to install.



ISO Recording Mode

Switch to ISO mode and Director records all camera inputs simultaneously via vMix ISO Recording — ideal for multi-camera interviews and post.



Live Streaming Control

Start and stop the configured vMix stream automatically on audio, or via REST API. Supports all three vMix stream outputs independently.



Cue List & Show Control

Build a rundown of cut, note and auto cues and step through with a single keypress. AUTO cues hand control back to voice-activated mode.



Auto Recording

Starts and stops vMix recording automatically on audio activity — never forget to hit record again. Configurable hold time after silence.



Meeting Room Integration

Bridge audio from video-conference platforms into Director and switch cameras on remote participants — making remote guests first-class.

WHO IT'S FOR

Built for stations of every size



Community Radio

Run the lot on a Raspberry Pi. Off-air monitoring, compliant recording and alerts — without an IT department.



University & Student

Real broadcast tools with multi-user roles, so students operate Logger while admin controls stay locked down.



Commercial Groups

Multi-site hub aggregates every transmitter to one dashboard, with chain fault location and SLA tracking.



Public Broadcasters

Legal hold, audit trail and SHA-256 integrity — built to defend compliance decisions to regulators.



Internet Radio

No RF hardware needed. Monitor and record HTTP, HTTPS, Icecast and Shoutcast streams continuously.



Production Teams

Director runs your vMix studio — voice-activated switching, ISO recording and streaming for video radio.

WHAT YOU NEED

- **Linux, macOS or Windows**
Runs on a Raspberry Pi, server, Mac or PC. One installer per platform.
- **Any modern browser**
Chrome, Firefox, Safari or Edge. Nothing to install on control machines.
- **RTL-SDR dongle (optional)**
Only for FM / DAB off-air monitoring. Not needed for IP streams.
- **vMix (Director only)**
Basic to Max edition. ISO Recording requires 4K or above.

INTEGRATES WITH YOUR STACK

Zetta playout

vMix

Microsoft Teams

Slack

Pushover

Email / SMTP

Webhooks

AES67 / Livewire

Now-playing APIs

ALSA / WASAPI

Mobile API (iOS / Android)

Self-hosted & GDPR-friendly — your recordings and data never leave your network.

Ready to see it in your station?

Get in touch for a guided demo and a setup tailored to your sites, streams and studios.



signalscope.site



conor@altivox.co.uk



james@altivox.co.uk