



ISERMO

Speech › Text › Translate

Administrator Guide

Setting up, securing and maintaining your ISERMO captioning appliance

Release 2026.10 · Customer edition · Document revision E



80 Little Falls Road • Fairfield, NJ 07004
800-631-0868 • Sales@HamiltonBuhl.com

www.HamiltonBuhl.com

Contents

Right-click here and choose “Update Field” to build the table of contents.

Orientation

- About This Guide
- How the System Works

Setup

- Network, Wi-Fi & Time
- Public Access (remote address)
- Licence & Channels
- Users & Permissions

Languages & Engines

- Languages
- Speech Engines (Alpha & Delta3)
- Auto Detect
- Translation (Omega)
- Spoken Audio (Lambda / Listen)
- Speaker ID (Kappa)

Audio

- Audio Sources & DSP
- X32 Console
- DMA32R Networked Audio

Displays

- Themes & Branding
- Signage Control
- TV Idle Pages, Disclaimer & QR

Security

- Security
- API Access

Maintenance

- Backup & Recovery
- Health & Monitoring
- Redundancy & Event Day
- Safe Shutdown & Support

Reference

- Glossary

Release 2026.10 · Customer edition · Document revision E. This guide replaces the earlier "Administrator & Installer Guide". Day-to-day event operation is covered in the Operator Guide.

About This Guide

This guide is for the customer's administrator: the person who sets the appliance up, manages users and settings, and keeps it healthy. It follows the order in which you normally work: first-time setup, languages and engines, audio, displays, security, backup and maintenance.

Note: What is in the Operator Guide

Running sessions, the Mics tab, hotkeys, presets, vocabulary, the audience page, TV controls, Demo Mode and Upload Audio are explained in the Operator Guide. This guide links to it rather than repeating it.

Quick start: the first 15 minutes

1. Connect the appliance to the venue network, power it on, and wait about two minutes for all engines to load.
2. Browse to <https://<unit-name>.isermo.local/operator/> (on the unit's Wi-Fi) or to its public address, then sign in with the administrator account supplied with the unit.
3. Change the administrator password (Users tab).
4. Check that the licence banner on the Mics tab shows the expected channel count.
5. Speak into a mic and confirm that its Level meter moves.
6. Run **Session → Pre-event check**. Everything should be green.
7. Start a rehearsal and confirm captions appear on /tv and on a phone at /audience.

Known limits

- Captions are machine-generated. They are not a certified verbatim record and do not replace a human stenographer where the law requires one.
- Speaker names come from the microphone. Optional Speaker ID (Kappa) can tell voices apart on a shared mic, but it is best effort.
- The appliance runs one captioning session at a time. Its channels are processed in parallel within that session.
- There is no built-in caption output to broadcast encoders (608/708, SDI, NDI, RTMP). Captions are delivered to browsers and through the Archive API.
- There is no built-in automatic failover. For critical events, keep a second unit on standby (see Redundancy).

How the System Works

The appliance is a self-contained captioning server. Every stage runs locally on the unit's AI accelerator:

Stage	ISERMO engine	Purpose
Voice detection	Beta	Separates speech from silence and background noise for each mic.
Speech recognition	Alpha	The fast engine for 25 European languages.
Speech recognition	Delta3	The global engine for 30 languages, with automatic language detection.
Translation	Omega (Standard / Plus)	Translates every caption into the session's second language.
Spoken audio	Lambda	Reads captions aloud on audience phones (Listen).
Speaker identification	Kappa	Optional. Names voices on shared mics.
Meeting minutes	Theta	Drafts minutes from finished sessions.

Captions reach the screens over a secure live connection. Completed sessions are stored in the appliance's archive. Nothing is sent to the internet unless you switch on Public Access.

Tip: Automatic tuning

When it starts, the appliance detects its accelerator and automatically picks the best engine set and translation tier (Omega Standard or Omega Plus) for that hardware. No manual tuning is needed.

Network, Wi-Fi & Time

All network settings are on the **Network** tab. Changes apply immediately and survive a reboot.

Wired ports

Choose DHCP or a static address (address, mask, gateway, DNS) for each wired port. If a cable is connected, the appliance prefers it for internet access.

Wi-Fi client and hotspot at the same time

The appliance can join the venue's Wi-Fi for internet **and** broadcast its own ISERMO hotspot for audience phones, at the same time. The hotspot automatically moves to the client network's channel. Networks marked **DFS** cannot be joined while the hotspot is on.

1. Click **Scan**, choose the network, enter the password and click **Connect**.
2. Set the hotspot name and password in the Access point card and click **Start AP**.
3. On the audience's own Wi-Fi, the captions are reachable at `https://<unit-name>.isermo.local/audience`.

Caution: Hotspot password

The console shows the real hotspot security and password. Use at least 8 characters. For the widest phone compatibility, the hotspot uses WPA2-Personal.

Date & time

Choose the time zone by city name (for example America/New_York), so daylight-saving time is handled for you, and keep network time (NTP) on. Accurate time matters for the archive, minutes, the licence and security certificates.

IPv6

IPv6 can be switched on or off for all connections from the IPv6 card.

Public Access (remote address)

Advanced → Public Access gives the appliance a secure public address, <https://<name>.isermo.com>, so the audience page, TVs and console can be reached from anywhere without opening firewall ports.

1. Enter the name you want and click **Check availability**.
2. Click **Apply**. The address goes live within about a minute.
3. The card shows the live address and the connection status.

Nothing is published until you switch it on. Removing the address takes the unit off the internet again, and local access keeps working. The same card can switch the remote-support channel for ISERMO technicians on and off. Only switch it on while a support case is open, then switch it off again.

Licence & Channels

Each appliance is licensed for a number of microphone channels and for particular audio-device types. The licence is tied to the unit's hardware.

- The Mics tab banner shows "Licensed: N channel(s)". Channels above N are hidden and cannot be used.
- A new unit may run on a temporary licence for a few days until the permanent licence is installed.
- If you replace one major hardware part, the licence keeps working. If several are replaced at once (for example the whole mainboard), contact ISERMO for a reissued licence.
- To add channels or device types (networked audio, mixing consoles), contact ISERMO.

Users & Permissions

Create accounts on the **Users** tab. Give every person their own account, so the audit log shows who did what.

1. Click **+ New User** and enter a username and a password. The minimum length is enforced, and 12 or more characters is recommended.
2. Choose a role: **viewer**, **operator** or **admin**.
3. Optionally click **Permissions** to choose exactly which tabs an operator may see. "Clear all" returns the account to the role's default.
4. Optionally switch on **Archive access** so the operator can open past sessions.

Operators can be given extra admin-style tabs one at a time: Themes, Languages, Backup, TV Idle Pages, Screen Share and Signage Control. Admins always see everything. Permissions are enforced by the server, not just hidden in the browser.

Caution: Security

Change the supplied admin password immediately. Remove accounts for people who leave. Do not share one login among several operators.

Languages

The **Languages** tab controls which languages appear in the menus (the session's primary and secondary language, and each mic's source and target). Add a language with its standard code (for example `pt`, `zh-TW`) and a display name. **Reset to default list** restores the 13-language starter set. The full list of codes is in the Language Reference.

Caution:

Removing a language that a mic is using switches that mic to Auto. Check the Mics tab afterwards.

Speech Engines (Alpha & Delta3)

Advanced → ASR Engines chooses which speech engines run on the unit.

Mode	What it does	When to use it
Both engines	Alpha handles its 25 European languages. Delta3 handles Auto and every other language.	Recommended on units with a large accelerator (the default there).
Delta3 only	Every mic uses Delta3 (30 languages, including Asian languages and Arabic, with Auto).	The default on compact units. It frees memory for translation and Listen.
Alpha only	Every mic uses Alpha (25 European languages, including Ukrainian, Bulgarian, Croatian, Slovak, Slovenian, the Baltic languages and Maltese). Auto is not available.	European-only venues on compact units.

The appliance picks the best mode for its hardware automatically ("selected automatically"). Switching modes takes about a minute while the engine loads, and it is refused while a session is running. "Both engines" is only offered on units with enough accelerator memory. Mic languages that the chosen mode cannot handle are greyed out on the Mics tab.

Auto Detect

Advanced → Auto Detect controls mics that are set to **Auto** (Delta3 language detection).

Allowed Auto-Detect languages

Tick the languages that can really occur in your room, as many as you need. If Auto detects a language you have not ticked, that sentence is treated as noise and dropped. This stops coughs, laughter or short filler words from being captioned as, say, Chinese. The setting is global and applies to every Auto mic. At least one language must stay ticked. If a blocked sentence was really spoken in the primary language, the appliance retries it in the primary language before discarding it.

Auto-Follow Secondary Language

When this is on, a mic on Auto (with "Translate to" left blank) translates into whichever session language the speaker is **not** using: an English speaker is translated to the secondary language, and a secondary-language speaker is translated to English. A mic with its own "Translate to" still overrides this.

Translation (Omega)

Every caption is translated into the session's secondary language, or into the mic's own "Translate to" language. The appliance selects the Omega tier automatically: **Omega Plus** on units with larger accelerators, **Omega Standard** on compact units. Both cover more than 400 languages. The Glossary (see the Operator Guide) forces fixed translations and do-not-translate terms.

Profanity masking

Masking is controlled per mic (the **Mask** tick on the Mics tab) and applies identically to every screen. ISERMO support can adjust the word lists on request.

Spoken Audio (Lambda / Listen)

Advanced → Settings → Audience Spoken Audio shows or hides the **Listen** button on every audience page. Hiding it stops current listeners gracefully within about a minute. The voice engine keeps running, so it can be switched back on instantly. The default voice follows the translated language, and listeners can choose another available voice language. See the Operator Guide for the listener's view. Voices are available for English, Spanish, French, Italian, Portuguese, Hindi, Japanese and Chinese. The audience list only ever offers voices that are actually available.

Speaker ID (Kappa)

Optional. Speaker ID labels each caption with the person speaking, recognised by their voice. It is useful when several people share one mic (panels, interviews, a roving handheld).

1. Open **Advanced** → **Speaker ID** and switch **Speaker ID on**. The engine starts, which takes a few seconds.
2. **Enroll** known speakers: give 20–30 seconds of normal speech (at least 5 s) by recording from the unit's mic, recording in your browser, or uploading a recording. Enrolling the same name again strengthens that voiceprint.
3. Voices that are not enrolled appear as "Speaker 1", "Speaker 2"... Under **Unknown speakers heard this session**, type a name to turn one into an enrolled voice.

Setting	Effect
Match threshold (enrolled)	Higher is stricter: fewer wrong names, and more "Speaker N". Default 0.50.
Same-voice threshold (unknown)	How alike two unknown voices must be to count as the same person.
Max unknown speakers per mic	The limit on "Speaker N" labels per mic.
Keep the current speaker (sticky)	Recommended. Stops labels flip-flopping. A new speaker is only taken on a clear sentence of at least Min. seconds to switch (default 3 s), or immediately for a confident enrolled match.
Show "Speaker N"	Switch it off to show only enrolled names (others show the mic's speaker name).

Note: Privacy

Only a numeric voiceprint is stored on the unit. No recordings are kept. Deleting an enrolled voice removes it permanently. When Speaker ID is off, Linux Health lists the engine as grey **disabled**.

Audio Sources & DSP

Depending on the licence, audio can come from a USB sound card, a Behringer/Midas **X32** mixing console (USB multichannel), a networked-audio fabric (**DMA32R**, AES67), or Bluetooth mics.

Gain staging

Set the console or preamp so normal speech peaks well below clipping, then fine-tune with **Gain dB** on the Mics tab. That gain is applied inside the appliance and does not move the console's faders.

Linux DSP

Each channel can be cleaned up by the appliance: high-pass → gate (expander) → EQ → compressor → gain. **Bypass all DSP** if the mixing console already sends processed audio (the usual case with an X32). Click **Enable full chain** for raw microphones connected through a USB interface.

X32 Console

On X32-licensed units, the **Advanced** → **X32** tab checks that the mixing console still matches the reference scene ISERMO installed.

- **Verify** compares the console with the reference. A green result means everything matches. Otherwise the tab shows how many settings differ.
- **Push Reference Scene** restores the reference settings to the console. A snapshot of the console is saved first, so the change can be undone.
- The archive recording is routed from the console automatically. If a warning says it could not be applied, run Verify once the console is reachable.

Caution:

Pushing the reference overwrites manual changes on the console, such as names, gains and routing. Agree it with your sound engineer first, and never push during a live session.

DMA32R Networked Audio

On networked-audio units, the **Advanced → DMA32R** card switches discovery of the DMA32R audio fabric on or off for the whole appliance. Switch it off when the DMA32R is not in use, or when other networked-audio devices on the network are not part of this system. The change takes effect immediately. The network must be prepared for networked audio (multicast snooping with a querier, and QoS for audio and clock traffic). ISERMO or your integrator sets this up at installation.

Themes & Branding

Themes & Branding sets the look of the TV screens and the audience page: colours, fonts, light or dark mode and caption position. Upload your logo (PNG, 2 MB or less). Built-in themes include Default Dark, High Contrast, Light and Transparent. Themes can be exported and imported, and changes appear on every screen immediately.

Signage Control

Advanced → Signage Control switches the room's displays on and points them at the caption pages automatically.

Sony BRAVIA Professional

For each TV, enter its IP address and pre-shared key and tick Enabled. The appliance can power TVs on and off and open /tv or /tv2. With **Run automatically on boot** ticked, every reachable TV is brought up when the appliance starts. For exact-page opening, switch on **Network debugging** in the TV's Developer options once, click **Connect ADB**, and accept "Always allow" on the TV.

IsermoSigna

Controls up to 20 Android TVs or boxes running the **IsermoSigna** kiosk app.

- **Devices:** add each device's IP address and API password. The status shows online / unreachable / wrong password, battery or mains power, and orientation. Available commands are refresh, reload start URL, set URL, bring app to front, orientation, WebSocket watchdog, reboot and shut down (the last two only on devices that allow them), and a change of the device's API password. **All enabled devices** sends one command to every device.
- **App download (APK):** upload the IsermoSigna app once. TVs on the same network can then download it from the plain-http download page or its QR code. The tab includes step-by-step install instructions.

Caution:

Change the device's default API password ("kiosk") on first use. Keep signage devices on a separate network segment from the public.

TV Idle Pages, Disclaimer & QR

TV idle pages, the per-screen disclaimer, the Wi-Fi and audience QR codes, and portrait rotation are all described in the Operator Guide (TV Screens). Administrators can grant these tabs to operators.

Security

- **Sign-in** is protected by strong password hashing, per-request security tokens and rate limits on failed logins. Sessions stay signed in for about three hours of activity.
- **Help pages** (this guide) are only served to signed-in users, and administrator material only to administrators.
- **HTTPS** is always used. The unit ships with its own certificate. When you use Public Access, the public address carries a trusted certificate automatically.
- **Audit log** (Advanced → Audit) records sign-ins and every operator action: sessions, mic changes, settings, engine changes, signage commands and shutdowns.
- **Remote support** for ISERMO technicians is off by default and only runs while you switch it on (Public Access card).
- **Safe Shutdown** is restricted to administrators.
- **Automatic updates of third-party software** are not applied on the unit. ISERMO delivers tested updates.

Tip: Good practice

Give each person their own account, use the operator role for event staff, review the audit log after events, and keep Public Access off when it is not needed.

API Access

Advanced → **API** creates read-only keys for external systems (records management, websites, video editing). A key can list archived sessions and download transcripts as JSON, SRT or TTML/IMSC1. It cannot change settings or start sessions.

1. Click **+Create API key** and give it a label.
2. Copy the key. It is shown only once.
3. Send it with every request as X-API-Key: <key> (or Authorization: Bearer <key>).

```
GET /api/archive-api/v1/sessions
GET /api/archive-api/v1/sessions/{id}?format=json|srt|ttml|imsc1
```

Revoke a key to block it instantly. Use one key per integration, and check "last used" to find keys that are no longer needed.

Backup & Recovery

Advanced → Backup & Recovery offers two kinds of backup.

Tool	What it saves	Use it to
Snapshots	Settings: configuration, glossary, mic presets, themes. The last 10 are kept.	Undo a settings change.
Full System Backup (Core)	The whole unit's software, settings and database (about 25 MB).	Recover or rebuild the unit.
Full System Backup (Full)	Core plus the complete runtime environment (about 20 GB). Engine data is restored from ISERMO's manifest.	Move to replacement hardware.

- **Create snapshot:** give it a label (for example "before tuning"). You can download it as an off-box copy.
- **Restore:** puts the settings back and restarts the caption services for a few seconds.
- **Factory reset:** returns the settings to the factory baseline. A safety snapshot is taken first. Users, network settings and the archive are not touched.
- **Re-baseline:** makes the current settings the new factory baseline.
- **Full backup:** choose Core or Full, click Create, then download and keep it off the unit. **Restore whole unit** replaces everything with the backup and restarts the services.

Caution: Recovery override password

Restore, delete, factory reset and re-baseline ask for a daily recovery override password. Your ISERMO contact can give you today's code. This stops accidental or casual changes.

Session archives are never deleted automatically. Delete individual sessions from the Archive to meet your retention policy.

Health & Monitoring

Tab	Look here for
Pre-event check	A green/yellow/red list of everything needed for a live event.
Alpha · Delta3 Health	Recognition quality per mic, repeated-phrase filtering, recent drops, and the blocked phrases list. Add phrases the engine keeps inventing on silence, or restore the built-in list.
VAD Monitor	Is each mic being heard (Beta voice detection)?
Linux DSP	The per-channel audio clean-up chain.
Linux Health	Services (green OK / red problem / grey disabled for optional features that are off), CPU, memory, disks, accelerator memory, the voice engine, network and recent system warnings.

The **Admin Web Console** (Advanced → Settings) is a diagnostic tool for ISERMO support. Only use it when an ISERMO technician asks you to.

Redundancy & Event Day

Redundancy

For high-stakes events, keep a second appliance on standby with the same licence type and a restored snapshot of your settings, rehearse on it, and plan a manual switch-over of the audio feed and the TV addresses.

Event-day checklist

1. The licence banner shows the right channel count.
2. The Pre-event check is all green.
3. Every mic moves its meter and is set to the right language, or to Auto with the allowed languages ticked.
4. /tv, /tv2 and a phone on /audience all show captions in a rehearsal.
5. Signage TVs are on the right page, and IsermoSigna devices show online.
6. Listen is shown or hidden as intended.
7. After the event: end the session, then export or generate minutes.

Data retention and privacy

Transcripts and recordings stay on the appliance until you delete them. Speaker ID stores voiceprints only, never recordings. Minutes are generated on the unit. Decide on a retention period with your records officer, and delete old sessions from the Archive accordingly.

Safe Shutdown & Support

Use **Safe Shutdown** (the operator console or the mobile remote, admins only) before moving or unplugging the unit. Press the power button to start it again. It is ready about two minutes later.

For help, contact ISERMO support with the unit name (shown in the browser address and on the Public Access card) and, if possible, a screenshot of Linux Health.

Glossary

Term	Meaning
Alpha	ISERMO speech engine for 25 European languages.
Delta3	ISERMO global speech engine for 30 languages, with Auto language detection.
Omega Standard / Plus	ISERMO translation engine tiers.
Lambda	ISERMO spoken-audio engine (Listen).
Kappa	ISERMO speaker identification engine.
Theta	ISERMO meeting-minutes writer.
Beta	ISERMO voice-activity detector.
X32	Behringer/Midas digital mixing console supported as an audio source.
DMA32R / AES67	Networked audio fabric and standard.
IsermoSigna	ISERMO kiosk app for Android TVs and boxes.
TTML / IMSC1 / SRT	Standard caption file formats.
Snapshot	A saved copy of the settings (not recordings).



80 Little Falls Road • Fairfield, NJ 07004
800-631-0868 • Sales@HamiltonBuhl.com

www.HamiltonBuhl.com