

Multilingual on YouTube

A step-by-step guide for churches using ChurchTranslator.AI

YouTube live streams can carry only **one audio track** — there is no way for a live viewer to switch languages inside the YouTube player. The good news: you don't need it. This guide shows the two-part playbook we recommend:

Live on Sunday: stream to YouTube in your main language, while everyone — in the pews or at home — gets live translated audio and captions on their phone through ChurchTranslator.AI.

After the service: add translated audio tracks to the YouTube replay, so later viewers can pick their language right in the YouTube player (gear icon → Audio track).

Part 1 — Livestream on Sunday (single language + live translation)

What you need

A computer running your livestream (OBS, vMix, or a hardware encoder), a YouTube channel with live streaming enabled (takes 24 h to activate the first time), and your ChurchTranslator.AI account with the capture app installed — or a stream key from the dashboard's **Streaming & Zoom** page if you prefer to feed us straight from your encoder.

A. Start your YouTube stream (one language — your sanctuary audio)

- 1 In a browser, open **YouTube Studio** → **Create** → **Go live**. Choose **Streaming software**, set the title, visibility (Public/Unlisted), and audience settings.
- 2 Under **Stream settings**, set **Latency** to *Ultra low-latency* — this keeps the video closer in time to the live translated audio on phones. Copy the **Stream key**.
- 3 In OBS: **Settings** → **Stream**, Service = *YouTube – RTMPS*, paste the stream key. Add your camera and your sanctuary audio mix (mixer/USB interface) as sources.
- 4 Click **Start Streaming** in OBS, confirm YouTube Studio shows the preview, then click **Go live**. Your stream is now live in your main language.

B. Feed the same audio to ChurchTranslator.AI

Pick **one** of these — both end in the same place:

- 1 **Easiest — the capture app.** On the Mac/PC that hears your sound board (it can be the same machine running OBS), open the ChurchTranslator capture app, check the level meter moves when someone speaks, and click **Start**. (Scheduled auto-start can do this for you every Sunday.) The dashboard's **Browser Capture** works too if nothing is installed.

- 2 From your encoder — RTMP.** Open **Dashboard** → **Streaming & Zoom** and copy the server URL and stream key. Server: `rtmp://rtmp.churchtranslator.ai/live`, Stream key: your streaming token. Send audio (video is ignored) from vMix, a hardware encoder, or a second OBS output (OBS itself streams to one destination — sending to YouTube *and* to us from one OBS needs the free “Multiple RTMP outputs” plugin).

Note: Treat the stream key like a password. One publish per key at a time — if a stream won't connect, make sure a capture app isn't already running a session.

C. Get translation to your people

- 1 In the sanctuary:** post the printed QR code (print it from **Dashboard** → **QR code**). Visitors scan it, pick a language, and tap **listen** — no app, no signup.
- 2 Online viewers:** paste your listener link in the YouTube stream description, e.g. `https://<your-church>.churchtranslator.ai` — “Watch in your language: open this link on your phone for live translated audio & captions.”
- 3 Check it works:** before the service, have someone speak while you open the listener link on a phone — you should see captions and hear translated audio within a few seconds.

Timing tip: Phones get translation near-real-time; YouTube video runs a few seconds behind even on ultra-low latency. In the room this doesn't matter. For at-home viewers the phone audio may run slightly ahead of the video — captions on the listener page are the most comfortable companion.

D. Sunday checklist

- 1** Encoder streaming to YouTube, broadcast is live.
- 2** ChurchTranslator session running (capture app “Started”, or RTMP feed connected — the dashboard shows the live session either way).
- 3** Listener link in the YouTube description; QR signs up in the sanctuary.
- 4** After the benediction: click **Stop** in the capture app (or stop the RTMP feed) and end the YouTube stream in Studio.

Part 2 — After the service: multi-language audio on the YouTube replay

Once your live stream ends, YouTube keeps it as a normal video — and normal videos **do** support Multi-Language Audio (MLA): several audio tracks on one video, switchable by the viewer via the gear icon → **Audio track**. Since much of sermon viewership happens after Sunday, this is where multilingual YouTube really pays off.

Before you start — requirements

- 1 Your channel needs access to YouTube's **Advanced features** (YouTube Studio → Settings → Channel → Feature eligibility; usually granted via phone verification or channel history). MLA rolled out broadly to creators in late 2025 — if you don't see it yet, check this first.
- 2 You need a **dubbed audio file per language** — audio-only (e.g. MP3/WAV/AAC), roughly the **same length as the video**. YouTube does **not** auto-generate these from your stream — you bring the tracks. Step A below creates them for you.

A. Create the dub files from your dashboard (Studio Voice)

Churches on our **Studio Voice** engine (currently in beta) generate the files in a few clicks — each track is spoken by your church's own Studio Voice from the service transcript:

- 1 Find the moment your **service starts in the YouTube replay** and note it in seconds — e.g. the replay runs 2 min 14 s of countdown before the first words → your lead-in is **134**.
- 2 Open **Dashboard** → **Transcripts** and click the service (it appears about five minutes after you stop streaming).
- 3 In the **YouTube audio tracks** card, pick your languages — the ones your listeners used are pre-selected; add any other supported language with “**+ Another language...**”.
- 4 Enter the lead-in seconds from step 1, then click **Create tracks**. Generation runs in the background — a typical service takes a few minutes per language; the card updates as each track finishes.
- 5 Click **Download** next to each finished track. You'll get one MP3 per language, timed to your service and ready for step B.

Sync: The dub follows your captions the way a live interpreter follows a speaker — normally within a couple of seconds of the video, with automatic gentle speed-up keeping it from falling behind during long passages. The file covers the service itself: if your video runs long after the benediction and YouTube complains about the length, add silence to the end in any free audio editor (e.g. Audacity).

Not on Studio Voice? You can still make the tracks yourself: download the replay's audio (YouTube Studio → your video → Download, or your OBS recording), pair it with your service transcript

(Dashboard → Transcripts) in an AI dubbing tool — or record a human interpreter against the replay — and check each file's duration roughly matches the video.

B. Add the tracks in YouTube Studio

- 1 Sign in to **YouTube Studio** on a computer.
- 2 In the left menu, click **Languages** (on some channels this lives under **Subtitles**).
- 3 Click the video (your stream replay) you want to edit.
- 4 Make sure the **video language** (original language) is set — you'll be prompted the first time.
- 5 Click **Add language** and pick the language of your first dub (e.g. Spanish).
- 6 In that language's row, next to **Audio / Dub**, click **Add**, then **Select file** and upload the dubbed audio file for that language.
- 7 Repeat “Add language → Add dub” for each language (YouTube supports multiple tracks per video — commonly cited as up to 6).
- 8 Click **Publish**. Processing can take a little while for each track.
- 9 **Verify as a viewer:** open the video, click the gear icon → **Audio track**, and switch languages. Viewers whose YouTube is set to that language will get it by default automatically.

Bonus: Title & description can be localized too: in the same Languages screen you can add translated titles/descriptions per language, and YouTube Analytics will break down watch time by audio track.

Quick reference

Goal	How
Live, viewers pick a language	Not possible inside the YouTube player — use the ChurchTranslator listener link/QR
Live, one language on YouTube	Part 1: OBS → YouTube; capture app or RTMP → ChurchTranslator
Replay, viewers pick a language	Part 2: Dashboard → Transcripts → YouTube audio tracks, then YouTube Studio → Languages → Add dub

Questions or stuck on a step? Email hello@churchtranslator.ai — we're happy to walk your AV team through a Tuesday-night trial run.