

On Air Encoding Settings

Shutter Encoder v20.3 · Enter these once, save them as a preset, and every file you upload will play cleanly alongside every other file.

WHY THIS MATTERS

On Air plays your files back to back — in playlists, in TV schedules, in your video library. Each time it moves from one file to the next, whatever differs between them shows on screen: the picture jumps size, softens, stutters, or the player stalls while it works out what changed.

Matching every file to one specification before upload is what prevents that.

INCLUDING YOUR SHORT ITEMS

Promos, bumpers, station IDs and sponsor spots go through these same settings. A ten-second promo at the wrong resolution is *more* noticeable than a long programme at the wrong resolution, because it sits between two correct ones.

One spec for everything, or the transitions give you away.

START HERE

SETTING	VALUE	WHERE TO FIND IT
Function	H.264	Choose function (bottom left)
Output format	.mp4	The dropdown to the right of the arrow

BITRATES ADJUSTMENT — top right panel

FIELD	VALUE	WHY
Video bitrate	4500 kb/s	Your average quality target.
Maximum	6000 kb/s	The ceiling. Stops a busy scene spiking into a bitrate your viewers cannot stream.
Audio bitrate	192 kb/s	Transparent for speech and music. Change this from the 256 default.
Mode	VBR	Quality flexes where it helps; the ceiling still holds.
2-pass / Max. Quality	unchecked	Not needed. 2-pass doubles encode time for little visible gain here.

IMAGE — panel above Bitrates

FIELD	VALUE	WHY
Scale	Source	Keep the resolution you shot.
Do not upscale lower resolutions	checked	Enlarging 720p to 1080p adds file size and no detail.

AUDIO SETTINGS — expand the section

FIELD	VALUE	WHY
Convert	AAC · Stereo · 48k	Universal. These are already the defaults — confirm rather than change.

ADVANCED FEATURES — expand the section; tick each box, then set its value

FIELD	VALUE	WHY
Force profile	high · 4.1	Do not skip this. It also forces the 4:2:0 colour format every player can handle, and 4.1 covers 1080p on older devices. Change the level from the 5.1 default.
Force preset	slow	Better compression for the same quality. Slower to encode, smaller to stream.

Enable fast start	checked	Video begins playing before it has fully downloaded.
Set GOP to	60	A keyframe every 2 seconds at 30fps. This field counts frames , not seconds — change it from the 250 default.

MATCH THE CEILING TO YOUR SOURCE

The figures above assume 1080p. If your source is smaller, lower both numbers — a ceiling far above your source achieves nothing.

SOURCE RESOLUTION	VIDEO BITRATE	MAXIMUM
1080p	4500 kb/s	6000 kb/s
720p	2600 kb/s	3500 kb/s
480p	1300 kb/s	1800 kb/s

SAVE IT ONCE

1. Enter every value above.
2. Press **Ctrl+S** (Windows) or **Cmd+S** (Mac) to save it as a preset. Name it *On Air*.
3. Next time, load it from the **star icon** beside Start function instead of retyping anything.

Presets cannot be shared between computers. There is no export file, so each person who prepares media saves their own from this sheet. Keep this page with whoever does your encoding.

MASTER AND TRANSCODE

Keep two folders and never let them mix. **Master** holds your original camera and edit files — never overwrite these; if the spec ever changes, they are what you re-encode from. **Transcode** holds the encoded MP4s that go to On Air.

Shutter Encoder's **Watch folder** automates the hop between them: right-click the file list, point the input at Master and the output at Transcode, and anything you drop into Master is encoded for you.

OPTIONAL, FOR THE PARTICULAR

FIELD	VALUE	WHY
Add x264-params	vbv-bufsize=12000	Tightens how the ceiling is enforced. Safe to leave blank.
Audio normalization	-16 LUFS	Evens out loudness across a library. Worth it if your material comes from many sources. Change from the -23 default, which is broadcast rather than streaming.

BEFORE YOU UPLOAD

- Play the first and last ten seconds of one encoded file.
- Play a promo straight after a full programme. They should look identical in size and sharpness.
- Name every file clearly before upload. Renaming a hundred files later is miserable.

Stuck? Open a ticket under **Media Services** and send us one source file. We would rather fix a setting once than have you re-encode a library twice.

benchmark-connections.com/whmcs/submitticket.php?step=2&deptid=13

Sign in to your client area first — tickets are opened from there.