LUMATIC LAB / SOFTWARE DOCUMENTATION

TECHNICAL REFERENCE & TROUBLESHOOTING

File limits, local storage, processing model, recovery and known boundaries.

DOCUMENT: 05 / TECHNICAL REFERENCE
APPLICATION: Lumatic Lab B&W Lite
VERSION: 2.6.1
FORMAT: A4 portrait
LANGUAGE: British English

DOCUMENT CONTROL

This guide describes the supplied B&W Lite v2.6.1 HTML application. Interface labels and behaviour are based on inspection of that build. It is not a promise that every browser or computer will behave identically.

A practical reference for photographers working with monochrome conversion, creative toning and 3D LUT export.

1. Application model

B&W Lite v2.6.1 is delivered as a single HTML file. The application runs in the browser and does not require a server account or cloud processing service for its normal editing workflow. It uses browser image decoding, canvas processing, local browser storage and downloadable files.

2. File and processing limits

Resource	Limit / behaviour
Photograph formats	JPEG, PNG and WebP
Photograph file size	20 MB maximum
Decoded image dimensions	24 megapixels maximum
Preview dimensions	Longest side limited to 1,200 pixels
PNG export dimensions	Original source pixel dimensions
LUT format	3D .cube only
LUT edge length	2–33; maximum 33 × 33 × 33
LUT file size	12 MB maximum per file
LUT stack	100 LUT entries maximum
Undo / redo history	20 editing states
Ledger	Up to 1,000 recorded state entries

These are application limits, not a guarantee that every device will process a maximum-size image or LUT without memory pressure. Available memory and browser canvas limits vary by computer and browser.

3. Processing sequence

The current preview and PNG export apply the global B&W Lite transform to source RGB values, then apply the selected LUT if one is active. The global transform includes channel mix, contrast, toning, tonal curve and split toning. The brightness control sets the total channel-mix weighting. The selected LUT is sampled after the B&W Lite transform.

The application does not provide selectable ICC profiles, an explicit working-space selector or a colour-management panel. Browser decoding and canvas colour handling can therefore affect how input values are interpreted. For critical work, test the output in the intended host application and keep a PNG reference.

4. Session recovery and privacy

Local session recovery is optional and off by default. When enabled, the application stores the working image, settings, LUT data and editing history in browser storage on the current device. The session is not a cloud backup and does not follow the user to another computer.

- Tick Remember full session on this device to enable recovery.
- The application attempts to restore the saved session when it starts again in the same browser profile.
- Use CLEAR LOCAL SESSION to remove the locally saved session and turn recovery off.
- Clearing the saved session does not remove the image currently open in the running application.
- Browser data clearing, private browsing rules, storage quotas or browser profile changes can remove or prevent access to local data.

User presets use browser local storage separately from the full session recovery store. The session ledger is also stored locally and can be exported as a CSV file.

5. Undo, redo and ledger

Undo and redo retain up to 20 editing states. The LEDGER command exports recorded state entries as a CSV file named Lumatic_BW_Lite_Session_Ledger.csv. The ledger is a record of timestamped state data; it is not a human-readable step-by-step narrative or a complete image backup.

6. Troubleshooting

Problem	Checks and response
Image will not load	Check that it is JPEG, PNG or WebP; under 20 MB; and no more than 24 MP. Try a fresh browser tab if the browser reports a decoding or memory error.
Only one photograph is loaded	This is intentional. B&W Lite processes one image at a time.
LUT rejected	Check .cube extension, 3D format, declared size 2–33, 12 MB file limit, valid RGB rows and exact N^3 row count.
LUT appears loaded but has no visible effect	Check that the correct stack item is selected and that the LUT is designed for the input values being supplied.
Complete Look export fails	Check whether an active LUT reference is available. Clear the stack selection or select a valid loaded LUT, then retry.
Preset not saved	Check browser local storage availability and quota. Presets do not store image or LUT files.
Session does not recover	Confirm the recovery option was enabled in the same browser profile. Browser storage may have been cleared, blocked or exceeded.
PNG export fails	Check available memory and destination download permissions. Large images require more browser memory than their compressed file size suggests.
LUT result differs in another application	Check working colour space, input/output profiles, range handling, LUT interpolation and processing order. Spatial effects are not encoded.

7. Known limitations and exclusions

- No RAW file support; the application accepts rendered JPEG, PNG and WebP images.
- No TIFF, HEIC or camera-RAW loading in this build.
- No batch or multi-image processing.
- No layer, mask, local brush or object-aware editing system.
- A 3D LUT cannot encode spatial effects, masks, grain, vignettes or image-specific processing.
- No explicit ICC profile selection or colour-managed proofing controls.
- The five-band tonal analysis is a simplified distribution display, not a formal Zone System tool.
- A user preset does not contain photographs or LUT files.

8. Support information to include when reporting a problem

- Application version: B&W Lite v2.6.1.
- Browser name and version, plus operating system.
- Image format, file size and pixel dimensions (do not send a private photograph unless necessary).
- For LUT issues: .cube file size, LUT_3D_SIZE value and the exact error message.
- The action immediately before the problem and whether session recovery was enabled.