

MELS v1.0 — Technical Short Specification

MELS- Mesh-Embedded Logo Signature

1. Purpose of the Method

MELS defines a simple and open process for embedding **a logo directly into the geometry of a 3D model**, serving as a **structural signature or seal**.

The goal is to provide authentication independent of textures, materials, or metadata, and compatible with **glTF/glb** formats for interactive 3D NFTs.

2. Definitions

-Structural Signature: A logo integrated into the mesh through a geometric operation.

-3D Logo: A 3D object representing the artist's logo (OBJ or equivalent).

-Host Mesh: The sculpture or 3D object created by the artist, used as the support for logo integration.

-Boolean Operation: Additive or subtractive geometric modification of the mesh.

3. Minimum Requirements (MELS Compliance)

To be compliant with MELS v1.0, a 3D NFT must meet all of the following conditions:

- 1-The logo must be a 3D object, not a texture.
- 2-The logo must be added, subtracted, or embedded into the host mesh.
- 3-The final model must be exported or converted to glTF or glb to function as an interactive 3D NFT.
- 4-The integration must be intentional and part of the artistic process.

4. Summary Process

- 1.Create the host mesh (OBJ).
- 2.Create the 3D logo (OBJ).
- 3.Position the logo:
 - outside → visible addition
 - inside → subtraction or hidden signature
 - nearby → free association
- 4.Apply a boolean add/subtract operation.
- 5.Export the final model in glTF/glb.

5. Constraints

The following are not considered MELS:

- Logos applied as textures, UVs, watermarks, or overlays
- Signatures present only in metadata
- Logos added in non-geometric post-production
- **A crypto wallet may contain only one MELS logo-signature. This logo may be used across all NFT platforms but must always remain linked to the same crypto wallet (the artist's or designer's blockchain address).**
- **For companies, agencies, or service providers working for multiple brands or artists, a separate wallet must be used for each MELS logo-signature to ensure identity uniqueness, traceability, and integrity.**
- **It is forbidden to use a protected logo, trademark, or distinctive sign without possessing the necessary intellectual property rights.**
- **The MELS method does not replace traditional legal protections (trademark registration, copyright, institutional filings). It does not constitute a legal guarantee of intellectual property ownership.**

6. Reference Example

Bad Head Cyan (2022)

Mint date: February 3, 2022

Contract Address: 0x495f947276749Ce646f68AC8c248420045cb7b5e

Token ID: 25584371751761932873858142294993948590275096702038761411014667971760299704321

This NFT is the **first documented example** of the MELS method and serves as the **historical prototype**, created before the method was formally named or defined.

7. License

MELS v1.0 is released under **CC0 (public domain)**.

8. Responsibility and Legal Framework

8.1 User Responsibility

Each user is solely responsible for:

- how they use the method,
- complying with the laws of their country,
- respecting the intellectual property rights of others,
- ensuring their creations comply with applicable regulations.

8.2 International Legal Framework

Using the MELS method does not exempt the user from respecting:

national intellectual property laws,

international regulations (Berne Convention, TRIPS, WIPO),

NFT platform rules,

contractual obligations or licenses associated with logos, trademarks, or artworks.

8.3 Disclaimer

The author of the MELS method declines all responsibility for any non-compliance with rules, constraints, or legal obligations related to the use of a logo-signature. Each user remains solely responsible for their use of the method and for complying with applicable laws.