Compliance sheet — star-maneuver

Everything a supplier qualification, a legal review or an export check usually asks about star-maneuver 0.2.2, in one document.

1. Identity

Document	STAR-PKG-STAR-MANEUVER-EN · v2.3 · 2026-11-14
Package	star-maneuver
Version	0.2.2
Capability	star.orbit.maneuver
Maturity	Beta (VERIFIED)
Python	>=3.9
Source commit	dc09f61d
Source	https://github.com/Andrea07072000/S.T.A.R.-/tree/main/packages/star_maneuver

2. Licence and obligations

Apache License 2.0. You may use, copy, modify and distribute it, also commercially, and you receive a patent licence from the contributors. When you redistribute it: keep the LICENSE file and the copyright notices (and a NOTICE file, if a future version adds one), and state in modified files that you changed them. You may not use the S.T.A.R. name to endorse your product.

3. What it needs at run time

Nothing beyond the Python standard library: it works offline.

4. Integrity

SHA-256 fingerprints of the files published on this website. Check a downloaded file with:

```
python -c "import
hashlib,sys;print(hashlib.sha256(open(sys.argv[1],'rb').read()).hexdigest())" star_maneuver-
0.2.2-py3-none-any.whl
```

FILE	SHA-256
star_maneuver-0.2.2-py3-none-any.whl	d84f1d73f0d907d1a1e7df4c87822e1d3b9d302735c05ada79694d4bbd767965
star_maneuver.py	c1908a47917dfdba2b61883b2d442ec547e51c6bc4986e94bb71d4ef7d8dfc83
star_maneuver-0.2.2-source.zip	b38b91920137790d971aa7ca611b8801e697ba0da9780c2a9d1bd83a24ac2241

5. What it does, and its limits

Impulsive manoeuvre arithmetic between circular coplanar orbits and plane changes. Standard library only.

Finite burns, gravity losses, non-coplanar Hohmann with optimal plane-change split, any flight qualification.

- `vis_viva(r, a, mu)`; `hohmann(r1, r2, mu)` and `bielliptic(r1, r2, rb, mu)` return per-burn and total delta-v (km/s) and time of flight (s). Units: km, s, km/s, km^3/s^2 (default mu = 398600.4418, IERS Conventions 2010).
- `plane_change(v, di)` = 2 v sin(di/2); `combined_dv(v1, v2, di)` by the law of cosines (radians).
- Invalid input fails explicitly with `ValueError` (non-positive radii, rb < max(r1, r2), negative speed).

6. Export, use and certification

The package is published and freely available. That usually takes software out of export-control lists, but not every use of it: read the page on space activities and export control before using it in a controlled programme. It is not certified or qualified for flight; the evidence describes what was tested and how.

7. Citation and bill of materials

```
@software{cavazzini_star_maneuver_0_2_2,
  author  = {Cavazzini, Andrea},
  title   = {{star-maneuver}: Closed-form vis-viva and Hohmann orbital transfer engine},
  version = {0.2.2},
  year    = {2026},
  url     = {https://andrea07072000.github.io/S.T.A.R.-/software/star_maneuver/},
  note    = {Apache-2.0. Source: https://github.com/Andrea07072000/S.T.A.R.-, commit dc09f61d}
}
```

CITATION.cff · BibTeX · SBOM CycloneDX 1.5 · SBOM SPDX 2.3

8. Warranty and liability

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Related: space activities and export control · acceptable use · evidence and limits · licence texts