

AstroMax Quantum

Installation guide — the program and the outside tools it can call

What you need, at a glance

Software	Needed for	Required?
AstroMax Quantum	everything: stretching, colour, palettes, masks, mosaics	yes
ASTAP + star database	plate solving, and the star catalogue colour calibration reads	for solving and SPCC
RC-Astro CLI (BlurXTerminator, NoiseXTerminator, StarXTerminator)	sharpening, denoising, separating stars	optional
GraXpert	background extraction	optional

Nothing here ships inside AstroMax Quantum. Each tool is downloaded and licensed from its own author. The program works without the optional ones — those buttons simply say the tool was not found.

1 · AstroMax Quantum

macOS

- Open the **.dmg** and drag **AstroMax Quantum** into your Applications folder.
- The first launch is refused: *“cannot be opened because the developer cannot be verified.”* That is macOS being careful about an application it has not seen before.
- **Right-click** (or Control-click) the app and choose **Open**, then **Open** again in the dialog. macOS remembers the answer — from then on it opens normally.

Windows

- Run **AstroMax Quantum Setup.exe**, or use the **portable** build, which needs no installation.
- SmartScreen may warn about an unknown publisher: **More info** → **Run anyway**.

First run

There is a 30-day trial. After that the program asks for a licence key, which is tied to one computer — it shows a **Computer ID** to send when buying. The key for AstroMax Quantum is separate from the keys for the AstroMax PixInsight scripts.

2 · ASTAP and its star databases

ASTAP does the plate solving, and its star database is also what colour calibration reads instead of PixInsight’s Gaia catalogue. Install the program first, then at least one database.

The program

- Download ASTAP from **www.hnsky.org/astap.htm** and install it normally.
- On macOS it lands in `/Applications/ASTAP.app`; on Windows in `C:\Program Files\astap`. AstroMax Quantum looks in both by itself.

The databases — take both

Database	What it holds	Used for
D50	star positions and brightnesses down to magnitude ~17	plate solving — Solve, Star Alignment, mosaics
V50	the same stars <i>plus</i> V magnitude and B–V colour	colour calibration (SPCC): a measured star can be compared with a real colour

D50 alone is enough to solve an image but not to calibrate colour, because it carries no colour information. Both may sit in the same folder; the program picks whichever each job needs.

Where to put them

The database is a folder of files named like `v50_1448.1476` — one per patch of sky. Put that folder where ASTAP itself keeps it. AstroMax Quantum looks in these places:

```
macOS  /usr/local/opt/astap  ·  /usr/local/share/astap  ·  /opt/astap  ·  ~/.config/astap
        ·  ~/astap
Windows C:\Program Files\astap  ·  C:\Program Files (x86)\astap
```

If yours is elsewhere, point the program at it once — see section 5.

3 · RC-Astro CLI — BlurX, NoiseX, StarX

Take the CLI version, not the PixInsight plug-in. They are separate downloads. The plug-in only runs inside PixInsight; AstroMax Quantum calls the command-line build.

- Buy and download from www.rc-astro.com, choosing the **CLI / command line** build for your system.
- Each product — BlurXTerminator, NoiseXTerminator, StarXTerminator — is licensed separately, and one licence covers the plug-in and the CLI.
- The CLI is *not* an application bundle: it is a plain executable in a folder, so it never appears in Launchpad or the Start menu. Do not go looking for an icon.
- Run each tool once from its own installer or terminal so it can download its AI model. Until that is done the first call from any program fails.

Where it usually lands

```
macOS  /Applications/RC-Astro/CLI/rc-astro  ·  /usr/local/bin/rc-astro  ·  ~/bin/rc-astro
Windows C:\Program Files\RC-Astro\CLI\rc-astro.exe
```

4 · GraXpert

- Free, from www.graxpert.com (or its GitHub releases page).
- Install it normally; on macOS that is `/Applications/GraXpert.app`.
- Used by the **Background extraction** and **GraXpert** buttons. Run it before separating stars: a gradient left in the background ends up in the star layer as a coloured pedestal.

5 · Telling AstroMax Quantum where things are

The program looks in the usual places by itself. When something is installed somewhere else, say so once:

- Open **Tools...** in the bar at the top of the window.
- Point each entry at the program file — for RC-Astro that is the `rc-astro` executable, not a folder.

- It is asked once and remembered between sessions.

At startup the Console line at the bottom names anything still missing, so you always know where you stand.

If something does not work

What you see	What it means
"... was not found. Install it, then say where it is"	The tool is not installed, or not where the program looked. Install it, then ■ Tools...
"StarXTerminator failed. Open it manually once to set the AI model."	The CLI is there but has not downloaded its model yet. Run it once on its own.
"No solution found"	Check that the ASTAP database is installed and that the image header carries focal length and pixel size. Leave Downsample on 0 (auto) .
SPCC reports "0 stars matched"	Usually the V50 database is missing — D50 alone cannot calibrate colour.

AstroMax Studio · astromax.studio — this guide covers installation only; the program itself explains each control in its tooltips.