

# Unofficial Handbook

(formerly known as "Lymow Notes")

## Setup, maintenance, troubleshooting and hints

V2.0 December 8, 2025

Copynot (nc) 2025, Dan Forth - whoever that is - with edits by Michael Pagano

**Disclaimer:** although some of the notes here came from Lymow, most of it is information, ideas and suggestions shared by owners from direct experience. Errors and dated information are inevitable! **Apply at your own risk.** Thanks to all those who have shared ideas or helped others.

### Contents

Planning.....	2
Account.....	2
RTK placement considerations.....	2
Charging dock placement.....	2
Arrival and initial setup .....	3
Do these things, in order of importance, before you do anything else.....	3
Additional setup for mowers made before September 2025:.....	4
Early upgrades to consider, to help improve some issues.....	5
Other early checks.....	5
Mapping hints.....	6
Regular Maintenance and inspections.....	7
Good practises to reduce the chance of possible issues.....	7
Maintenance checklist .....	8
Troubleshooting.....	9
General .....	9
Communications .....	10
Charging .....	11
RTK.....	12
Mowing and navigation .....	13
Usage Hints.....	15
Installing Lymow's scraper and brush set (December 2025).....	15
Useful Numbers and Specs .....	16
Miscellaneous tips and notes .....	16
Deeper Knowledge requiring extra care.....	18
User Projects .....	18
Would a Lymow be good for you? – my opinion.....	19
Useful things to remember .....	19

## Planning

### Account

- Decide how you're going to connect in the Lymow app – Google account, Apple ID or regular email address. **Keep a note of which method** in case you need to log in again or uninstall/reinstall the app – things get quite confusing if you later try to use the wrong method.

### RTK placement considerations

The RTK is *essential* for reliable navigation of the mower. Therefore:

- Use a GNSS/GPS app on your phone (e.g. “GPS Status & Toolbox” by MobiWia on Android, GNSS View for iPhone) to confirm the best location for your RTK. The more satellites the phone app – and thus later the RTK – can “see” at relevant times of day, the better.
- Satellite visibility is *far* more important than height, line-of-sight, or closeness to the mower or dock – the radio the RTK uses to broadcast to the mower can go through walls or even entire houses, and cover a good long distance. The RTK *will* need reliable power.
- Some have had success mounting their RTK in an attic or shed so that it can stay installed year-round. This may work if there aren't metals or meshes in the enclosure or walls which will reduce the RTK's satellite reception – again, this can be tested ahead of time with a GPS status app.
- Lymow uses the five main GNSS satellite clusters: GPS, GLONASS, BDS, Galileo and QZSS. The chip in the RTK can spot up to about 60 satellites. The RTK uses LoRa to broadcast to the mower, which needs to get that signal clearly enough to precisely resolve its position. If the RTK signal and its own satellite reception is strong, the mower uses it. But as a fallback, e.g. when the mower is under trees, it uses VSLAM for up to 10 minutes, with varying effectiveness. The RTK needs up to 5 minutes (sometimes more) after power on to pinpoint enough satellites to get to 10-20mm precision.
- The mower gets its *worst* LoRa signal when it is directly under the RTK – so try to avoid placing the RTK above/near crucial pathways.
- The RTK does **not** use WiFi, Bluetooth or 4G. It needs reliable power, the ability to see lots of satellites, and no major impediment to its LoRa broadcast.

### Charging dock placement

Choose permanent location which is:

- firmly supported by something like pavers, plywood or concrete – this matters for good charging due to the contact pressure required to start and keep charging.
- flat – with a slight slope down towards the QR codes if easy to arrange.
- protected from the elements if possible - perhaps by an overhang or dog kennel (dock is 350mm high) – but don't put it in a tight corner such as an “L” of the house. Garages have been used with success but beware of unexpected clutter.
- has relatively easy access to power, using a good-quality extension lead if you need one.

- has a wall or some kind of heavy mass right behind it, so it isn't moved when the mower bumps around and pushes firmly while trying to dock. A grippy rubber mat underneath can have the same benefit.
- preferably able to "see" some GNSS satellites so the mower can get near the dock. But if you want to put it inside a garage or elsewhere where satellite reception is limited or nil, you can manually drive the mower in and out if you wish.

Like the RTK, the dock does **not** use WiFi, Bluetooth or 4G – its only communication with the mower is via supplying current, or not. This is controlled by the micro-switches under the dock's contacts, and the (overly-sensitive hence must-be-taped) moisture sensors underneath the dock.

Try to avoid placing the dock or any navigation channels in areas with a crushed-stone base – these get into the tracks increasing track tension, which is a Bad Thing.

If you're considering solar power, the dock will need a sustained 250W when using the 2.5A charger; the RTK would need at least 1W (measured/sustained - higher during power on).

Even with regular AC power, *RTK reliability is what makes your mower's navigation reliable*, therefore consider a UPS with power surge protection for it!

Finally, the mower does **not** need WiFi, Bluetooth or 4G to mow – for this it only needs satellites and a reliable RTK signal. You *do* need to be close and using Bluetooth to map or manually drive the mower. You need WiFi to see its camera view and – most importantly – you need WiFi, 4G or Bluetooth to configure the mower, set up schedules, start/end mowing and to get and clear error notifications. WiFi (best) or 4G are also needed for firmware updates.

**Read** the information - tutorials, FAQ, manual - and **watch** the videos in the **Lymow Help Centre**: <https://lymowtechsupport.zendesk.com/hc/en-us>. Your life will be much easier if you do this now. There are also numerous "how-to" videos on YouTube from actual users, such as HandyDadTV. Look for them! See also William Carver's [Sep '25 setup guide](#).

## Arrival and initial setup

It's heavy! Have help handy for any box moves.

Cut the box straps, poke small holes in corners to allow air to flow as you lift the lid straight up – this reduces the chance of accidentally breaking the dock's rear upright during unpacking.

### Do these things, in order of importance, before you do anything else

- Check track tension – they usually arrive with the tension waaaaay too tight, which is bad for both battery life and wheel hub life. Aim for 20-30mm of play when depressing the top track in the centre. *Lymow's official recommendation is the distance between the bottom edge of the tread and the frame should be approximately 40mm (1-1/2 inch) – many users still regard this as too tight.* You can remove the battery and use the Allen keys Lymow provides to make tension adjustments without removing the mower's floor plate - this matters in mowers where the floor plate screws are firmly anchored. See <https://www.youtube.com/watch?v=1Yu6V5v6Xx8> for a good how-to.
- Moisture sensors on the underside of the dock – tape these with waterproof tape. **This is official advice from Lymow** - apparently they're too sensitive and there's been no software fix. Spray silicone waterproofer on the sensor before

taping, also spray the power supply connector before plugging it into the dock.

For more on this and other options to consider, see

[https://m.facebook.com/story.php?story\\_fbid=4572996349578457&id=3951569995054432](https://m.facebook.com/story.php?story_fbid=4572996349578457&id=3951569995054432) and

<https://www.facebook.com/groups/lymow/permalink/4576521365892622/>

- Take a photo of the mower and charging-block serial numbers, and the RTK QR code - **especially the latter**, as you need it to bind the RTK to the mower, which is tricky if it's already installed on the roof of your house!
- Connect to your mower and update its firmware to the latest before doing an RTK bind. Also note that the RTK bind is not actually verified, meaning a typo will be silently accepted but the RTK *won't* be seen by the mower until it is corrected.
- Remove the plastic film over the LCD screen, otherwise it will be difficult to view the screen in low light. It's only there to protect the screen during shipping. NB: the backlight for this LCD goes on if Settings|Vehicle Lighting is on in the app.
- **Mow your lawns with your regular mower** not long before starting with the Lymow. While some have used theirs to break in new lawn from weeds, weeks of growth or even rough pasture, you'll get best results – and learn the normal behaviour of your mower much more quickly – if you start it in “lawn maintenance mode”, just as you intend to go on.

### Additional setup for mowers made before September 2025:

**You can ignore this section if your mower is new and recently delivered.**

- *Before* using with the 10A charger, unscrew the dock contacts and ensure the spade connectors to those contacts are **firm**. If they are loose, 10A current can cause arcing, plastic melting and loss of contact or unreliable contacts. “You have to take the screws out that hold the contact, then the screws recessed down inside the box that holds the contact to be able to free it to look underneath. If you need additional wire slack, take the 4 screws off the large rectangle plastic cover at the back-centre of the charger.”
- Check the external hub bolts under the side cover. And *especially* the internal hub bolts for the track wheels, per below. The internal ones are on the inside of the wheel motors – you get to them by flipping the mower over and accessing the bolts one at a time by rotating the track.
  - If they are welded to a metal ring or have some other metal disc solution (mowers made after July '25), leave them be - and also ignore the next two bullet points
  - If they are hard to remove, **don't** force them, as this can strip or break the bolt head – it likely means they were inserted with red Loctite, which requires heat to remove. Leave them for now and inspect now and then.
  - If they are easy to remove – even if they have some visible Loctite on them: remove and apply blue Loctite, and add a white alignment mark on the head once they're reinstalled so you can see if they move. Consider adding lock washers as well.

## Early upgrades to consider, to help improve some issues

- Remove the plastic side-covers on the tracks and perhaps even the metal that supports those side covers. Users have reported that side-cover removal *doesn't* seem to cause increased accumulation of debris – the opposite in fact – and inspection and cleaning is much easier. However, the occasional stick, nut, stone or pine-cone will get in, whether or not you remove covers. Since the added track tension from those objects may lead to hub damage, do inspect regularly!
- Install scrapers against the front track wheels to reduce grass build-up there. *Grass accumulation between the hub wheel and track increases track tension, which can ultimately detach the wheel hub completely.* If you email Lymow support, they will send you some – instructions are [below](#). Self-made scrapers can be [3D-printed](#) or hand-fashioned from stiff plastic, such as the right-angles used under the straps on the Lymow's outer cardboard box.
- Dock contact reliability can be improved by wrapping them with wire - see William Carver's setup guide above. Or, easier, support the dock contacts with a 25mm light foam cube. Ensure they can still be easily pressed to activate their micro-switches - no charging happens until those switches are firmly pushed by the mower contacts.
- Add an extension to the soft mud-flap behind the mower blades, so that the contacts get less grass juice and detritus during regular mowing. This extension could be as simple as folded duct-tape which gets replaced occasionally, per [https://www.facebook.com/story.php?story\\_fbid=4550488178495941&id=3951569995054432e](https://www.facebook.com/story.php?story_fbid=4550488178495941&id=3951569995054432e) and <https://www.facebook.com/groups/24969042096037430/permalink/25576718058603161/> NB: there has been an unconfirmed suggestion that newer mowers already have enhanced flaps from the factory.
- Fit upward-facing brushes on the dock where the mower contacts pass as the mower approaches to the dock's contacts. See [later in this document](#), for brushes you can get from Lymow or: [https://www.facebook.com/story.php?story\\_fbid=4506968399514586&id=3951569995054432](https://www.facebook.com/story.php?story_fbid=4506968399514586&id=3951569995054432)
- Ceramic-coat the contacts and the mowing deck body above/around the blades; elsewhere if you like. Makes cleaning easier.
- If you don't much need extra mulching functionality (i.e. no leaf litter), remove the side mulching plug and also consider not adding the insert Lymow provides. How to remove side mulch plug while retaining rear flap with M4 bolts/nuts: [https://www.facebook.com/story.php?story\\_fbid=4532722350272524&id=3951569995054432](https://www.facebook.com/story.php?story_fbid=4532722350272524&id=3951569995054432) NB: post-July '25 models may not need the extra bolts.

## Other early checks

- Make sure you mount the RTK with the antenna pointing *downwards*; preferably tape its power connection and add a support loop in the power lead so the weight of the lead isn't directly on the connector. Power security matters!
- The battery should arrive with some charge, though there have been reports of none. Remember to connect it internally (open the back of the mower). Then test it by powering the mower on – hold the power button for **just two seconds** and release it the moment you hear the fan start - then wait 15 seconds or so for it to come to life. If you hold it down more than 2 second, it powers off again.

- A 4G mobile data SIM is installed above the battery in its compartment. If you want, you can remove it to check what plan it has via <https://www.eiotclub.com/pages/refill> But be very sure to replace it in the correct orientation for its notch - see diagram on roof of mower – most easily read if mower is upside down. NB: 4G isn't needed to for mapping, manual driving/mowing or scheduled operation of the mower - just as WiFi isn't. But both 4G and WiFi add value to short-range Bluetooth operation, such as camera streaming, as well as allowing for firmware updates. 4G is not enabled by default but can be turned on in the Lymow app - contact Lymow if there is no 4G service once it's been on for a day or so.

## Mapping hints

- Tap the mower's "+" button a few times to raise the mowing deck a little before mapping, also for manual docking. Set speed to slow to map well.
- Cart the mower around looong perimeters in a wheelbarrow or trolley - much easier than driving it, so long as you don't need high precision. As best we can tell, the centre of the mower defines its location while mapping. See <https://m.youtube.com/watch?v=ywiSe2qbF8A>
- After each significant change or addition to your maps, **do a backup** in the app!
- It *will* drift lightly to the right while manually driving, mapping or mowing via the app – apparently this is a common condition of manual guidance via "joystick" interfaces. Best solution: map at the slowest speed. Or, for larger areas: map with the mower in a barrow or on a small cart.
- Start out small – with a non-complex smallish zone near the dock. Get that zone working with scheduling, mowing parameters and docking. Once that's going well, incrementally add other or more-complex zones, testing the mower in each new zone after it's added. This incremental approach gets you familiar with the mower with much less pressure than trying to do it all at once.
- You might want to map a complex zone quite simply or conservatively at first, then use the Modify Edge function to progressively add finer details, testing via short "Perimeter first" mows as you go.
- Channels, including to the dock, are regarded as **safe paths** by Lymow. Therefore, try to run them in areas where there won't be clutter or unexpected obstacles in the direct path of the mower, ditto for the area it needs to perform docking manoeuvres. Because they know channels need to run in narrow areas with apparent obstacles (e.g. overhanging branches, small holes in fences), Lymow currently *don't use* "Smart" obstacle detection mode in channels, even if it's turned on.
- At present, the narrowest path you can map in a zone is 1.3 metres (4.3 feet). Any less and that part of the map will be ignored/deleted. The mower currently needs that much width to get down the path, turn safely, and come back. However, where you don't have solid walls or drop-off edges, you can cheat to get extra width. For example, a narrow grass strip alongside a path can be mapped if you're happy to include part of the path in the mapped width.
- If need be, you can later move the charging dock and then easily re-add its location in the app. But aim to *not* relocate the RTK unit once you're into serious mapping, as moving the RTK *will* require all maps to be re-made! NB: so long as the RTK's *mount* never moves, you can remove the head - e.g. to store it inside or winter – then carefully replace it back on the mount before mowing. This also applies if you need to use the RTK at a different, distant property – keep rigidly-



fixed mounts at both places. NB: it's currently unknown if one mower can support two distinct RTKs, e.g. for a secondary place a long way off. Just down the road is easy: use the same RTK without moving it, as its range is up to 1km.

- **Always** check that the RTK error shown in the app is nice and low during mapping – e.g. 0.01m (metres = 10mm or roughly half an inch). A higher error such as 0.1m (4 inches) or more may be a clue you need to relocate your RTK. That's best done *before* you make lots of maps!
- To make life easier, make a small dummy zone (high deck, no blade speed) to interconnect or replace channels to the dock.
- Lightly overlap zones where possible so you don't need to create channels between them – the first point where two zones touch when you're mapping the overlap is typically where the mower will cross from one to the other when moving between zones. Any overlapped area will be mowed during each zone's turn, with that zone's settings.
- Avoid creating channels or zone edges across a crushed-stone base – these get into the tracks increasing track tension, which is a Bad Thing.
- **Do** create no-go zones around permanent/long-term obstacles such as trees, drains, hydrants etc., as this makes for much more efficient mowing. The easiest way to map a small no-go zone, e.g. around a shrub, is to carry it around, if you're able. Note that no-go zones shouldn't touch or overlap the edge of a mowing zone, and that (in earlier firmware versions at least) perimeter mows around them only happen for no-go zones that are more than roughly 1m diameter.
- Smaller zones can be easier for charge management or other reasons, but they do create more turning wear on the lawn.
- Did I mention: after each significant change or addition to your maps, **do a backup** in the app!

## Regular Maintenance and inspections

### Good practises to reduce the chance of possible issues

- Power the mower off and on after changing major settings, such as obstacle avoidance.
- **Before** any OTA firmware update, back up your maps! If you have issues getting an update to happen, turn off 4G (if selected) and move it as close as possible to the best WiFi router it's currently bound to, then restart the update process.
- **After** a firmware update, power cycle the mower or even disconnect the battery for 10+ minutes before using it. This "deep power cycle" is also a useful early technique for *any* troubleshooting, akin to rebooting your phone or PC.
- **Cleaning** is best done with an air blower, brushes and damp cloth. **Spray** cleaning is undesirable because the unit's waterproofing (i.e. electronics!) isn't enough to withstand a strong spray. This is especially true in the handles area, which you might want to explicitly seal, and also take care to avoid water getting into the upper portion of the mower deck.
- Set lockout times so the mower doesn't resume a mow at night, unless you want exactly that.
- Sharpening blades: the surface you grind to sharpen the blade should be UP, facing the mower deck – at 30 degrees for a regular blade. You don't need fancy

tools or techniques like blade-balancing, as these are small blades made from light metal – a hand-file will do, and you may not even need to remove the blades (but do disconnect the battery first!). A little and often is best.

<https://youtu.be/K04B4gJRoVU?si=95ruvOMbkORC7LIH>

- If you have major hazards such as a public road, pond, high drop-off, or *Items Which Must not be Mowed* - then be conservative and supervise the mower in those areas, *especially* after new firmware updates. The RTK-based navigation is very accurate - **except** when RTK power glitches or interference affects satellite signals or interference affects the RTK's LoRa radio, or a solar flare hits Earth or the mower software glitches or the bumper sensor sticks, or there's a mechanical fault.... If the mower is near an important hazard when any of those things happen, you could end up with a dead mower, or worse. Consider creating special zone(s) containing such hazards and only mow them under supervision.
- Set at least two perimeter laps so the back and forth phase of mowing doesn't accidentally penetrate the perimeter (rocks, wall, edge) while manoeuvring.
- Mow slower so it handles bumps (and edges) better.
- If you plan to turn the charger off for several days, disconnect the battery too. The battery will completely discharge in a couple of days if not continually charged. At present, the amount of power used to keep the mower on, cooled and connected to WiFi, satellites etc so it's ready to mow on demand is about 250W. You can see this yourself via the Engineering screen – see [Miscellaneous tips and notes](#) below.

## Maintenance checklist

- Check your charging contacts regularly and clean as required, then optionally coat with very thin lithium grease. For many, contact cleaning will be a minor & infrequent task; for others an onerous one. Grass type is **the** major factor affecting this, and that isn't really under anyone's control. Apart from the mud-flap and brush enhancements listed under "Early Upgrades" above, the main mitigations are avoiding mowing when damp and not taking too much off in one go. The latter is much easier once your lawns are in "maintenance mode" - as opposed to using the Lymow to break them in from "not mowed in weeks".
- **Even if the contacts seem clean**, a light spray and finger-wipe of them and of sensors like the camera and rain sensor after each mow is a good idea. Have a spray bottle handy for this chore. For more serious accumulation, a brass-bristle brush is safe to use, as it's softer than the contacts, so won't scratch them.
- A strong blower such as the one below will quickly blow dry debris out from the tracks and mowing deck:  
<https://www.aliexpress.com/item/1005008671245984.html>
- Debris does accumulate under the mowing deck cover over time and can affect deck lowering and raising, sometimes even charging. It's a good idea to clean it out at least twice a season, and also check the blade motor mounts. Removing the deck cover is about eight screws, per  
[https://www.youtube.com/watch?app=desktop&v=RQ6H5\\_F0cj4](https://www.youtube.com/watch?app=desktop&v=RQ6H5_F0cj4) If you get a lot of debris in there, consider adding a light pre-filter to the mesh intakes of the deck.
- Check your wheel hub nuts regularly! If any are loose or missing, sort them out *before* you mow again. You may also be able to remove four bolts from the wheel



hub to inspect the planetary gear inside for damage. **However:** don't force-remove any hub bolts, as they are not strong and Lymow has adopted a strong thread-locker in more recent builds. (Inner hub screw size: M3x8mm, though you could upgrade to M3x12mm).

- Re-check track tension regularly – aim for 20-30mm of play. You can remove the battery and use the right-angle Allen keys Lymow supplies to make tension adjustments without removing the mower's floor plate. The first time you do this, the inner hex bolts will be very hard to get moving – persist, carefully.
- Lymow have suggested the tracks be lubed with lithium grease where they contact the cogs. Others have pointed out this will cause grass to stick, and some have suggested dry silicone spray instead. Regardless of whether and how you decide to lube, focus on track tension, track condition, and blowing out loose grass – keep grass from building up between the wheels and the hub!
- If you get a lot of track clogging, consider removing their side protectors.

## Troubleshooting

### General

- **Early/effective troubleshooting steps for many issues:**
  - Force-restart: Home+Power for about 10s. Then just power.
  - Disconnect the mower's battery for 10+ minutes
  - While you're doing that, reboot the phone and power cycle the RTK (the RTK then needs a few minutes to see enough satellites for precision)
  - If still unresolved, force-close the app and clear its cache. An app uninstall/reinstall has resolved even-more-persistent issues – you won't lose your maps but do have your [original login method](#) handy.
- If it has stopped mowing unexpectedly, it may have stopped for an error, or you may have inadvertently pressed the big red STOP button, which stays down indefinitely once pushed. In either case, red LEDs should show on top instead of green (unless you've disabled those LEDs via the Vehicle Lights setting in the app) - and you should also get a notification in the app. Get it ready to Resume in the app by pressing the big red STOP button! If the button doesn't seem to work, check there's no pebble or other debris stuck under it.
- Deep power cycle (battery disconnect for 10+ minutes) for any issues that aren't resolved by a normal power off/on, and also after a firmware update.
- If map in the app doesn't update to reflect live mowing or is in some way scrambled, exit the map and come back in to see where it's at. If need be, force-close the app and reopen it.
- When you encounter interesting or intractable issues, *do* use the app's "send logs" feature. Follow that up with an email to [support@lymow.com](mailto:support@lymow.com) which includes at least the last six digits of your mower's serial number – optionally charging block and RTK serial numbers too, where relevant. In your email, mention the logs and explain what your issue is – with two or three photos and/or a link to a video where possible/relevant. Response time is typically 1-2 working days, in China's time-zone and with reduced service on weekends and Chinese public holidays.

- If you don't get any email response from Lymow (including in spam) in a couple of working days, try sending from a *different* email account. Email is much less reliable than it was even a few years ago and your emails may have been unexpectedly blocked before reaching them.
- If you see "Location service not initialised", ensure STOP hasn't been pressed and that you have a good connection from your phone via Bluetooth.
- If you start the app and it's logged out or wanting you to Add Device, ensure you log in again with the [original login method](#) you used when you first created your account. Using a different method can lead to this confusing condition, e.g using your email address when you originally connected via Apple ID.
- At the beginning of the OTA firmware upgrade installation, don't skip the country selection. You will later get the error message "Your account region doesn't match this device's supported regions. Clearing the cache will allow you to start the update again.

## Communications

- Lost Bluetooth access? Try:
  - Persisting – it has worked
  - Force-close then clear cache on the app
  - App uninstall/reinstall has also worked for some.
  - Standing right above the mower
- Lost WiFi access?
  - You can see WiFi strength under Settings|Status bar in the app – something like -50 is fine, anything below about -95 won't be enough to use pause/cancel etc.
  - Ensure the configured access point(s) are available and broadcasting 2.4Ghz SSIDs. They should not broadcast a 5Ghz signal with the same SSID as the required 2.4GHz signal.
  - Force-close then clear cache on the app
  - Use the app to disconnect and reconnect the mower to the WiFi access point
  - Uninstall/reinstall the app
  - Deep power cycle (disconnect mower's battery for 10+ minutes)
  - Backup maps, then factory reset the mower – you can restore maps later. Lymow have recommended this in a few cases to restore WiFi, and it has worked for others also. Lymow advised to first check Settings|Device in the app, and factory reset if there isn't an IP number showing after repeated (re)connection attempts.
- 4G connection problem?
  - You can check the 4G SIM's status in the app via the Settings|Device Info screen – it should show "Activated". And the Settings|Network|Preferred network should be 4G.
  - You can also check the SIM's status yourself via the method documented in [Other early checks](#) above.
  - Lymow noted: "If you select 4G priority, the mower will attempt to use 4G as the main connection right after powering on. However, if the mower

cannot successfully ping the network within the first 5 minutes after start-up, it will stop trying to use 4G for that session. Even if the 4G signal becomes available later, the mower will not automatically reconnect via 4G until it is restarted. This behaviour can cause 4G to appear unavailable after some time, especially if the network was unstable during the initial start-up period."

## Charging

- Don't be fooled – the switch on the back of the dock only controls whether the dock LEDs light up - it does *not* control actual charging.
- Dock LEDs: Solid green = waiting, both sides flashing = moisture issue; left-middle-right = contacts issue; "step-increase" style (e.g. left constant, middle flashing) = probably charging – see the app for confirmation. Also, the 10A power supply brick's light will turn red when it is charging.
- If you hear a "brake" hum when it's on the charger, bump or shift it gently so it stops.
- Under Settings you'll find "Charging Handbrake". This controls whether the motors run slightly to keep it firmly parked on the dock, hence charging reliably. If you have a perfectly level stable area (i.e. pavers, garage floor) and you don't want the battery being used during charging to keep the brakes engaged, you can turn this option OFF.
- Power cycling or disconnecting/reconnecting the charger can resolve some charging issues.
- If the 10A power supply has ever been used and there are unresolved charging issues, the spade connector to the dock contacts might be bad or loose *under* its shrink wrap! (See notes under [Additional setup steps](#), above). If you recently received an upgrade to the 10A power supply and you need to use the extension cords, ensure you are using the extension cords that came with the 10A power supply. Do not use the 2.5A power supply extension cords with the 10A power supply.
- It's also worth checking those spade connectors and reconfirming the firmness of their connection to the dock contacts for any other intermittent/non-charging issue, regardless of what charger you're using - *after* you've tried all easier checks. This has solved charging problems for several people.
- If the maximum value when charged is sometimes only 95% or 98% instead of 100%, don't worry, that's normal. But if the max drops much below 90%, you may want to recalibrate the battery management system. To do this, run the battery down to 0% (don't settle for 1%), e.g. by manually mowing or leaving it powered on but off the dock for a while. Then fully recharge it. Doing this once or twice should be enough to recalibrate ok.
- Cycling between 95-100% of charge while on the dock is normal and won't harm the life of your battery. Modern LiPo batteries protected by good battery management systems are robust and likely to comfortably outlast the mower around them.
- Most other charging issues seem to be related to contact pressure, as no charging will happen if there isn't enough pressure to push both contact micro-switches. Hence the recommendations for **a firm dock foundation**, slight slope down towards the QR codes, and raising the mower deck a little with taps of the "+" button before manually placing it on the dock contacts. At least one person greatly improved charging reliability by adding soft packing foam under the dock contacts to keep them more firmly raised.

- If you have no battery power to raise the mower deck, use the silver tab on the back to raise it, and consider propping it up on small blocks to keep it raised if necessary.
- Right after a recent firmware update, some owners got a roughly-hourly series of spurious “unexpectedly stopped charging” notifications, with no matching errors in the log. It seemed like the mower/app were notifying the normal transitions to Waiting from Charging which happens when the charge is near full - though this wasn’t the only possible cause. In most or all cases, the problem reduced and then went away within a day or two. In my case it stopped after I did a battery recalibration, but that may have been coincidence.
- Detailed guide for checking power contacts on charger, dock and mower with a multimeter: (Google Lens etc on your phone can translate the diagrams)  
<https://lymowtechsupport.zendesk.com/attachments/token/sppZ7inPksHOagYu9oiBDJgBQ/?name=Not+charge+EN.pdf>

## RTK

- RTK antenna should be pointing **down**. And remember, RTK placement is all about maximal view of the sky – not height, not proximity to the dock or mower.
- The RTK precision reading in the app, such as “0.01m” is in **metres** - so that excellent reading is about 10mm (just under ½ an inch), and something like 0.5m (1.6 ft) is very bad!
- Support the RTK power connection with tape and a support loop so the weight of the power supply cable isn’t all on that connector.
- If you don’t trust your RTK’s power reliability, add a UPS with surge protection.
- If you move the RTK, power cycle both it and the mower and give both a few minutes to re-see satellites. Note that all maps must be redrawn *any time you move the RTK to a new location*. Your old maps *will* show up until you delete them, but won’t be reliable.
- An “IMU signal lost” error has been resolved at least once by checking/fixing RTK power, even though IMU means “Inertial Measurement Unit”, which is a multi-sensor component on the mower itself.
- Bad RTK? Power cycle the RTK and look for the *faint* red power LED near its USB connector. You may need to shade it to notice it’s on.
- Also double-check you have bound the correct QR code from the bottom of the RTK, not from the mower – at present the Lymow app doesn’t flag typos or other code errors, it simply silently fails to bind.
- If RTK binding is lost, place mower on the dock and try a bind from there. Remember that the app doesn’t verify RTK typos so type carefully!
- For persistent RTK connection issues, try powering it from the dock if possible, or via its USB connector - just to eliminate its regular power supply as a possible cause.
- If still unresolved, carefully disassemble the RTK - there are two levels, four screws initially and four screws on the second level. Ensure the internal connectors are firmly connected to the circuit board, especially the gold one!

## Mowing and navigation

- If your mower won't mow or quickly stops mowing, this may be because it detects rain incorrectly, via the sensor on top of the mower - the two small metal nubs about 10mm apart on the main body. Clean them, and make sure there's no residual moisture there. If they're dry, disconnect the battery for 10+ minutes, restart your app, and then the mower. If it recurs, contact Lymow support. In the meanwhile, you can turn off Settings|General Settings|Rain sensor mode.
- If it ignores no-go zones or similar behaviour, unplug battery for 10+ minutes and then check the zones are all still registered.
- Getting persistent out-of-bounds errors, and clearing each error doesn't help? Try restoring a backed-up copy of your maps from when it was working ok. This may clear any glitch in its working/map memory caused by firmware bugs.
- If you find it leaving too much of an un-mown gap compared to your original perimeter, consider changing the Safe-Margin Mode in zone settings to "Precise Edge" instead of "Offset Edge".
- If the mower persistently reports out of bounds when it isn't, or has a persistently high RTK error, or is missing from map even though the RTK error looks fine (e.g. 0.01m): manually drive the mower back and forth in the open until the RTK error corrects to a sensible figure and/or it reappears on the map.
- If the mower throws an "out of bounds" error while in the narrow channel from the dock because of initially-poor view of satellites, try making a very short channel to a wider non-mowed zone, assuming your terrain allows. The larger zone won't throw spurious out of bounds errors while accuracy is still improving.
- Note that "smart" detection currently does not apply when the mower is navigating through channels, docking etc. This is because Lymow knows these paths may have far more obstacles than a regular lawn and the mower might not be able to make its way through them if that settings is used. The downside is that it's **up to you** to ensure the channels and dock area are consistently free of the kind of obstacles that could get damaged by or cause damage to the mower if it's using only touch detection. This includes vehicles!
- Perimeter mowing used to be exactly the same as channels above, for similar reasons. But from Oct '25 Lymow added some options to it, which work to varying degrees – it will depend on what kind of obstacles you have on your perimeters.
- If the mower angles too aggressively into a rigid perimeter (e.g. wall) and "bounces" repeatedly as it goes along, try approaching that barrier at a shallower angle when mapping, to lower the chance of an initial bounce. Then ensure you've selected the same mowing direction for the perimeter as the direction you mapped it, e.g. clockwise. Later firmware will hopefully improve this – it's due to a "Perimeter Protection" feature Lymow introduced in August, which should be optional.
- If the map won't open in the app, try manually moving the mower 2-3 metres a couple of times - may come right.
- If the mower just randomly stops mowing, try a reboot - power button 2 seconds to turn off, same on - then resume.
- To mow manually: touch the remote icon in the app. Then touch it again to select blade height, blade speed etc. Sometimes you may have to edit and save the latter twice to get the change to "take".
- A useful post illustrating how to troubleshoot track/wheel issues (most relevant for mower built before August '25):

[https://www.facebook.com/story.php?story\\_fbid=4522883524589740&id=3951569995054432](https://www.facebook.com/story.php?story_fbid=4522883524589740&id=3951569995054432)

- If the mower reports that it can't find the dock, try placing the mower on the dock then go to the app's map editor, touch + and add the dock by selecting the charging button.
- If getting strange offsets of dock or mower location that aren't resolved by moving the mower a few metres out in the open, and you've already given it a while to re-acquire satellites after it was powered on, then also try power cycling the RTK. Then wait a few minutes for that to regain precision, and repeat the mower moving process.
- If docking is slow or awkward, **first clean the camera lens**, then check QR sticker orientation – if necessary you can use a heat gun or hairdryer to remove and replace in the correct orientation.
- Other docking issues can arise if there is low light around the dock, or strongly-contrasting sunlight and shadows across the QR codes, making them hard for the mower to identify. Setting the mower lights to turn on when docking can help with the former issue. Also ensure the mower's camera can see most of the QR code when approaching the dock, especially if there's a slope on the approach – you can drive it nearby and use the remote control mode's FPV view to check.
- If deck height stays up instead of lowering to mow, try to change it by tapping the +/- buttons – it has been known to come right with persistence. You can also try changing it with the silver tab on the back of the mower deck, then trying again with the buttons.
- For a spurious E7 "lifting motor jam" (a November firmware bug that may be fixed already), you can manually adjust the deck height to its lowest setting using the remote control on your phone, then resume mowing.
- If deck height doesn't change – perhaps even though you can hear a motor - disassemble the mowing deck and remove accumulated grass and debris – see [Maintenance checklist](#).
- If the mower is persistently circling, look at the front wheels. The iron strap supporting a wheel is may be bent, with the wheel rubbing the side wall. This is easy to bend back to straight.
- If one motor stops, try loosening both tracks evenly and re-check. Then see the Test menu with (among other things) hub calibration to try and fix that – see [Miscellaneous tips and notes](#) below.
- If persistently or intermittently going backwards for no reason, or you see other odd "navigation" behaviour – give the bumper a gentle kick or two on each side to try and clear the sensors. See Engineering screen in [Miscellaneous tips and notes](#) below. Contact-cleaner on the bumper micro-switches has helped resolve sticking switches.
- Slip errors were more frequent with the early-October firmware and has improved as of this handbook edition. Some have reduced slipping by wrapping some heavy zip-ties around the tracks so the heads are on the outside of the track. Another has successfully trialed screwing these into the tracks to create more friction:  
[https://www.amazon.com/gp/aw/d/B0852FFY62?psc=1&ref=ppx\\_pop\\_mob\\_b\\_asin\\_title](https://www.amazon.com/gp/aw/d/B0852FFY62?psc=1&ref=ppx_pop_mob_b_asin_title)
- For a blade error – blade stopped & mower not moving, possibly also E10 errors: [https://www.reddit.com/r/Lymow\\_Official/comments/1nuird8/fix\\_for\\_blade\\_error/](https://www.reddit.com/r/Lymow_Official/comments/1nuird8/fix_for_blade_error/) - basically this was caused by a loose internal connector, whose status is shown as the lower-left "dot" of the connections triangle on the mower's LCD. Lymow



sent an owner a PDF for how to check, which is linked from this thread:  
<https://www.facebook.com/groups/lymow/posts/4538184919726267>

- If mowing but with no blades turning *and no obvious sticks etc blocking them*: do this, essentially a soft reset:
  - be next to the mower (Bluetooth), go into the app and hit pause
  - go to the remote control function
  - select Blade speed to Power & select start mower
  - move it a metre forward, then backwards
  - stop mowing function on app and back out to original mowing screen
  - hit resume... sometimes it takes 10 seconds all the way up to 2 min but it will continue to mow where it left off without cancelling and starting the mow all over

## Usage Hints

### Installing Lymow's scraper and brush set (December 2025)

If you email [support@lymow.com](mailto:support@lymow.com) noting that you need wheel scrapers (hint: you do), they will send you a set of scrapers and likely also dock brushes – the latter remove loose debris from the mower's charging contacts as it docks. Here's how to install them:

**Scrapers** - see also <https://m.youtube.com/watch?v=23KP0EQIG6Y>:

1. If you still have a side cover and its supporting aluminium bracket on your track, remove them.
2. Unscrew the four screws holding the remaining aluminium box frame inside the track. Don't lose the metal washers and rubber grommets on the bottom screws!
3. With the box frame out, place a scraper fitting on it so that the open slots in the new fitting will be on the bottom (closest to the mower body) and the rubber scraper will be lying against the front wheel. While rear wheel scrapers are also supplied, with longer scrapers, you may not want to bother with them unless you've seen evidence of grass build-up at the rear. Note that the positioning of the open screw slots are different between front and rear fittings, so you can't interchange them.
4. Screw two short metal screws – you can use the ones that hold the side cover bracket - through the two holes in the scraper fitting, into the top of the frame. Don't over-tighten as the fitting plastic is fairly brittle.
5. Now put the box frame back in the same orientation as it came off - the two "washer" screws being nearest the track bottom - and screw in those ones first, then the top two. There'll be some pressure from the scraper against the front wheel, that's normal. Done! (You can reinstall the side covers now if you use 'em).

Some photos of the process are in the Dan Forth comments a fair way down this thread:

<https://www.facebook.com/groups/lymow/permalink/4608380686040023>

### Dock brushes:

Use the supplied glue (or any glue) to fasten the brushes just in front of the dock charging connectors - you can place them manually without glue to get the sense of them but it's obvious.

NB: in my case, one of the nuts on the brushes arrived loose - just screw them on as needed, and you can adjust the default height of the brushes using those nuts. I left mine pretty high and it didn't impede the mower's docking any.

## Useful Numbers and Specs

- Date of manufacture can be found from the number on the packing label, for example if it ends in 250814 it was manufactured on Aug 14, 2025.
- Mower serial number is under Settings|Device in the app, on a label on the mower and also the packing box label.
- Mower: length 29.3" width 21.8", height 12.5" (730x555x310mm)
- Charging dock: length 31.6", width 27.6", height 13.9"
- Lymow-supplied garage (rain cover) : length 32.4", width 28.3", height 15.7"
- When you select Blade speed, the following selections are available and correspond to these actual RPM blade speeds:
  - Eco = 3000rpm
  - Standard = 4000rpm
  - Power = 5000rpm
  - Max = Max (probably around 6000rpm)
- Bolt sizes and torque specifications ex Lymow:
  - Front Hub Center Bolt M6x12mm, 4-5 Nm
  - Rear Hub Sprocket Bolts M5x12mm, 5 Nm
  - Rear Hub Inside Bolts M3x8mm, 1.2 Nm
  - Track Adjustment Locking Plate M5x45mm cap head bolts, 5 Nm
- Outside hub bolt size M5-0.8x12mm, inside M3-0.5x8mm
- Cut width: 16"/405mm, less any overlap
- A thread (opinions only!) on torques for mower screws and bolts:  
<https://www.facebook.com/groups/lymow/permalink/4535700353308057/>

## Miscellaneous tips and notes

- It's an unfortunate but very real fact that Facebook currently hosts the most active support and information groups for Lymow – by far. So if you're finding responses slow or sparse where you're hanging out, join [Lymow Robotic Lawn Mower](#), which Lymow actively monitors. The best non-FB group is probably the [Lymow Official](#) subreddit – despite its name, I've not seen any indication to date that Lymow staff read or respond there, but the community is helpful.
- Special commands on the mower - also see [Deeper Knowledge](#) below:
  - **Force-restart:** Home+Power for about 10s. Then just Power.
  - **Clear the mower cache** - hold down Power button for 3 seconds
  - **Engineering screen:** hold down Home for a few seconds to see this. For example, the second digit after the FNT label is bumper sensor status – 0 for off, 1 for one sensor, 2 for the other or 3 for both. And the bottom-right number is power usage in Watts, typically -250 when sitting idle, and

positive numbers such as 1600 (2.5A) or 7000 (10A) during charging. For more, see William Carver's **Lymow Engineering Screen** PDF in the Files section of the official [Lymow Robotic Lawn Mower](#) FB group.

- Over The Air (OTA) firmware updates normally take a few minutes but can take 30 or more if WiFi signal is poor. Don't get impatient and interrupt the process unless you want a brick instead of a lawnmower. During 2025, firmware and app updates have happened regularly, with plenty of useful improvements. So you'll likely get plenty of practice with installing them.
- Blade nut torque is 6nm – don't over-tighten! The blades have keyed inserts that should prevent you from re-installing them on the incorrect side or orientation. But with a hand-file, you can sharpen them without removal (disconnect battery first!)
- If the rain sensor isn't working, try cleaning with water and a little surfactant e.g. dishwashing liquid.
- Info on using multiple mowers on one property – see BobvSimon's comment in this thread:  
[https://m.facebook.com/story.php?story\\_fbid=4584505821760843&id=3951569995054432](https://m.facebook.com/story.php?story_fbid=4584505821760843&id=3951569995054432)
- Troubleshooting WiFi access points - see especially David Gibb's comment in: [Lymow Robotic Lawn Mower | Updated information about what I've experienced with WiFi and Bluetooth | Facebook](#)
- A trick for setting chessboard mowing angles just how you want them:  
<https://www.facebook.com/groups/lymow/permalink/4561952477349511/>
- You can use VLC to view the mower's live video stream – in VLC, open a variant of this URL: <rtsp://192.168.1.225:80/h264ESVideoTest> - alter the IP number to match your mower's IP on your local network. You may be able to do the same from a 4G connection if you know how to safely forward a port on your router. Some users view the stream in VLC in one window on their phone while remote-controlling the mower using the app in another window. Handy video showing how: <https://www.facebook.com/groups/lymow/permalink/456213380664754/>  
NB: Remote control is limited to Bluetooth-only for regulatory/safety reasons.
- If you want to temporarily test an RTK location with no AC power, you can power it with a USB connector from a regular phone-type USB power bank - but do remember that the power bank won't be waterproof and won't power it for long.
- Changing/adding a mower? You can backup the maps to the cloud in the app and then ask Lymow to transfer the maps to the new mower.
- "I've managed to edit mid-mow by pausing the task, hitting the controller icon and then the pencil icon. I've even added a no-go zone mid mow! You have to select the zone first and then use "configure zone"." (Does it resume with the new settings - maybe just height and speed?)
- Gibbs contact protectant significantly reduced grass juice build-up on the mower contacts.
- Create your own garage from an old plastic 55-gallon drum, per <https://www.facebook.com/groups/9661250583889508/posts/25625204697067508>
- If you ordered a second battery, the cable that comes with it can be used to charge a battery from a second power supply (e.g. the 2.5A if you have one), while the mower is mowing using the other battery. Some owners do all their charging with just this cable and the 10A charger, swapping batteries into the mower as required.

- If you'd like more notifications from the mower, not just alerts when things go wrong, see <https://www.facebook.com/groups/lymow/permalink/4548939625317463/> (basically, there's an "Alerts only" setting in the app that you can turn off).
- Mower has returned to charge before completion and you don't want it to resume automatically? Hit Pause in the app until you're ready.
- Resume-after-recharge is nice - but turn it off if you're parking your mower inside a garage or behind gates requiring human intervention, otherwise a little unexpected mayhem may ensue when it resumes.
- End of season: 70% charge and disconnect battery, store battery and mower in a not-cold and dry place. **Do** bring the RTK head inside in freezing or very wet seasons - thermal expansion and contraction of electronic circuitry is Bad. Leave the RTK mount (firmly) in place so you won't need to remap next season.

### Deeper Knowledge requiring extra care

- **Test menu** (used below): power motor on, wait 40 seconds, press red STOP button once, hold down + and - buttons together until the Test menu appears. Press red STOP again before continuing – *the red LEDs on the mower need to be green again*. Navigate the menu with + and - and use HOME to select. **Use with care!** - for example, the hub calibration moves the tracks, hence requires the mower to be well supported with tracks slightly off the ground.
- **Hub motor calibration:** for when you have unmatched track movements resulting in major unexpected curving or turns to left or right – see Charles Guy's comment with photos in: [https://www.facebook.com/story.php?story\\_fbid=4579404018937690&id=3951569995054432&rd=1](https://www.facebook.com/story.php?story_fbid=4579404018937690&id=3951569995054432&rd=1) - basically, support the mower so the tracks are off the ground, enter the Test Menu, select HUB CALI, watch the tracks move and stop, then restart, done.
- **Rain sensor calibration:** if your mower is aborting a mow due to spurious rain detection, and the sensors are clean and dry: enter the Test Menu, select RAIN CALI, watch the pretty flashing lights until they stop, then restart, done. To confirm it worked, look for a 4095 rain sensor value at the end of the SNC line on the Engineering screen which appears when you hold down the Home button.
- In case you need a replacement cable, the charger connector is an M16 3-pin - you need one rated for 10A. The third pin is also AC gnd. Here is a non-Lymow power supply some users have installed: [https://www.facebook.com/story.php?story\\_fbid=25254794354108546&id=9661250583889508](https://www.facebook.com/story.php?story_fbid=25254794354108546&id=9661250583889508) and here's connector photo and details: [https://www.reddit.com/r/Lymow\\_Official/comments/1o84e6a/comment/njvpogj/](https://www.reddit.com/r/Lymow_Official/comments/1o84e6a/comment/njvpogj/)
- To read the RTK's output, connect your phone or PC to its USB port and use Termv19b.zip, PuTTY or Termius, 115200 8,N,1,N. This **doesn't** prove the info is being properly broadcast to the mower though.

### User Projects

- 3D printable wheel scrapers:
  - #1: <https://www.printables.com/model/1390236-lymow-scraper>
  - #2: <https://www.facebook.com/groups/lymow/permalink/4608380686040023>

- 3D printable roller attachment for added stripey pleasure:  
<https://www.facebook.com/groups/lymow/permalink/4554314934779932>
- 3D printable plug to cap the end of the RTK power lead when you take the RTK in for winter  
<https://www.facebook.com/groups/9661250583889508/permalink/25853918510862791/>
- Experimenting with tempering blade edges for increased hardness:  
<https://www.facebook.com/groups/9661250583889508/permalink/25791431713778138/>

## Would a Lymow be good for you? – my opinion

Owners and potential owners seeing all the above - plus the steady flow of posts asking for help on support groups - often ask: “is this a viable mower for me?”

Here's my personal view, based on many months of reading support forums and a few weeks of ownership:

These are the first generation of a noticeably-more-capable class of robot mowers, priced low and launched by a start-up company. They have flaws but, for most owners, the mowers already satisfy most of the key promises made and are steadily improving via software updates and add-ons from both Lymow and the active user community.

Lymow have occasional communication issues – especially around shipping. But overall, they support their customer base well, send replacement units when issues can't be diagnosed or fixed at long range, are making continual improvements to the mower and to their processes, and certainly seem to be in it for the long haul.

Thus, ask yourself: *Am I comfortable with learning, setting up and properly maintaining a new tool that's complex enough to work in highly varied, sometimes-rugged and often-challenging environments? **Not** a consumer toy like most robot vacuums, for example?*

If you just read much of this handbook, the answer's almost certainly “yes”. And in that case, a Lymow should work out very well for you, improving your lawns and saving you loads of time in the long run.

## Useful things to remember

1. Facts don't defeat propaganda. Self-interest does.
2. It's all about RTK placement, really.  
Oh, and track tension.  
And clean contacts.  
But mainly: RTK.
3. Per Aldous Huxley: **Try to be a little kinder.**