

GOLD SERIES

OptiMATE 6 Select

The Owner's Guide — in plain English

One smart charger for your motorcycle, car, ATV, jet ski, classic, or just about anything with a 12V battery.

What it does, in one breath

Clip it on, tell it what kind of battery you have, and plug it in. From there it charges, tops up, health-checks, and babysits your battery for as long as you leave it connected — without overcharging or cooking anything. That's the whole job.

Works with: 12V batteries on motorcycles, cars, ATVs, jet skis, classic cars, and farm equipment.

Handles three battery chemistries: standard lead-acid, high-performance AGM, and lithium-based chemistries — lithium, lithium phosphate (LiFePO₄), and sodium-ion.

Models: TM370v2 · TM371v2 · TM372v2 **Power:** 100–240V wall input, 12V / 6A output (72W).

Up and running in 60 seconds

New to battery chargers? Relax — this one is genuinely hard to get wrong. Here are the only three things you need to do.

Step 1 — Find out what kind of battery you have

Look at the label on your battery (or check the owner's manual). Match it to one of these:

The label says...	That means...	Use
"Lead-acid", "VRLA", "GEL", or "AGM"	Standard lead-acid	Program 1
"Optima", "Odyssey", or "Full River"	High-performance AGM	Program 2
"Lithium", "LiFePO4", "LFP", or "Sodium-Ion"	Lithium, lithium phosphate, or sodium-ion	Program 3

Not sure?

Most motorcycle and car batteries are plain lead-acid, which means Program 1. If your battery says lithium, LiFePO4, or sodium-ion, use Program 3. Still stuck? Reach out to JJDistribution and we'll help you identify it — better a quick question than a guess.

Step 2 — Clip it on

If the battery is still in the vehicle (the everyday way):

1. Turn the vehicle and everything on it completely off.
2. **RED** clip goes to the **positive (+)** battery post.
3. **BLACK** clip goes to a **bare metal part of the engine or frame** — not the battery. Pick a spot away from the battery, fuel lines, and anything that moves.

If the battery is out of the vehicle: RED to (+), BLACK to (-). Simple.

Why black goes to the frame, not the battery

Connecting the last clip a little distance from the battery keeps any tiny spark away from it. Charging batteries give off a whiff of explosive gas, so we move the spark somewhere safe. It's a small habit that matters.

Step 3 — Pick your program, then plug in

With the charger still unplugged, tap the button until the right light is lit:

- **Program 1** → LED #1a (standard lead-acid)
- **Program 2** → LED #1a + #2 (high-performance AGM only)
- **Program 3** → LED #1b (lithium, lithium phosphate, or sodium-ion)

Now plug it into the wall. It starts on its own — no “go” button to press.

It remembers

The lights flash twice to confirm your choice is saved. The charger keeps that setting even after you unplug it, so next time you can usually skip straight to plugging in.

Then what? Nothing.

Most batteries are full in 12–18 hours. A really flat one can take up to 48. You don't have to watch it or unplug it — when LED #6 glows green, your battery is full and healthy. You can leave it connected for months and it'll simply keep things topped up.

Know your battery (the 60-second version)

There are three families of 12V batteries, and the charger has one program for each. Here's how to tell them apart.

1 · Lead-acid — the common one

You'll find it in: most cars, motorcycles, and ATVs.

Also labeled: VRLA, GEL, or “standard AGM”.

Charges at 14.4V → use **Program 1**.

2 · High-performance AGM — the specialist

You'll find it in: performance and racing vehicles.

Brands: Optima (spiral cell), Odyssey, Full River.

Charges at 14.7V → use **Program 2** — but only if the battery actually specifies 14.7V. If in doubt, most AGM batteries are happy on Program 1.

3 · Lithium, lithium phosphate & sodium-ion — the modern ones

You'll find it in: newer motorcycles and performance vehicles.

Also marked: LFP, LiFePO4, Li-Ion, Na-Ion, or 12.8V.

Charges at 14.3V → use **Program 3**.

When you genuinely can't tell

Start with Program 1 for anything lead-acid, or Program 3 for lithium, lithium phosphate, or sodium-ion. Picking the wrong one won't damage a healthy battery, but the right program gives you the best charge — so it's worth a moment to check the label.

Reading the lights

The little row of LEDs is how the charger talks to you. Most of the time you only care about one of them: green means done. Here's the full vocabulary.

Light	What it's telling you	What to do
#6 GREEN — on	Battery is healthy and full (90%+).	Nothing. You're good.
#7 AMBER — on	Charged, but slowly leaking power.	Check for a “parasitic drain.” Disconnect the battery from the vehicle and test it on its own.
#8 RED — on	Battery is weak or damaged.	Have it professionally tested. It may be time for a new one.
#8 RED — blinking fast	Something's wrong right now.	Usually clips are reversed — unplug, swap them, retry. On lithium-based batteries, it can mean permanent damage.

“Parasitic drain” — what's that?

It's just a fancy term for something in your vehicle quietly sipping power while everything's “off” — an alarm, a clock, a dash cam. If LED #7 shows up, that's often the culprit rather than a bad battery.

What's happening inside (you don't have to do anything)

Curious what the charger is up to while you go about your day? It works through a sequence of smart stages, all on its own. Here's the tour — purely so you know it's earning its keep.

First, a safety check

The moment you plug in, it confirms the clips are on correctly. If LED #8 blinks fast, the clips are backwards — unplug, swap them, and reconnect. No harm done; it simply won't run until they're right.

If your battery is really flat: Recovery mode

A deeply drained battery (below half charge) gets special treatment first. For lead-acid batteries, the charger may briefly push higher voltage — up to about 22V — to break down **sulfation**, the crusty buildup that kills neglected batteries. This can take anywhere from 15 minutes to 4 hours.

For lithium, lithium phosphate, and sodium-ion batteries, it sends gentle wake-up pulses instead. If the battery doesn't respond within 60 minutes, LED #8 blinks — a sign the battery may be beyond saving.

Then the main event

- **Main charge** — the big push, from roughly 50% up to 75%. Usually 4–12 hours.
- **Optimization** — fine-tuning from 75% to 100%, balancing the cells. 10 minutes to 2 hours.
- **Health test** — it pauses charging for 30 minutes and watches whether the battery holds its charge. Green LED #6 means it passed with flying colors.

And then it just... looks after things

Once full, the charger slips into **maintenance mode**: 30 minutes on, 30 minutes resting, on repeat. This is what lets you leave it connected for months over winter or between weekend rides without a worry.

Hidden trick: Service mode

Need steady 13.6V power for vehicle diagnostics or reprogramming? While charging (during the main stages), press and hold the button for 3 seconds. It'll hold a constant 13.6V for you.

The best thing this charger does: storage

Here's the headline. A fully charged battery left alone can drain itself flat in **2–3 months**. A flat battery left sitting is how most batteries die young. The OptiMATE 6 solves both problems by simply staying connected.

Putting a bike (or car) away for the season

1. Charge the battery fully before you store it.
2. Leave the charger connected — that's it.
3. It holds a perfect 100% the whole time, using less than 0.024 kWh a day (pennies).

When you come back, the battery's ready to go. No jump-starts, no shopping for a replacement.

Great for

- Bikes and cars stored for the off-season
- Weekend-only or backup vehicles
- Classics and anything that sits more than it drives

A couple of good habits

Glance at the connections every couple of weeks. If your battery has removable caps, check the water level and top up with distilled water if it's low.

Place the charger where the battery lives — being at the same temperature lets it compensate for hot or cold weather automatically. (It nudges voltage up when it's cold, down when it's hot, so you never have to think about it.)

When something's not right

Most issues are quick fixes. Find your symptom below.

Red light (#8) is blinking fast

- **Clips reversed (most common).** Unplug, swap red and black, reconnect.
- **Battery severely damaged (lithium-based chemistries).** Have it professionally assessed — recovery may not be possible.
- **Vehicle electronics interfering (lithium-based batteries).** Switch everything off. If it persists, take the battery out and charge it on its own.

It's taking forever to charge

- **Battery was very flat.** Totally normal — a deeply drained battery can need 24–48 hours.
- **Vehicle is drawing power while you charge.** If you can, remove the battery, or at least disconnect the negative terminal.
- **Battery may be damaged.** No progress after 48 hours? Get it tested.

Battery's getting hot while charging

1. If it's too hot to comfortably touch, unplug it right away.
2. Let it cool for at least 30 minutes.
3. Inspect for bulging, cracks, or leaks.
4. Looks fine? Resume, but check the temperature every 15 minutes for the first hour.
5. Heating up again? The battery is likely damaged — have it assessed.

Battery charged fine, but the vehicle won't start

- **Dirty or loose terminals.** Clean the posts and clamps, reconnect firmly.
- **Worn-out battery.** Have it load-tested; it may need replacing despite charging up.
- **Not the battery at all.** Could be the vehicle's starter system — worth a mechanic's eye.

Waking up a “locked” lithium-based battery

Lithium, lithium phosphate, and sodium-ion batteries all have a built-in guardian called a **BMS (Battery Management System)**. If the battery gets drained too far, the BMS locks it to protect it from harm — which can make it look dead. The charger can often coax it back to life.

First, look it over

If the battery is bulging, cracked, or leaking, stop — do not try to charge it. Those are signs of real damage, and charging it isn't safe.

The reset, step by step

1. Turn off the vehicle's electronics if the battery is still installed.
2. Connect the charger straight to the battery posts — RED to (+), BLACK to (–).
3. Make sure Program 3 (lithium, lithium phosphate, or sodium-ion) is selected.
4. Press and hold the button for 3 seconds, until LED #3 blinks once per second.
5. Let go. The charger sends special reset pulses.
6. When the BMS unlocks, LED #3 stops blinking and stays on — and normal charging picks up automatically.

If LED #8 blinks instead

- Double-check the clips aren't reversed
- Turn off all vehicle systems
- If it keeps blinking, the battery may be permanently damaged

Safety — the part we won't joke about

Batteries hold acid and, while charging, give off **hydrogen gas that's invisible and genuinely explosive**. None of this is scary if you respect a few simple rules. Please read this section once, properly.

NEVER

- Smoke, or allow sparks or flames, near a battery
- Charge a frozen battery
- Let the two charger clips touch each other
- Place the charger directly above the battery
- Use the charger in rain or snow

ALWAYS

- Work in a well-ventilated area, with someone within earshot
- Wear safety glasses near batteries
- Keep water and soap nearby in case of acid contact
- Remove rings, watches, and bracelets first
- Unplug the charger from the wall before connecting or disconnecting clips

If battery acid touches you

- **Skin:** wash immediately with soap and water.
- **Eyes:** flush with cold water for 10+ minutes and get medical help right away.

Where to put the charger

- **Do:** a hard, flat surface (vertical mounting is fine too), as far from the battery as the cables reach, with open airflow.
- **Don't:** directly above the battery, on plastic / leather / fabric, in cramped spaces, or anywhere acid could drip onto it.

Reverse polarity protection (your safety net)

Connect the clips backwards and the charger simply refuses to run — LED #8 blinks and nothing is damaged. Unplug, swap the clips, reconnect. The charger is designed to forgive this honest mistake.

Batteries this charger is NOT for

Use it only on 12V lead-acid batteries, or 12.8V lithium-based batteries — lithium phosphate (LiFePO₄) or sodium-ion. Never on:

- NiCd (nickel-cadmium) or NiMH (nickel-metal hydride) batteries
- Other lithium chemistries (LCO, LMO, NMC, LTO)
- Non-rechargeable batteries

General common sense

- Don't use damaged cords or plugs, and never operate the charger if it's been dropped or damaged.
- Don't disassemble it, connect it to ground, or use it near flammable materials.
- Pull the plug (not the cord) to disconnect, and unplug before cleaning. Wipe with a slightly damp cloth only — no solvents.
- Avoid extension cords if you can. If you must, match the plug type and use a properly rated, good-condition cord.
- Children 8+ and anyone who needs assistance should be supervised. Keep small accessories away from young kids — they're a choking hazard.

The technical bits

For the spec-curious, and for anyone matching the charger to a particular battery.

The three programs at a glance

Program	For	Voltage	Max time
1	Standard lead-acid (flooded, VRLA, GEL, most AGM)	14.4V	48 hrs
2	High-performance AGM (Optima, Odyssey, Full River) — only if it requires 14.7V	14.7V	48 hrs
3	Lithium, lithium phosphate (LiFePO4/LFP), and sodium-ion	14.3V	24 hrs

Temperature note for Program 3

On Program 3, charging is held back if it's below 0°C (32°F) or above 45°C (113°F) — lithium, lithium phosphate, and sodium-ion cells don't like charging in extreme temperatures, so the charger protects them for you. It also keeps stored batteries on this program around 70–90% for the longest life.

Specifications

Specification	Detail
Models	TM370v2, TM371v2, TM372v2
Input	100–240V AC, 50–60Hz (works worldwide). 0.36A @ 240V / 0.92A @ 100V
Output	12V DC, up to 6A (variable), 72W
Lead-acid range	12V, 3–144 Ah
Lithium-based range	12.8V, 2–68 Ah (lithium, lithium phosphate, or sodium-ion)
Safety features	Reverse polarity, short-circuit, and overcharge protection; temperature compensation
Power use	Standby (ECO) under 0.5W (0.012 kWh/day); maintenance about 0.024 kWh/day
Operating temp	0°C to 40°C (32°F to 104°F)
Certifications	FCC Part 15 (Class A), CE compliant

In the box

O-34 fused clips — red and black, with 15A fuse protection and reverse-polarity protection, ready for on- or off-vehicle charging. If a fuse ever blows, fix the cause first, then replace it with a 15A ATO-type fuse only.

Handy add-ons (sold separately)

- **Permanent battery leads** — fit once for a quick snap-on connection; perfect for bikes and seasonal vehicles.
- **SAE connectors** — quick-disconnect, compatible with other OptiMATE accessories.
- **Magnetic connector** — mount it somewhere easy to reach, away from the battery.
- **Panel-mount sockets** — charge without opening the hood or seat.

Full accessory catalog at

Plain-English glossary

Every bit of jargon in this guide, decoded.

AGM (Absorbed Glass Mat)

A sealed lead-acid battery where the acid is soaked into glass mats. Tougher against vibration and spills than the old flooded type.

Ampmatic

OptiMATE's smart system that adjusts the charging current to suit your battery's condition, moment to moment.

BMS (Battery Management System)

The protective electronics inside a lithium, lithium phosphate, or sodium-ion battery. It guards against overcharging and over-draining — and can lock the battery to keep it safe.

Desulfation

Breaking down the lead-sulfate crystals that build up on neglected battery plates. That buildup is the #1 cause of battery death.

Float charging

Holding a battery at a full 100% without overcharging it — exactly what maintenance mode does.

LFP / LiFePO₄

Lithium Ferrous Phosphate — a safe, stable lithium chemistry used in vehicles. Often just called LFP.

Pb (Lead-acid)

The classic, most common vehicle battery: lead plates in sulfuric acid.

Sodium-Ion (Na-Ion)

A newer battery chemistry that swaps lithium for sodium. It shares a similar charge profile to LiFePO₄, which is why it runs on the same Program 3.

SOC (State of Charge)

How full the battery is, as a percentage. 0% empty, 100% full.

Sulfation

The crystal buildup on battery plates. A little is normal; left flat too long it becomes permanent and the battery suffers.

VRLA (Valve-Regulated Lead-Acid)

A sealed lead-acid battery with a pressure-relief valve. Includes AGM and GEL types.

Warranty & support

3-year limited warranty

TecMate (International) SA backs the OptiMATE 6 Select for three years from the date of purchase against defects in materials or workmanship. That means repair or replacement, at the manufacturer's discretion.

What's covered — and what isn't

- **Covered:** genuine defects in materials or workmanship.
- **Not covered:** misuse or abuse, repairs by unauthorized people, and normal wear and tear.

The warranty applies to the original retail purchaser and isn't transferable. It also doesn't affect any statutory rights you have under local law.

Making a claim

1. Keep your proof of purchase.
2. Contact TecMate or your authorized representative (see below).
3. Ship the unit prepaid, with the proof of purchase.

Where to reach us

Region	Contact
Vietnam	JJDistribution — Ho Chi Minh City, Vietnam
International	TecMate (International) SA — Neringstraat 14, B-3300 Tienen, Belgium · tecmate.com/warranty
The Americas	TecMate North America — Oakville, ON, Canada (USA, Canada, Central & South America)

General information and the full accessory range:

A note on the fine print

Battery posts, terminals, and related accessories contain lead and lead compounds — chemicals known to the State of California to cause cancer and reproductive harm (Proposition 65). Wash your hands after handling. This device also complies with FCC Part 15: it must not cause harmful interference, and must accept any interference it receives.

Thanks for choosing the OptiMATE 6 Select —
the smart, set-and-forget way to keep every battery you own alive and ready.