

Your Free Bonus Pack

Thank you for reading. These are the tools that carry you from the last page to a system you can build with confidence — free, and yours to keep.

Spot Fake Solar Gear in 60 Seconds

The listing tricks that drain wallets—and the tell that gives each fake away.

How to use it: keep this open on your phone while you shop. Before you tap **Buy**, find the block that matches the part and run it past the two lines. A fake usually gives itself away in the spec sheet—or in what the spec sheet leaves out.

1. Charge controllers — “MPPT” that is really PWM

THE TELL — a rock-bottom price, a huge amp number like “100A” on a small, light unit, and no maximum PV input voltage anywhere in the spec. A real MPPT controller names its maximum PV voltage and costs noticeably more.

DO THIS — look for a stated maximum PV input voltage and current, and a rated power at your bank voltage. No numbers, no sale.

2. Wire & cable — aluminum sold as copper

THE TELL — “100% copper” shows up only in the title, never in the spec; the price per foot is far below everyone else; the roll feels surprisingly light. That is CCA—copper-clad aluminum—hiding inside.

DO THIS — require the words “bare copper” or “pure copper” in the spec, and treat CCA as a no for any power wiring. Cheap wire is the most expensive part you can buy.

3. Batteries — inflated amp-hours

THE TELL — the battery weighs far too little for the amp-hours claimed; the RMS current is not stated, and the cells are “Grade A” with no datasheet. Stored energy has weight; a big number with no datasheet is a wish.

DO THIS — weigh the claim against the stated watt-hours, and require a real continuous BMS amp rating plus the maker’s datasheet.

4. Inverters — “peak” watts wearing the continuous label

THE TELL — the big number on the picture is the peak or surge watts; the continuous rating is smaller, buried, or missing. “Pure sine” is in the title but not confirmed in the written spec.

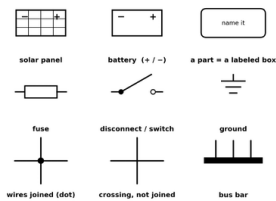
Draw Your Solar System on Paper First

The cheapest place to catch a mistake is a sheet of paper—not a live wire. Sketch your system here before you buy or build.

How to draw it

- **Go left to right:** sun → panels → charge controller → battery → then the inverter (to your AC outlets) and any DC loads.
- **Fuse every source:** put a fuse close to each point the battery or the panels can feed.
- **Mark every disconnect** — each place you can switch a section off to work on it.
- **Name each box** (controller, inverter, monitor...), and write + / - and the wire size on the lines.
- Use a **dot** where wires join; leave **no dot** where they only cross.
- When it looks right, check it against the finished diagram in Chapter 3 and your blueprint.

The symbols to use



Same symbols the diagrams in the book use.

Label Your Solar System in an Afternoon

Five dollars of tags now saves hours of guessing later—for you, an electrician, or a first responder.

How to use it: print this page (plain or sticker paper). Fill in a tag for each wire, cut it out, wrap it around the cable near the end, and cover it with a wrap of clear tape. **Label both ends of every wire.** Mark polarity with + or -, and write the fuse that protects it.

Cut-out cable tags

FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-
FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-
FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-
FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-
FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-
FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-	FROM _____ TO _____ AWG _____ FUSE _____ A +/-

Solar Power System

SOLAR PV + BATTERY SYSTEM PRESENT - Panels and battery stay **LIVE** even when the system is “off.”

FIRE · ANY SMOKE · SPARKING OR ARCING · A BUZZING OR CRACKLING ELECTRICAL SOUND · HISsing · POPPING · SWELLING · OR RAPID HEAT

GET OUT. CALL 911.

Tell them: a **solar and battery power system** is here, and the battery type (in the box below). **Do not touch or operate the equipment. Do not try to put it out.** Keep others away.

Do not go back in until fire officials say it is safe. Do not restart the system until qualified service personnel have inspected and cleared it.

ALWAYS TRUE — EVEN WITH THE SYSTEM “OFF”

- The panels, and the wiring between the panels and the PV disconnect, stay energized whenever there is light.
- Battery terminals stay live, and the equipment can hold stored voltage inside. Treat all of it as live.
- **Off does not mean safe to touch.** Never unplug a connector, pull a cable, or loosen a lug while it is energized or carrying current.

FILL THIS IN FOR YOUR SYSTEM — THEN POST THIS PAGE WHERE THE SYSTEM LIVES

Battery chemistry: ☐ LiFePO₄ (lithium iron phosphate) ☐ AGM lead-acid ☐ Other:

Battery bank is: _____

Panels / array are: _____

MAIN BATTERY disconnect is: _____

Solar (PV) disconnect is: _____

Battery/ESS emergency stop, if installed: _____

PV rapid-shutdown control, if installed: _____

Owner / contact: _____

Everything in your pack, at a glance.

What is inside

1. Spot Fake Solar Gear in 60 Seconds. The listing tricks that drain wallets — and the tell that gives each fake away. Keep it open on your phone while you shop.

2. Draw Your Solar System on Paper First. A blank canvas and the same symbols the book's diagrams use, so you can sketch your build before you buy or wire a thing.

3. Label Your Solar System in an Afternoon. Printable cut-out cable tags plus a one-page as-built record — for you, an electrician, or a first responder.

4. Emergency Solar Power Shut-Off. A fill-in safety card to post where your system lives, so anyone knows what to do in a hurry.

5. A 7-day email mini-course. “From Overwhelm to Your First Plan” — one short step, one calm answer, arriving in your inbox a day at a time.

Also kept current online: dated price ranges and state-by-state rules — the parts of solar that change with the calendar, refreshed with a date on every sheet.

No strings. This pack is a thank-you, not a trade. Nothing in the book is locked behind it — every worksheet, table, and blueprint is complete in the printed pages. You are never asked to leave a review to get any of it. If a tool here saves you time or worry, that is the whole point.

From The Beginner's Guide to DIY Off-Grid Solar Power