DETECTORMODS

Detector Troubleshooting Guide

Is it the control box, or something else in your kit?

GPX 6000, GPZ 7000 AND GM 1000

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1 · Read this first

OK, so your detector is misbehaving. This guide should help you work out: is it actually the control box? Or something else in your kit?

This guide is a beta. If something in it is wrong, or doesn't match what your detector actually does, email us and we'll sort it out: david@detectormods.com. Tell us which detector and which part of the guide.

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We've had detectors go back and forth in the post multiple times because the unit came up with "Coil Overcurrent". You would think that's a coil or control box issue. Well, after numerous trips in the post, we found the problem was a curly power cable… We don't have the time for another one of those!

We also don't have time to give free phone support for 30 minutes helping you work out that you have a dodgy speaker.

So this guide should help you narrow it down. Is it the detector? Is it another piece of equipment? Is this a problem you can solve, or do you need to contact us?

What this guide will do for you

- Tell you which checks to do, and in what order, for what your detector is doing.
- Show you how to prove which part is at fault, by swapping one thing at a time.

- Point you at the part that fixes it, when it's something we make.
- Tell you when to stop and email us, and what to put in the email.

The same checks are in our free Detector Troubleshooter. Pick your detector, answer a few questions, and at the end it writes the email summary for you: detectormods.com/tools/detector-troubleshooter.

Before anything goes in the post

Every detector that comes in costs us time before we find anything: booking it in, the paperwork, and the diagnostic itself. That fee is unavoidable. If the job isn't a warranty job, or there's nothing wrong with the detector, the fee is for our time — we've been sent on a wild goose chase for a problem that isn't there. So do these checks first, and email us rather than ringing: david@detectormods.com.

2 · Which detector have you got

This guide covers the Minelab detectors we work on: the SD, GP and GPX series (including the GPX 6000), the GPZ 7000 and the GM 1000. They don't all work the same way, and the differences matter when something goes wrong.

GPX 6000 AND GPZ 7000

GPX 6000. A screen, a removable battery on the detector (no power cable), a built-in speaker, a wired headphone socket and Bluetooth.

GPZ 7000. A screen and a removable battery on the detector, but no built-in speaker: headphones plug into the detector, or you listen through the WM 12 wireless module.

These are the careful ones, and chapter 12 has the whole story. If it's under Minelab's warranty and unmodified, Minelab comes first for anything to do with the coil or the inside.

GM 1000

GM 1000. Minelab's Gold Monster 1000: a screen, a built-in speaker and a 3.5 mm headphone socket. Only two coils fit it, the 5″ GM05 and the 10×6″ GM10, and depending on when it was bought your kit has one or both. It runs on a rechargeable Li-ion pack, or on 8 AA cells in the AA holder. Your whole path is the GM 1000 short list in chapter 15, then chapter 13 before you send anything.

GPX 6000 AND GPZ 7000

Never fit a normal pulse-induction (SD/GP/GPX) coil to a 6000 or 7000 by any adapter — a mono coil in an X-coil adapter can destroy a GPZ 7000 instantly. The 6000's and 7000's front-end modules are not something we can repair.

Something else? If it's an SDC 2300, an Equinox, a Manticore or another brand, please don't send it to us or email us about it: we don't know those circuits, and learning a new detector from scratch is an enormous job. Go through Minelab (or the maker) or your dealer.

3 · The three rules

Whatever your detector is doing, these three come first. A lot of the faults we see are found by one of them.

Rule 1: connectors first

Is there anything in the connectors that shouldn't be? Check every single connector for dust, dirt and fluff: anything that is not a part of the connector should not be there. If there's something in the hole of the connector, or on the part that plugs in, clean it out.

- Every plug and socket: power, coil, headphones, and the handle button's plug where there is one.
- Look for dust, dirt, fluff, moisture, green corrosion and bent pins.
- **Switch off before you plug or unplug anything** — coil, battery, cable. Pulling a coil out while the detector is running can damage it.

Fine dust raises the resistance of the contacts, and that can make a detector noisy. Clean, dry, straight pins are what you want. Never use graphite, oil, grease or WD-40: dirt sticks to it. That's the honest reason we make DM-50 and our coil connector lubricant.

GPX 6000 AND GPZ 7000

Keep connectors clean and dry, and never put anything on the battery seal or o-rings. Minelab's GPZ 7000 manual says to wash connectors with distilled water, and not to use lubricant or grease on dust seals or o-rings.

Rule 2: known settings

Do a factory reset (GPX, 6000, 7000) or set the start positions (SD, GP), and run the machine as close to standard as possible, or use known settings that have been reliable in the past. A setting someone changed and forgot about sounds exactly like a fault.

GPX 6000 AND GPZ 7000

GPX 6000. With the detector off, press and hold the power button for 7 seconds. When it's done you'll hear a confirmation tone and see FP (Factory Preset). Pair your Bluetooth headphones again afterwards.

GPZ 7000. Reset Settings, on the Reset page, puts your settings back to factory and keeps your GeoStore data. Reset All does that too, but it also empties the GeoStore and restarts into the first-time setup. Reset All is also in the System menu: hold the power button with the detector off. Listening through the WM 12? Wireless is Off by default, so after a reset set it to On and select Connect WM 12 again.

Rule 3: swap one thing at a time

Ideally we swap the power cable for another, then the battery, then the audio, then the coil. We need to know if one of these items alone is the culprit, so swap one at a time and see whether the fault goes with it. Borrow if you don't have a spare: a mate's battery or headphones prove just as much as your own.

- **Use a newish, healthy, charged battery,** and swap in a known-good one as part of the swap test.
- **Switch off, wait at least 30 seconds, then switch on once — don't flick it.** Flicking it off and on can cause trouble of its own.
- **Strip the audio back** to plain wired headphones: no wireless set, no booster, no speaker.
- **Take out any of our old in-line boosters** that sit between the battery and the box.

GPX 6000 AND GPZ 7000

There's no power cable on these two. The swaps are a charged, known-good battery, another pair of headphones (or wired instead of wireless), and your other genuine coil if you own one. Chapter 12 comes first.

4 · It won’t turn on at all

What “won’t turn on” looks like depends on your detector.

GPX 6000 and GPZ 7000: nothing on the screen, no start-up.

GPX 6000 AND GPZ 7000

Start with chapter 12: the warranty question and the coil warning come first. Then:

GPX 6000. Charge the battery on its own charger: the light flashes green while it charges and stays steady green when it’s full, in about 5–6 hours. From a vehicle, charge it only from a normal 12 V car system. Then press the locking lever, take the battery out, check its contacts and the detector’s are clean, dry and undamaged, and refit it firmly.

GPZ 7000. Charge it on the BC 10 charger until its Battery light stops flashing and stays steady green. Minelab’s manual says that can take up to four hours and its FAQ says five to six, so allow six before you decide it won’t charge. Make sure the battery is fully in and latched, the contacts and the seal are clean, and the detector isn’t too hot; if it is, let it cool in the shade. Comes on, then switches itself off? Check the coil cable is connected with the retaining ring done up firmly.

Won’t charge at all? Look at the BC 10’s Power light first: off means no power is reaching it, and fast-flashing red means the input voltage is wrong, so check the plug pack, its switch or the car socket. If the Power light is steady green but the Battery light flashes red fast, the charger has found an error. Then it’s the battery or the charger: borrow another to tell which. Both are Minelab parts, and Minelab’s warranty on batteries is 6 months. Still dead with a charged battery: Minelab first if it’s under warranty and unmodified, otherwise email us first.

5 · It’s on, but there’s no sound

Your detector is on, but nothing is coming out of the headphones or the speaker.

GPX 6000 AND GPZ 7000

Start with chapter 12: the warranty question and the coil warning come first. Then Minelab’s own checks:

GPX 6000, wired. Start-up finished; headphones pushed fully in (the ML 100 cable locks with a quarter turn anti-clockwise); volume up. Unplug the headphones and listen to the built-in speaker. Try another pair.

GPX 6000, Bluetooth. Headphones on and charged; detector Bluetooth on and paired; volume up on both. Try other Bluetooth headphones, then wired. A flat ML 100 still works on its cable. After a factory reset of either one, pair them again.

GPX 6000 speaker muffled or scratchy. Detector off, remove the screw at the rear and the speaker cover, and gently clean the speaker with a soft damp cloth or a rinse of clean water. No sharp tools on compacted dirt.

GPZ 7000, headphones in the detector. Start-up finished and the Detect page showing. Headphones plugged into the socket on the headphone module at the rear. Volume, Threshold Level, Threshold Pitch and Volume Limit not wound right down. Try another pair.

GPZ 7000, WM 12. On (press its power button for a second) with its lights flashing, and charged. Wireless set to On, then select Connect WM 12. A red light that blinks now and then is normal; blinking red all the time means the link is lost. Sound from the WM 12’s speaker but not its headphones? Check the headphones. Headphones work in the detector but not through the WM 12? It’s the WM 12 or the link: reset the WM 12 with the end of a paper clip on its Reset button, then connect again.

Then a factory reset (chapter 3); with a WM 12, set Wireless to On and select Connect WM 12 again afterwards. Still nothing: Minelab first if it’s under warranty and unmodified, otherwise email us first.

6 · It’s noisy, won’t settle, or gives false signals

If your detector is making unreasonable noise, won’t ground balance and is just being a pain to work with, these are the things to look at.

First, hold the coil dead still for a few seconds and listen. Noise that carries on with the coil still is usually interference from outside (EMI); the checks below rule out the rest. False signals that only come as you swing are usually the coil, its cable or the ground.

If you think, “but my detector has always run quiet in this location”, maybe someone has installed something? If you’re in a location with an electric fence and it’s off, it’s not going to do anything; if they

turn it on, it’s going to make a racket. Same goes for any and all other powered human creations.

And interference can steal depth without sounding bad at all: see chapter 9.

GPX 6000 AND GPZ 7000

Start with chapter 12: the warranty question and the coil warning come first.

Never fit a normal pulse-induction (SD/GP/GPX) coil to a 6000 or 7000 by any adapter — a mono coil in an X-coil adapter can destroy a GPZ 7000 instantly.

Hold the coil still. Noise with the coil dead still is usually interference (EMI). Move away from power lines, fences and other detectors, and out of the house.

GPX 6000 Noise Cancel. Hold the coil still about 100 mm above the ground, press Noise Cancel, and wait for the confirmation tone (about 5 seconds). Still noisy? Minelab’s manual has a second noise-cancel procedure for its own GPX 14 Double-D coil.

GPZ 7000 Auto Noise Cancel. It can take up to 55 seconds, and ends with three long beeps.

Then: the coil plug (clean, dry, fully home, and on the 7000 the retaining ring done up firmly), a factory reset (chapter 3), and your other genuine coil if you own one. Still noisy: Minelab first if it’s under warranty and unmodified, otherwise email us first.

7 · The sound is crackly, distorted, or cuts in and out

Crackles, distortion and cut-outs are nearly always in the sound path: the headphones, their plug and lead, a wireless link, or a socket. Start there.

GPX 6000 AND GPZ 7000

Start with chapter 12: the warranty question comes first.

GPX 6000. Wired: refit the plug fully (the ML 100 cable locks with a quarter turn), wiggle it and the lead, and try another pair. Bluetooth: charge the headphones and pair them again, then try wired. Speaker muffled or scratchy: clean it as Minelab shows (chapter 5).

GPZ 7000. Refit the plug fully at the rear socket, wiggle it and the lead, and try another pair. WM 12: charge it; blinking red all the time means the link is lost, so select Connect WM 12 again; then try headphones straight into the detector.

Still crackly: Minelab first if it’s under warranty and unmodified, otherwise email us first.

8 · It won’t ground balance

Whichever way your detector balances:

- Balance over clean ground, never over a target or a hot rock.

- Keep the coil moving while it balances.
- Re-balance after any switch change, and whenever the ground changes.
- Start from your Setup Guide's start positions.

GPX 6000 AND GPZ 7000

Start with chapter 12: the warranty question comes first.

GPX 6000 Quick-Trak. Press and hold the Quick-Trak button and keep it held the whole time. Raise and lower the coil 10–100 mm and swing it over clean ground. Release once the ground noise is at a comfortable level or won't drop any further. Ground Type: Difficult is the default and Normal the other, so try the other one.

GPZ 7000 Quick-Trak. Minelab says to balance with its yellow ferrite ring every time. Lay the ferrite on clean ground, away from metal. Press and hold the trigger and sweep the coil low, side to side or in a figure-8, passing over the ferrite straight away and on every sweep, for about 10–12 seconds. Release the trigger once the tone over the ferrite stays smooth and quiet. No ferrite? Swing back and forth over the same clean ground with the trigger held, and release once the audio has stabilised; ask your Minelab dealer for a ferrite. Don't pump the coil up and down the way you would on a GPX. Ground Balance Mode is Auto by default.

Then a factory reset (chapter 3). Still won't balance: Minelab first if it's under warranty and unmodified, otherwise email us first.

9 · It won't find gold, or seems to have lost depth

If the detector picks up metal, it's going to pick up gold. Gold in the ground can be in numerous different states, and we have videos about nuggets that are harder to hear even though, given the weight, you'd expect them to be glaringly obvious. For example, "California undetectable nugget now easy to hear" and "The undetectable gold is now detectable part 1", both on our YouTube channel: youtube.com/@DetectorMods.

Weight isn't depth

If you're using multiple pieces of gold and you think "this weighs one gram, I should get one gram of depth", that's wrong. The detector doesn't detect cumulative pieces of gold well: it will see the largest piece that is exposed to it. That's true for all the pulse induction machines, and not as true for the VLF units.

If you want a demo, take a tiny loop necklace, loose in your hand, and detect it. Then try again with it squeezed together tight, and watch the depth increase!

And don't test with lead: its weight doesn't tell you anything useful about how it behaves electrically.

The proof test

Test the machine before you blame it.

1. Hold the coil off the ground, away from metal, power lines and buildings.
2. Pass a known target across the coil at a measured distance: one of our test targets, or a nugget you know.
3. Compare with what this detector did before, or with a mate's detector of the same model.

We don't print distances: every machine, coil and setting is different. What matters is the comparison.

> **FROM THE SHOP**
>
> **Test targets** — gold-plated spheres sized against real gold, from 0.1 g to 2 g — a known target to test with.
>
> detectormods.com/shop/82/test-targets-01-to-2g

It hears it like it should? Then the machine is fine. Look at how it's set up and used:

- Known settings: a factory reset, or your Setup Guide's start positions, then set up from the Setup Guide.
- The timing or mode to suit the ground.
- Coil size to suit the gold: small coils for small gold.
- Coil low and level, and a slow, steady swing.
- Some nuggets are hard to hear, whatever they weigh.

Weaker than before? Interference can steal depth without sounding bad at all. In some cases it can swamp the front of the detector while it seems to run fine, and cost up to 70% of its depth. So before you blame the machine, repeat the test somewhere else, well away from power lines, fences and buildings. Test where you actually intend to detect, not in the shed at home.

> **GPX 6000 AND GPZ 7000**
>
> Start with chapter 12: the warranty question and the coil warning come first.
>
> Never fit a normal pulse-induction (SD/GP/GPX) coil to a 6000 or 7000 by any adapter — a mono coil in an X-coil adapter can destroy a GPZ 7000 instantly.
>
> Use the same proof test. Weaker than before? Move well away from interference, run Noise Cancel (6000) or Auto Noise Cancel (7000), do a factory reset, and test again. Still weaker, or it only hears big metal close up? Your other genuine coil, if you own one: on the GPX 6000, a Minelab GPX 6000 coil or one of the Minelab-approved coils from Coiltek or Nugget Finder; on the GPZ 7000, a genuine Minelab GPZ coil or one of the Minelab-approved Nugget Finder coils. Then Minelab first if it's under warranty and unmodified, otherwise email us first.

10 · The screen says something

GPX 6000 and GPZ 7000

> **WARNING**
>
> Never fit a normal pulse-induction (SD/GP/GPX) coil to a 6000 or 7000 by any adapter — a mono coil in an X-coil adapter can destroy a GPZ 7000 instantly. The 6000's and 7000's front-end modules are not something we can repair.

Start with chapter 12: is it still under Minelab's warranty? Out of warranty, or upgraded by us: email us first, before anything goes in the post. Then:

GPX 6000 (icons).

- **Coil and error icons for 5 seconds, then it powers off:** a coil error. Minelab's steps: check the coil connector is connected properly at the front of the control box; check the coil cable for damage; check the coil for visible damage; try another genuine coil if you have one. If the error persists: Minelab first if it's under warranty and unmodified; otherwise email us first.
- **Error icon alone for 5 seconds, then it powers off:** a system error. Minelab first if it's under warranty and unmodified; otherwise email us first.
- **Coil icon flashing, with a repeating alarm:** overload. Move the coil away from the metal. The detector switches itself off after 60 seconds of continuous overload, and overloading doesn't harm the electronics.

GPZ 7000 (messages).

- **Coil Error:** check the coil is attached and its cable is connected to the control box with the retaining ring securely fastened. Then wait at least 30 seconds and switch on once — don't flick it — with the coil away from large metal objects.
- **Overload:** an overload message and an alert sound until the coil is moved away from the metal. Harmless.
- **Upgrade Failed:** Minelab's own fix first: switch the detector off and on again, then retry the upgrade from the start. If the power button doesn't respond, wait 10 minutes, then press and hold it for 10 seconds. Still failing: Minelab first if it's under warranty and unmodified; otherwise email us first.
- **Low battery:** the battery icon turns red and flashes with a low battery warning; when it's completely flat the detector shows a message and switches itself off. Charge it.

11 · It got wet, dropped, or damaged

DO NOT POWER IT ON

If it's still wet, or it went right under, don't switch it on: not to check, not for a second.

Dropped or knocked

Switch off and look it over before you switch on again (and when you do, wait at least 30 seconds, then on once — don't flick it): the coil for cracks, the cable where it goes into the coil, the coil bolt and the shaft, and every plug for bent pins or a cracked body. Knocks and vibration can also break wires inside the box, but check everything outside first.

GPX 6000 AND GPZ 7000

GPX 6000. Rain-proof only: never under water. Its coils are waterproof to 1 metre, but not the coil plug, and the battery pack isn't waterproof.

GPZ 7000. Weatherproof, not waterproof, and it can't be submersed. The GPZ 14 coil is waterproof to 1 metre; the detector, the WM 12 and headphones aren't. Minelab says to wash connectors with distilled water, never to use lubricant or grease on dust seals or o-rings, to keep the battery seal clean and seated, and to replace damaged seals or batteries.

Water got inside, or it went under: battery out, don't switch it on, and take it to Minelab if it's under warranty and unmodified. Otherwise email us first. Dropped, cracked, or a bent pin: don't force anything, and the same applies.

12 · GPX 6000 and GPZ 7000 owners: the careful path

These two are the careful ones. Their front-end modules are not something we can repair, Minelab will not repair a modified detector, and the wrong coil can destroy a GPZ 7000 in an instant. So every check in this guide for these machines starts with two things, in this order.

First: is it still under Minelab's warranty?

If your GPX 6000 or GPZ 7000 is still under Minelab's warranty and has not been modified, take it to Minelab first — they can check the front-end modules, and we can't repair those. If we have upgraded it, email us first and we'll tell you the best route.

Minelab lists the GPZ 7000 and its accessories under a 3-year warranty, and Minelab batteries under 6 months. For your GPX 6000's terms, or if you're not sure, ask your dealer.

In Minelab's own words: "Unauthorised modifications or repairs to your detector will VOID YOUR WARRANTY." And: "Minelab will not repair modified detectors."

Second: the coil warning

> **WARNING**
>
> Never fit a normal pulse-induction (SD/GP/GPX) coil to a 6000 or 7000 by any adapter — a mono coil in an X-coil adapter can destroy a GPZ 7000 instantly. The 6000's and 7000's front-end modules are not something we can repair.

Use only a genuine coil made for your detector. On the GPX 6000, that's a Minelab GPX 6000 coil, or one of the Minelab-approved coils from Coiltek or Nugget Finder. On the GPZ 7000, it's a genuine Minelab GPZ coil, or one of the Minelab-approved Nugget Finder coils. Switch off before you unplug a coil.

What you can safely do yourself

These checks come from Minelab's own manuals (on the GPZ 7000 the coil swap is ours), and they're the only ones we suggest on these machines:

- **Charge** the battery fully on its own charger (chapter 4).
- **Connectors** clean and dry; never put anything on the battery seal or o-rings.
- **Factory reset** (chapter 3).
- **Noise cancel** (chapter 6).
- **Headphones and wireless:** another pair, re-pair or reconnect, try wired (chapter 5).
- **Your other genuine coil,** if you own one.

Anything to do with the coil or the inside: Minelab first if it's under warranty and unmodified, otherwise email us first. Don't post anything until we've replied.

What we change on these two

Our GPX 6000 and GPZ 7000 upgrades are done inside, and they don't change the controls: the machine looks and drives exactly as it did. That's why the checks for these two follow Minelab's manuals.

The two side by side

	GPX 6000	GPZ 7000
Battery	removable; own charger; steady green when full (about 5–6 hours)	removable; BC 10 charger; Battery light steady green when full (allow up to 6 hours)
Sound	built-in speaker, wired 3.5 mm headphones, Bluetooth	no built-in speaker; ¼″ socket on the headphone module; WM 12
Factory reset	from off, hold power 7 seconds: tone and FP	Reset Settings keeps the GeoStore; Reset All empties it
Noise cancel	coil still, 100 mm up, press, about 5 seconds	Auto Noise Cancel, up to 55 seconds, three long beeps
Ground balance	hold Quick-Trak; raise and lower 10–100 mm and swing	hold the trigger and sweep over Minelab's yellow ferrite
Coil error	coil and error icons, then it powers off	Coil Error message
Water	rain-proof only	weatherproof, not waterproof

13 · Before you send anything to us

Every detector that comes in costs us time before we find anything: booking it in, the paperwork, and the diagnostic itself. That fee is unavoidable. If the job isn't a warranty job, or there's nothing wrong with the detector, the fee is for our time — we've been sent on a wild goose chase for a problem that isn't there. So do these checks first, and email us rather than ringing: david@detectormods.com.

Email first. We'll tell you where to send it and what to include. Please don't post anything until we've replied.

BEFORE YOU SEND ANYTHING

- [ ] I've done the checks in the chapter for what it's doing.
- [ ] I've cleaned and checked every connector.
- [ ] I've run it from known settings: a factory reset, or my Setup Guide's start positions.
- [ ] I've swapped one thing at a time, and written down what happened after each swap.
- [ ] I've stripped the audio back to plain wired headphones.
- [ ] I've taken photos of the connectors.
- [ ] GPX 6000 or GPZ 7000: I've checked the warranty (chapter 12).

What to write in the email

- **Your detector:** the model and the exact variant (GPX 4500, not just "GPX"), and whether we've upgraded it.
- **What it's doing:** the symptom, in your own words.
- **When it started,** and what you were doing at the time.
- **What you swapped, and what happened** each time.
- **What else is in the kit:** battery, power cable, coils, headphones, wireless set, booster, speaker.
- **Whether it has been wet** or knocked.
- **Photos of the connectors.**
- **Your postcode.**

GPX, GPX 6000 and GPZ 7000: anything on the screen, word for word, with a photo.

The Detector Troubleshooter writes most of this for you: at the end it gives you a summary to copy, and an Email us button. detectormods.com/tools/detector-troubleshooter

If you've been thinking about an upgrade, you can join the list for your model at detectormods.com/waitlist.

14 · The parts that fix most of this

We only point you at a part where it can genuinely be the fix, or the spare that proves the fault.

Testing

- **Test targets** — gold-plated spheres sized against real gold, from 0.1 g to 2 g — a known target to test with. detectormods.com/shop/82/test-targets-01-to-2g

For the GPX 6000 and GPZ 7000

Batteries and chargers for these two are Minelab parts. For coils, see chapter 12. Beyond the test targets, we don’t point 6000 or 7000 owners at any part of ours.

Settings

- **Your Setup Guide** — the start positions and settings this guide keeps sending you to, on the Manuals page. detectormods.com/manuals

15 · Quick paths

The main lines of each chapter, in order. Stop as soon as one fixes it.

It won’t turn on at all

GPX 6000 and GPZ 7000

1. Warranty first (chapter 12).
2. Charge it fully on its own charger.
3. Battery out; contacts and seal clean and dry; refit it (GPZ 7000: latched; let it cool if it’s hot).
4. Still dead: Minelab first if under warranty and unmodified, otherwise email us first.

It’s on, but there’s no sound

GPX 6000 and GPZ 7000

1. Warranty first (chapter 12).
2. Wired: start-up done, volume up, plug fully in, another pair. GPX 6000: unplug them and listen to the speaker.
3. Wireless: on, charged, paired or connected; then try wired.
4. Factory reset (GPZ 7000 with a WM 12: then Wireless On and Connect WM 12 again).
5. Still silent: Minelab first if under warranty and unmodified, otherwise email us first.

It’s noisy, won’t settle, or gives false signals

GPX 6000 and GPZ 7000

1. Warranty and the coil warning first (chapter 12).
2. Hold the coil still; move away from interference; noise cancel.
3. The coil plug: clean, dry, fully home.
4. Factory reset.
5. Your other genuine coil, if you own one.
6. Still noisy: Minelab first if under warranty and unmodified, otherwise email us first.

The sound is crackly, distorted, or cuts in and out

GPX 6000 and GPZ 7000

1. Warranty first (chapter 12).
2. Plug fully in; wiggle it and the lead; another pair.
3. Wireless: charge it; re-pair (GPX 6000) or Connect WM 12 (GPZ 7000); try wired.
4. GPX 6000 speaker scratchy: clean it as Minelab shows.
5. Still crackly: Minelab first if under warranty and unmodified, otherwise email us first.

It won’t ground balance

GPX 6000 and GPZ 7000

1. Warranty first (chapter 12).
2. Quick-Trak as Minelab says. GPX 6000: try the other Ground Type. GPZ 7000: sweep over Minelab’s yellow ferrite with the trigger held; Ground Balance Mode on Auto.
3. Factory reset.
4. Still won’t balance: Minelab first if under warranty and unmodified, otherwise email us first.

It won’t find gold, or seems to have lost depth

GPX 6000 and GPZ 7000

1. Warranty and the coil warning first (chapter 12).
2. The proof test.
3. Weaker: move away, noise cancel, factory reset.
4. Your other genuine coil, if you own one.
5. Still weak: Minelab first if under warranty and unmodified, otherwise email us first.

The screen says something

GPX 6000 and GPZ 7000

1. Warranty and the coil warning first (chapter 12).
2. Coil error: the coil plug, the cable, the coil. Overload: move away from the metal.
3. Upgrade Failed (GPZ 7000): switch off and on, then retry the upgrade (power button not responding: wait 10 minutes, then hold it for 10 seconds). Still failing, or a System error (GPX 6000): Minelab first if it's under warranty and unmodified; otherwise email us first.
4. Your other genuine coil, if you own one.
5. Still there: Minelab first if under warranty and unmodified, otherwise email us first.

It got wet, dropped, or damaged

GPX 6000 and GPZ 7000

1. Water inside, or it went under: don't power it on. Battery out; Minelab if under warranty and unmodified, otherwise email us first.
2. Rain or splashes: dry the connectors and the battery bay; check the battery seal.
3. Dropped, cracked, or a bent pin: Minelab first if under warranty and unmodified, otherwise email us first.

GM 1000: the short list

Won't turn on at all

1. Switch off and fit the other battery: the second Li-ion pack or the AA holder, whichever you have, with 8 fresh AA cells in the holder. Slide it fully home, twist the end cap to locked, and switch on.
2. Charge the Li-ion pack fully: Minelab says 5 to 6 hours. Use the mains plug-pack, or in a vehicle only a normal 12 V car battery. A red light on the pack means "Error": use the other pack or the AA holder.
3. Check the contacts on the battery and in the battery bay: clean, dry, no green corrosion.

It's on, but there's no sound

1. Turn the volume up. Unplug the headphones and listen to the built-in speaker, then try another pair of 3.5 mm stereo headphones.
2. In Gold (Iron Reject) mode, iron stays silent on purpose: test with a coin or a bit of brass, not a nail.
3. Switch off and screw the coil plug in securely at the back of the control box.
4. If you have both coils, swap them. Or borrow a mate's GM05 or GM10: no other coil fits.

Noisy, chattering or false signals

1. Keep the coil low: waved in the air, it picks up noise. A hand over the coil beeps, and that's normal.
2. On Auto+? Go to Auto, or a lower manual number.
3. Re-run noise cancel: switch off, hold the coil still in the air away from metal, switch on and give it about 10 seconds.
4. Move away from power lines, mobile towers, generators and other detectors. A loud, steady signal next to big metal is normal: move the coil away.
5. Screw the coil plug in securely and wind the cable closely round the shaft. With the coil still, gently flex the cable near the plug and the coil. The first time it crackles or cuts out, stop and switch off: it's the coil or its cable.
6. If you have both coils, swap them. Or borrow a mate's GM05 or GM10.
7. Factory reset: press and hold the Power button for about 10 seconds, then set your mode and sensitivity again. It can't undo our upgrade.

Won't settle or ground balance

1. Ground balance is automatic. Pump the coil up and down over the problem patch, and lower the sensitivity, or use Auto instead of Auto+.
2. Later Getting Started Guides show a Quick Ground Balance on a long press; if yours has it, use it over a clean patch of ground.
3. Minelab designed the GM 1000 for moderately mineralised ground, so very hot or fast-changing ground can beat it: try milder ground.
4. Factory reset, as above.

Lost depth, or not finding gold

1. Air test: hold the coil off the ground, away from metal, and pass a known target across it at a measured distance. Do it where you detect, not in the shed at home, and compare with before or with a mate's GM 1000. Only huge metal, very close? Stop there.
2. In variable ground Auto keeps winding the sensitivity back, so set it by hand: start low, bring it up until it chatters, then back off a touch.
3. In Gold (Iron Reject) mode? Try Deep All-Metal. The 5″ coil is for small gold and tight spots, the 10×6″ for coverage and depth.
4. Move away from power lines, mobile towers and generators, and test again.
5. Factory reset, as above.

The screen shows something

1. Gold Chance Indicator pointing right on junk: that's normal. Brass, lead, aluminium and even big iron can read right.
2. Battery level low: charge it, or fit the other battery.
3. A warning triangle: switch off, screw the coil plug in properly at the back of the control box, fit the other battery (the second Li-ion pack, or the AA holder with 8 fresh AA cells) and switch on. If the triangle stays, stop there.

Got wet

1. The coils are waterproof to 1 m. The control box is only rain and splash proof, and must never go under.
2. If the control box got wet inside or went under: switch off, take the battery out and leave it all to dry for days, not minutes. Don't open the control box. Dry the coil plug and socket before you plug the coil back in.

Still playing up? If we modified your GM 1000, email us first (chapter 13), and please don't post anything until we've replied. If we haven't worked on it, it's a standard machine, and the right place is Minelab or your dealer. Minelab's warranty on a GM 1000 is 2 years from purchase (batteries 6 months).

Appendix · Your Setup Guide, and how to reach us

Your Setup Guide has the start positions and settings this guide keeps sending you to. Every edition is on the Manuals page: detectormods.com/manuals.

- **GPX 6000, GPZ 7000 and GM 1000:** the GPZ 7000, GPX 6000 and GM 1000 edition of the Setup Guide.

Questions about a detector in this guide, or ready to send something? Email david@detectormods.com first, please, rather than ringing, and we'll tell you what to do next.