

Metal Detector Terminology Cross-Reference

Minelab / XP / Nokta / Garrett - Printable 8.5 x 11 Landscape Reference Sheet

Note: Terms are grouped by field function. They are not always mathematically identical across brands, but they describe the same practical adjustment family.

Adjustment Type / Function	Minelab Term	XP Term	Nokta Term	Garrett Term	Plain-English Meaning
Target separation / reset speed	Recovery Speed	Reactivity / Multi-Reactivity	Recovery Speed	Recovery Speed / Speed	How fast the detector resets between targets. Higher = better in trash/iron; lower = usually more depth.
Main power / signal gain	Sensitivity	Sensitivity	Sensitivity	Sensitivity	How hard the detector is listening. Too high causes falsing and chatter.
Ground mineral compensation	Ground Balance / Tracking Ground Balance	Ground / Ground Balance / Ground Stabilizer	Ground Balance / Ground Suppressor	Ground Balance / Ground Track / Ground Balance Window	Balances out mineralized soil, wet sand, hot rocks, and changing ground.
Electrical interference reduction	Noise Cancel	Frequency Scan / Noise Cancel	Noise Cancellation	Frequency Scan / Channel Scan	Finds a cleaner channel or frequency to reduce EMI chatter.
Iron rejection behavior	Iron Bias / Ferrous Limits	Silencer / B.Caps / Iron Volume / Disc behavior	Iron Filter / Stability / Bottle Cap Rejection	Iron Discrimination / Iron Audio / Iron Volume	Controls how aggressively mixed iron and non-ferrous signals are treated as iron.
Bottle cap rejection	Iron Bias / Ferrous Limits / Discrimination Pattern	B.Caps	Bottle Cap Rejection	Iron Audio / Iron Discrimination	Helps identify or reject steel bottle caps that can sound like coins.
Rejecting unwanted target ID ranges	Discrimination Pattern / Accept-Reject	Discrimination / Notch	Discrimination / Notch	Discrimination / Notch Discrimination	Silences or accepts parts of the target ID scale. Useful for iron, foil, tabs, or trash ranges.
Rejecting a narrow ID range	Notch	Notch	Notch Filter / Notch	Notch Discrimination	Blocks a specific target ID window while leaving nearby IDs active.
Tone zones / audio bins	Target Tones / Tone Regions	Tones / Full Tones / Pitch / Square / PWM Audio	Tone Break / Number of Tones	Audio Modes / Tone ID / Tone Breaks	Determines how many tones you hear and where each tone starts or stops.
Tone break location	Tone Break	Tone Break	Tone Break	Tone Break / Discrimination Breakpoints	Moves the ID point where one tone changes to another.
Volume by target type	Tone Volume / Volume Adjust	Iron Volume / Audio Response	Ferrous Volume / Tone Volume	Iron Volume / Volume	Lets iron be quieter than good targets, or changes volume by tone region.
Background hum	Threshold Level / Threshold Pitch	Threshold	Threshold Level	Threshold	Constant background hum used to hear faint targets, especially in gold or all-metal work.
Audio loudness boost on deep targets	Volume Gain / Audio Theme behavior	Audio Response	Audio Gain / Audio Boost	Audio Type / Volume / Threshold behavior	Controls how loud weak or deep targets sound compared with shallow targets.
Frequency choice	Single Frequency / Multi-IQ / Multi-IQ+	Frequency / FMF Fast Multi Frequency	Frequency / Multi Frequency / M1-M3	Frequency / Multi-Flex / Multi-Frequency	Chooses single frequency or simultaneous multi-frequency operation.
Search environment preset	Search Mode: Park, Field, Beach, Gold, All Terrain	Programs: General, Sensitive, Deep HC, Beach, Diving, Relic, Goldfield	Search Mode: Park, Field, Beach, Goldfield	Search Mode: Zero, Coins, Jewelry, Relics, Custom, All Metal	Factory starting point that changes multiple settings at once.
Pinpointing	Pinpoint	Pinpoint	Pinpoint	Pinpoint	Non-motion target centering mode. Same basic term across brands.
Target ID number	Target ID / Conductive ID / 2D ID	Target ID / T.ID	Target ID	Digital Target ID	Number assigned to a target. ID scales differ by brand and model.
Depth meter	Depth Gauge	Depth Indicator	Depth Indicator	Depth Indicator	Estimated target depth, usually based on a coin-sized target assumption.
All-metal style hunting	All Metal / Horseshoe Button	All Metal / Pitch / Relic Modes	All Metal / Goldfield	All Metal Mode	Opens more audio information, often including iron, for maximum target feedback.
Wet salt control	Beach Mode / Salt Handling	Salt Sens / Beach / Diving Programs	Beach Mode / Saltwater Settings	Salt Elimination / Beach Modes	Helps stabilize the detector over conductive saltwater and wet sand.
Hot rock / mineral false reduction	Ground Balance / Iron Bias / Discrimination Pattern	Ground Stabilizer / Notch / Disc	Ground Suppressor	Ground Balance / Ground Track / Hot Rock Handling	Reduces false signals from mineralized stones or bad ground.

Quick Translation List

What You Mean	Minelab	XP	Nokta	Garrett
Speed in trash	Recovery Speed	Reactivity	Recovery Speed	Recovery Speed / Speed

What You Mean	Minelab	XP	Nokta	Garrett
Turn up power	Sensitivity	Sensitivity	Sensitivity	Sensitivity
Quiet the ground	Ground Balance	Ground / Ground Stabilizer	Ground Balance / Ground Suppressor	Ground Balance / Ground Track
Quiet EMI	Noise Cancel	Frequency Scan	Noise Cancellation	Frequency Scan
Reject iron better	Iron Bias / Ferrous Limits	Silencer / B.Caps / Disc	Iron Filter / Bottle Cap Reject	Iron Discrimination / Iron Audio
Make iron quieter	Tone Volume	Iron Volume	Ferrous Volume	Iron Volume
Cut out certain numbers	Notch / Discrimination Pattern	Notch	Notch	Notch Discrimination
Change target sounds	Target Tones / Tone Break	Tones / Full Tones / Tone Break	Tone Break / Tones	Tone ID / Tone Break
Hear faint targets better	Threshold / Audio Gain behavior	Threshold / Audio Response	Threshold / Audio Gain	Threshold / Audio Type

Practical Field Notes

Situation	Setting Direction
Heavy iron or modern trash	Raise Recovery Speed / Reactivity
Clean beach or open field	Lower Recovery Speed / Reactivity for more depth
Steel bottle caps everywhere	Increase Iron Bias / B.Caps / Bottle Cap Reject, or check with Iron Audio
Detector is chatty	Lower Sensitivity, run Noise Cancel, and check Ground Balance
Good targets sound clipped	Lower iron filtering and avoid overdoing discrimination

Key takeaway: Reactivity, Recovery Speed, and Speed are the same adjustment family - target separation versus depth. Higher is useful in trash; lower is usually better in clean ground.

Tom's Top Picks for Metal Detectors of 2026

Reference: Prospectors Cache video "Best Metal Detector for EVERY Budget (2026)". *Prices are approximate current street prices and can change by dealer, bundle, sale, and stock status.

Budget Tier	Top Pick	Approx. Current Price*	Brief Description
Starter / Under \$300	Minelab X-TERRA PRO	\$254.99	Waterproof to 16 ft with Pro-Switch single-frequency operation. Strong starter pick for park, field, and beach use.
Best Under \$500	Nokta Triple Score Pro Pack	\$499.00	Simultaneous multi-frequency, waterproof design, two-coil pro pack value, and simple controls. Excellent value detector.
Garrett Pick	Garrett Vortex VX9	\$599.99	Multi-frequency, fully submersible to 16 ft, lightweight, and upgradeable Vortex platform. Good modern Garrett choice.
Mid-Range Value	Nokta Legend	\$659.00	Proven simultaneous multi-frequency detector with strong waterproof performance and adjustable features for serious hunters.
Upper Mid / All-Around	Minelab Equinox 900	\$999.00	Multi-IQ, fast recovery, waterproof, light carbon-fiber shaft, and strong coin, relic, beach, and gold versatility.
Best Overall / Serious Use	XP DEUS II RC + WS6	\$1,299.00	Fast multi-frequency, fully wireless, extremely light, excellent target separation, and underwater-capable to serious depth.