THANK YOU FOR CHOOSING
GARRETT METAL DETECTORS!

Congratulations! As the proud owner of the Garrett Master Hunter CX (Computer Express) Plus you have joined an international family of treasure hunters. Men, women and children alike have used their Garrett detectors to find coins, relics and gold nuggets that are valued in the millions of dollars. So, to get the most out your CX Plus and treasure hunting experiences be sure to carefully read through this owner’s manual!

Your Master Hunter CX Plus, whose microprocessor-controlled circuitry has been acclaimed and proven through countless hours of field use, is a fine detector for hunting coins or any other metallic objects. It offers the serious metal detector hobbyist added depth and completely accurate ground balance and the precise adjustment available only with microprocessor controls. Computer designed circuitry that responds to signals from revolutionary PROformance searchcoils results in greater penetration to discover and locate treasures of all kinds.

Your Master Hunter CX Plus is engineered with microprocessor based technology and is backed by more than 40 years of metal detection research and development by Garrett’s leading team of engineers. It is remarkable in its ability to locate coins, jewelry and other metallic objects at exciting depths. And with Garrett’s revolutionary Graphic Target Analyzer™ (GTA) display that offers target acceptance/rejection, precise discrimination and other key information, you can spend more time digging treasure and less time digging trash!

The CX Plus is pre-programmed at the factory to adapt itself automatically for optimum performance, yet to always follow your targeting directions. Simply press the ON touchpad and begin hunting immediately without interference from ground minerals. Garrett’s unique LCD display shows the identity of your target. Electronic pinpointing and coin depth measuring offer added assistance.

To prospect for precious metals or hunt for deeply buried caches, switch to the All Metal Mode and Fast Track™ will precisely ground balance the circuitry
of your detector. The Master Hunter CX Plus is equipped with a 7"x10" PROformance searchcoil.

Again, welcome to the Garrett treasure hunting family. In becoming a part of this great tradition and hobby, you have made the right start to successful treasure hunting.
Before assembling your CX Plus metal detector ensure you have the complete set of parts, which include:

- Control Housing
- Upper Stem
- Lower Stem
- Two (2) Mounting Washers
- One (1) Wing Nut
- One (1) Threaded Bolt
- Spring clip
- Searchcoil with Cable
- Instruction Video
- Warranty Registration Card

If any part is missing contact your local dealer.
ASSEMBLY

No tools are required to assemble the Master Hunter CX Plus. Hand tighten all necessary parts.

1. Compress the button end of the spring clip and insert, button end first into the lower stem of your detector so that the buttons pop out of the holes as they do in the upper stem. These two sets of buttons will enable you to secure the top stem to the control housing and to adjust the length of the overall stem to your height so that you can scan with the detector comfortably.

2. Attach the lower stem to the searchcoil. Make certain that two rubber washers are inserted into this stem before slipping the searchcoil onto it. Place the threaded bolt through the holes in the connector and hand tighten the knobs. No tools are needed.

3. Depress buttons in the upper stem and slide into the control housing until they pop into the holes.

4. Depress the buttons in the lower stem and insert it into the upper stem. Buttons will pop into the holes and you can achieve the desired stem length. The third set of holes from the end is most commonly used.
5. Wrap the searchcoil cable securely around the stem and connect to the detector. The first cable turn goes over the top of the stem. The cable should be snug, but still loose so that the angle of the searchcoil can be easily changed, if required. To connect the cable to the detector, insert the cable connector and rotate the collar clockwise until secure.

FEATURES

1. LCD - The LCD on the Master Hunter CX Plus provides extensive visual information for the detector operator. Battery condition is reported continuously while the detector is turned on and information is provided on detected targets that will aid in their recovery.

2. UPPER SCALE - The Upper Scale provides information about detected targets while the operating mode and battery condition are displayed below.
Coin depth reads in inches the depth of coin sized targets. The detector automatically adjusts to report this information correctly whenever the Pinpoint touchpad is pushed and released, regardless of which size searchcoil is being used. Large or very deep objects may not be accurately measured.

The LCD indicates the probable identification of all targets, whether announced by an audio response or not.

The 0 to 12 Scale is an aid when setting the Detection Depth (Sensitivity) control. (Do not confuse with the Coin Depth reading). This scale also provides target information based on conductivity of the metal detected, information that will become more valuable as you gain experience. Conduct tests on metals of interest to learn approximate readings for the various denominations.

**TOUCHPADS**

1. **POWER** - Press the POWER touchpad once to turn the CX Plus on. It automatically begins operating in the Discrimination Mode. Press the pad again and the detector will shut off. The detector will shut off automatically when no touchpad is pushed and no target is detected for about 10 minutes.

2. **ALL-METAL** - This touchpad serves a dual function. When pressed and released, it places the detector in its ALL METAL mode of operation. When
pressed and held firmly, its Fast Track function is activated. As you begin scanning with the search-coil in a normal manner, ground balance adjustment is quickly and automatically achieved. Repeat this procedure at any time to achieve precise ground balance.

3. PINPOINT / DEPTH - Press and hold to activate the pinpointing function of your Master Hunter CX Plus after you have discovered a target. A complete discussion of pinpointing can be found in this owner’s manual. After you have pinpointed a target and released this touchpad, the display will indicate how far coin-sized targets lie beneath the bottom of the searchcoil and the reading will be highly accurate regardless of the size coil being used. This reading holds for approximately three (3) seconds.

4. DISC - Press DISC (Discriminate) to return to the Discriminate Mode when you have been operating in the All Metal Mode. The CX Plus begins operating in the Discriminate mode whenever it is turned on.

5. + and - - These two similar pads with arrowheads (at extreme right of the console) are used to regulate the Audio Threshold and Detection Depth (sensitivity). If either + or - is pressed, the sensitivity in the current operating mode will be changed. To change the audio threshold, press and hold the All Metal touchpad while regulating the threshold by pressing the + or - pad.

Special Note: Don’t ever worry about “damaging” the circuitry of your CX Plus by adjustments that you make. Just hold down the All Metal touchpad and press the DISC touchpad to restore factory settings.
CONTROL FUNCTIONS - SIDE PANEL

It is recommended that you begin hunting with both controls set at the Initial Setting (>) indicators.

1. FERROUS RANGE - Allows adjustment for the elimination of targets in the iron range up to but not including aluminum pulltabs. Targets located and accepted in this range will cause your audio signal to grow louder.

2. NON-FERROUS RANGE - Allows adjustment for elimination of targets in the range of pulltabs through aluminum screw caps. Garrett’s Target Elimination controls permit you to select the targets you desire. Furthermore, the Multi-Range Discrimination System permits selection of these targets in both Ferrous and Non-Ferrous ranges. The Ferrous control is adjustable from zero through bottlecap rejection while the Non-Ferrous control takes over at pulltab rejection and is adjustable through aluminum screw tops. Proper use of the two controls will dramatically improve accuracy by eliminating worthless targets in both the ferrous and non-ferrous ranges and in accepting many kinds of gold and silver rings, jewelry and coins.
OPERATING INSTRUCTIONS

Discriminate Mode
Whenever you turn on your Master Hunter CX Plus by pressing the POWER touchpad, you have activated the Discriminate (trash elimination) mode. When operating in this mode, the CX detects only selected metal objects.

Garrett’s two Multi-Range Discrimination controls permit you to select targets you desire. The following settings are marked on the ferrous controls:

- Nails setting will eliminate rusty iron and iron nails.

- Foil setting will eliminate iron, nails and foil. Salt water will be eliminated near this setting.

- Bottlecaps setting will eliminate steel bottlecaps, plus iron, nails and foil.

- Nickel setting will eliminate that metal and coins made of it, plus bottlecaps, iron, nails and foil.

On the Non-Ferrous control knob the settings for pulltab, screw top, zinc penny and flat screwtop indicate the items which will be excluded from detection. Remember that the elimination is cumulative, i.e. all items to the left of the pointer will be excluded. Test typical trash items before taking your Master Hunter CX Plus into the field.

Setting the Multi-Range Discrimination controls at higher settings will cause some rings and coins to escape detection. Therefore, it is recommended that you never rotate these knobs any farther clockwise than necessary. Fill rotation counterclockwise (to the left) will cause most metallic targets to be accepted. As the knob is turned farther clockwise (to the right) more targets will be rejected. As you become familiar with your targets through bench testing, you can remember the rejection settings of your detector by the numbers on the controls.
LCD METER DISCRIMINATION

Because many professional treasure hunters firmly believe that you should dig all targets, they always search in the All Metal mode. Others search in this mode and reject unwanted targets by using information reported on the LCD.

When searching in the All Metal mode, always check the display on every target. You will learn through experience whether to dig or not.

HEADPHONE JACK

Headphones are a valuable accessory for any metal detector to mask interference from outside noise. They permit you to hear small and deep targets that might be missed when using audio from the detector speaker. Headphones are particularly essential when you are hunting where noise of people and / or traffic is excessive. When headphones are not in use, always leave the rubber plug in place.

BATTERIES

The Master Hunter CX Plus utilizes a battery pack that requires six (6) “C” cell standard or NiMH rechargeable batteries. It is recommended that top quality, heavy duty or alkaline batteries be used. It is advisable that you remove the battery pack when the detector is not in use, particularly for a period of weeks. The Master Hunter CX Plus should operate 15 to 20 hours with carbon or NiMH batteries and a longer time with alkaline batteries.

Checking Condition - Battery condition is reported on the LCD continuously while the detector is operating. Batteries should be considered weak when only two elements appear on the display. They should be replaced when less than two elements appear or when the detector begins making target-like sounds when no target is encountered.
Replacement

1. Slide cover to the rear and slip off completely.

2. Take out battery pack which is not connected by wire. It may help to turn the detector upside down. Place your hand over the cavity to catch the pack as it slides out.

3. Unscrew two thumbscrews to release the top and remove batteries.

4. Install batteries. Carefully observe polarity of the batteries.

5. Replace top on pack by tightening the two screws and insert pack into the detector. Use finger pressure only and do not screw too tightly.

6. Press down on the pack and begin sliding the battery cover until it snaps. Remove hand and continue sliding cover until it snaps. Please note that your Master Hunter CX Plus will lose its Audio Threshold and Sensitivity settings when the battery pack is removed for approximately four minutes.
This will enable a treasure hunter to learn about the discriminating capabilities of the CX Plus before taking it into the field. The following tests should be performed with the search coil perpendicular to a bench, floor or other non-metallic surface:

1. Rotate both Multi-Range Discrimination controls fully counter clockwise. Bring various metallic targets across the bottom of the searchcoil at a distance of about two inches. Each target will cause the sound to increase, a characteristic of true non-discriminating operation.

2. Rotate the Ferrous control to the 3 or 4 position and the sound will decrease or cease when small nails are scanned across the bottom of the search-coil.

3. Rotate the control farther and the sound will diminish as steel bottlecaps are tested. You will note that nails, foils and other small junk items will also be rejected (i.e. cause no increase in sound).

4. Rotate the Non-Ferrous control farther clockwise and pulltabs will be rejected. At this setting you will note that nickels and some rings will also be rejected. The conductivity of this type of target is not great enough to cause the detector to respond when the Discrimination controls are set at a high number.

5. You may find that slight adjustments to the Discrimination controls may be necessary. For example, you may wish to eliminate almost all trash from the audio response, yet get an audio signal from all coins. Adjust the Ferrous control on the left to reject small iron trash yet still accept nickels. Adjust the Non-ferrous control to accept all other coins.

6. Experiment with the two control knobs and vari-
ous metallic objects. Keep a written record of your results and use this when searching in the field. Again never rotate either control knobs any farther clockwise than is absolutely necessary to eliminate targets you do not wish to detect.

TEST PLOT CONSTRUCTION

As you operate and use your CX Plus, you will quickly grow more proficient in its use. Building and using your own test plot will sharply increase this proficiency. Bury several items, including a nail, a piece of foil, a pulltab, a bottlecap and several coins at varying depths of one to four inches about 18 inches apart. Clearly mark where each item is buried. Scan over them while carefully listening to and studying the different detection signals.

Remember that newly buried objects, especially coins, will be somewhat more difficult to detect than items that have been buried for some time. This is primarily a metallurgical phenomenon. Experiment with various detection modes, and pay attention to both audio and CX Plus display as you scan. Note your detector’s response at the various settings.

Practice pinpointing and locating targets precisely. Use both the manual and the electronic methods of pinpointing.
TARGET ACCEPTANCE

The drawing illustrates what types of targets can be accepted and rejected in the two ranges. Synchronized audio signals indicate the section in which targets have been detected:

Ferrous Reject: Audio threshold is maintained. No change in sound.

Ferrous Accept: Normal increase of sound indicates acceptable target.

Non-ferrous Reject: Audio threshold is maintained, or there might be a slight decrease in the sound level which indicated an unacceptable target.

Non-Ferrous Accept: Clear and distinct acceptance tone.

More on Target Audio
When a metallic object is accepted, the detector’s speaker or headphone sound will increase from your audio threshold level. Some rejected targets, however, may cause the audio to “break up” or sound erratic.

This is generally a response to shallow trash targets and can be remedied by raising the height of your searchcoil when scanning. Another indication of a reject target is an audio signal as you scan one way and no response when scanning from the other direction.

Test typical trash items before hunting with the CX to determine what signal your detector will give on encountering them.
All Metal Mode

Press the All Metal touchpad to activate the All Metal mode. In this mode the Master Hunter CX Plus will respond with an increase in sound to the presence of any metal or conductive mineral target beneath its searchcoil. For maximum depth and best operation over highly mineralized ground, always operate in the All-Metal mode.

Mineralization is automatically balanced (canceled out) in the All Metal mode by your CX Plus’ Fast Track ground balancing which is accomplished by pressing and holding the All Metal touchpad while scanning the searchcoil for only a few seconds in a normal manner. When you turn on the CX Plus, wait until you hear the audible tone that indicates your detector is operating. Release the touchpad and continue scanning. Repeat this procedure at any time to ground balance the CX Plus precisely, no matter what type of mineralized soil is underneath. As you search in the All Metal mode, you should occasionally raise the searchcoil, then lower it. If your audio level changes, readjust the ground balance with the Fast Track control, according to the above instructions. Such readjustment will sometimes be necessary because of the changing concentrations of ground minerals, especially when you are prospecting in gold country.
**SEARCHING**

Scan the searchcoil at a rate of about one to two feet per second with the searchcoil about one to two inches above the ground. When you are searching in the discriminate mode, detection of a metal target within the range you have selected with your Discrimination controls will be indicated by an increase in sound.

**Searchcoil Height**

Because of the sensitivity of the Master Hunter CX Plus and its searchcoil, it is not necessary to operate with the searchcoil held to the ground. The recommended operating height is two inches from the surface. In areas of heavy concentrations of mineral and rocks, it may be necessary to operate with the coil held even farther above the surface. Even with the coil held at this height (or even higher) above the ground, your Master Hunter and its searchcoil will continue to penetrate deeply, even into highly mineralized rock or soil.

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**Recovery**

Whenever your detector locates a target, you’ll want to recover it with the greatest possible ease. This is accomplished first by pinpointing. You can then utilize another function of the CX Plus for measuring coin depth.

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**Pinpoint targets by first drawing an imaginary “X” on the ground with the searchcoil at the place where maximum sound occurs.** You’ll notice when operating in the Discriminate Mode that you cannot maintain the detection sound with the searchcoil held completely still above your target. The searchcoil must be moving slightly for you to detect the exact location of your target.

**Electronic Pinpointing**

Precise pinpointing in either mode is available with this feature of your Master Hunter CX Plus. When you press the Pinpoint touchpad and hold it, you can place the searchcoil directly over your target. Move it around slightly, and maximum sound will be heard when the target is directly beneath your searchcoil.
When pinpointing, the Master Hunter CX Plus is operating in an All Metal mode, and you can hold the searchcoil perfectly still with the detector producing a constant sound.

For most effective electronic pinpointing, place the searchcoil on the ground to the side of your target. Press and hold the Pinpoint touchpad. Scan back and forth across the target, maintaining searchcoil contact with the ground. You will observe an increase in sound and LCD reading when the target is directly beneath the searchcoil’s center. You may also release the touchpad while the coil is over the target and you will get a coin depth reading.

**Coin Depth Measuring**

Pinpoint targets as directed above, but keep the searchcoil in contact with the ground. Move the searchcoil off to one side of the target and release the touchpad. The LCD will indicate coin depth in inches. This reading will hold for about three seconds.

Since the final step in recovery usually entails digging, it is recommended that you use a probe to help locate exactly where to dig. Always make as small a hole as possible. It is quicker, requires less work and makes refilling holes easier. And, you should always fill your holes.
SEARCHCOILS

Your Garrett CX Plus is equipped with a 7”X10” PROformance searchcoil suitable for almost any kind of target in any terrain. Also available from your Garrett dealer are a 10”x14” PROformance Power DD searchcoil, which you will find helpful in seeking large and deep targets, and a 4.5” Crossfire for use in especially trashy locations or in tight places that larger searchcoils do not reach.

When changing searchcoils, hand-tighten the knobs only. Never use tools of any kind.

Garrett’s acclaimed TreasureHound™ CX Plus Depth Multiplier multiplies the depth to which the CX can detect objects that are larger than a fruit jar. Because the TreasureHound enables your Master Hunter CX to search deeper than ever before, it is known as the “cache hunter’s delight.” Because it detects only large targets and is not bothered by small pieces of metal junk, it minimizes the necessity of digging.

GOLD PROSPECTING

Gold and other precious metals can be found in various forms with a Master Hunter CX Plus. You will most likely be searching for nuggets, but gold can also be found as lode or hard rock deposits in a vein, usually mixed with other minerals. The CX Plus can also be used to locates placer deposits in streams or dry sand, with such gold then recovered by panning.

Hard work, patience and research are three of the keys to success in electronic prospecting. Research is important because it is vital that gold always be sought in areas where it is known to exist.

The CX Plus is usually operated only in the All Metal Mode if gold is to be found. This is particularly important when searching for tiny gold nuggets. Furthermore, when prospecting, all targets must be located and carefully inspected. It is only in this manner that you can be successful in using a detector to discover valuable metal nuggets and ore samples. Although some electronic prospectors have expe-
rienced success in using the Discriminate mode to locate large nuggets, the detector will respond more effectively to tiny nuggets in the All Metal Mode. Heavy ground mineralization could also limit depth of detection in the Discriminate Mode.

Hot rocks, a problem for any electronic prospector, can be described as a concentration of non-conductive iron mineral that causes a detector to recognize it as metal.

When you suspect that you have a signal from a hot rock, locate the target precisely by pinpointing. Then move your searchcoil away and switch to the Discriminate mode by pressing the DISC touchpad. Both Multi-Range Discrimination controls should both be set at zero. Now scan the target again, trying to keep the exact same distance. If the sound does not change, decreases or becomes silent, your target is a hot rock. When this happens, ignore the target, press ALL METAL touchpad and continue searching.

If the signal increases at all in the Discriminate Mode, you should investigate this target more closely and identify the metal causing your audio to increase.
MAINTENANCE

Always remember that your CX Plus is a sensitive instrument. It is built to withstand rugged treatment in the outdoors. Use your Garrett detector to the fullest extent, yet always protect and handle it with reasonable care.

• Avoid extreme temperatures as much as possible, such as storing the detector in an automobile trunk during the summer or winter months.

• Keep the detector clean. Wipe the housing after use and wash the coil when necessary. Protect the CX Plus from dust and sand as much as possible.

• Your searchcoil is submersible, but your control housing is not. Never submerge the control housing and always protect it from heavy mist, rain or blowing sand.

• Disassemble the stem and wipe it clean after use in sandy areas.
• When storing longer than about one month, remove the battery holders and batteries from the detector.

SERVICE AND REPAIR

In case of difficulty, read this Owner’s Manual thoroughly to make certain your detector is not inoperable due to manual adjustments. (Just hold down the All Metal touchpad and press the DISC touchpad to restore factory settings.) Contact your dealer for additional assistance.

When your detector must be returned to the factory for service, make certain:

You have checked batteries, switches and connectors. (Weak batteries are the most common cause of detector “failure”.)

You have contacted your dealer, particularly if you are not familiar with the CX Plus.

You have included a letter that fully describes the problem and conditions under which they occur. Make certain to include your name, address
and a phone number where you can be contacted between 8:30 a.m. and 4 p.m., C.S.T.

You have carefully packed the detector in its original shipping carton or other suitable box.

Make certain that proper insulation or packing material is used to secure all parts. Do not ship stems or headphones unless they are part of the problem. Be certain to return all coils.

Ship to:
Garrett Metal Detectors
1881 West State Street
Garland, Texas 75042

Call Garrett’s Customer Service Department (800-527-4011) if you have further questions. Please allow approximately one week for Garrett technicians to examine and repair your detector after they receive it, plus another week for return shipping. All equipment will be returned UPS or parcel post unless written authorization is given by you to ship collect by air parcel post, UPS Blue (air) or air freight.

RECOMMENDED READING

Recommended Accessories

Your Garrett Master Hunter CX Plus represents the highest quality in metal detector manufacturing. Complement it with quality accessories such as these from Garrett:

• TreasureHound™ Depth Multiplier (Part No. 1611700). This 2-box coil configuration finds larger targets (gallon-sized cans) at the greatest possible depths and ignores small trash items.

• 4.5” Crossfire Coil (Part No. 2217600). Use this sniper coil to find smaller, shallower targets in trashy or confined areas.
• Deluxe Garrett Headphones (Part No. 1603000). Allows you to hear faint signals that may denote deep targets. Also reduces background noise.

• Master Hunter CX Armrest Assembly (Part No. 1601870). Use for additional stability and comfort while searching.

Since Garrett's CX Plus is one of the world's premier metal detectors, you will be especially interested in The New Successful Coin Hunting, by Charles Garrett, filled with “how to” tips and success stories about finding coins. The CX Plus is an excellent detector for finding every type of treasure and all of the RAM books are pertinent to its use.

Of particular interest, however, will be How to find Lost Treasure, a pocket-sized book ideal for use in the field. Well illustrated, this book helps you learn how to locate treasure “hot spots”, identify and pinpoint buried treasure targets and recover these items professionally.

For beginners, however, the new edition of Treasure Hunting for Fun and Profit will prove especially interesting and helpful. Where can you hunt? How about ghost towns and deserted structures? You will read about them in Charles Garrett’s Ghost Town Treasures. Robert Marx’s Buried Treasures You Can Find locates thousands of sites where treasure is known to have existed.
Hobbyists of all ages will want to read *Gold Panning is Easy*. Since the CX Plus can be used to find gold nuggets, you will be interested in *You Can Find Gold with a Metal Detector*. All hobbyists should learn about this interesting and exciting aspect of metal detecting.
MIND YOUR MANNERS!
The following is a Code of Ethics that many treasure hunt clubs endorse and hobbyists follow to preserve our exciting hobby of metal detecting. We encourage you to do the same:
• I will keep informed on and obey all laws, regulations and rules governing federal, state and local public lands.
• I will aid law enforcement officials when possible.
• I will cause no willful damage to property of any kind, including fences, signs and buildings.
• I will always fill the holes I dig.
• I will not destroy property, buildings or the remains of ghost towns and other deserted structures.
• I will not leave litter or leave uncovered items lying around.
• I will carry all trash and dug targets with me when I leave each search area.
• I will observe the Golden Rule, using good outdoor manners and conducting myself at all times in a manner which will add to the stature and public image of all people engaged in the field of metal detection.

MAIL-IN ORDER FORM
Add $2.00 for first book, and $1.00 for each additional book ordered (maximum $3.00) for handling and shipping charges.

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Address: ____________________________________
Warning!

When searching for treasure with your Garrett detector, observe these precautions:
• Never trespass or hunt on private property without permission.
• Avoid areas where pipelines or electric lines may be buried.
• National and state parks / monuments, etc. are absolutely off-limits.
• Deepseeking detectors can detect concealed pipes, wiring and other potentially dangerous material. When those are located, the proper authorities should be notified.
• Do not hunt in a military zone where bombs or other explosives may be buried.
• Do not disturb any pipeline, particularly if it could be carrying flammable gas or liquid.
• Use reasonable caution in digging toward any target, particularly in areas you are uncertain of the ground conditions.
• If you are unsure if you can use your metal detector in any area, seek permission from the proper authorities.