

# OPERATING INSTRUCTIONS: FREEDOM 2 DETECTORS

(Coin Commander and Plus)

The control panel of the Freedom 2 has four control knobs and a jack for the headphones.

## CONTROL FUNCTIONS

**Power/Detection Depth Control:** Rotate knob clockwise to turn detector on. Further rotation increases detection depth.

**Audio Control:** This enables the operator to adjust precisely the threshold level of sound generated by the detector.

**Trash Elimination Mode # 1:** This full range adjustment control allows you to determine the junk items you wish to eliminate from detection. It is activated when the trigger operated **Master Control Switch** is in its center (non-depressed) position.

**Trash Elimination Mode # 2:** This is another full range discrimination control that operates independently of the other control to eliminate junk items from detection. It is activated when the **Master Control Switch** is held with the lower half depressed.

**Master Control Switch:** This switch is located on the handle where the “trigger finger” would normally rest. Its independent settings enable the detector to operate in three separate and distinct modes.

Trash Elimination Mode #1 is the center or non-depressed position.

Trash Elimination Mode #2 is activated when the Master Control Switch is held with the lower half of the switch depressed.

The electronic zero motion pinpointing mode is engaged when the upper half of the Master Control Switch is depressed and held.

Release the switch to return to the Trash Elimination operating mode.

**Headphone Jack:** Located on the control panel.

## OPERATING INSTRUCTIONS:

Set controls to INITIAL SETTINGS ( $\Delta$ ) positions. By first rotating the controls to these points the detector is turned on and adjusted for satisfactory operation. Setting the audio level is a separate adjustment.

**Discrimination:**

The **Trash Elimination** controls permit the selection of targets desired in two separate and independent discrimination modes. Switching between the two modes is accomplished by just the pressure of ones trigger finger.

When a metallic object is accepted, the detector's speaker or earphone sound will increase from the pre-selected audio threshold level. When a metal object is eliminated (rejected), the sound will decrease or become silent. Some rejected targets will cause the audio to "break up" or sound erratic. The following explains the various **Trash Elimination Settings**:

**Nails:** Nails and rusty iron will be eliminated.

**Bottlecaps:** Bottlecaps, foil, nails and rusty iron, will be eliminated. Salt water will be eliminated near this setting.

**Pulltabs:** Pulltabs, bottlecaps, foil, nails and rusty iron will be eliminated. Nickels, rings and many foreign coins and tokens may also be eliminated at this setting. Test typical trash items before operating.

**Independent Elimination Modes:** As described above the operator can instantly change from one discrimination mode to another. Virtually unlimited discrimination combinations can be chosen by the imaginative hunter.

For instance, one mode may be set at "Zero" or All Metal and the other at bottlecap rejection. When a target is detected in the All Metal mode a press of the fingertip will tell whether bottlecap discrimination eliminates it.

### **Searching:**

Scan the searchcoil at a rate of about one or two feet per second. Maintain a one to two inch searchcoil height above the ground. Detection of a metal target within the range selected will be indicated by an increase in sound.

### **Pinpointing:**

Precise pinpointing is available with the third mode of operation. (See the Master Control Switch functions)

To use the pinpointing function of the detector to determine the exact location, press the "trigger switch" and **HOLD**. The detector will now give a more pronounced signal when the searchcoil is held directly above or criss-crossed over the target.

Even more precise pinpointing can be obtained by placing the searchcoil on the ground, then pressing and **HOLDING** the switch. Slide the coil, maintaining ground contact across the target.

### **BATTERIES:**

The Freedom 2 requires three (3) 9-volt batteries.

### **Battery Test:**

Each time the detector is turned on the batteries are automatically and audibly checked. Three tones indicate the batteries are very good, two tones and the batteries are adequate. One single tone and it is time to replace the batteries.

### **Battery Replacement:**

#### **Freedom 2 Coin Commander:**

The batteries are located beneath the armrest of the **Freedom 2 Coin Commander**. To replace them, loosen the captive metal knurled screw and remove the cover. Pull the printed circuit board with the two batteries attached from the compartment. (Notice how the wires are positioned). Next, grasp the wires on the left side of the compartment and remove the third battery. Replace the batteries being careful that the wiring follows the batteries back into the compartment.

Be sure the waterproof O-ring seal is properly formed around the ridge on the cover. Reposition the door and tighten the knurled metal screw. Tighten finger tight only.

#### **Freedom 2 Plus:**

The batteries are located on the side of the chassis of **Freedom 2 Plus** inside the control housing. To reach them disconnect the searchcoil cable and loosen the captive thumbscrew beneath the control housing. Press on the searchcoil connector to loosen the chassis and carefully slide it out. The batteries are beneath a protective clamp directly behind the control panel. Loosen the screw holding it and slide the clamp off to allow removal of the batteries.

## **MAINTENANCE**

- ❖ Always remember that your detector is a sensitive electronic instrument. It is built to withstand rugged treatment in the outdoors. Use your Garrett detector to the fullest extent possible, and never feel that you have to *baby* it. Yet, always protect the detector and handle it with reasonable care.
- ❖ Try to avoid temperature extremes as much as possible, such as storing the detector in an automobile trunk during hot summer months or outdoors in sub-freezing weather.
- ❖ Keep you detector clean. Always wipe the housing after use, and wash the coil when necessary. Protect your instrument from dust and sand as much as possible.
- ❖ Your searchcoil is submersible. The control housing is not! *Never* submerge the control housing and *always protect it* from heavy mist, rain or blowing surf.
- ❖ Disassemble the stem and wipe it clean after use in sandy areas.
- ❖ When storing longer than about one month, remove batteries from the detector.

## **REPAIR SERVICE**

- ❖ In case of difficulty, read this Owner's Manual again thoroughly to make certain your detector is not inoperable needlessly. Your dealer may also be able to offer advice.

- ❖ When your detector must be returned to the factory for service, always include a letter that describes its problem as fully as possible. Before you return your detector to the Garrett factory, make certain:
- ❖ You have checked batteries, switches and connectors. (Check *batteries* especially closely. They are the most common cause of detector “failure”.)
- ❖ You have checked with your dealer, particularly if you are not familiar with this type detector.
- ❖ You have included a note with the detector describing the problems you are encountering with this detector 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., Central Time.
- ❖ 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 keep all parts secure. 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 W. State St., Garland, TX 75042.
- ❖ You can 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 to you. 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.

## **MIND YOUR MANNERS**

Filling holes and obeying *no trespassing* signs are but two requirements of a dedicated metal detector hobbyist. A sincere request that Charles Garrett makes to every user of one of his detectors is that each place searched be left in a better condition than it was found. Thousands of individuals and organizations have adopted this formal Metal Detector Operators Code of Ethics:

- ❖ I will respect private and public property, all historical and archaeological sites and will do no metal detecting on these lands without proper permission.
- ❖ 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 whenever possible.
- ❖ I will cause no willful damage to property of any kind, including fence, signs and buildings and will always fill 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 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.

## **WARNING!**

Any metal detector may discover underground power lines, explosives or other items which when struck could cause personal injury. When searching for treasure with your detector, observe these precautions:

- ❖ Do not hunt in an area where you believe there may be shallowly buried underground electric lines or pipes.
- ❖ Do not hunt in a military zone where bombs or other explosives may be buried.
- ❖ Avoid striking any line known to be or suspected to be carrying electrical power.
- ❖ 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 where you are uncertain of underground conditions.

**PATENT PROTECTION:** Proof of Garrett excellence is the recognition given them by the following United States patents: 4,709,213; 4,488,115; 4,700,139; 4,398,104; 4,423,377; 4,303,879; 4,334,191; 3,662,255; 4,162,969; 4,334,192; 5,148,151; 5,138,262; 5,721,489; 5,786,696; 5,969,528; Design 274,704 and 297,221; Design 333,990; G.B. Design 2,011,852; Australia Design 111,674 and other patents pending