

RED BARON

# VLF RB5 SPD

## Ground Reject Discriminator!

Eight Inch Coplanar coil, waterproof & lightweight



Push Button Tuner

Adjustable, Aluminum shaft

PUSH BUTTON TUNER/MODE SWITCH



Convenient thumb-push button in the tip of the handle may be pressed momentarily to reestablish the tuning threshold... OR... TO CHANGE MODES... It is not necessary to change the mode select toggle switch each time. If searching in the ALL-METAL VLF mode, depressing the push-button switches the unit to the S.P.D. DISC. mode and keeps it there for as long as the button is depressed.

After target identification, the unit can be returned to ALL-METAL by simply releasing the button. If the Mode Select Switch is placed in S.P.D. DISC mode, the reverse is true. Therefore, searching can be done in S.P.D. DISCRIMINATE but pinpointing is accomplished in ALL-METAL by simply holding the button depressed. Holding the button in when in TR mode switches mode to SPD Disc.

Snap off Battery Door

### RED BARON RB-5

- Battery Check Switch
- Tuning Control
- Mode select switch
- Ground Adjust control
- 3 3/4" Intensity meter
- 2 1/4" speaker
- on/off volume
- Discriminate Level Control
- 1/4" Headphone Jack

#### Typical Depth Range\* RB-5 w/8" Coil

Test Objects	Distance from Coil	
	From	To
Dime	8"	12"
Penny	10"	14"
Quarter	11"	15"
Half Dollar	12"	16"
Silver Dollar	13"	17"
3 1/2" Jar Lid	22"	26"
Cannon Ball	34"	38"

\*These performance figures are based upon Air Tests performed in our laboratories. While these figures do not necessarily represent how the detector will operate in the field, they are given as an aid to the buyer to show comparative performance relative to our own instruments.



**\*Lifetime Warranty**

# RED BARON RB-5

BH-4500

## SIMPLIFIED OPERATING INSTRUCTIONS

These simplified instructions are merely intended to be a quick introduction to the detectors operation. For the most accurate and successful usage, it is imperative that the detailed operating instructions be read and understood thoroughly.

Hold unit so coil is approximately 2 feet off the ground and away from any metal objects.

1. Place mode switch in "SPD DISC" position.
2. Turn volume control fully clockwise.
3. Adjust tuning control for .2 on the meter. The unit is now completely tuned and is ready to be ground adjusted.
4. Place mode switch in "All Metal" mode and with the coil approximately 2 feet off the ground...
5. Lower coil to the ground...
  - A. If the sound increases, raise the coil back up to the 2 foot level and turn ground adjust knob counterclockwise (approximately one full turn) depress and release "Push-Button Tuner/Mode Change Switch" to re-establish tuning threshold.
  - B. If the sound decreases, raise the coil back up to the 2 foot level and turn ground adjust knob clockwise, (approximately one full turn) depress and release "Push-Button Tuner/Mode Change Switch" to re-establish tuning threshold.

Repeat step A or B until you obtain the least amount of change in sound when going from "Air" to "Ground". Once this is obtained, your unit is fully "Ground Adjusted" in both "All Metal" and "SPD Discriminate" modes.

6. To Discriminate—Place mode switch in "SPD DISC".
7. Set Discriminate Level Control to desired position.

By switching to the "Discriminate" Mode, many unwanted items are rejected automatically. These items include foil, wire, nails and any small size linear scrap.



The drawing to the left shows the sequence of rejection using the Disc. Level Control. Each instrument is individually calibrated. Levels may vary slightly from what is shown, but the sequence is still the same.

**NOTE:** The search coil must be moving to detect a target when using in the "SPD" Discriminate mode.

8. To use unit in the "All Metal" mode, simply place mode switch in the "All Metal" position.
9. To use unit in the "TR Discriminate" mode simply place mode switch in the "TR Discriminate" position, and momentarily depress pushbutton to re-establish tuning threshold.
10. To change modes momentarily, depress "Push Button Tuner/Mode Change Switch".

**EXAMPLE:** A. If searching in the "All Metal" mode, depressing the pushbutton switches the unit into the "S.P.D. Discriminate" mode for as long as the pushbutton is depressed.

B. If searching in the "S.P.D. Discriminate" mode depressing the pushbutton switches the unit into the "All Metal" mode for as long as the pushbutton is depressed.

C. If searching in the TR Discriminate mode depressing the pushbutton switches the unit into the "S.P.D. Discriminate" mode for as long as the pushbutton is depressed.

## RB-5 SPECIFICATIONS

1. Operating Frequency	6.75 KHz
2. Audio Frequency	480 Hz
3. Operating modes	VLF/SPD VLF/All Metal TR/Discriminate
4. Ground Adjust	10 turn, fine adjust
5. Output Indication	3 1/4" Meter 1 MA Movement
6. Speaker	2 1/4" 16 Ω impedance
7. Battery Current Consumption	
A. No sound	24 MA
B. Normal Operation (Threshold)	32 MA
C. Full sound	95 MA
8. Battery Supply	16 ea. AA
9. Battery Life	
A. Carbon Zinc	28 Hrs
B. Alkaline	62 Hrs
C. Ni-cad	20 Hrs
10. Battery Test	Yes, two position switch
11. Coil Diameter	8 inch Ultra wide scan Coplonar loop, waterproof, lightweight, temperature compensated
12. Optional Coil(s)	6 inch, 12 inch
13. Weight with batteries	4 lbs 8 oz

## RED BARON RB-5 GROUND ADJUST

This procedure, though to perform is quite simple, is in fact extremely important. When the unit is "Ground Adjusted" it simply means the unit has been electronically adjusted to eliminate the effects of ground mineralization.

Most metal detector manufacturers have the "Ground Adjust" feature, although they may call it "Ground Compensation", "Ground Control", "Ground Rejection", or "Ground Cancellation", and it's true their units can be adjusted to eliminate the effects of ground mineralization; however, this is only true as long as the units are used in the "All Metal" or "Normal" modes.

While searching in the TR Discriminate mode the user does not have the ground adjust and depth capabilities; therefore, depending upon the extent of mineralization in the soil, the loss of all or nearly all depth will occur.

As a rule of thumb...The more mineralization in the soil, the less depth capabilities one has in the TR-Discriminate mode.

It was not until BOUNTY HUNTER introduced the revolutionary new S.P.D. (Synchronous Phase Discrimination) circuitry that enabled discrimination not only at VLF depths, but this patented feature made it possible to discriminate while rejecting the effects of ground mineralization.

## RB-5 SYNCHRONOUS PHASE DISCRIMINATION

(Pat No. 4128803)

Another Bounty Hunter FIRST. The revolutionary S.P.D. circuitry enables Discrimination at VLF Depths. This patented technique uses a type of analog computer that reads the sensing signal of the combined target and matrix (supporting soil around the target), then subtracts the effects of the matrix—leaving only the sound of the target itself to analyze.

## SYNCHRONOUS PHASE DISCRIMINATION

### COMPARE PERFORMANCE

The RB-5 is one of the most powerful and versatile Metal Detectors ever produced for the Treasure Hunter. Shown on the right is the relative performance of:



A - Detector with VLF



B - Standard TR Discriminate



C - VLF/SPD Discriminate