

FISHER[®] RESEARCH
LABS

F-PULSE

PULSE INDUCTION
METAL DETECTING PINPOINTER



OWNER'S MANUAL

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Power on/off:**Power On:** Quick-Press (press-and-release button)

- Hear *start-jingle* followed by *ready-beep*.
- Wait for *ready-beep* before presenting pinpointer to metal. If metal is near pinpointer before *ready-beep*, pinpointer will overload (not detect) or operate at reduced sensitivity (see Overload p.8).

Power Off: Press-and-Hold the button for 1/2 second.

- Release the button when you hear the *power-down jingle*.

**Proportional Target Alert**

As the F-Pulse approaches a target, the audible alert intensifies. The closer you get to the target, the faster the beep.

Retune

With the pinpointer ON, quick-press the button to retune. The sensitivity level will generally not change or drift, but certain operating conditions may cause a loss of sensitivity or spontaneous alert (excess sensitivity). Keep away from metal when retuning with quick-press.

LED Flashlight:

1. Start with power OFF.
2. Press-and-hold button for 1 second.
 - LED status will change (on-to-off or off-to-on).
3. Release button.
4. Device is powered ON; ready to hunt.

Default Settings

- LED, On
- Alarm, beep+vibrate
- Sensitivity, medium

Programming Alarm and Sensitivity

1. Start with power ON.
2. Press-and-hold button. Do not release the button at the first alarm (*power-down-jingle*).
3. Following the *power-down-jingle*:
 - Wait 2 seconds
 - Hear the *program-menu-jingle* 
 - Immediately release button
4. You are now in the Programming Menu.
5. In the Programming Menu:
 - Pinpointer will not detect metal
 - LED will flash continually, once per second, to indicate you are in the Programming Menu
 - Quick-press to advance to next setting
 - Press-and-hold to:
 - a) save setting
 - b) turn Pinpointer off.

There are 6 settings to choose from:

	<u>SENSITIVITY LEVEL</u>	<u>TARGET ALERT</u>
1.	Low	Beep + Vibrate
2.	Medium	Beep + Vibrate
3.	High	Beep + Vibrate
4.	Low	Vibrate only
5.	Medium	Vibrate only
6.	High	Vibrate only

Note: If target-alert set to vibrate-only, there will be no beep at power-on or power-off.

Ground Cancelation

In mineralized soils, you may need to cancel out the signal from minerals in the soil. There are two methods, depending on the type of ground mineralization.

For Saltwater and Most Ground Mineralization Conditions

1. Start with power on.
2. Touch the tip of the probe to the soil, or submerge into the water.
3. Quick-press the button.
4. Hear beep, confirming calibration is complete.

For Extreme Ground Mineralization

If pinpointer beeps erratically or “falses” when it touches the ground, even after performing the Ground Cancelation procedure above, cancel ground by powering pinpointer on *after* touching shaft to the ground.

Alternate Calibration Procedure:

1. Start with power OFF.
2. Touch the tip of the probe to the soil.
3. Quickly press-and-release the button to turn power ON.
4. Pinpointer is silent and ready to detect.

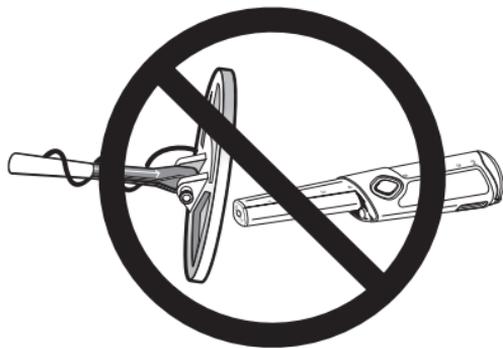
Caution: If you turn on the F-Pulse in close proximity to a metal target in the ground, you may desensitize it, or put it into overload. If using this alternate ground calibration method, be sure to touch the tip to the ground *away from* your target.

Interference (Frequency Shifting)

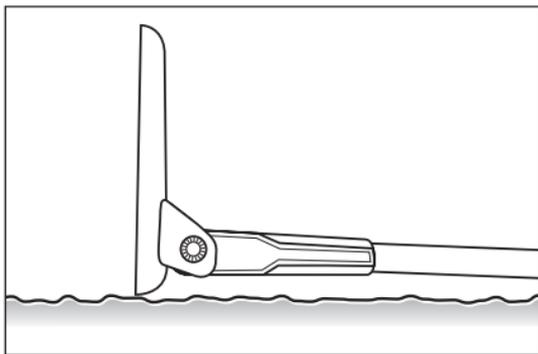
All metal detectors operate at different frequencies. It's these different frequencies that make certain detectors better at detecting certain targets. The F-Pulse is designed to work with the different frequencies of various detectors, and to enable the user to calibrate the F-Pulse to a frequency that eliminates (or minimizes) interference with your detector.

The factory default setting of the F-Pulse may interfere with your metal detector, causing it or your pinpointer to beep irregularly.

A pinpointer is most likely to interfere with your metal detector when pointed into the horizontal plane of the searchcoil.



To minimize interference while probing the ground, lay the metal detector down with the searchcoil perpendicular to the ground.



Frequency Shift: (To eliminate interference with your detector)

1. Turn Pinpointer power OFF.
2. Turn your detector ON.
3. Turn Pinpointer ON.
4. Press-and-hold button for 4.5 seconds to reach Frequency-Shift menu as follows:
 - a) Hold for 1/2 second and hear *power-down jingle*.
 - Continue to hold.
 - b) Hold for additional 2 seconds and hear *program-menu-jingle*.
 - Continue to hold.
 - c) Hold for additional 2 seconds and hear *frequency-menu-jingle*.
 - Release the button.
5. While in Frequency-Shift menu:
 - The Pinpointer will detect metal.
 - LED will flash continually, twice per second.
6. Quick-press button to cycle to next frequency.
 - There are 16 different frequencies to choose from.
 - Hear an increasing pitch as you change frequency.
 - When pitch changes from high to low, you have cycled back to the first frequency selection.
7. Stop at the frequency that does not interfere with your detector.
8. Press-and-hold button for 1 second to turn off.
 - Your frequency selection is saved.
 - Quick-press to power-on and continue detecting.

Overload

The F-Pulse must not be near metal during power-on (approximately one second). If you power it on in close proximity to a metal object, it will enter Overload Mode.

If in Overload Mode, the following will happen:

1. Hear audio alert: BEE-BOO BEE-BOO BEE-BOO.
2. LED light flashes continuously.
3. Pinpointer will not detect metal.

To exit Overload Mode:

1. Move it away from metal.
2. Quickly press-and-release the button.
3. Pinpointer will alarm and LED stops flashing.
4. Ready to detect.

Re-Boot

If your pinpointer becomes unresponsive and/or locks up, and any sequence of button presses does not return it to normal operation, it's time to re-boot.

1. Remove the battery door to break battery contact.
2. Replace battery door and resume operation.

Lost Mode and Auto Shutoff

If the F-Pulse is left powered on with no button presses for 10 minutes, it will enter Lost Mode. The unit enters a low-power setting, the LED flashes and the unit beeps every 15 seconds. After 30 minutes, the unit will completely power down.

Batteries

The F-Pulse operates on 2 AA alkaline, lithium or nickel-metal hydride batteries (not included). You can use high quality rechargeable batteries. Expect approximately 25 hours of operation from alkaline batteries.

Do not use “Zinc-Carbon” or “Heavy-Duty” batteries.

To replace batteries:

1. Use a coin or flathead screwdriver.
2. Rotate counterclockwise to remove cap.
3. Install 2 AA batteries, positive-side down.
4. Rotate clockwise until snug to close and seal.

The battery compartment was designed to provide a snug fit for the batteries. If you experience difficulty in removing your batteries, tap the pinpointer against the palm of your hand to help dislodge the batteries.

CAUTION: Waterproofing requires a tight seal.
Rotate battery door securely for waterproof seal.

Low-Battery Warning:

If your batteries are running low and need to be replaced, you will hear a *boop-boop-boop* sound at power-down.

Critical Low-Battery:

If the batteries are totally spent, you'll hear a *boooooop* sound and the pinpointer will then turn itself off.

Waterproof Design

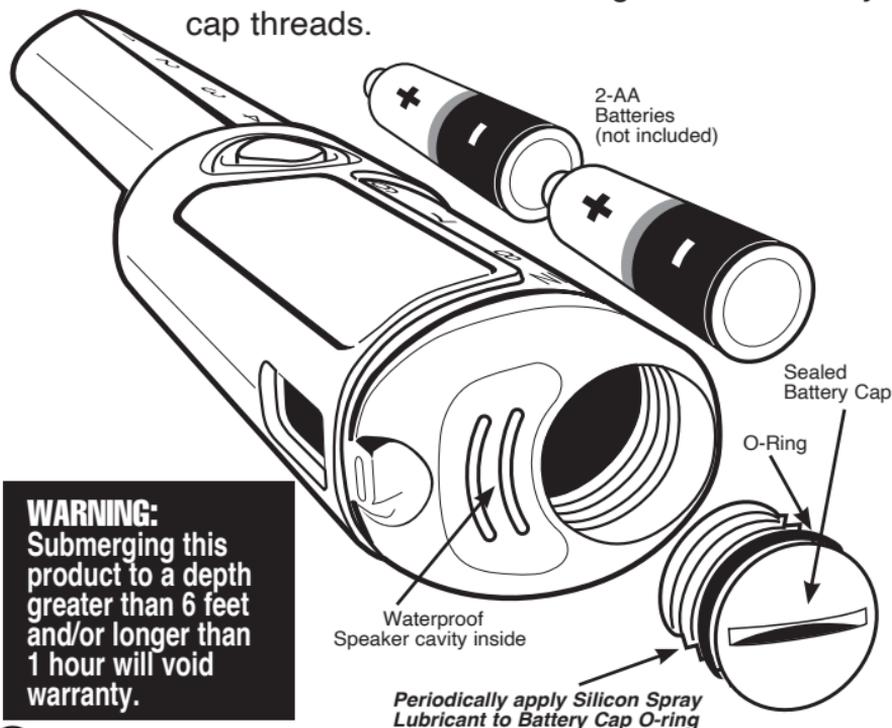
The F-Pulse is waterproof to a depth of 6 feet for 1 hour. The rubber O-ring around the battery cap is vital to maintaining a waterproof seal.

You must periodically apply a silicon spray lubricant to the o-ring to maintain a watertight seal.

IMPORTANT:

Check the O-ring.

Make sure there is no debris on the O-ring or in the battery cap threads.



WARNING:
Submerging this product to a depth greater than 6 feet and/or longer than 1 hour will void warranty.

Operation after submersion in water

The F-Pulse has a waterproof membrane that lets sound out. It is located inside a cavity under the vent next to the battery cap.

After it is immersed in water, the cavity fills with water. When on the surface, water will drain out of the vent. You may want to shake the water out.

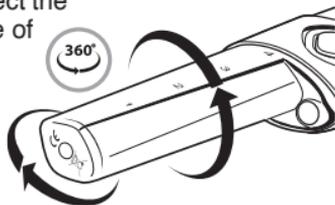
The pinpointer may exhibit a muffled sound while the waterproof membrane is wet. Shake out the water and let membrane dry; sound will return to normal.

Tips on how to use a Pinpointer

The F-Pulse is a powerful tool that will reduce the time you spend recovering buried objects while metal detecting.

If the target is close to the surface, F-Pulse can detect the buried target prior to digging and decrease the size of the plug you dig.

The detection area on the F-Pulse is 360° along the tip and barrel of the probe. For precise pinpointing, use the tip of the probe. For larger areas use a flat side-scan technique, passing the length of the shaft over the surface to cover a larger area.



The F-Pulse will detect all kinds of metal including ferrous and non-ferrous metals. The target alert (audio or vibratory) is proportional, meaning the intensity of the alert will increase as you get closer to the target.

Specifications:

Technology:	Pulse Induction, bipolar, fully static	
Pulse rate:	2500pps, 4% offset adjust	
Sample delay:	15 μ s	
Response:	Audio and/or vibratory	
Sensitivity levels:	3	
Dimensions:	240mm x 45mm x 35mm	
Weight:	180g	
Humidity range:	4% to 100% R.H.	
Temperature range:	0°C to +60°C	
Volume:	Maximum Sound Pressure Level = 70dB @ 10cm	
Waterproof:	6 feet for 1 hour	
Electrical Rating:	3V \approx 100mA	
Batteries:	(2) AA	
Battery life:	Alkaline	25 hrs
	NiMH rechargeable	15 hrs
	Lithium	50 hrs

TROUBLESHOOTING

Problem	Solution
1. Short battery life.	<ul style="list-style-type: none"> • Use high-quality batteries. • Do not use zinc-carbon or “heavy-duty” batteries.
2. Pinpointer does not power-up.	<ul style="list-style-type: none"> • Check battery polarity (+ terminal down) • Check batteries.
3. LED light is flashing. <ul style="list-style-type: none"> • In Alarm Programing mode • In Frequency Programing mode • In Overload 	<ul style="list-style-type: none"> • Press-and-hold to power-off • Press-and-hold to power-off • Quick-Press to retune
4. Pinpointer does not respond to button presses and/or does not detect.	<ul style="list-style-type: none"> • Remove battery cap and reinstall.
5. Pinpointer beeps erratically/falses in the air.	<ul style="list-style-type: none"> • Hold away from metal. • Then quick-press button.
6. Pinpointer beeps erratically when in contact with the ground.	<ul style="list-style-type: none"> • Quick-press button to calibrate Pinpointer to soil. • See p.5 for ground calibration procedures
7. Pinpointer or metal detector interfere with one another.	<ul style="list-style-type: none"> • Shift Pinpointer frequency. • See p.7 of manual.
8. After submersion in water, sound is muffled; water comes out of vent.	It's normal. Shake water out. Let dry.

NOTICE TO CUSTOMERS OUTSIDE THE U.S.A.

This warranty may vary in other countries; check with your distributor for details. Warranty does not cover shipping costs.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

According to FCC part 15.21 changes or modifications made to this device not expressly approved by Fisher Research Labs, Inc. could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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Made in USA from USA and imported parts



RoHS

WARRANTY:



This product is warranted against defects in materials and workmanship under normal use for **two years** from the date of purchase by the original owner. Liability in all events is limited

to the purchase price paid. Liability under this warranty is limited to replacement or repair, at our option, of the product returned, shipping cost prepaid, to Fisher Research Labs. Damage due to neglect, accidental damage, misuse of this product or normal wear and tear is not covered by the warranty.

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