JW FISHERS MFG INC 1953 COUNTY ST. E. TAUNTON, MA 02718 USA

(508) 822-7330; (800) 822-4744; FAX (508) 880-8949 Email: info@jwfishers.com WEB: www.jwfishers.com

TECHNICAL DATA SHEET



- EXTREMELY SENSITIVE
- EQUALLY SENSITIVE IN SALT, FRESH, OR ON LAND
- WILL NOT DETECT MINERALS
- DETECTS ALL METALS
- INTERCHANGEABLE SEARCH COILS
- LARGE METER AND U/W EARPHONE
- RECHARGEABLE BATTERIES
- 200 FOOT DEPTH RATING
- 2 YEAR WARRANTY





PULSE 8X/6X Hand Held Detectors

Fishers Pulse 6X and 8X detectors are two of the top performing underwater metal detectors on the market today. These commercial grade detectors are specifically designed for underwater operations, but work equally well on land, in fresh water or salt water. The 6X and 8X will easily locate a variety of targets including gold and silver jewelry, coins, artifacts, weapons, ordnance, anchors, pipelines, cannons and cannon balls. These high performance Pulse Induction metal detectors detect both ferrous and nonferrous metal objects, while ignoring minerals in the environment. The detectors will not give false detection signals from salt water, coral, high iron rocks, or other ground mineralization, as some other types of detectors do. With JWF detectors the detection range is unaffected by the material between the detector's coil and the metal target. Whether detecting through air, water, silt, sand, mud, or coral, the detection range remains the same.

Both the Pulse 6X and 8X come with a complete accessory package that includes all the pieces necessary for land and underwater detecting. Included with the detectors are a corrosion proof PVC underwater handle and an aluminum land handle, underwater earphone, AC and DC battery chargers, and a hip mount kit. The 8X package also includes a carry bag and land headphones. The 6X and 8X have both visual and audio target indicators. When a metal object is detected the audio alarm sounds and a meter shows the strength of the signal. The meter is beneficial in determining the size and burial depth of the target, information not easily conveyed by the blinking LED indicators or the audio-only readout of some other detectors. The audio alarm is loud enough for a diver to easily hear without having the earphone directly over the ear.

Rechargeable batteries power the detectors for 12 hours before requiring an overnight recharge. Batteries can be easily field replaced to allow around the clock operation. Unlike some other

detectors, the electronics compartment can be opened for inspection or battery replacement without voiding the warranty.

The detector's buoyancy is slightly negative in the water. This allows the diver to sit the detector on the bottom to dig a target without having it float away, which is a problem with "positive buoyancy" detectors. The underwater housing is a single solid casting with $\frac{1}{4}$ " wall thickness and molded-in brass inserts. A $\frac{1}{2}$ ' thick acrylic faceplate is fastened down with six stainless steel screws giving a maximum depth rating in excess of 200 feet.

The standard 7.5 inch coil has good sensitivity to both small and large targets, and makes target pinpointing a breeze. Other size coils are available for more specialized applications. It is necessary to have the underwater connector option to interchange coils.

The top of the line Pulse 8X is the most sensitive pulse detector you can buy, and continues to be the choice of commercial and professional divers worldwide. The 8X is in use by US and foreign Navies, Coast Guards, FBI, Secret Service, numerous federal and law enforcement agencies, and professional treasure hunters everywhere. The 6X has the same heavy duty construction as the 8X but is not as powerful. However, the 6X can be upgraded to the 8X at anytime.

WARRANTY

The Pulse 8X and 6X are covered by Fishers exclusive unconditional Two year warranty.

OPTIONS (purchased separately)

- Connector for coil
- · Interchangeable search coils
- Dual underwater earphones
- Land earphones (included with P8X)
- Carry bag (included with P8X)
- 220vac charger
- Extra battery pack

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STANDARD FEATURES FOR THE PULSE 6X

- Can be upgraded to a PULSE 8X at any time.
- Single control knob.
- Very sensitive and stable.
- Detects both ferrous and non-ferrous metals.
- Detection indicated by both meter and earphone.
- Does not detect minerals.
- Compact underwater earphone.
- 200 foot depth rating.
- Separate handles for land and underwater use.
- Belt-holder for hip mounting the control unit.
- "Battery Low" LED.
- 120vac and 12vdc battery chargers.
- Two year warranty.

ADDITIONAL FEATURES FOR PULSE 8X

- Increased (100% more) sensitivity and detection area.
- Low, med, high, sensitivity switch allows pinpointing of targets.
- Land earphones.
- Carrying bag for detector and accessories.
- Meter shows battery voltage.
- Leak detection system.

SENSITIVITY (with 7 1/2" coil)

You can expect the following detection ranges whether in air or buried in mud, coral, sand, dry or wet, fresh or salt water.

| | PULSE 6X | PULSE8X |
|---------------------------|----------|-----------|
| Small ring | 2 1/2 in | 5 in. |
| • Penny | 4 1/2 in | 9 in. |
| Quarter | 5 in | 9 1/2 in. |
| •4"x4"x1/8"Alum | 9 in | 15 in. |
| • 1 gallon can | 22 in | 30 in. |
| • Larger targets to a max | | |

DIMENSIONS/WEIGHT (in air):

| •Coil | 7 1/2" Dia | 11 oz. |
|------------------------|----------------------------|----------|
| • Underwater handle | 31" | 1.5 lbs. |
| • Aluminum Land handle | 38" | 2 lbs. |
| • Case | 7 1/2" L x 5 1/2" W x 4" H | 4 lbs. |
| Shipping Box | 8" x 12" W x 32" L | 15 lbs. |

MATERIALS/COLOR:

| • Case | High impact urethane/gray |
|--------|--|
| | . RG58 coax with abrasion resistant jacket |
| • Coil | High impact ABS, epoxy/black |

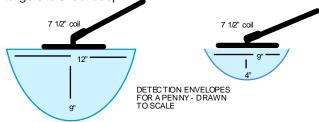
PULSE DETECTORS-GENERAL

Pulse induction detectors have had a major impact on underwater metal detecting. Their claim to fame is very simple: they are a very sensitive metal detector that does not detect minerals (extreme concentrations may give some reading). Their sensitivity is excellent, the best hand held units, with a 7.5" coil, will detect coin size targets at 9-12 inches, and larger objects to over 6 feet. Our pulse detectors are able to achieve their high sensitivity on land or in fresh or salt water without detecting either the water or the minerals on the bottom.

Non-pulse detectors use compensation networks in a effort to reduce the effect of minerals on the detector. One manufacturer uses the motion technique which requires the coil to be constantly moving to detect anything. This gets rid of the mineral background only as long as the mineral background is of an even concentration; if it is not, false readings result. When the target alarm goes off you are never quite sure if it is a real target or not.

COIL SIZES (see Pulse 6X/8X option sheet for more details)

The detection range of a pulse detector is determined to a large degree by the coil size. Larger coils will detect large targets deeper, but have reduced range for the smaller targets. The 7.5 in coil is an ideal size for detecting both small targets, such as small rings, and larger targets to 6 foot deep.



DETECTION AREA FOR A PENNY - 7 1/2" COIL

Optional coil sizes available: 10", 16", 18" with 100' cable, 8" x 48" oval with skids, and a 22" long hand probe. The larger loop sizes give wider detection envelopes allowing large areas to be covered.

- The 18" coil with 100' cable turns this diver held detector into a boat deployed detector where the coil is lowered from the boat.
- The 8" x 48" oval coil with up to 100' of cable is mounted on skids for towing along the beach or in shallow water.
- The hand probe has a small coil mounted in the tip and works extremely well in those tight areas where larger coils can't fit.

PULSE DETECTORS-HOW THEY WORK

Pulse detectors operate by transmitting a continuous stream of high energy magnetic pulses (one hundred per second) from the coil. After each pulse is transmitted the detector then listens for the return signal.

When the transmitted pulse hits a metal object, an electro-magnetic field is induced in the object. This causes eddy currents to flow in the metal, which in turn generates a second electro-magnetic field. This field is picked up by the coil and then displayed by the meter and heard in the earphones.



Working a wreck site

DISCRIMINATION-IT SURE SOUNDS GREAT!

Discrimination is the ability to ignore the trash and only detect the "good stuff". The fact is, discrimination also rejects many good targets and the detection range for all targets can be dramatically reduced. For these reasons we do not put discrimination on our detectors. Two examples on discrimination:

In actual tests with a competitors pulse detector with discrimination, the detection range for a coin went from 6" without discrimination to less than 3" with the discrimination.

The manufacturer of a motion detector (non-pulse) held a seminar which was conducted by a professional treasure hunter who stated "I don't recommend using the discrimination control because you just can't afford to miss a target".