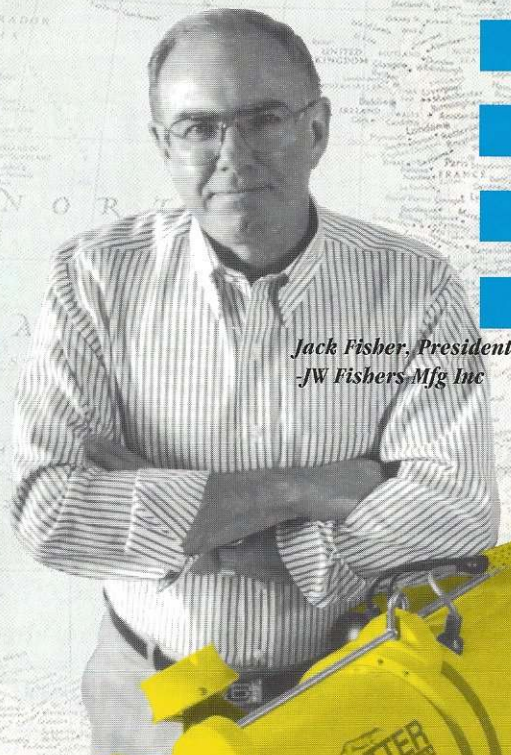
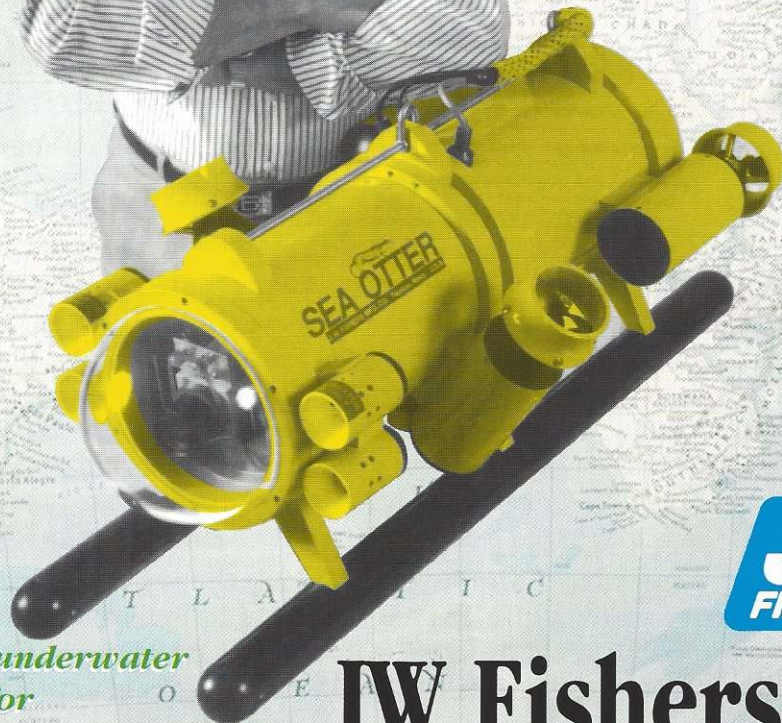


"Underwater Search Equipment it *Pays* to own"



*Jack Fisher, President
JW Fishers Mfg Inc*



Side Scan Sonars

Boat Deployed Metal Detectors

Remote Operated Vehicles

Diver Held Metal Detectors

Underwater Video Systems

Pingers and Receiver

Search Accessories

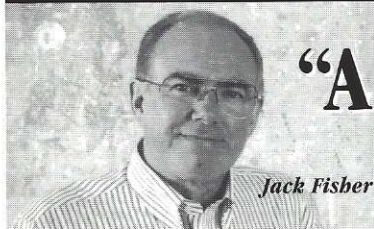
*Manufacturing and supplying underwater
search equipment worldwide for
over 35 years.*



JW Fishers Mfg

www.jwfishers.com

Email: jwfishers@aol.com



Jack Fisher

"A complete line of video systems

ROVs, AUVs, Towed, Dropped, and

Comprehensive data sheets are available for all products.

SeaOtter ROV

Perfect for pipeline work, river and ocean searches, and the inspection of hazardous sites, the SeaOtter reduces or eliminates the need to dive in difficult or dangerous environments. This ROV is powerful enough to handle currents, and rugged enough to reach depths of up to 500 feet.

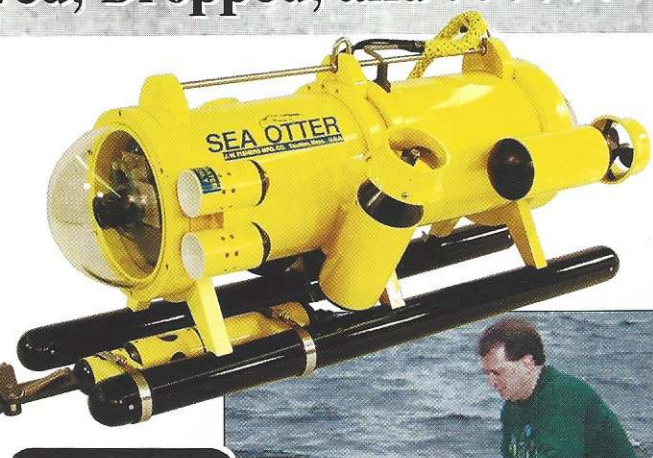
It's also very easy to operate. A proportionately controlled four-motor propulsion system allows the vehicle to move in any direction. Meters on the control panel monitor thruster power and direction.

A commercial grade ROV with significantly more power than the mini ROVs.

- Depth rating of 500 feet
- CCD color camera with 6mm, 50° wide angle lens, 70° tilt, focus 2" to infinity
- Four variable-speed, remote controlled thrusters
- Four 100w tungsten halogen U/W lamps
- Ground fault and leak detection circuitry

Our most Popular ROV

- 13" topside color monitor
- Field maintainable
- Upgradeable to SeaLion



Topside Control Box



Topside Color Monitor

Options: digital compass, on-screen display, manipulator arm, metal detector, PAL format camera and 220 vac for European use.

SeaLion ROV

For heavier currents, or situations requiring cable lengths up to 1,000 feet, the more powerful SeaLion is available. Comes with all the features of the SeaOtter plus two additional horizontal thrusters and up to 1,000 feet of cable. Optional 1,000 foot depth capability. The SeaOtter can also be upgraded to the SeaLion. Fishers ROVs are in use by power companies, commercial diving firms, military units, and law enforcement agencies worldwide.

Our most Powerful ROV



Options: digital compass, on-screen display, manipulator arm, metal detector, PAL format camera and 220 vac for European use.

PIC-1 AUV Pipe Inspection Camera



JW Fishers patented pipe inspection camera is an autonomous (AUV) camera system capable of performing long pipeline inspections. The original system made many long video pipe inspections, including a 5 mile pipeline in Cleveland, Ohio. With a water flow of 2 feet per second, a 1.4 mile pipe can be video taped with a single one hour trip. The computer controlled "delayed start" allows almost any length pipe to be video taped using multiple trips. The system was designed to video tape intake pipes for municipal water supplies and hydro plants. There are no umbilical cables to the surface. The AUV system is completely self contained with a digital video camera, underwater lighting, batteries, and a computer system to control the lights and camera on/off times.

Inspection Camera for Long Pipelines



Patented

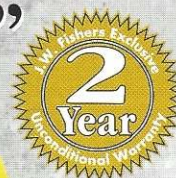
The AUV's streamline design enables it to travel down the center of the intake pipe using natural water flow for propulsion. The maximum water flow speed for clear video is approximately 3 feet per second. The system can traverse pipes that contain 90 degree turns and up or down vertical shafts. The AUV's design keeps it in the center of the pipe and aligned with the water flow. The AUV travels through the pipe tilted at a 45 degree upward or downward angle giving a clear, well illuminated picture of the top or bottom of the pipe. The AUV is deployed at the intake point and is removed when it arrives at the screenhouse.

Time and date stamp on the video, with known video references in the pipe, provide an excellent reference to the location of the AUV for any video segment. The audio channel is also active and provides valuable info for probable leak points in a pressurized pipeline.

Options: sonar arrival beacon, 220 vac charger.

for search and inspection operations"

.... Diver-held Camera Systems



TOV-1 Towed Video

The TOV-1 Towed Video System is ideal for a variety of applications, from large scale underwater searches to visual inspection of dive sites.

This towed video system can cover large areas quickly. Use the TOV-1 to inspect an area or to verify a target before sending in divers. Minimize your dive team's in-water time and maximize their useful bottom time.

The camera provides both straight ahead and downward viewing and produces a high quality video picture which can be viewed on a monitor or TV and recorded on videotape. The TOV-1 can also be deployed as a dropped video system for straight down and side viewing. In use by dive rescue and law enforcement agencies worldwide.

- Compact corrosion proof U/W housing
- High resolution B&W camera (.5 LUX)
- Wide angle lens (50°)
- Two 100 watt tungsten halogen lights
- 150 foot cable included
- 250 foot depth capability
- Leak detection circuitry
- Surface powered, 120 vac

Options: Low light (.07 LUX) 70° B&W or color camera, monitors, two additional lights, Altimeter, 12 vdc, 500 ft depth capability and Depressor Wing. PAL format camera and 220 vac for European use.



DHC-1 Diver Held Camera



- 500 foot depth rating
- 150-1000 foot cable with U/W connector
- Compact .5 LUX B&W camera
- Auto Iris, fixed focus, 50° wide angle lens
- Powerful 100/200 watts of diver switchable lighting
- Surface powered

The DHC-1 Diver Held Video Camera and lighting system was designed for use by commercial divers performing inspection work in depths up to 500 feet. Both the low light B&W camera and the optional color camera produce sharp, high resolution video images which are sent to the surface for viewing on a video monitor or TV. Camera functions and lighting are controlled by the diver. Only weighs 6 ounces in water.

Options: 150-1,000 ft cable, color camera, monitor, 12 vdc, spares kit, and carrying case. PAL format camera and 220 vac for European use.

DV-1 Dropped Video Camera

The DV-1 dropped video system provides a cost effective method for visual observation of sites and small area searches. Targets and dive areas can be verified and recorded without incurring time consuming check-out dives.

- Compact system for rapid deployment
- High res B&W camera (.5 LUX)
- Wide angle lens (50°)
- Two 100 watt lights
- 150 foot cable included
- Leak detection circuitry
- 120 vac

Options: Up to 1,000 foot cable, Low light 70° B&W or color camera, monitors, altimeter, and 12 vdc. PAL format camera and 220 vac for European use.

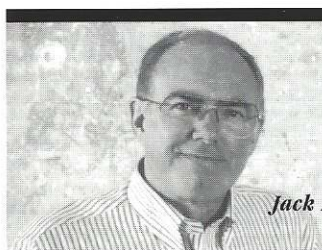


MC-1 Mini Camera



The MC-1 Mini Camera is so compact and lightweight it can easily be mounted to a divers helmet or lowered into a pipe for internal inspections. The MC-1 can assist the commercial diver performing underwater structure inspections or be lowered into the water on a pole to perform shallow water inspections from the surface. An internal light ring is available for applications where compact size is crucial, such as internal pipe inspection work. An external 100 or 250 watt light is available for applications where high powered lighting is required. The Mini Camera is surface powered allowing unlimited operating time.

Options: Up to 1,000 foot cable, high res B/W and color cameras, internal light ring, 12 vdc and external light.



Jack Fisher

"Fishers Metal Detectors are

Boat Towed, and

Comprehensive data sheets are available for all products.

PROTON 4 Magnetometer

This marine magnetometer is low cost, ruggedly constructed, and easy to operate. A high performance, micro-processor-driven system, the Proton 4 is the ultimate detector for ferrous metals (iron and steel). The Proton 4 features a one gamma sensitivity, and a range capability of 1,500' to each side (3,000' total swath) letting you cover a wide area quickly and completely. Both small and large targets can be located.

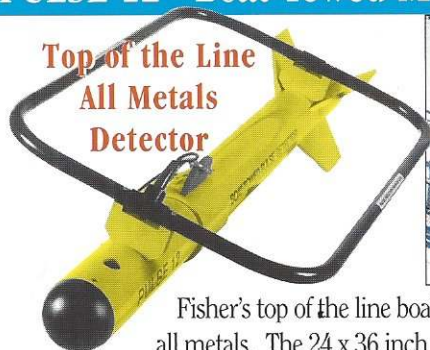
The Proton 4 is available with an optional printer which produces a permanent record of readings along with GPS coordinates. For easy record-keeping an RS232 interface and software package is available which records all data, graphs magnetic readings, and plots the boat's search path.

- Low cost/high performance
- One gamma sensitivity
- LCD readout and target alarm
- 150-1,000 feet of cable
- 1,500 foot detection range
- Two second cycle time

OPTIONS: Built-in printer, 300-1,000 ft. cable, GPS coordinates printout, RS232 computer interface & software, Depressor Wing, 1,000 ft. version available.

PULSE 12 Boat Towed Metal Detector

**Top of the Line
All Metals
Detector**

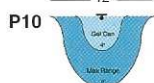
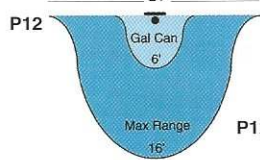
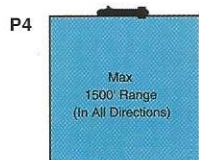


Fisher's top of the line boat towed pulse detector. Detects all metals. The 24 x 36 inch coil provides high sensitivity and an extra large detection area. The Pulse 12 system includes search coil with 150 feet of cable, tow fish, and master control unit.

The Pulse 12 master control unit can operate up to three search coils simultaneously, allowing a large area to be covered quickly.

- Detects all metals
- 1-4 MPH tow speed
- Detection alarm
- Powered by two 12V batteries
- Can be converted for land use

OPTIONS: Two additional search coils, 300 foot cable, altimeter, RS232 computer interface and Depressor Wing.



P12, P10, DRAWN TO SCALE



**Most Sensitive
Detector for
Iron/Steel Targets**

PULSE 10 Boat Towed Metal Detector

The Pulse 10 is a powerful boat towed metal detector available at an economical price. Its low cost and large detection area make this detector an excellent choice for both commercial operations and recreational treasure hunters. The Pulse 10 system includes an 18" search coil, with attached 150 feet of cable, tow fish, and top side control unit.

- Detects all metals
- 1-3 MPH tow speed
- Detection alarm
- Powered by two 12V batteries
- Can be converted for land use

OPTIONS: 300 ft. cable, altimeter, RS232 computer interface, and Depressor Wing.



RMD-1 Remote Metal Detector



The RMD-1 is a high performance pulse induction metal detector which can be attached to almost any ROV or towed underwater system. Pulse induction technology

allows the RMD-1 to detect both ferrous and nonferrous objects on or under the ocean floor while ignoring mineralization in the saltwater seabed. The ROV metal detector has been used to locate and track underwater pipelines, find missing tools and dredge parts, locate weapons and unexploded ordnance, and to search for lost treasure. A surface control box displays the readout with both a meter and audio alarm.

OPTIONS: RS232 computer interface, different coil sizes.

the most powerful you can buy"

..... Diver Held Metal Detectors



Diver Mag 1 Hand Held Magnetometer

The DIVER MAG 1 is a top performing microprocessor driven marine magnetometer detection system with one gamma sensitivity. A super sensitive detector of ferrous metal (iron/steel) this hand held mag works equally well on land, or underwater. Locate pipelines, cables, iron cannons and cannon balls, dredge parts, and just about any ferrous metal object of any size. Ruggedly constructed for commercial operations, the DIVER MAG 1 was designed with user friendly controls for ease of operation.

- Low cost, high performance
- Operator adjustable buoyancy
- Visual and audio readouts
- 200 foot depth rating
- 1,500 foot detection range for large targets
- One gamma sensitivity
- User friendly controls
- Easy to operate
- Rechargeable batteries

OPTIONS: Extra battery pack, 220 vac charger.

**Most Sensitive
Detector for
Iron/Steel Targets**



PULSE 8X Hand Held Metal Detector

You can detect all metals on land or underwater with the Pulse 8X. Very powerful, it's the choice of the pro's. Perfect for all commercial applications. The Pulse 8X features rechargeable batteries, earphone, meter read-out, and interchangeable coils. All accessories included for land and underwater hunting. Will not give false readings on minerals. In use by military, law enforcement, police, customs, commercial and recreational divers worldwide.

- Commercial grade construction
- Use underwater or on land
- Will not detect minerals
- 6 foot detection range
- 200+ foot depth rating
- Detects all metals
- Rechargeable batteries
- 120vac and 12vdc chargers
- U/W and land earphones
- U/W and land handles
- Hip-mount kit
- Carrying bag with pouch

OPTIONS:

Interchangeable coils, extra battery pack, 220 vac charger.



Pulse 8X Accessory package

**Pulse 8X
is the Most
Popular Professional
Detector Sold**



PULSE 6X Hand Held Metal Detector

The more economical Pulse 6X shares many of the features of the Pulse 8X, but has less detection range. The 6X can be upgraded to the more powerful 8X at any time.

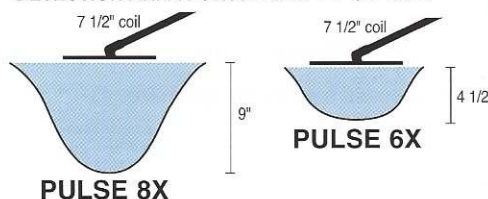
**Most
Economical**

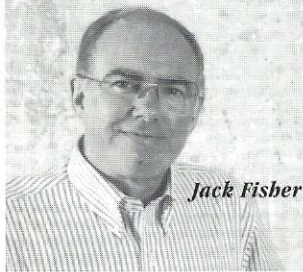


OPTIONS:

Interchangeable coils, extra battery pack, carry bag, 220 vac charger, land earphones.

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





Jack Fisher

"Remove the Water with Side Scan Sonar and mark the target with Fishers Pingers"

Comprehensive data sheets are available for all products.

Side Scan Sonar

JW Fishers family of side scan sonars are some of the most effective tools for underwater searches because they can cover large areas quickly and "see" what's on the bottom regardless of water visibility. The printout "removes the water" and shows a clear picture of the bottom.

The picture is produced on a high resolution thermal printer that is built right into the control unit. The 17" wide printout gives 300% more resolution (203 dpi) than monitor (71 dpi) based systems. For every search you do, you'll have a detailed copy of the ocean floor for reference.

Fishers offer three different sonar systems. The SSS-100K covers large search areas quickly, the SSS-600K gives very high resolution to detect even small soft targets, and the dual frequency SSS100/600K does it all.

Choose from three different systems: 100K, 600K, or dual 100K/600K

SSS-100K A low frequency system is best for wreck hunting and general search applications such as locating pipelines, logs, rock outcrops, large propellers, and sunken vessels. The SSS-100K has excellent long range capabilities of up to 1,800' per side (3,600' swath) for locating large ships.

SSS-600K Very high resolution over ranges up to 200' (400' swath). Although it has a shorter range capability than the low frequency system, the 600K shows more target detail than the 100K. Ideal for law enforcement and dive rescue operations because it shows soft targets such as drowning victims and clothing.

SSS-100K/600K The dual frequency side scan offers the best features of both the low and high frequency systems in a single package. The operator can switch between high and low frequency at any time.

Single frequency side scans can be upgraded to the dual frequency system at any time.



Sonar Pingers and Receiver

Pingers generate acoustic signals underwater. They are used to mark an underwater site or piece of equipment so a returning diver, using a pinger receiver, can locate the exact spot. Pingers are available with different transmit frequencies so several can be deployed in the same general area without interference from each other. Pingers can operate from days to months depending on output power selected. Pingers are available in a longer housing (more batteries) for extended operations.

JW Fishers family of pingers include both the Single Frequency Pinger (SFP1) and the Multi-frequency Pinger (MFP1). The SFP1 is available in several frequencies one of which is specified at time of order. The MFP1 has user selectable frequencies from 20 to 50 kHz in 500 Hz increments. The operator selects one of 60 different frequencies before deploying the pinger. Many pingers can be deployed in the same general area, each broadcasting at a different frequency. The diver adjusts his pinger receiver to the frequency of the desired pinger and the receiver leads him directly to it. An optional extension shaft with directional hydrophone allows the receiver to be used as a surface unit from a boat.



Pinger Receiver PR-1

Features of Pinger Receiver:

- 3-97 kHz, 2kHz bandwidth.
- Digital readout of frequency.
- Typically 30 deg receive angle.
- Earphone and light bar for signal strength.
- Diver-held or surface deployed (optional).
- 4 1/2" dia x 12" long.

Very Powerful Commercial Grade System

Pingers



SFP1

MFP1

Extended Housing
(Holds more batteries)

SFP1

MFP1

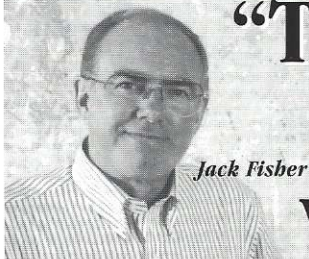
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|--------------------------------|---|--|
| • Freq..... | 22, 32, 40, or 50kHz..... | 20 to 60* |
| • Output* | .1, 5, 2, 8W..... | .1, 5, 2, 5W |
| • Pulse width* | 1, 3, 5 ms..... | 2, 3, 4 ms |
| • Pulse rep rate* | 2, 1, 1 per 2 sec..... | 2, 1, 1 per 2 sec (pulses per second) |
| • Battery Life** | 4 days to 8 months..... | 3 days to 4 months (extended housing triples operating time) |
| • Size | 2 3/8" dia x 9" long (14" for extended housing) | |
| • 1,000 foot depth capability. | | |

*Operator adjustable.

**Dependent on operator settings and battery type.

Alkaline or Lithium 9v batteries, PVC housing.

U/W earphone, compass, rechargeable battery and charger, leak detector, PVC housing.



Jack Fisher

“Tracking cables just got easier and cheaper with Fishers Cable Tracker 1”



Comprehensive data sheets are available for all products.

CT-1 Cable Tracker

JW Fishers Cable Tracker 1 (CT-1) system was specifically designed to locate and track buried cables including power and communications cables. The system locates cables buried on land or underwater. The CT-1 will track cables and identify fault or break points that are exposed to water.

The Cable Tracker 1 system consists of a shore based Signal Injector and a Cable Tracker Probe.

The Signal Injector control box is used to create a constant current electromagnetic field around the cable at 25 or 1,024Hz. The Signal Injector is connected to the shore end of the cable and the Cable Tracker Probe is used to track the electromagnetic signal along the length of the cable. In most cases the 1,024Hz signal is injected because the higher frequency has greater accuracy and makes precise pinpointing of the cable easier. When maximum detection distance is required the 25Hz signal works best. The Signal Injector is powered by 120/220 vac. The Cable Tracker Probe operates on its own internal 9 volt battery pack.

If the cable is a power cable at 60Hz (USA) or 50Hz (Europe) it can be tracked without the use of the shore based Signal Injector. If the cable is a communications cable (no AC power lines), the Signal Injector is connected to the cable at the surface and is set at 1,024Hz (if the approximate location of the cable is known) or 25Hz if long range sensitivity is needed. The probe frequency switch can be set at 25, 50, 60, or 1,024Hz to match the signal source.

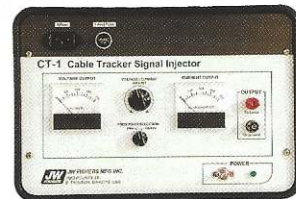
As the probe approaches the buried cable, the signal gets stronger in the earphone. At the same time, more segments are lighting up on the LED bar graph indicating a stronger signal. When the diver is directly over the cable the signal will suddenly drop to near zero (called the null-spot). If the diver goes past the cable, the signal will suddenly jump to full scale again. The cable is easily pin-pointed by pointing the probe directly at the bottom and slowly moving the probe back and forth stopping at the null-spot. The probe will be then pointing directly at the cable.

So effective is the Cable Tracker 1 system for tracking and pinpointing cables, that in many cases the cable can be located and tracked from a small boat on the surface. The operator holds the probe in the water and operates it exactly as stated above for the diver. Once the cable is located and tracked from the surface, the diver enters the water and descends to the bottom where the cable is precisely pinpointed.

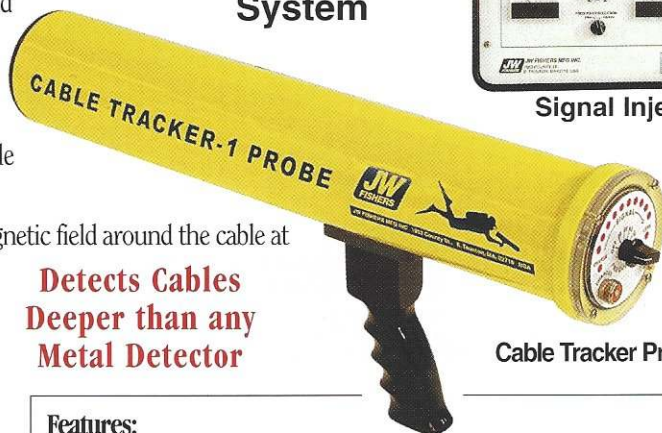


Diver Probe Faceplate

Cable Tracker 1 System



Signal Injector



Cable Tracker Probe

Detects Cables Deeper than any Metal Detector

Features:

- Locates and tracks power and communications cables
- Locates faults (breaks) in cables
- Works on land or underwater
- Audio and LED visual output
- 200 foot depth capability
- Rechargeable Ni-Cad batteries included (or use six AA batteries)
- 120 vac and 12 vdc chargers included
- Signal Injector included with frequencies of 25 and 1,024Hz
- Switch selectable Receiver Probe frequencies 25, 50, 60, and 1,024Hz
- Leak detection circuitry



Tracking Cable in Shallow Water

Options: 500 ft depth capability, carrying case, custom frequencies, 220 vac charger for European use.

"Underwater Search Accessories that reduce your search time"

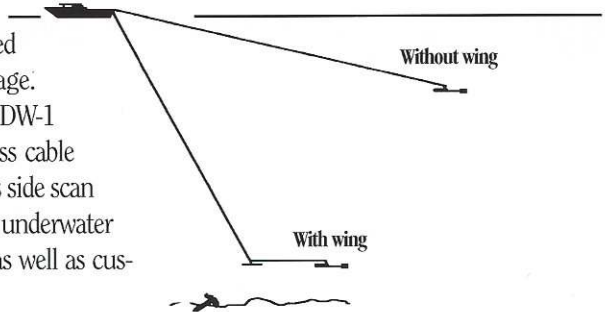


Comprehensive data sheets are available for all products.

DDW-1 Depressor Wing



The DDW-1 is a low cost depressor wing designed to tow any underwater instrument package. Operating on hydrodynamic depression, the DDW-1 will tow equipment to greater depths with less cable deployed. It tows standard equipment such as side scan sonars, towed video equipment, towed underwater metal detectors, marine magnetometers, as well as custom underwater housings.



UA-2 Altimeter



This precision underwater altimeter allows detection and survey equipment to be towed at precise distances above the bottom for greater accuracy and safety. With an adjustable bottom alarm and a large LCD readout showing depth from 1 to 99 feet, distance is updated three times a second. Powered by 12 vdc. System comes complete with control box, 150 foot cable, and transducer.

Options: 150-1,000 foot cable, 0-5 vdc output pulses.

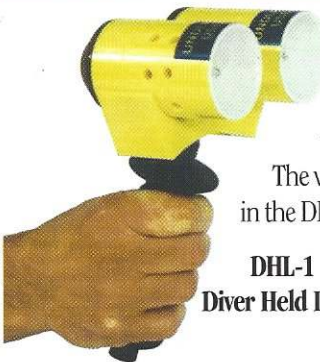
On-Screen-Display



Can be used with any video camera. Displays Time, Date, and boat's GPS directly on the screen and is recorded with the video on a VCR. With the optional remote sensor package, the water temperature, depth, and compass heading are also displayed and recorded. Ideal for ROV systems.

Options: remote sensor package.

DHL-1 and SL-1 Dive Lights



DHL-1
Diver Held Light

Fishers underwater light systems are ideal for any of the numerous underwater inspection projects encountered by today's commercial divers. The DHL-1 Diver Held Light and SL-1 Single Light supplies continuous lighting for extended underwater operations such as hull or bridge inspection in depths up to 1,000 feet.

The very powerful light beam is provided by two 100 or 250 watt tungsten halogen lamps in the DHL-1 or a single 100 or 250 watt lamp in the SL-1. SL-1 lights can be ganged together for those applications where multiple lights are required. Both light systems are surface powered by 120 vac and include ground fault protection circuitry.



SL-1
Single Light

Options: 150-1,000 foot cable, 12 vdc, 220 vac, 250 watt bulbs.

Distributed by:



JW Fishers is the leader in producing economically priced, high-tech underwater search equipment. For additional information or to order our demonstration video, call today. The \$14.95 video cost will be credited toward your first purchase.



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