

**Operator's
Manual**

SeekTech® Inductive Clamp



⚠ WARNING!

Read this operator's manual carefully before using this tool. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.

RIDGID®

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General Safety Information



WARNING

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

SAVE THESE INSTRUCTIONS!

Work Area Safety

- **Keep your work area clean and well lit.** Cluttered benches and dark areas may cause accidents.
- Do not operate electrical devices or power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or heavy dust. Electrical devices or power tools create sparks which may ignite the dust or fumes.
- Keep bystanders, children, and visitors away while operating tool. Distractions can cause you to lose control.

Electrical Safety



DANGER

When using on cables energized with electrical power, there is a risk of electrical shock. **USE ONLY ON INSULATED CONDUCTORS.**

Avoid exposure to rain or wet conditions.

Personal Safety

- **Stay alert, watch what you are doing and use common sense.** Do not use tool while tired or under the influence of drugs, alcohol, or medications. A moment of inattention while operating tools may result in serious personal injury.
- **Avoid Traffic.** Pay close attention to moving vehicles when using on or near roadways. Wear visible clothing or reflector vests.

- **Gloves should always be worn for health and safety reasons.** Sewer lines are unsanitary, and may contain harmful bacteria and viruses.
- **Do not overreach.** Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- **Use safety equipment.** Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- **Use proper accessories.** Do not place this product on any unstable cart or surface. The product may fall, causing serious injury to a child or adult, or causing serious damage to the product.
- **Prevent object and liquid entry.** Never spill liquid of any kind on the product.

Service

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified repair personnel could result in injury.
- When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance Section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electrical shock or injury.
- **Follow instructions for changing accessories.** Accidents are caused by poorly maintained tools.
- **Conduct a safety check.** Upon completion of any service or repair of this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- **Damage to the product requires service:** Refer servicing to qualified service personnel under any of the following conditions:
 - If liquid has been spilled or objects have fallen into product;
 - If product does not operate normally by following the operating instructions;
 - If the product has been dropped or damaged in any way;

- When the product exhibits a distinct change in performance.

Specific Safety Information

- **Use equipment only as directed.** Do not use the clamp unless proper training has been completed and the operator's manual read.
- **Do not immerse the clamp** in water.
- **Store idle tools out of the reach of children** and other untrained persons. Tools are dangerous in the hands of untrained users.
- **Maintain tools with care.** Properly maintained tools are less likely to cause injury.
- **Check for breakage of parts, and any other conditions that may affect the Inductive Clamp's operation.** If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your tool.** Accessories that may be suitable for one tool may become hazardous when used on another tool.
- **Keep handles dry and clean,** free from oil and grease. This allows for better control of the tool.
- **Store in a dry place.**
- **Protect against excessive heat.** The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.



WARNING

Read this operator's manual carefully before using the SeekTech Inductive Clamp. Failure to understand and follow the contents of this manual may result in electrical shock, fire, and/or severe personal injury.



WARNING

Important Notice

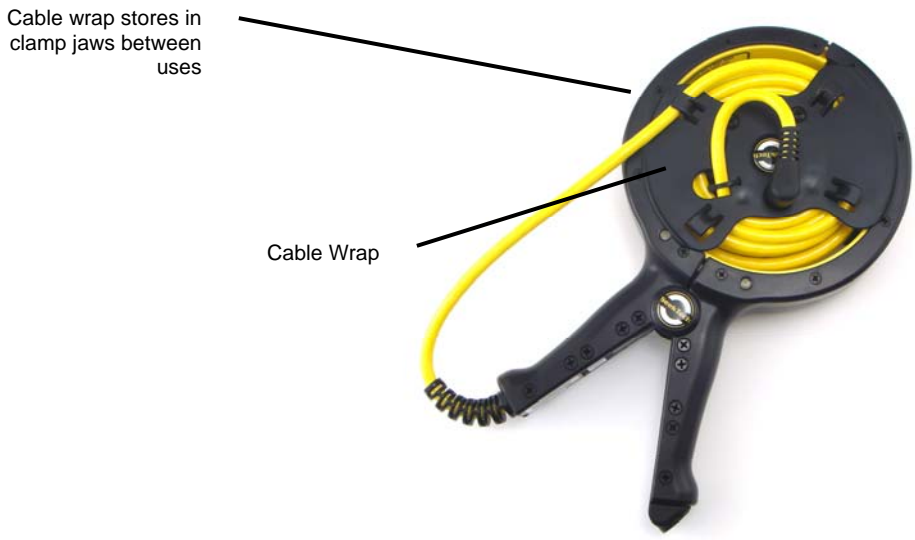
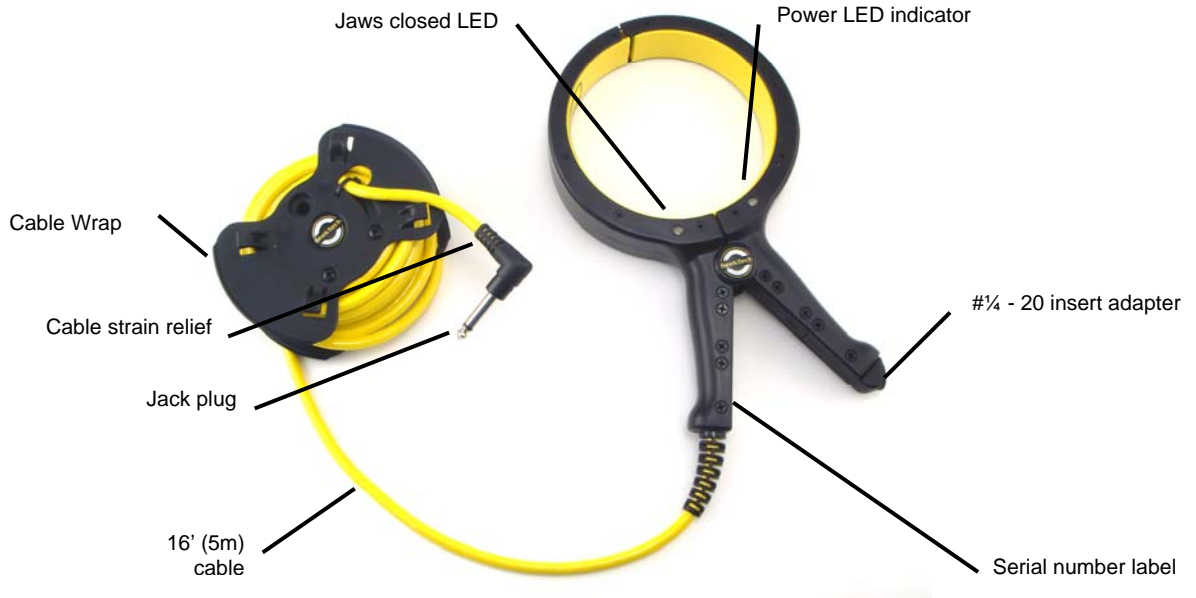
As electromagnetic field lines can be distorted and interfered with it is important to verify the location of underground objects before digging.

Several utilities may be underground in the same area. Be sure to follow local guidelines and one call service procedures.

Exposing the utility is the only way to verify its existence, location, and depth.

Ridge Tool Co., its affiliates and suppliers, will not be liable for any injury or any direct, indirect, incidental, or consequential damages sustained or incurred by reason of the use of the Clamp.

Inductive Clamp Components



Description

The SeekTech Inductive Clamp allows users to apply a signal to a cable or pipe when it is not possible to connect transmitter leads directly to the target conductor. When its jaws are closed around a cable or pipe, the clamp couples the transmitted signal onto the conductor by induction. Once the signal is applied to a conductor, it can be traced using a compatible receiver, such as the SeekTech SR-20.

Line Types

The clamp should only be used on insulated conductors. When using the clamp, the target conductor should be grounded at each end. Otherwise, the signal may not be strong enough to locate. When applying the clamp between two grounded points, the signal will only be on the section between grounds (see Figure 1). The clamp may be used with frequencies of 8kHz to 262kHz.

Note: The inductive clamp operates best at frequencies in the region of 33kHz. 8 kHz can be used on good conductors if less bleed over is desired.

The Inductive clamp is most commonly used on:

- Telephone cables
- Power cables
- CATV cables
- Pipes.

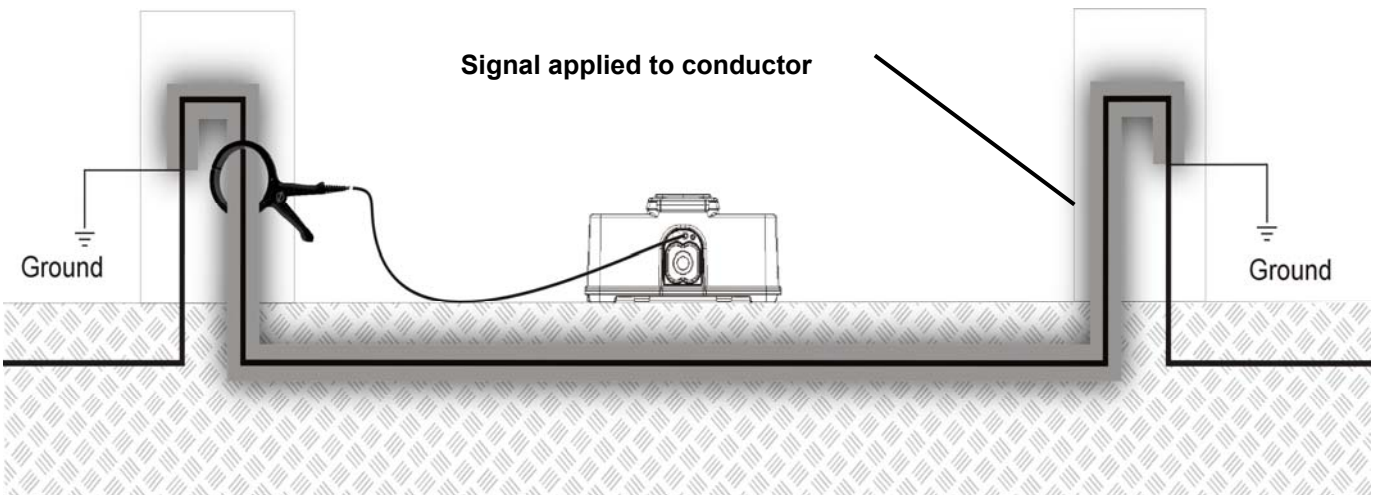


Figure 3: Using the SeekTech Inductive Clamp

The jaws of the clamp must be completely closed around the conductor to apply a signal. For optimal signal strength, place clamp around the conductor between two grounded points.

Using the SeekTech Inductive Clamp

1. With the transmitter powered off, insert the jack plug into the phone jack on the back of the SeekTech line transmitter. Make sure the plug is fully plugged in.
2. Clamp the jaws around the target conductor, making sure the jaws are fully closed. Inspect the LEDs to verify power and "jaws closed" status.



Figure 4: Example: Attaching the Inductive Clamp

3. Be sure the conductor to be traced is grounded at both ends.
4. **Note:** no ground stake is required with an inductive clamp.

5. Power the transmitter ON and select the desired frequency. The SeekTech clamp can be used with frequencies from 8kHz to 262 kHz. (European transmitters are limited to ~93 kHz.)
6. Move the receiver over the suspected conductor's path to test for signal. (If no signal can be detected see page 7, "Trouble Shooting").

NOTE: If both LED's are not lit, the clamp is not transmitting. Make sure the plug is fully seated and the jaws are fully closed.

**DANGER**

ALWAYS PLACE THE CLAMP AND CONNECT IT TO THE TRANSMITTER FIRST BEFORE POWERING THE UNIT ON TO AVOID SHOCK.

ALWAYS TURN UNIT OFF BEFORE TOUCHING AND DISCONNECTING CLAMP OR LEADS.

ELECTRIC SHOCK MAY RESULT FROM FAILURE TO CONNECT CLAMP OR LEADS BEFORE POWERING THE UNIT ON.

DO NOT HANDLE THE TRANSMITTER WHILE YOU ARE CONNECTED DIRECTLY TO GROUND YOURSELF.

Service and Repair

**WARNING**

Tool should be taken to a RIDGID Independent Authorized Service Center or returned to the factory. All repairs made by Ridge service facilities are warranted against defects in material and workmanship.

Maintenance and Cleaning

1. The plastic housing may be cleaned with mild cleaner applied to a rag. Never submerge the clamp in liquid.
2. Clean the metal core where the jaws clamp together so no debris or dirt gets between the jaws.

Locating Faulty Components

For troubleshooting suggestions, please refer to the section on troubleshooting at the end of the manual. If necessary, contact RIDGE Tool Technical Service.

Trouble Shooting

PROBLEM	PROBABLE FAULT LOCATION
Neither LED indicator is lit	Verify that the clamp is fully plugged into the transmitter and the transmitter is ON.
	Make sure the cable has not been cut, damaged, or dismantled.
Only Power LED is lit	Make sure jaws are fully closed and the metal core ends are making contact.
	Core ends are dirty. Remove clamp from transmitter and clean them with a mild cleaner.
Both LED's lit, but receiver detects weak signal or no signal	Target conductor may not be grounded on both sides of clamp.
	Transmitter and receiver may not be set to the same frequency.
	Review circuit to ensure grounding is adequate and conductor is continuous.

Specifications

Weight: 1.75 lbs. with cable (.8 kg)

Dimensions:

Length 10.5" (26.67 cm)
 Width 5.85" (14.85 cm)
 Height 1.48" (3.75 cm)
 Cable Length 16'5" (5.02 m)

Power Source:

Any SeekTech Line Transmitter (e.g., ST-510, ST-305) or comparable, which has a 10 watt or less maximum output power if frequency is under 45kHz, and a 1 watt maximum if above 45kHz. Must be jack-plug compatible.

Standard Equipment

- Inductive Clamp
- Attached Cable w/ jack plug
- Operator's Manual

Optional Equipment

#1/4-20 Threaded adapter for hot sticks.