



Pro871 and Pro871C Cable Locator Operating instructions



WARNING – Read and understand the instructions before operating this unit. Failure to do so could lead to injury or death.

The Armada Technologies Pro871 (the Pro871C adds the optional clamp) wire and valve locator is designed to find underground cables and trace their paths. The complete Pro871 kit consists of;

- (1) Pro871R Receiving Wand
- (1) Pro871T Transmitter and Carrying Case
- (1) ProH1 Mono Headset
- (1) ProGS Ground Stake
- (1) Set of Black/Red Connecting Leads
- (1) Operating Manual
- (1) IC871 Inductive Clamp (Pro871C only)

Please be sure that all items are included before operating the Pro871.

Battery Installation - The Pro871 transmitter requires 8 “D” cell batteries. The Pro871 receiver requires one 9v battery. To install the batteries in the Pro871 transmitter, open the case and remove the 2 holding screws on the battery compartment located on the right side of the unit. Place the batteries in the holder, orienting them in accordance with positive and negative poles. Turn on the Pro871T and make sure the green ‘ON’ LED comes on. If no response is seen, try adjusting the batteries to insure good connection. If still no response, be sure the

batteries are good and fresh. This can be noted by the red 'LO Batt' LED located to the left of the 'ON' LED.

The Pro871R receiver battery compartment is located on the backside of the Pro871R unit. Open the battery compartment cover. Install the 9 volt battery and replace the cover. Turn the unit on and observe the ON LED to confirm good battery install.

The Pro871R receiver also has a LO BATT LED and it acts as a warning that the batteries are possibly wearing out. When this LED comes on, monitor the performance of the receiver or just replace the battery.



The Pro871 Cable Locator (IC871 Clamp not shown)

Operation – With the transmitter off, connect the red lead to the wire you want to trace and the black lead to the included ground stake. Insert the ground stake into the soil or earth ground. Do not use common grounds such as pipes or electrical grounds. It is important that the ground stake be in the soil and independent for the Pro871 to work properly.

Turn the Pro871T transmitter on. Adjust the FREQ setting as follows. For direct connect locates where the wire is directly connected to the metal of the cable or cable sheath, use either the HI or LO setting depending on your preference. The Lo setting requires a good ground of the cable itself. If it has this, LO usually provides a longer distance locate with less bleed over into other cables. Without this ground, your locate will not be effective and HI should be used.

The red LED 'TRANSMIT' will blink when the unit is on and a good circuit has been formed. The brighter this LED, the better the circuit conduction. A dim LED indicates a poor circuit and consequently, the locate will be difficult.

Experiment with which setting works best for the job you are doing. However, THE TRANSMITTER AND RECEIVER MUST BE BOTH ON THE SAME SETTING TO WORK PROPERLY.

For use with the inductive clamp IC871, use the HI setting.

To use the IC871 Clamp. plug the clamp into the clamp receptacle on the Pro871T transmitter and turn the unit on, using the HI FREQ setting on both the transmitter and receiver. Clamp the IC871 around the cable to be traced. The tracing signal will be induced to the cable. As a note, inductive coupling is not as effective in terms of response and distance as the direct connect method.

Tracing Wire - After the Pro871 transmitter has been properly connected and verified to have a good ground and power, turn on the Pro871R receiver by turning the volume knob on the front of the receiver. Place the receiver near the operating Pro871R transmitter. A beeping sound should be heard indicating that the receiver is working properly. A high pitched tone could indicate that you are too close to the receiver or your batteries are low. A fading signal indicates low battery.

The black control knob on the front of the receiver regulates the volume of the receiver, both headphones and external speaker. Additionally, the analog meter on the front of the receiver will indicate the reception power level visually. After connecting and turning on the transmitter and turning on the receiver, point the receiver toward the ground and listen for the beeping signal. The closer you are to the cable, the louder the signal should be except for directly over the cable in the NULL mode (discussed next).

The Pro871R also has the option of NULL or PEAK tracing. Simply put, NULL means that the signal nulls or stops when the receiver is directly over the cable.

PEAK means the signal is loudest directly over the cable. The user should become familiar with this difference and select the response that best suits their preference.

Helpful Hints –

Batteries are the number one reason users call for technical support. Before assuming that there is something wrong with the unit, replace the batteries. It will save you time, money, and embarrassment.

Ground condition makes a huge difference in the performance of cable locators. Basically a path is being created from the transmitter, through the cable, out through the ground and back to the ground stake. Any mistake in any of these links will cause the locator to not work properly. Be sure your ground stake is secure and in the dirt and that the transmitter is connected to the cable that you want to track.

In addition, the more conductive the soil, the better. As moisture is a good conductor, the wetter the better. Dry sandy desert soil is not a good transmitter of signal and you will experience better results in moist soil. If you are in the desert, a little water at the ground stake may help.

The best way to really learn the Pro871 is to use it. Set up a test site at your home or office and get used to how it works. There is no substitute for experience in the art of locating. Good luck!

Warranty – Armada Technologies warranties all products for 12 months from manufacturing defects from the date of retail purchase. Armada Technologies will repair or replace any component that is returned to Armada Technologies within 12 months of purchase and does not exhibit signs of abuse or misuse. It is Armada Technologies sole discretion to determine this condition. Armada Technologies also reserves the right to require a proof of purchase in order to determine date and validity of purchase.