

GOLDAK Underground Detection Equipment

MODEL 7200/9200 METAL & VALVE LOCATOR

OPERATING MANUAL


*Innovating Underground
Locating Since 1933*



GOLDAK
PRODUCTS

www.goldak.com

CONTENTS	PAGE NO.
A. General Description	1
B. System Components	2
C. The Model 7200 XP	3
1. 7200 XP LED Display	3
2. Trigger Commands	4
3. “Motion” Mode	4
4. “Pinpoint” Mode	5
5. Turn off the 7200 XP	7
6. Changing the Batteries	7
7. Testing the 7200 XP	8
D. The Model 9200	9
1) 9200 LED Display	9
2) Trigger Commands	10
E. Technical Support	11



Model 7200/9200 Metal and Valve Locator

A) General Description:

Both the 7200 XP & 9200 Digital Metal and Valve Locators use computer-driven circuitry to assure easy and accurate locations of buried metallic objects. Although each has different features they share the same ergonomic, collapsible design along with fully automatic operation all from a single trigger. Both are used extensively by municipalities, water and gas utilities, contractors, maintenance people and others to locate valve caps, boxes, valve risers, manhole covers, etc. Below is an illustration and comments on both the 7200 XP & 9200, and their components.



B) System Components:

- **Trigger:**
Single trigger action used to switch between locating modes (7200 only) and turn the unit on and off.
- **Display Head:**
LCD display with vertical red-lighted graph.
- **Battery Compartment:**
Easy access for the eight “AA” batteries.
- **Headphone Jack:**
Optional headset to eliminate outward audio.
- **Speaker:**
Provides a strong, clear tone to indicate when a metallic object is located.
- **Swivel Arm:**
Swivels only one direction, folding down for easy storage in case or bag.
- **Detection Head:**
When “peak” signal is obtained, the center of the object will be directly under the **Cross-Hair Symbol**.



Folding the 7200 XP / 9200

Note: Both the display head and the detection head are adjustable, allowing the operator to position them in a way that is most comfortable for their individual use.

Model 7200/9200 Metal and Valve Locator

C) The Model 7200 XP:

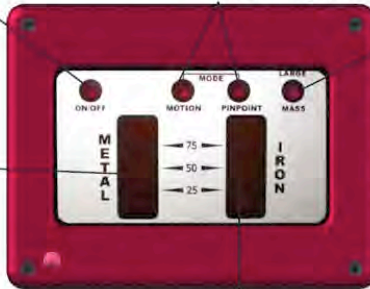
The Model 7200 XP has two distinct features that distinguish it from most metal & valve locators. First it has a “motion” mode, which allows the user to freely swing the locator while searching, greatly reducing the amount of time it takes to sweep an area. Second is a feature that, while in “pinpoint” mode, allows the user to distinguish between ferrous and non-ferrous metals. The following instructions will guide you in how to access each mode individually and enhance your ability to locate your desired objects quickly and accurately.

1. 7200 XP LED Display:

On/Off Battery Indicator Light:
(When Battery is low, light blinks)

Motion mode and Pinpoint mode indicators: Tells the user which mode they are currently in.

Metal Indicator:
Senses the Amount of metal Content in the Object being Located



Large Mass indicator:
Lights up when the object being located is a large mass.

Iron Indicator: Senses the amount of Iron content in the object being located

2. Trigger Commands:

The trigger of the 7200 XP has only three possible commands. Below is a quick list of each command and its function.

Single Click – Turns unit on and/or resets “motion” mode

Click Hold – Resets and retunes “pinpoint” mode

Double Click – Turns unit off

3. “Motion” Mode:

“Motion” mode was designed and engineered to eliminate ground effects and false signals often associated with this type of locator, while simultaneously allowing the operator to move the locator freely and at an increased pace without getting erroneous readings commonly found with other metal locating devices.

– Activating

To activate “motion” mode at any time the locator is on, simply click the trigger once. A single, quick click of the trigger will always reset the unit to “motion” mode.

– Searching

To search while in “motion” mode, sweep the detection head evenly above the ground you are surveying at the recommended distance of about 2” - 4”. When the disc passes over a metal object, the 7200 XP will emit a short beep with a rising pitch. In “motion” mode this response will always be the same, regardless of the size of the object being located (*Eg. whether you pass over a sprinkler head or a manhole cover, the unit will respond only with a short beep*).

- **Verifying**

To verify an object positively, pass the detection head repeatedly over the target location. A crisp beep should occur every time you pass over the desired object, in effect, verifying its presence.

4. **“Pinpoint” Mode:**

“Pinpoint” mode was designed and engineered in the more traditional style of metal and valve locators, but with an enhanced, self-tuning feature not commonly found in other similar instruments. While in “pinpoint” mode the 7200 XP also has a self-adjusting gain feature that enables the user to center even large objects such as manhole covers.

- **Activating**

To activate “pinpoint” mode at any time the locator is on, simply click-hold the trigger until hearing a distinct-guidable siren burst. Hearing this tone means the locator is in “pinpoint” mode, while also confirming that it has automatically tuned itself at the level from the ground that it was held. The operator can have the instrument re-tune itself automatically at anytime by click-holding the trigger. When doing so, the user will once again hear a siren burst, confirming the locator has successfully re-tuned. *(Note: It is recommended for maximum sensitivity that the user hold the instrument away from any known metals while tuning).*

- **Pinpointing the Object**

To pinpoint the object while in “Pinpoint” mode make sure the instrument is successfully tuned away from metal and the desired distance above the ground which you wish to search at. Maintain that distance and sweep the detection head across the desired area while continuing to keep the disc parallel to ground level. As you move across the desired object the instrument will emit a continuous tone, indicating the detection head is passing over a metallic object. Response of the locator will vary relative to the differing conditions of each job scenario. For instance, a manhole cover that is relatively shallow will produce a long, continuous tone as you pass over it, while a manhole cover that is buried a few feet deep might only produce a short, quick tone as you pass over it.

- **Metal/Iron Indicator**

This feature is provided to give the user even a little more information to decipher the object being located. Being able to determine the composition of the underground object can be a great aid in determining whether the item the user is locating is in fact the one that is being targeted (valve lid, valve riser, etc. vs. aluminum). When passing over most metallic objects of any type, the METAL indicator will almost always provide a response. It is when you pass over objects that have magnetic qualities (such as iron, steel, and nickel) that the IRON light will respond, as well as the METAL light. When only the METAL light responds the instrument is likely over non-magnetic materials (such as brass or aluminum). *Note: The level of iron response will vary depending on the composition,*

Model 7200/9200 Metal and Valve Locator

shape, and orientation of the object. On large flat iron objects the light will be lit as you approach the object, yet as you continue over it, the IRON light could go off due to the conductivity of the object.

- **Large Mass Indicator**

The Large Mass Indicator will light any time the instrument senses it is over a large mass of metal. Large masses of metal would generally include manhole covers, valve lids, valve risers, vault lids, etc.

Note: The deeper the large mass, the less likely it is to be indicated as a large mass on the display (eg. A manhole cover at three feet deep can easily be located, but will not be indicated as a large mass. A manhole cover at three feet will read very similar to a silver dollar buried six inches deep.

5. Turn Off the 7200 XP:

To turn off the 7200 simply double click the trigger. Also, the 7200 XP will shut off automatically after five minutes of inactivity to preserve battery life.

6. Changing the Batteries:

- When the ON/Battery light flashes during operation, the batteries must be replaced with new ones.
- Place the 7200 XP, in extended position, on the floor.
- Place the heel of your palm on the top end of the chassis, and grasp the ledge of the handle cavity in the battery cover with your fingertips.
- Pull up on the cavity ledge with your fingertips. The spring-loaded cover will “pop” out of the chassis. Fully remove the cover.

- Remove the batteries from both the cover and the chassis. Replace them according to the polarity markings molded into each part. The 7200 XP uses eight “AA” size, 1.5V alkaline batteries.
- Replace the cover as it was before, inserting the tab first. Seat the battery cover completely by pressing down the lower corners of the cover with your thumbs. The cover will “pop” into place when it is properly installed.
- Activate the instrument to make sure that the batteries are properly installed and making good contact.

7. Testing the 7200 XP:

You should have received two metallic discs with your locator. One of which is ferrous and the other is composed of non-ferrous metal.

- Place both discs on the ground (free of other metals or piping) two to three feet apart.
- Start in motion mode to locate both discs.
- Switch to pinpoint mode – as you pass over the discs, one will light only the metal side of the display while the other disc will light the metal and iron sides of the display.

Model 7200/9200 Metal and Valve Locator

D) The Model 9200:

The Model 9200 was designed in the more traditional style of metal and valve locator, with the addition of an automatic, self-tuning feature and a digitally enhanced response. Built in the same lightweight, ergonomic package as the model 7200 XP, the model 9200 offers simplified functionality that makes locating underground metal objects ultra-easy with just a single click of a button.

1. 9200 LED Display:

On/Off Battery Indicator Light
(When battery is low, light blinks)

Signal Response Meter



2. Trigger Commands:

The trigger of the 9200 has only two possible commands. Below is a quick list of each command and its function.

Single Click – Turns unit on and/or resets auto-tuning

Double Click – Turns unit off

– **Activating**

To activate the model 9200 valve/metal locator, simply click the trigger once. A single quick click of the trigger will turn the unit on if it is off, or reset the auto-tune feature if the unit is already on. The 9200 will make a rising tone as it starts up.

– **Searching**

To search with the 9200 hold the detection disc a little above the ground level at which you intend to search. Click the trigger and the instrument will make a “siren” sound to indicate that it has been reset. Lower the detection disc slightly to stabilize the setting, and sweep the search area. When the disc passes over metal, the LED bar graph will light up and the speaker will make a robust sound corresponding to the nearness of the metal object.

– **To Pinpoint**

The 9200 allows the user to pinpoint the center of the object, regardless of its size. As you pass the detection disc over the metal object, position the disc for maximum response. The instrument will automatically adjust itself to the size of the object. When the “peak” response has been obtained, the object will be centered under the circle with the cross-hair on the top of the disc.

Model 7200/9200 Metal and Valve Locator

– Turn Off the 9200

To turn off the 9200, simply double-click the trigger. The unit will emit a descending tone and shutdown. Also, to preserve the battery, the 9200 will shutdown automatically after five minutes of inactivity.

F. Technical Assistance and Servicing:

Should the Model 7200 XP/9200 Metal and Valve Locating System or any of the accessories require repair or servicing aside from normal product maintenance, we suggest that you contact the factory at the following address:

Goldak, Inc.
15835 Monte Street, Unit 104
Sylmar, CA 91342
818-367-0149
fax: 818-833-7694
email: sales@goldak.com
website: www.goldak.com

We will inform you of any local repair stations in your area, or advise you to ship the instrument directly to the factory. If you ship product, we suggest you:

- a) Pack the instrument carefully and securely.
- b) Include any accessory items normally used with the instrument.
- c) Include a note with the instrument stating the nature of the problem(s) you have encountered in using the instrument.
- d) Include a contact name, telephone number and fax number.

GOLDAK Underground Detection Equipment



GOLDAK PRODUCTS

Goldak, Inc.
15835 Monte St., Unit 104 ■ Sylmar, CA 91342
818-367-0149
818-833-7694 fax
www.goldak.com