

# **MPX** *DIGITAL*

*High Performance Digital Metal Detector  
with Ultra Deep 10" Search Coil*



**Owners's  
Manual**

*Super Advanced Digital System  
High Powered, More Depth!  
Audio-Centering Pinpointing.*

[www.kellycodetectors.com](http://www.kellycodetectors.com)



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## GLOSSARY OF TERMS

The **MP<sup>x</sup> Digital** is a high powered metal detector designed for the serious treasure hunter. Using special advance circuitry, automatic operation along with the ability to see further in the ground the **MP<sup>x</sup>** will achieve depths at up to 20% deeper, through the use of surface mount technology. This **MP<sup>x</sup>** series also uses more power in the searchcoil which in turns “pushes” the signal deeper in the ground.

### Exclusive Features of the MP<sup>x</sup>:

- State-of-the-art surface mount technology.
- 20% more depth then the standard model.
- More power in the searchcoil that pushes the signal deeper.

### FEATURES —

#### 1. Use the Target ID to learn what you’ve found.

The detected objects are shown on the large LCD meter. You can determine immediately whether the objects are worth digging, or not.

#### 2. Use the Bar Graph LCD to locate your target fast!

#### 3. Fully automatic with no tuning or ground balancing required.

#### 4. State-of-the-art adjustable Icon Target identification system.

#### 5. Unique Tone for Targets.

When an object is being detected, a unique tone corresponding to the target will be heard. Therefore you don’t have to keep watching the LCD display while searching.

#### 6. Auto-low battery voltage indication.

The Battery Icons will be displayed on the LCD when the battery voltage goes below the proper value. In this case, the batteries should be replaced at once.

**Air Test** - A sensitivity test performed by outwardly moving various sized metal samples under the metal detector searchcoil to measure the distance limit of detection. This test is not always an accurate indicator of ground depth penetration capability. (*see Bench Test*)

**Alkaline** - A class of battery characterized by the ability to sustain longer periods of current drain and greater storage life when compared to the standard carbon-zinc type.

**Bench Test** - An air test to determine at what discriminate settings various metal samples are rejected or accepted. The test is conducted in a non-metallic area.

**Cache** - Any intentionally buried or secrete hoard of valuables.

**Conductivity** - The measure of a metal target's ability to allow eddy current generation on its surface.

**Control Housing** - A metal or plastic box which holds circuit boards, indicators, meter, controls and power supply.

**Depth Penetration** - The greatest measure of metal detector ability to transmit an electromagnetic field into the soil matrix and produce a target signal.

**Discrimination** - Adjustable circuitry which ignores or nulls audio responses from a specific conductivity range allowing positive responses to be heard from metals higher in conductivity above the discriminate control setting. Designed primarily to eliminate audio response from trash metals.

**Double Blip** - A signal characteristic common to elongated ferrous targets such as nails detected in the all-metal non-motion mode.

**Faint Signal** - A sound characteristic of targets that are sometimes deeply buried or very small in size.

**False Signal** - An erroneous signal created by automatic retuning overshoot, ground voids or highly mineralized hot rocks.

**Ferrous** - Descriptive of any iron or iron bearing material.

**Metal** - Metallic substances; iron, foil, nickel, aluminum, gold, brass, lead, copper, silver, etc.

**Metal Detectorist** - A person operating a metal detector in the field. This name is preferred by many over Treasure Hunter.

**Mineralized Ground** - any soil that contains conductive or non-conductive components.

**Motion Discriminator** - A detector type that requires searchcoil motion to activate its simultaneous ground balance and discriminate functions.

**Non-Ferrous** - Not of iron. Metals of the precious class (i.e. gold, silver, copper, etc.)

**Pinpointing** - Finding the exact target location with respect to a searchcoil's designated center. Accomplished by interpreting the centers of audio response width in perpendicular direction or scans.

**Searchcoil** - A circular (can be other shapes) plastic housing containing single or multiple transmit and receive windings in a specific orientation or configuration to emit and receive signals from ground and targets. (also called loop or coil).

**Searchcoil Cable** - An electrostatically shielded cable of conductors (wires) which convey signals to/from the searchcoil or control housing.

**Sensitivity** - The measure or capacity of a metal detector to perceive changes in conductivity within the detection pattern. Generally, the more sensitivity a detector can smoothly provide, the more depth it will achieve.

**Signal** - An audio response or visual indication alerting the operator that a target has been detected.

**Slow Motion** - A description of searchcoil speed required to operate the motion discriminate mode.

**Sweep** - the motion one employs in moving the coil.

## MIND YOUR MANNERS

Filling holes and obeying **NO TRESPASSING** Signs are but 2 requirements of a dedicated metal detector hobbyist. A sincere request that Kellyco makes to every user of a detector is that each place searched be left in a better condition that it was found. Thousands of individuals and organizations have adopted this format.

### **Metal Detector Operators Code of Ethics:**

- I will respect private and public property, all historical and archaeological sites and will do no metal detecting on these lands without proper permission.
- I will keep informed on and obey all laws, regulations and rules governing federal, state and local public lands.
- I will aid law enforcement officials whenever possible.
- I will cause no willful damage to property of any kind, including fences, signs and buildings and will always fill holes I dig.
- I will not destroy property, buildings or the remains of ghost towns or other deserted structures.
- I will not leave litter or uncovered items lying around. I will carry all trash and dug targets with me when I leave each search area.
- I will observe the golden rule, using good outdoor manners and conducting myself at all times in a manner which will add to the stature and public image of all people engages in the field of metal detection.

### **Warning!**

Any metal detector may detect underground power lines, explosives or other items which when struck could cause personal injury. When searching for treasure with your detector, observe these precautions:

Do not hunt in an area where you believe there may be shallowly buried underground electric lines or pipes.

Do not hunt in a military zone where bombs or other explosives may be buried.

Avoid striking any line known to be or suspected to be carrying electrical power.

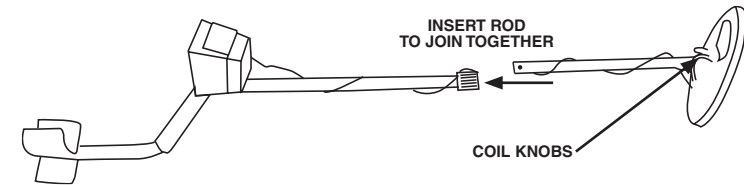
Do not disturb any pipeline, particularly if it could be carrying flammable gas or liquid.

Use reasonable caution in digging toward any target, particularly in areas where you are uncertain of underground conditions.

## ASSEMBLY —

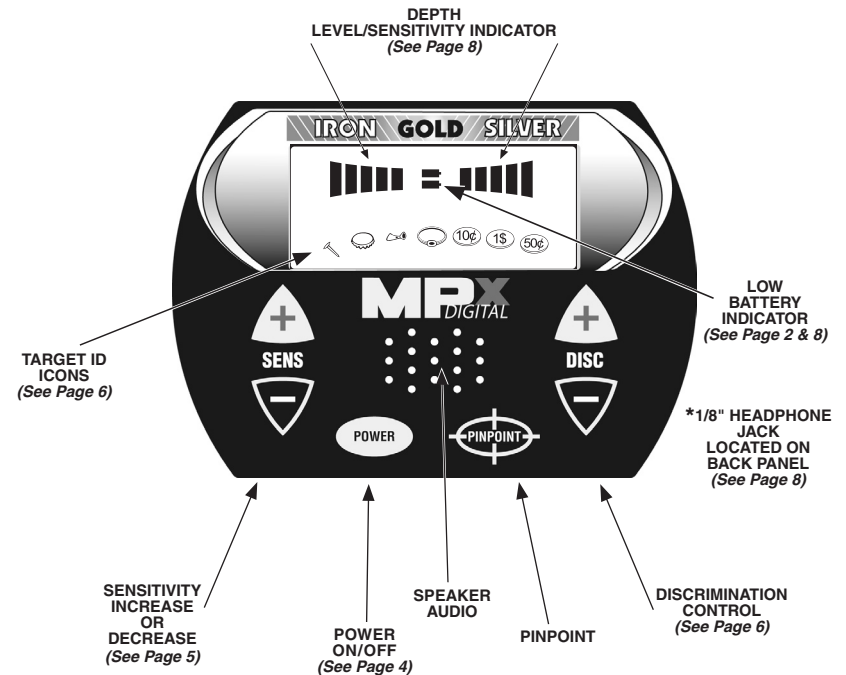
The detector is shipped fully assembled in one carton. Only two adjustments are necessary, and no tools are required.

1. Turn the search coil to the scanning position. It may be necessary to loosen the knobs securing the coil and then tighten them again. Make sure that the knobs are tightened (by hand) securely after the search coil is positioned.



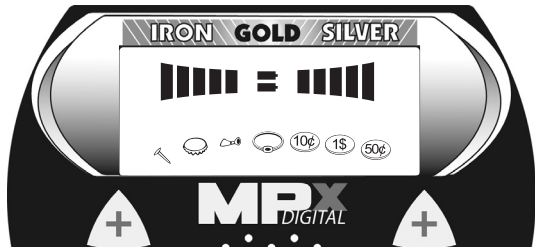
2. Install (2) 9 volt batteries and then the detector will be ready for use. (See page 8.)

## CONTROL PANEL —



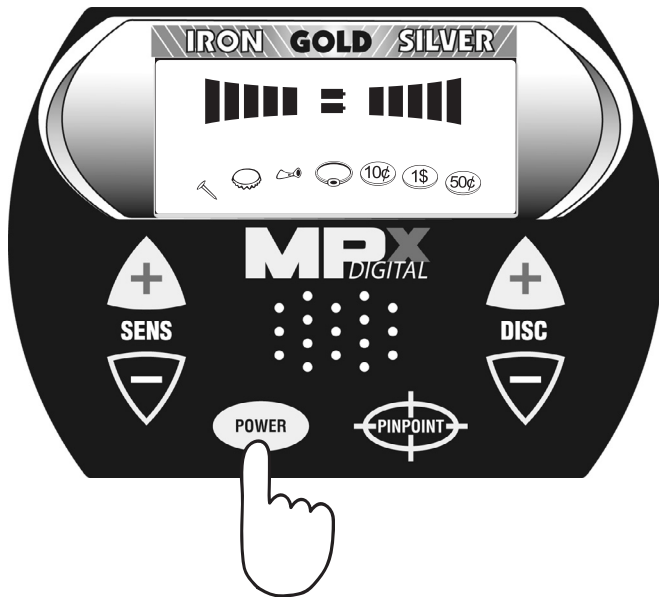
## TARGET ID GUIDE —

At the top of the control panel is an easy to read graph indicating targets for use with the Target Icons on the lower scale of the LCD.



## OPERATION OF CONTROLS —

Power ON and OFF Button



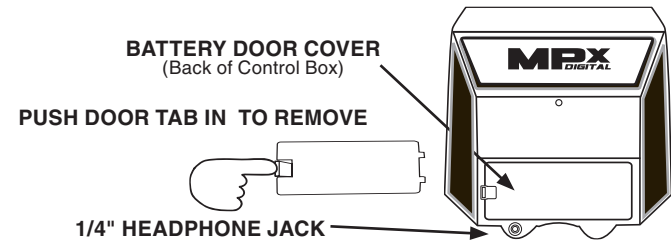
Press the **POWER BUTTON ONCE** to turn the **MPX ON**.

**NOTE:** Pressing the **POWER BUTTON TWICE** will turn the **MPX OFF**

## USING THE HEADPHONE JACK —

To bypass the built-in audio speaker you can simply plug in any 1/4 inch stereo headphone jack and now you will only get audio from the headset. By using the headset you will be able to hear the fainter targets. Another benefit of using headphones is that it will decrease the battery usage in the audio circuit. Always use headphones designed for metal detector use.

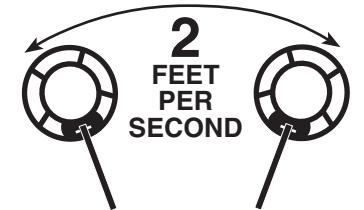
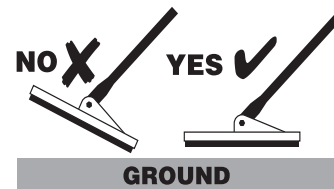
**Installing the Batteries:** Remove the battery compartment cover and install two (2) 9-volt batteries. Make the correct connections between the new batteries and ensure the battery snaps are plugged in. Replace the battery cover.



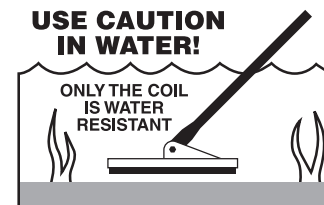
*\*Automatic Low Battery Indicator: When you see 1 or even 2 low battery icons, it's time to replace one or both of the batteries.*

## IN THE FIELD TIP FOR USING YOUR MPX —

1. Always keep the bottom of the coil level with the ground. Try to maintain coil 1 inch off the ground at all times. You do not need to scrub the ground with the coil.
2. The MPX is an Ultra Slow Motion Metal Detector. When using this detector the coil must be in motion to detect any target. A sweep speed of about 2 feet per second is perfect. You can hunt as fast as you want or your pace dictates.



3. The coil is water resistant and can be used around water, however be careful not to get water into the control housing.

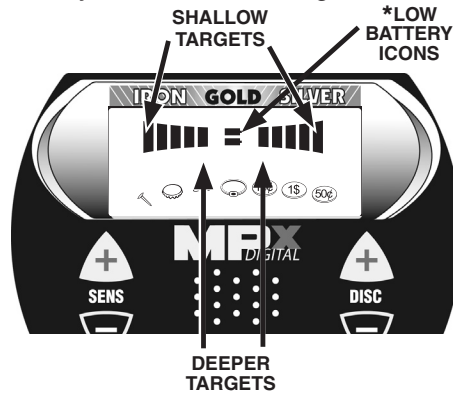


4. Correct arm position. Adjust the lower stem so that your arm is hanging in a comfortable position by your side with the coil about 1 inch off the ground.



## USING THE MP<sup>x</sup> 5 SEGMENT LCD FOR DEPTH READING —

This feature is fully automatic and requires no tuning on the operator part. When a target is detected, you will see 5 LCD light indicator illuminate on the screen on both the left and right of center. This feature will enable you to do two things. First you can determine if a target is close to the surface by observing how many bars are illuminated. One (1) bar on both sides would indicate a deeper target, and five (5) bars on both sides would indicate a shallow target.

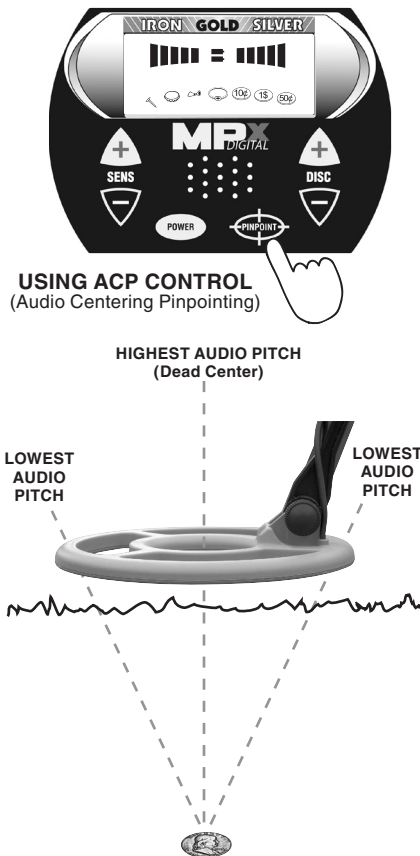


## ACP or (Audio Centering Pinpointing) CONTROL —

The MP<sup>x</sup> incorporates a very precise ACP Pinpointing Control that will accurately locate any target when you're ready to dig. Once you have located a buried target and have identified that target in the slow motion mode you start by moving the coil away from the target area with the coil about 1/2 inch off the ground. Now you simply push and hold in the pinpoint button on the MP<sup>x</sup> and slowly move the search coil over the target area until you get the highest audio pitch and the loudest sound (volume level) at this point you are centered over the target. What you are hearing is the new ACP technology working to make pinpointing as effortless as possible.

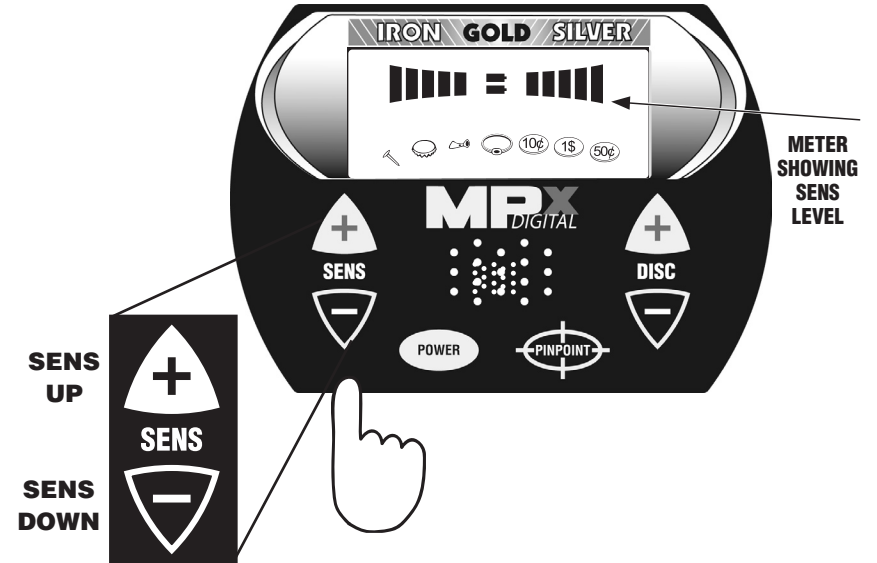
**Note:** The deeper the target the softer or lower the sound or volume will be.

**TIP:** Practice pinpointing with a coin lying on top of the ground so you can see how the ACP works.



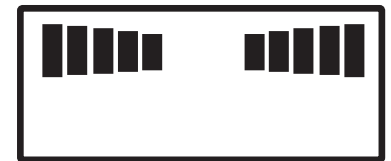
## OPERATION OF CONTROLS —

### Sensitivity Control Buttons



The sensitivity control is used to adjust the MP<sup>x</sup> sensitivity to changing ground conditions. Operating the MP<sup>x</sup> in the maximum setting may result in erratic operation due to heavy mineralization in your present search area. Reducing the sensitivity to show 2 to 4 bars will help in most cases. Areas that contain high minerals are salt water beaches, many areas high in iron, volcanic islands or any soil that is high in mineral content.

**Tip:** Start out with maximum sensitivity and if the MP<sup>x</sup> operates in a stable manner then leave it alone. If you are getting False Signals, or, you get a tone and nothing is there, then decrease the sensitivity 1 notch at a time till you achieve stable operation.



HIGH SENSITIVITY



MEDIUM SENSITIVITY

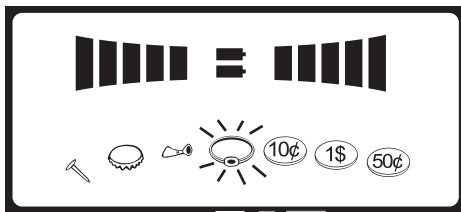


LOW SENSITIVITY

You can adjust the sensitivity at any time, directly by pressing the  $\triangle$  or  $\nabla$  cursor on the control panel. The status of the sensitivity will be displayed at the moment that you are pushing the  $\triangle$  or  $\nabla$  touch pad.

### TARGET IDENTIFICATION ICON SCALE –

When a target is detected by the MP<sup>x</sup>, the target Icon corresponding to the detected metal will cause that Icon to “flash” momentarily for about 4 seconds. You can easily determine the types of detected metals according to the Icon location on the Target Identification Icon Scale.



TARGET ID SCALE

Icons will “FLASH” for 4 seconds when target is detected.

Using the Discrimination Control to eliminate or tune out “Junk” and unwanted targets.



PUSH the UP touch pad for LESS discrimination (Audio response and target Icon)

PUSH the DOWN touch pad for MORE discrimination

When using the down touch pad for discrimination you will no longer get an audio response or target Icon indicator on that target. If you want to hear the audio and see the Icon response, you can simply push the up touch pad to decrease the discrimination.

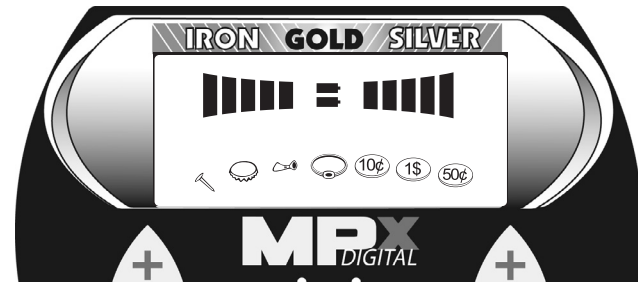
**NOTE:** When pushing the down touch pad the eliminated Icon (or Target) will not show up on the “LCD” screen. (No audio response and target Icon.)

### SEVEN (7) TONE AUDIO TARGET IDENTIFICATION SYSTEM –

By utilizing a seven (7) tone audio identification system you will quickly learn each tone and the target or targets it represents. The highest tone will in many cases indicate a larger coin or larger non iron object. The lowest tone will in most cases indicate an iron target has been detected. The remaining five (5) tones in the middle will indicate different size coins, rings and most nickels. Remember you need to sample some coins and rings to see what tone is produced by the audio Identification system of the MP<sup>x</sup>. Continual use and practice will put these seven (7) tones to memory.

**Note about Audio Tone Identification Systems:** You will notice that multiple targets of the same likeness or conductivity will produce the same tone. This is normal in this type of Audio system, this is where your experience will pay off.

The top of the control panel has an easy to read graph indicating the conductive zone of three metal groups. Iron, gold and silver. You use the graph as an instant reference point of each detected icon target below.



The lower Icon Symbols are as follows:

Starting from the left, (these only appear when the MP<sup>x</sup> is on).

- 1<sup>st</sup> Icon: iron or small nails.
- 2<sup>nd</sup> Icon: bottle cap or some foils.
- 3<sup>rd</sup> Icon: pull tab or nickel.
- 4<sup>th</sup> Icon: gold ring range.
- 5<sup>th</sup> Icon: dime.
- 6<sup>th</sup> Icon: US dollar or quarter.
- 7<sup>th</sup> Icon: 50 cent coin or larger item.

LOWEST TONE	1
	2
	3
	4
	5
	6
HIGHEST TONE	7

By listening to the target tone and watching the “flashing” icon you can quickly identify most buried targets.

**Note:** When any target is being detected, the corresponding icon will flash for several seconds, along with its unique tone.