VEVOR®

TOUGH TOOLS, HALF PRICE

Technical Support and E-Warranty Certificate www.vevor.com/support

METAL DETECTOR

MODEL:TS156A

VEVOR®
TOUGH TOOLS, HALF PRICE

METAL DETECTOR

MODEL:TS156A

NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:

✉ **CustomerService@vevor.com**

This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

FC	This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)This device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation.
[wheelie bin symbol]	This product is subject to the provision of European Directive 2012/19/EC. The symbol showing a wheelie bin crossed through indicates that the product requires separate refuse collection in the European Union. This applies to the product and all accessories marked with this symbol. Products marked as such may not be discarded with normal domestic waste, but must be taken to a collection point for recycling electrical and electronic devices

INTRODUCTION

This metal detector is designed using the latest technology. It features lightweight and is easy to operate. It has two detection modes, which are ALL METALS mode and DISCRIMINATION mode, and you can select a desired mode between them.

Features:
•Two detection modes - ALL METALS mode and DISCRIMINATION mode
•Adjustable sensitivity
•Two kinds of alarm tones
•Adjustable volume
•Auto ground balance
•Audio alarm
•Current meter used to indicate metal detection intensity
•Low battery indication
•3.5mm earphone jack

STRUCTURE / ASSEMBLY INSTRUCTION

Overall Structure:

Arm Cuff

Handle

Control Box

Cable Plug

Search Coil Cable

Upper Stem
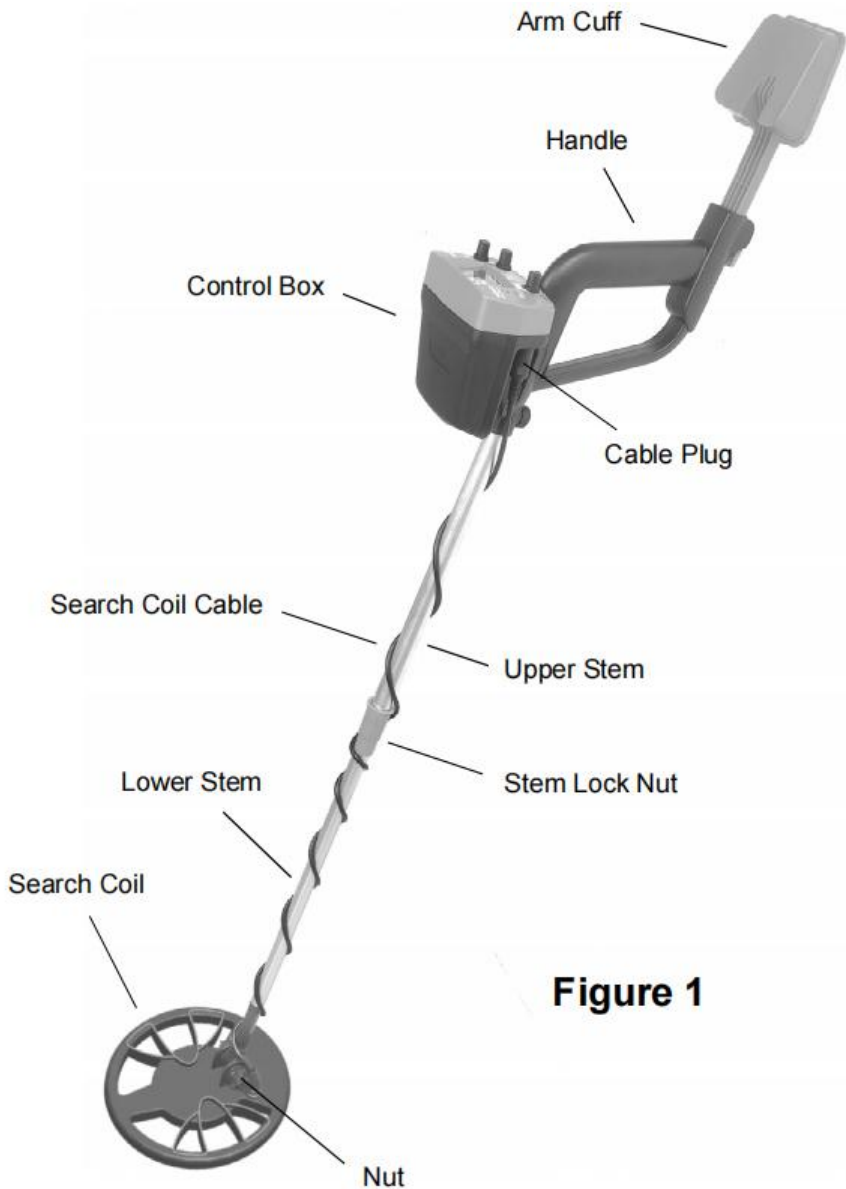
Lower Stem

Stem Lock Nut

Search Coil

Figure 1

Nut

Upper Part Structure:

Tip:
You can slide the battery cover
downwards to remove it.
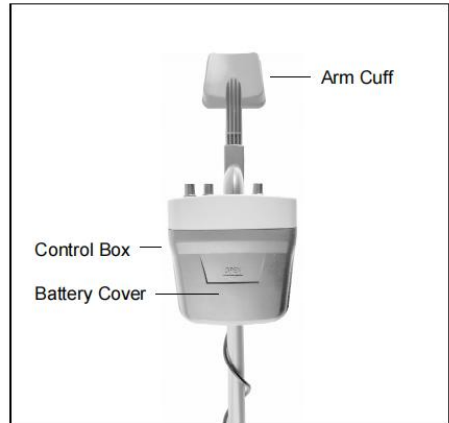
Figure 2. Front View of the Upper Part of the Detector

Tip:
After you gently pull up the end

of the arm cuff lock by 90°, you

can adjust the height of the arm
cuff. After you finish the
adjustment, pull down the end
of the arm cuff lock to lock the
arm cuff.
To remove the control box from
the upper stem, counterclockwise
turn the bolt that holds the control
box to remove the bolt. Then
move the control box upwards to
remove it from the upper stem.

Figure 3. Back View of the Upper Part of the Detector

Assembly Drawing

Arm Cuff

Hole

Handle

Arm Cuff Lock

Control Box

Bolt

Upper Stem

Threaded Ring

Figure 4

Stem Lock Nut

Fixing Ring
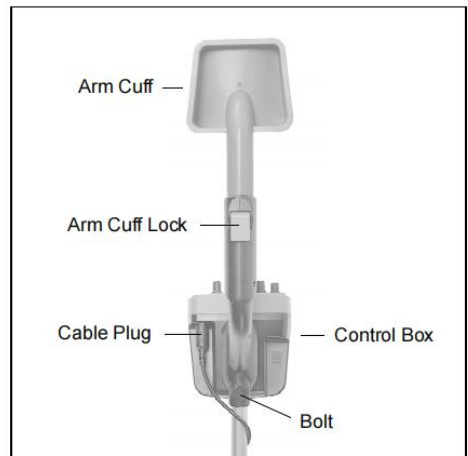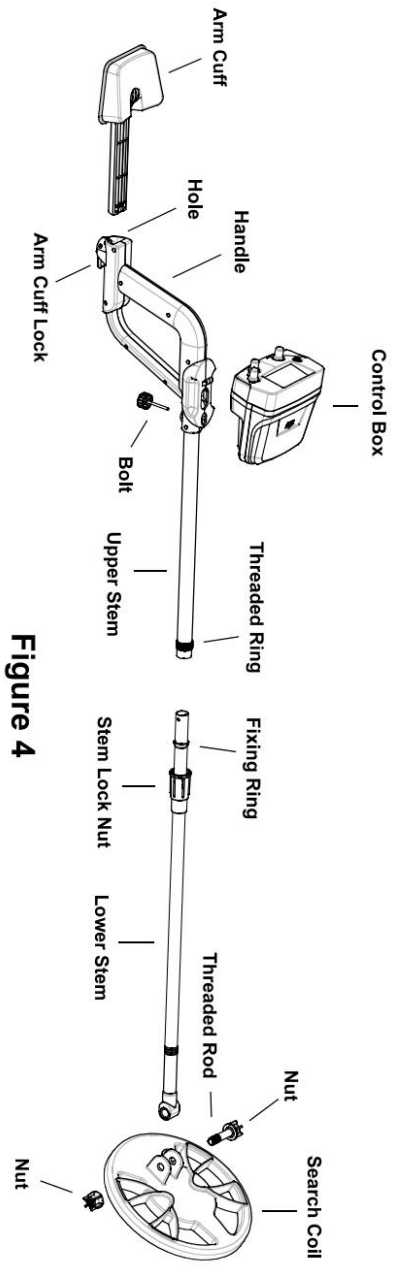
Lower Stem

Threaded Rod

Nut

Nut

Search Coil

Note:

1. See the above figure, the fixing ring is placed around the lower stem, and its flat side faces the upper stem.

2. The two protrusions on the inner surface of the threaded ring must fit into the two holes near the lower end of the upper stem.

3. If you want to use the arm cuff, insert it into the corresponding hole beside the handle to a desired depth and then pull down the end of the arm cuff lock to lock the arm cuff. Once inserted, the arm cuff can not be disconnected from the upper stem.

4. To avoid damage, do not pull the search coil cable with force. When connecting the cable to the socket on the rear of the control box or disconnecting the cable from the socket, hold the cable plug instead of the cable.

PANEL OF THE CONTROL BOX

Figure 5

1. Meter

Used to indicate the operating status of the detector.

2. Earphone Jack

3. ALL METALS/DISC Knob

Counterclockwise turn this ALL METALS/DISC knob to the "ALL METALS" position. The knob clicks and the detector stays in the ALL METALS detection mode.

When this knob is in the "ALL METALS" position, clockwise turn it and, after it clicks, the detector is in the DISCRIMINATION (DISC) mode.

4. POWER/VOLUME Knob

Used to turn on or off the detector or select a desired alarm volume.

To turn on the detector, clockwise turn this POWER/VOLUME knob until it clicks. Continue to clockwise turn this knob to increase the alarm volume.

To decrease the alarm volume, counterclockwise turn this knob. To turn off the detector, counterclockwise turn this knob until it clicks.

5. SENS Knob

Used to adjust the sensitivity of the detector.

You can clockwise turn this **SENS** knob to increase the sensitivity, or counterclockwise turn this knob to decrease the sensitivity.

6. Low Battery Indicator

When the batteries are not high enough, this low battery indicator will light up as an indication and you must replace the batteries immediately; otherwise the detector's detecting ability will decrease or the detector will not be able to work normally.

OPERATING INSTRUCTION

Preparation prior to metal detection

Before beginning an outside search, test the detector with the following metal samples:

•An iron nail

•A five-cent coin (nickel)

•A one-cent penny (zinc coin, after 1982)
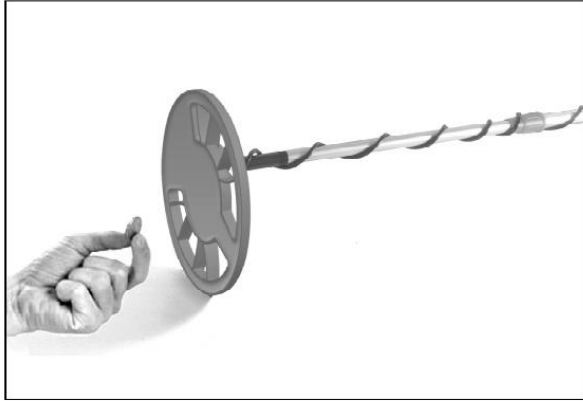
•A 25-cent silver quarter

Figure 6

Place the metal detector on a wooden or plastic table with the search coil roughly perpendicular to the table surface (see Figure 6). Make sure the table is far away from TVs, computers, or any device that can cause electromagnetic interference.

Note: To avoid interference, remove any watches, rings, or other metal objects on your fingers and hands.

Testing the detector in the All METALS mode

Counterclockwise turn the **ALL METALS/DISC** knob until it clicks. Now the detector is in the ALL METALS mode. Gently turn the **SENS** knob completely clockwise until it reaches the end.

Now the detection sensitivity is at the highest level. Refer to Figure 6, respectively pass the metal samples (the iron nail and 3 coins) across the search coil at a distance of 5cm to 8cm. When any of the metal samples passes across the search coil, the detector should beep and the meter pointer should deflect rightwards. When the detector stops sounding, the meter pointer should return to its original position quickly.

The ALL METALS mode allows the detector to achieve the maximum detection depth possible.

Note: During test, the metal sample which you are using must be in motion; otherwise the detector will not respond to this metal sample.

Testing the detector in the DISCRIMINATION mode

Note:

The Figure 7 on the right shows the knob positions for some often encountered metals. If the **ALL METALS/DISC** knob is in one of these positions, the corresponding metal will be ignored during scanning. The specifications or descriptions on the figure are not accurate and are for non-critical reference only.
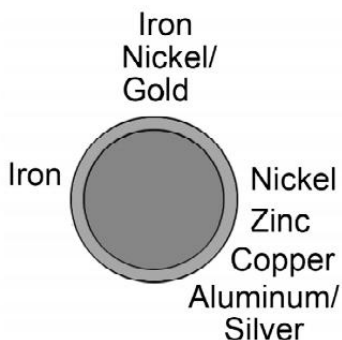

Iron
Nickel/
Gold

Iron

Nickel
Zinc
Copper
Aluminum/
Silver

Figure 7. The ALL METALS/DISC Knob

Make sure that the **ALL METALS/DISC** knob is in the "ALL METALS" position, then turn the knob clockwise until it clicks. Now the detector is already in the DISCRIMINATION mode. In this mode, you can use the **ALL METALS/DISC** knob to search for specific metals by having it ignore other kinds of metals. At the present knob position, where the knob just clicked, the detector will respond to ANY metal object and the meter pointer will swing to the right when the detector beeps.

1. To adjust the settings to prevent the metal detector from detecting iron metals, set both the **VOLUME** knob and **SENS** knob at midpoint (or a higher setting).

2. Then set the **ALL METALS/DISC** knob to about " 12 o'clock ". See Figure 8.

Figure 8. The ALL METALS/DISC Knob

3. As a test, sweep the iron nail sample across the search coil at a distance of about 5cm to 7.5cm, the detector will not beep and the metal pointer will not deflect, but the other metal samples (the three coins) will cause the detector to beep and the meter pointer to deflect rightwards when they are respectively swept across the search coil.

4. To have the metal detector ignore nickel metals, set the **ALL METALS/DISC** knob to about " 3 o'clock " (see Figure 9). Sweep the nickel across the search coil at a distance of about 5cm to 7.5cm; the metal detector will not respond to the nickel or the iron nail. But it will respond to the other samples.
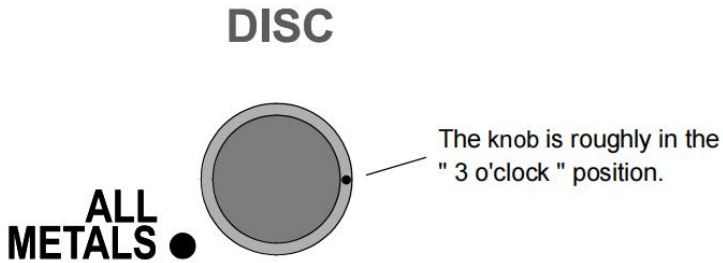
DISC

The knob is roughly in the
" 3 o'clock " position.

ALL
METALS ●

Figure 9. The ALL METALS/DISC Knob

5. To prevent the zinc penny from being detected, set the **ALL METALS/DISC** knob to about " 5 o'clock " (see Figure 10). By now, only the 25-cent silver quarter should be detected.

DISC

ALL
METALS ●

The knob is roughly in the
" 5 o'clock " position.

Figure 10. The ALL METALS/DISC Knob
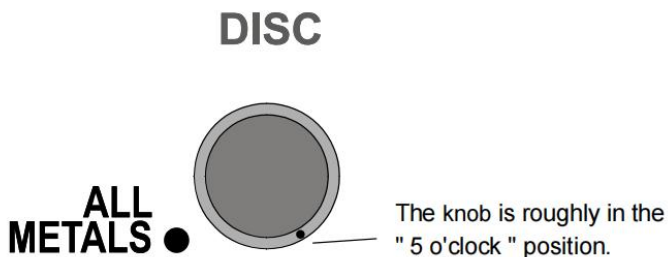
Note: The discrimination position of aluminum is similar to that of silver. So both metals will be detected at the same time. The discrimination position of gold is similar to the nickel setting.

Through the above tests, you can quickly know the performance of the detector and know how to use the detector.

Tip: During test, the metal sample which you are using must be in motion.

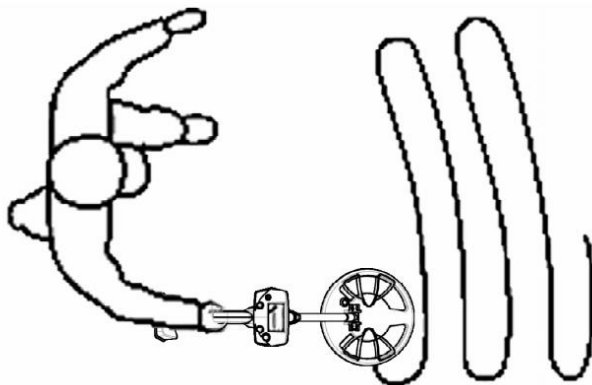# Detecting metallic object with the detector

Figure 11. Detecting Metallic Object

After you finish all the tests mentioned above and have set the detector to meet your need, you can start to detect metallic objects.

Turn on the detector, and set it in the ALL METALS mode. Adjust the **SENS** knob to a desired sensitivity setting, and be far away from any external interference source.

During detection, keep the search coil height approximately 3cm to 5cm above the ground and parallel to the ground at all times for best detection results, walk slowly as you scan slowly the search coil in a straight line from side to side.

When you detect a metallic object, you can use the DISCRIMINATION mode to try further identification or discrimination, if necessary.

Metal detection is a careful, difficult job. Because there may be iron nails, metallic oxides, and metal scraps in soil, it may be necessary to perform detection many times in a same location to get an accurate result, especially in an area where the soil contains complex mineral substance constituents.

Note:

1. Because many factors (degree of oxidation of metallic object, metal impurities

in soil, soil moisture content, etc) can affect metal detection/identification in DISCRIMINATION mode, the results of metal identification/discrimination are not guaranteed to be correct.

2. During detection, the search coil must be in motion. If the search coil is still, the detector can not detect metal normally.

3. The detector can work with the earphone (optional). To use the earphone, just insert the plug of the earphone into the earphone jack on the control box, the loudspeaker in the control box will be disabled automatically.

Note:

For safety, do not use earphone near traffic.

To avoid hearing loss, do not use earphone if using it makes you feel uncomfortable.

DUAL-FREQUENCY AUDIO ALARM FUNCTION

The detector has a dual-frequency audio alarm function. When it detects a ferrous metal object, it emits a tone of 660Hz audio signal, and when it detects a non-ferrous metal object, it emits a tone of 2000Hz audio signal.

BATTERY REPLACEMENT

When the low battery indicator lights, the batteries are not high enough and must be replaced immediately.

To replace the batteries, turn off the detector first. Then slide the battery cover (see Figure2) downwards to remove it. Replace the old batteries with new ones of the same type, make sure that the polarity connections are correct (see the polarity indications at the bottom of the battery compartment). Reinstall the battery cover.

NOTE

1. To preserve battery life, turn off the detector when not in use.

2. If the detector can not operate normally, a possible cause is that the batteries are exhausted.

3. Protect the plug of the search coil cable from damp; otherwise the detector may lose its detecting ability. Dry the plug as needed.

4. The control box is not waterproof. Protect the control box from water, and do not use the detector in the rain.

5. Do not place the detector in any high-temperature environment.

6. Do not tamper with the circuit of the detector.

7. Do not pull the search coil cable with force.

8. Handle the detector gently. Do not bump, drop or abuse the detector.

9. When you turn a knob, do not apply excessive force.

WARNING

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

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

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

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

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

5. Observe all national, state and local laws while detecting.

TECHNICAL SPECIFICATION

Operating Current: About 40mA
Battery: 1.5V battery, AA or equivalent, 6 pieces

DECLARATION

1. This manual is subject to change without notice.

2. Our company will not take the other responsibilities for any loss.

3. The contents of this manual can not be used as the reason to use the detector for any special application.

ACCESSORIES

Manual: 1 piece
Earphone: 1 piece
Handbag: 1 piece
Digging shovel: 1 piece
Earphone plug: 1 piece
Battery: 6 pieces

Address： Baoshanqu Shuangchenglu 803long 11hao 1602A-1609shi

Shanghai
Imported to USA: VEVOR STORE INC, 9448 RINCHMOND PL #E
RANCHO CUCAMONGA, California, 91730 United States of America

EC	REP	SHUNSHUN GmbH
		Römeräcker 9 Z2021, 76351
		Linkenheim-Hochstetten, Germany

Made In China

VEVOR ®

TOUGH TOOLS, HALF PRICE

Technical Support and E-Warranty Certificate
www.vevor.com/support