Gold-Tac QUAVAR-PI

Audio/Haptic Aid & Digital Amp



User Manual

Model: QVPI-500



Neil looking for a target

Congratulation on purchasing your

QUAVAR-PI

Audio/Haptic Aid & Digital Amp!

Metal detecting is a fascinating and rewarding activity enjoyed by many people all over the world. Deafness partial or profound, has made it difficult and even impossible for some to take up or continue metal detecting. By getting to know and use you Quavar, you will find that deafness in no longer an *impediment!*

With the assistance of this device you too can become one of the many, finding gold and other treasures.

You to can go out there and have a good

Gold-Tacing Day!

We of **Gold-Tac** are wishing you enjoyable & profitable adventures.





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A target has been found

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Pinpointing the target

Introduction

The CUAVAR-PI is design for persons with a hearing impairment, who are or desire to be Detectorists.

- The device offers tactile perception delivered by an haptic transducer to the operator. The detector dose not require to be operated without audio.
- Audio has also been provided as teaching aid and for operator with partial loss of hearing
- The QUAVAR-PI has the ability to discern between proper and false targets. For beginners this aid will make it easier in reducing false targets and having to do less digging.
- Familiarise your self with your detector by reading its manual.
- Follow the simple step by step explanations provided in our manual on setting up and linking the devices.
- We have also provided you with simple explanation to pre-set your detector and prospect without SOUND.



Neil using the CUAVAR-PI with is GPX 5000



QUAVAR-PI & Attachments





Digging up the target

Power Supply (Fig.2)

The QUAVAR-PI is power by a 1.5A Lithium rechargeable battery. Included in the in the device is a dedicated charger and battery protection systems.

Note: The battery should be fully charged before use.

Charging from a car 12V DC outlet:

- * Select the unit car charging adaptor supplied with your kit .
- Insert the 2.1mm Female DC plug into the male bulkhead DC fitting (5).
- * Plug the cigarette lighter end into the 12V DC outlet of your car.

Charge Status Indicator: (Fig.2)

- * Power ON, is displayed with a green LED (6).
- * When battery is charging s red LED (6) is on.
- * When fully charged the red LED will turn OFF.

You will have an 8-hour use time from a 3-4 hour charge.

The QUAVAR-PI automatically adjusts to maintain audio and detecting performance as the battery discharges during use.







The target has been dug up

<u>Assembly</u>

Audio Input Cable: (Fig.2)

- * Select the audio cable supplied in the kit.
- Carefully insert the female 2 pin plug into the male
 2 pin input plug (1) fitted to the bottom panel.
- * Screw the lock nut securely.

Haptic transducer: (Fig.1)

- * Select the audio/haptic Transducer.
- Insert carefully the female 3 pin plug into the male plug (2) fitted to the bottom of the panel.
- * Screw the lock nut securely.

Audio Amplifier Output: (Fig.1)

The QUAVAR-PI provide audio amplification for the use of an external speaker. The speaker can be used a teaching aid, and for operator with partial loss of hearing preferring to have sound.

 The 6.5mm audio output jack (3) fitted to the top panel, is to be used with mini external speaker supplied in the kit. The external speaker and haptic transducer can be used at the same time.

ON/OFF Volume Switch: (Fig.1)

 The switch (4) activates the haptic transducer and audio amp, as well as controlling the amplifiers volume. The haptic system dose not require sound to operate. The volume can turned down.





Fig. 1



Fig. 2



Looking for the it in the pile of dirt

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Setup Procedure (QUAVAR-PI & Metal Detector)

Once you have assemble the attachment to the device. Clip it to the waist band of your harness, now you are ready to tune your Detector To the QUAVAR-PI. It is a very simple procedure. We are providing you with a series of setting to suit Minelab pulse induction detectors series. Just fallow the steps.

Note: For the best tactile perception, secure the haptic transducer underneath your harness on the chest area for maximum body contact.

- Connect the QUAVAR-PI to your detector by inserting the 6.5mm male jack from the audio cable of the device into your detector power pack or battery audio output female jack.
- Next turn on both machines and let the detector go through its tuning cycle. On the QUAVAR-PI adjust the volume of its external speaker to a comfortable level. The haptic transducer activates automatically when the device is turned to the ON position.

SD & GP Series:

 On your detector adjust the Audio Pitch (TONE).
 With the SD & GP series the TONE level is to be set to about 3/4 of the way up. Use the QUAVAR-PI audio extension cable (GT3021).

SDC Serie:

 The SDC 2300 has two audio pitch settings, High and Low. For the Quavar-PI to function properly the detector has to be set to the <u>LOW</u> Audio Pitch (Tone) setting.

GPX Series:

 With the GPX 5000 it is important to set the Audio Tone to 43 or under so as not to overload the QUAVAR-PI. Do not lower the setting below 40 or raise the setting above 45.

GPZ Serie:

 With the GPZ 7000 it is important to set the Threshold Pitch to between 65 to 70. It has a preset setting of 53.



Passing the scoop over the coil to fiend the target

Note: With the GPZ connect your QUAVAR-PI to the audio output on the Wireless Receiver or directly to the detector, using the Gold-Tec QUAVAR-PI audio extension cable (GT3021).

Final Calibration:

For best results do a final adjustment. You will require 3 or 4 metallic targets, between say 0.5g to 2g. Place the targets on the ground and pass the coil over them. You should hear the sound through the speaker and be able to feel the vibration from the transducer. The transducer will be mimicking (with a slight delay) the audio output from your detector as your coil passes over the targets. Once the proper adjustment has been reached the transducer will only activate for metallic targets.

Note: All detectors are slightly different. Therefore the Audio pitch (TONE) may have to be adjusted on your particular machine to attain the right audio frequency for the Haptic system to function properly. The given values are just a benchmark to get you started. If required, increase or lower the pitch until a happy medium is reached.

Detector's Operating Settings

SD Series:

- * Balance: Both channels.
- * **Threshold**: Fraction above 1/3.
- * **Depth**: Deep.
- * Tone: 3/4 way up to suit QUAVAR-PI.
- * Level Adjust: a bit over 1/2, tracking faster.
- * Running: All metal.
- * Balance Mode: Tracking

GP Serie:

- * Boost: Deep.
- * Threshold: 1/3 of the way.
- * Signal: 9/10 of the way.
- * Volume: 9/10 of the way.





Flicking through the dirt to fiend the target

- * **Tone**: 3/4 way up to suit QUAVAR-PI.
- * Level Adjust: a bit above 1/2.
- * Soil: Sensitive.
- * RX Gain: Enhance.
- Balance: Tracking

SDC Serie:

- * Noise cancel: Reset for the area you are working.
- * Threshold: Set it to about mid way.
- * **Detecting Mode**: Pick setting appropriate for the type of ground you are working.
- * Audio Pitch: set to low Pitch to suit the QUAVAR-PI.

Note: Follow the steps in the detector's manual and familiarise yourself with your machine.

GPX Series:

- * Volume limit: Set high on 16.
- * Ground Balance: Type, General.
- * **Special**: Set for FINE GOLD.
- * Manual Tune: 46 depending on EMI.
- Motion: Slow.
- * **RX Gain**: 11 (highly mineralised ground).
- * Audio Type: Run quiet.
- * Audio Tone: 43 (when using QUAVAR-PI)

do not go below 40 or above 45

- * Stabilizer: Set to 6.
- * Signal Peak: Set to 16
- * Target Volume: up to 20
- * Response: Set to normal.
- * Tracking Speed: Set to medium



This is important to set the *Audio Tone* to 43 or slightly under has not to overload the QUAVAR-PI. Do not go below 40 or above 45.





There it is, a nice little gold nugget

Summary:

For this detector alone, there is probably 300 possible settings. The settings we have given you are for persons with hearing impairment, so as to pre-set their detector without having to use sound and knowing that it will be working as it should. Those setting are for highly mineralized noisy ground. But when used on benign ground (low mineralization) those setting will give you a deeper ground penetration. For some one starting detecting the setting will make is easier to find gold.

Detecting and Pinpointing Targets

(with no sound).

Target detection:

- To obtain the best performance, the coil is to be swung close and parallel to the ground at all times.
- Swing from side to side (Fig. 1) while walking forward and notice the slight time delay between the detector & the response of the Haptic transducer.
- The average swinging time is 3 seconds from side to side.
- When the coil is passed over a target, the transducer will respond at either end of a 30 to 40cm gap.
 Use imaginary lines or mark the ground. The target will be situated in the centre. The gap will narrow by slowing down your swinging.



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Remember to always fill in your holes

Pinpointing targets: (Fig. 2)

 Step back, then go forward slowly with a back & forth coil motion toward the centre of gap. Once the edge of the coil gets to the target, the transducer will respond. Now just dig!

Setting Ground Balance: (with no sound)

The simplest way is to run the detector on TRACK-ING, it will automatically cancel the affects of ground mineralisation and adjust the ground balance setting when the ground changes.

- The change in balance is displayed by a steady vibration from the haptic transducer. To adjust and reset just pump your coil up and down 10cm off the ground until the vibration stops.
- Passing the coil over a loud target will overload the machine as well, a steady vibration will be produced. Use the same procedure as above.
- * Only use FIXED when you have a definite target.
- Do not keep swinging the coil over the target in TRACKING you may end up ground balancing out the target.



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Away we go, more nuggets to be found

Technical Specifications

Quavar-PI:	Audio/Haptic Aid
Audio amplifier:	Digital
Speaker resistance:	8 Ω
Speaker wattage:	1.5W
Power supply:	Lithium battery
Battery capacity:	1,500 mAh
Audio output jack:	6.5mm female
Audio input cable:	6.5mm male jack & 2 pin plug
Haptic Transducer:	Gold-Tec transducer with 3 pin plug
Charging:	Fused car charging adaptor (5A) with 2.1mm plug

Accessories

- GT3021: CURVER Audio Cable, 1.6m suits SDC & GPX detectors.
- GT3011: Gold-Tac 240V-12VDC regulated switchmode power adaptor, 2.1mm plug - 500mA
- GT1001: Gold-Tac Mini External Speaker & 3.5mm to 6.5mm jack adaptor.
- GT2011: Gold-Tee Universal Bungee, suits all detector models.

Cautions

- Please use only supplied components or optional accessories produced by Gold-Tec to avoid damage to the unit.
- Please refer to our distributors or direct to Gold-Tec for the optional accessories suitable for your unit.
- * To reduce the risk of damage, do not expose the Quavar-PI to rain or moisture.
- When charging never place the unit on dashboard of a car. <u>Always</u> place it in a cool place. Lithium batteries do not like to be abused. Explosions could occur.



PUAVAR-PI

<u>Warranty</u>

The QUAVAR-PI control unit has a 1 year warranty covering parts and labour. Refer to your online registration for details.

The QUAVAR-PI Haptic transducer has a 1 year out of the box warranty against manufacturing defects. Refer to either your supplier or Gold-Tec directly for service.

The warranty period commences from the date of purchase.

The Gold-Tec warranty does not cover damage caused by accident, misuse, neglect, alteration, modification or unauthorised service.

It is the responsibility of the owner to pay all transport costs for getting the unit to Gold-Tec. The repaired unit will be returned to the owner freight free.

Note: The warranty is not transferable. The warranty will only be valid when the online warranty registration has been completed within 14 days of original purchase.



Giving you the Edge

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