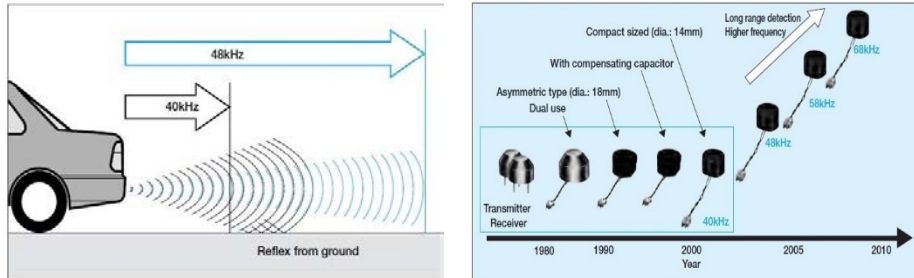




QST **250**

USER GUIDE

The QST250 is designed to give a visual indication of the output signals of ultra-sonic parking sensors found on many of today’s vehicles. The tool supports both the old 40 kHz and newer 48 kHz sensors and through advance diagnostics allows you to determine the frequency of the sensors and compare them to ensure the correct ones are fitted.



Important Notices

COPYRIGHT

No part of this manual may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise) without prior written permission from Bartec.

DISCLAIMER

Bartec makes commercially reasonable efforts to provide accurate and complete data in connection with our tools and our website, but the volume of data compiled and the variety of sources from which the data comes makes it impossible to warrant full accuracy or completeness of any kind. AS A RESULT, BARTEC DOES NOT WARRANT, AND SPECIFICALLY DISCLAIMS ANY WARRANTY, THAT OUR TOOLS, WEBSITE, AND/OR THE CONTENT CONTAINED THEREIN IS ACCURATE OR COMPLETE.

All specifications, illustrations and information contained within this manual are based on the most current information available at the time of publication. Bartec reserves the right to make changes at any time without obligation to notify any person or organization. Bartec will do its best to keep customers informed of any changes that might affect the tool’s performance.

Important items will be called out by using “NOTE”. Information following this indication should always be paid attention to.



Whenever you see this symbol, the information you are about to read is vitally important and should be committed to memory.

CE COMPLIANCE

Type Designation: **QST250**

Description/Intended Use: Handheld vehicle diagnostic and service function tool.

Hereby, **Bartec** declares that the product referenced above is in compliance with the essential requirements of **Directive 1999/5/EC**, on the approximation of the laws of the member states relating to **Directive 1999/5/EC**.

Contents

Important Notices.....	1
COPYRIGHT.....	1
DISCLAIMER.....	1
CE COMPLIANCE.....	1
Kit Contents.....	3
Tool Layout.....	3
Installing Batteries	3
Power On/Off.....	3
Checking the Parking Sensors	3
Using Tool [Stand Alone].....	4
Using Tool [with External Sensor (Probe)].....	4
Quick Test.....	4
Advanced Tests	4
Pulse Oscilloscope.....	5
Peak Output Scan.....	5
Bar Graph	5
Frequency Analyzer.....	5
Settings.....	5
Sound Control	5
Turn Off Time	5
Software Version.....	6
LCD Screen Contrast.....	6
Specifications	6
Tool Service.....	6
Technical Support	6
LIMITED WARRANTY and REPAIR.....	7
TOOL REGISTRATION FORM (By Fax or Mail).....	9

Kit Contents

- QST250 Tool
- External Sensor (Probe)
- Sticky Pad



Tool Layout




Installing Batteries

The QST250 is powered by 4 AAA Alkaline Batteries. Batteries will provide operational time of over 20 hours and will indicate when the batteries are low.

NOTE: It is recommended that when you change the batteries you change ALL 4.

Power On/Off

The QST250 has a dedicated power button  located in the center of the tool.

To turn the tool ON, press and HOLD the POWER button until the screen illuminates. To turn the tool OFF, press and HOLD the POWER button until the screen is off. The tool can be turned off from any of the menus and does have an Auto Off feature (Turn Off Time) that can be adjusted in the Settings Menu.

Checking the Parking Sensors

In order to check the sensors, you will need to force them to transmit. In most cases the sensors will transmit when the vehicle is in reverse.

Place vehicle on level surface, engage parking brake and chock the wheels so the vehicle doesn't move. Turn the Key On Engine Off and shift the vehicle in Reverse.



NOTE: some vehicles will not shift to reverse unless the vehicle is running. Do NOT exit the vehicle. Either use the External Sensor lead or an extra person.

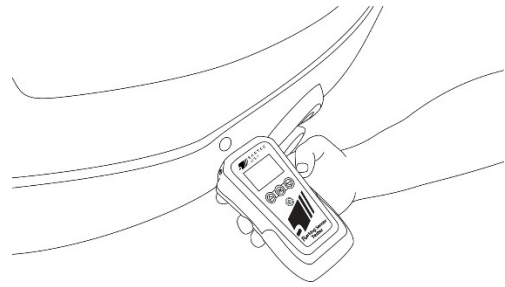
NOTE: in some cases, if there are 1 or more sensors not working, the system will transmit a signal during a test mode but stop transmitting once it sees a bad sensor(s), use the External Sensor lead and test each sensor individually.

Using Tool [Stand Alone]

To use the tool, Stand Alone, select either Quick Test or pick from the list of Advanced Tests. Once you are in an operations screen, point the tool towards the parking sensor.



The tool will detect and display the output signal as shown here. To continue to the next sensor, press OK.



It is important to maintain the same distance away from each sensor when conducting testing as the distance will affect the output level

shown.

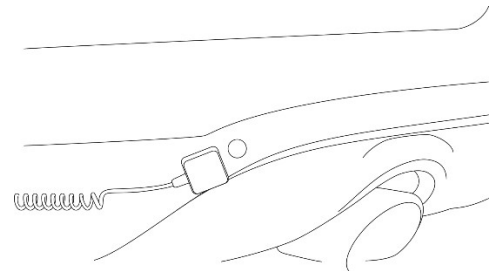
Using Tool [with External Sensor (Probe)]

Place the external sensor probe as close to the parking sensor as possible ensuring the pickup hole is pointing towards the sensor.



DO NOT STICK IT ON TOP OF THE SENSOR

Please note the internal and external sensor pick-ups will produce slightly different results. Please ensure you test all sensors with the same pick up to avoid mixed readings



Just like using the tool in stand-alone, the screen will show the output level of the sensor.

Quick Test

The QST250 has a Quick Test function that allows for testing the ultra-sonic parking sensors displaying a basic peak level output in a comparative bar graph layout.

This function will allow you to test up to 8 sensors (you can test anywhere from 1-8 sensors) and compare their output levels in one screen.

To use this function, select Quick Test from the Main Menu.



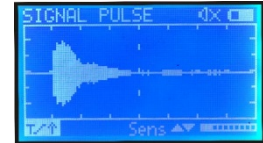
The tool will allow you to set the sensitivity using the up and down arrow keys. For most tests, the default sensitivity will work. Once set, press OK to continue.

Advanced Tests

The QST250 has the ability to display the output information from the ultra-sonic sensor in different formats by selecting from the Advanced Test list.

Pulse Oscilloscope

This allows the technician to see the Signal Pulse of the sensor displayed in an “on-tool” oscilloscope.



Peak Output Scan

Shows output level on a continuously updating graph.



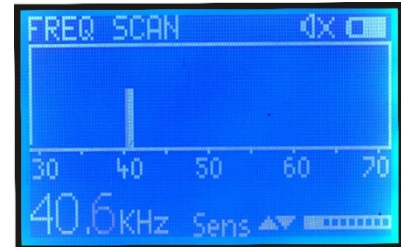
Bar Graph

Shows output level on a bar graph



Frequency Analyzer

As some sensors can be of varying frequency, this feature allows you to check and verify all the sensors are operating at the same frequency.



NOTE: during this test, do not mix using stand-alone and external sensors as the results will be skewed.

Settings

The QST250 can be configured using the settings for:

- Sound Control
- Turn Off Time
- Software Version
- LCD Screen Contrast

Selecting Exit on any of these menus will return you to the Home/Main Menu.

Sound Control

Allows the user to turn the sound on/off for:

- Pulse Detection
- Key Press

Selecting “None” will mute all sound. There is no volume control, only the option to turn the sound on or off.

Turn Off Time

Allows the user to determine the amount of inactive time before the unit powers off.

You can choose from:

- NONE
- 5 min
- 10 min
- 15 min

Software Version

Displays the version of software loaded on the tool.

NOTE: the QST250 cannot be updated

LCD Screen Contrast

Allows the user to adjust the contrast of the tool screen. To adjust, press the up/down arrow keys until the screen has reached the desired contrast and press Enter.

Specifications

Operating Voltage	6Volts
Frequency Detection Range	30kHz to 70 kHz
Battery	4 x AAA Alkaline or NiMh
Operation Temp Range	32 to 122 degrees F
IP Rating	IP61
Size	1.5”h x 3.75”w x 6.75”l
Weight	2 pounds



Tool Service

The QST250 is not field serviceable. If damage occurs, or the tool does not power on, follow these steps to get you back up and running again:

1. Contact our Technical Support team with your concerns. Please have the serial number ready.
2. If our Technical Support team cannot correct your issues in the field, they will begin the process for a Return Material Authorization (RMA) to have your tool sent in for service.
3. Our Technical Support team will pass your information along to our Repair department, who will assist you with the details on processing your return. Information you should receive includes:
 - Your RMA #
 - Ship-to address of our repair facility
 - Confirmation of your return shipping address



Do not attempt to open your Bartec tool, as this will void your warranty!

Technical Support

To speak with our Technical Support team, please call our toll-free number: (866) 407-8767

Or contact us by email: help@bartecusa.com

Hours of operation: 8am-8pm EST, Monday-Friday

For efficient and accurate service, please have the following information ready when contacting us:

- **QST250 Serial Number:** This allows your call information to be added to our database for future reference.
- **Have the vehicle in question in-house:** This helps our Technical Support team to walk you through resolving the situation.

LIMITED WARRANTY and REPAIR

Bartec products are guaranteed for a period of 1 year from the original date of purchase (either from the factory or authorized dealer). In order for your warranty to become active, you must register your tool with Bartec USA by mailing in the warranty card or registering on our website. We warranty that the tool will be free from defects in material and workmanship, when properly used. THIS WARRANTY APPLIES ONLY TO THE ORIGINAL CONSUMER PURCHASER OF THIS PRODUCT. In the event of a defect, Bartec USA LLC will, at its discretion, repair or replace the tool with a product of like kind or quality, which may be new or reconditioned. The repaired or replaced product will be warranted for 90 days from the date of return shipment, or for the balance of the original warranty, whichever is longer. Claims of all defects must be submitted within 30 days of occurrence and verified by an authorized Bartec representative. **Limitation of Liability:**

Under no circumstances shall Bartec be liable for any special, consequential, or incidental damage arising from any defect in products manufactured or sold by Bartec outside of the responsibilities expressed by this warranty. No person, distributor, or representative of Bartec is authorized to make any representations on behalf of Bartec beyond those expressly stated in the applicable literature. Bartec reserves the right to make design and other changes, modifications, or improvements without any obligation to install the same on previously sold or delivered products. It is expressly agreed that the liability of Bartec is limited, and we do not function as an insurer. The remedies set forth in this warranty shall continue the exclusive remedies available to the purchaser or user and are in lieu of all other remedies expressed or implied. The liability of Bartec, whether in contract, or in tort, under any warranty or otherwise, shall not exceed the selling price by Bartec or the manufacture of the particular product made, sold, or supplied by Bartec.

Exclusions:

The following items are excluded from the warranty coverage: - periodic maintenance and repair or replacement of parts due to normal wear and tear

- batteries (except internal)
- finishes
- service performed or attempted by anyone other than an authorized Bartec service technician

Opening, dismantling, or repairing of this product by anyone other than an authorized Bartec technician will void this warranty.

LIMITED WARRANTY and REPAIR

This warranty does not apply to damage or loss by and or all the conditions:

- Freight Damage
- Decals, Overlays or Decorative Items
- Misuse or misapplication or failure to follow the directions, or failure to follow cautions or warnings on product, operation, service guides, etc.
- Minor stress cracks in surfaces that are considered cosmetic and have no effect on tool function or performance or safe use.
- Any damage related to fire, accident, misuse, acts of war, disaster, terrorism, or God.

It is expressly agreed that the liability of Bartec limited WARRANTY IS EXCLUSIVE. BARTEC DISCLAIMS ANY AND ALL OTHER WARRANTIES. Bartec USA, LLC does its very best to ensure the accuracy of the information contained in work instructions but cannot be responsible for errors or omissions by third party sources.

This warranty is exclusive to the original purchaser of the tool and is not transferable. **Repair Terms:**

To obtain service for your Bartec tool the purchaser must obtain a Return Materials Authorization (RMA) number from Bartec USA customer service prior to shipping. Bartec shall not be liable for any expense incurred by purchaser in order to remedy a defect without prior authorization. To obtain your RMA number, you will need to provide at a minimum the follow: 1) Model and Serial Number, 2) Supplier from which the tool was purchased 3) Date of purchase, 4) Description of problem, how and when it occurred. Please note that Bartec USA may attempt to have you try some things in the field prior to issuing an RMA number to determine if the tool does need to come back. The purchaser must return the product per the instructions on the RMA form.

Bartec USA may refuse your delivery if the RMA number is not clearly marked on the outside of the box.

Bartec USA reserves the right to refuse to provide service free-of-charge if the sales receipt is not provided or if the information contained in it is incomplete or illegible or if the serial number is altered or removed. Bartec USA is not reasonable for any losses or damage to the product incurred while the product is in transit or is being shipped for repair.

IMPORTANT NOTE: IN ORDER TO COMPLETELY & PROPERLY DIAGNOSE THE ISSUE THE ENTIRE KIT MUST BE RETURNED.

LIMITED WARRANTY and REPAIR

Warranty Repair Freight:

Inbound freight costs for warranty repair tools will be the responsibility of the customer. Freight costs out bound will be paid by Bartec and returned in the same method as the inbound.

Non-Warranty Repair Freight:

Inbound freight costs for non-warranty repair tools will be the responsibility of the customer. Outbound Freight costs will be paid by Bartec and returned UPS ground.

Freight:

Warranty Repair:

Inbound freight costs for warranty repair tools will be the responsibility of the customer. Freight costs out bound will be paid by Bartec and returned in the same method as the inbound.

Non-Warranty Repair:

Inbound freight costs for non-warranty repair tools will be the responsibility of the customer. Outbound Freight costs will be paid by Bartec and returned UPS ground.

MECHANICAL TOOLS & CABLES:

Warranty:

Bartec MECHANICAL Tools and cables are warranted for 180 days from the ORIGINAL purchase date (from an AUTHORIZED DEALER). When properly used and maintained, Bartec will warranty the tool to be free from defects in material and workmanship. The Warranty applies ONLY to the ORIGINAL OWNER and is not transferable. In the unlikely event of a defect, Bartec will at its discretion repair or replace the tool with a product of like kind or quality which may be new or reconditioned. The repaired or replaced product will be warranted for 90 days from the date of the return or the balance of the original warranty, whichever is longer. Claims of ALL defects must be submitted within 30 days of occurrence and verified by an AUTHORIZED BARTEC agent or representative.

TOOL REGISTRATION FORM (By Fax or Mail)

First Name: _____

Last Name: _____

Company: _____

Address: _____

City: _____

State: _____ ZIP: _____

Phone#: (____) _____ - _____

Fax #: (____) _____ - _____

Date of Purchase: ____/____/_____

Supplier Purchased from: _____

Serial Number: _____

Model: _____

Email Address: _____

Please complete and mail to: Bartec USA:

Attention Inside Sales

44231 Phoenix Drive, Sterling Heights, MI 48314

Or fax to 586-323-3801