

CORDLESS ELECTRONIC LISTENING TOOL

USER MANUAL



Save Time trouble-shooting with the Wireless ChassisEAR™

USE FOR:

- Road Test Diagnose
- Under Chassis
- Under Hood
- Fuel Injectors
- Industrial Equipment
- Switches

CAUTION: It is against many state laws to operate a motor vehicle while wearing earphones.



Wireless ChassisEAR™

Complies with harmonized standard for all EU countries

Channel frequencies

- Channel 1 - 863.4 MHz
- Channel 2 - 864.6 MHz
- Channel 3 - 866.1 MHz
- Channel 4 - 867.6 MHz

NOTE: Changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

NOTE: Only cable leads/clamps supplied with this equipment must be used. It is responsibility of the user to use only the accessories supplied with this equipment.

The Wireless ChassisEar™ is a versatile electronic listening tool which is designed to allow the user to listen to amplified sounds through a speaker or earphones during a road test.

There are up to 6 extremely sensitive microphones/clamps that can be attached adjacent to many difficult to diagnose vehicle parts.

Some of these vehicle parts/areas include:

1. Wheel bearings
2. Brake callipers
3. C.V. joints
4. Leaf and coil springs
5. Differentials
6. Transmissions
7. Body squeaks and rattles
8. Under the dash
9. Fuel injectors
10. Alternators
11. Water pumps
12. Smog pumps
13. Power steering pumps
14. AC compressors
15. Industrial equipment

During a road test under load, these parts make different sounds than when the car is on a hoist. In order to accurately diagnose an under car problem, the car must be driven during diagnoses so that all parts and bearings are under full load and actual driving conditions.

Before using the Wireless ChassisEar™ for the first time, please review the components.

KIT CONTENTS- Wireless ChassisEar™ :

- 1 ea -Receiver unit
- 2 ea -Transmitter unit – channel 1-4
- 4 ea - Cable leads/Clamps – for all channels
- 1 ea - Ear phones
- 12 ea - Velcro straps
- 12 ea - Nylon straps
- 16 ea - AAA batteries 4 per unit
- 6 ea - AA batteries 6 per unit
- 1 ea - Blow molded case
- 1 ea - Vinyl pouch
- 1 ea - Location identifier note pad
- 1 ea -Instruction manual

HOW TO USE:

1. With the vehicle elevated, attached the clamps to the suspect areas. If, for example, you suspect there is a bad wheel bearing, attach the clamps, one each, per wheel bearing. Put the clamp on the tie rod or knuckle close the inside of the wheel. In order to generate an exact cross-comparison of sounds place the clamp on identical opposite locations. With the availability of two more channels, you could place transmitters on the transmission and differential, since many times what you think is a wheel bearing turns out to be something different. Or, if you suspect a brake problem, attach the 4 clamps adjacent to the brakes. **The closer clamp is positioned to the suspected problem, the better sound reproduction you will get.**

2. Be sure the transmitters are securely fastened to the locations chosen. Each transmitter has 3 methods of attachment:

- a) *First, there are two internal magnet so that transmitter can hold to a metal surface.*
- b) *Second, there is a Velcro strap that can be wrapped around any non-moving part.*
- c) *Third, there is a spring-loaded clam that can grab onto non-moving part. BE SURE EACH TRANSMITTER IS SECURELY HELD IN PLACE WITH ONE OF THESE METHODS TO AVOID LOSS OF TRANSMITTER FROM EXCESSIVE BUMPS OR SHAKING DURING ROAD TEST.*

Also, carefully check for clearance of all vehicle parts that are located close to the transmitters to avoid contact/damage from movement or heat.

3. Using the location identifier note pad, record information on not pad of the location and corresponding channel for each microphone/clamp. This will allow you to properly assign the problem noise to the proper malfunctioning part while conducting the road test.

4. It is highly recommended that if earphones are used during diagnoses (there is a earphone jack available on the receiver), that there be a separate driver for the vehicle.

CAUTION: It is against many state laws to operate a motor vehicle while wearing earphones.

5. Before conducting the road test , turn on the on/off volume control switch located on the front of the Wireless ChassisEAR™ receiver. Select the first channel and adjust the volume to the desired level. Various volume levels may reveal different sounds and problems. Initially make a mental note of the sounds you hear as you listen. Next, push each channel according to the locations, for example channel #2 and #4, just by pushing the channel indicator in an alternating manner.

IMPORTANT:

Make notes while driving (being cautions) as to what is heard on each channel (rattles, squeaks, grinding, whining, etc.) When you have returned to the shop, you can then zero in on the exact location of the noise/problem.

FUEL INJECTORS:

It is quick and easy to hook up the Wireless ChassisEAR™ clamps on fuel injectors. The “tapping” solenoid are easily heard. If a clear metal to metal “ringing” sound is heard, then the injectors is clean. If the “needle” inside the solenoid is making a dull “thud”, then a deposit buildup more than likely exists inside the injector. A cleaning of the injectors is suggested . It is important to listen to the injectors before and after cleaning in case one is still dirty after cleaning.

REPLACEMENT PARTS:

STE97216	Wireless ChassisEAR™ Kit
STE97216-01	WCE Receiver unit
STE97216-02	WCE transmitter – Channel #1
STE97216-03	WCE transmitter – Channel #2
STE97216-04	WCE transmitter – Channel #3
STE97216-05	WCE transmitter – Channel #4

CAUTION: When removing cable leads from transmitters, do not pull the wire or the warranty may be voided. You may damage the connection in the transmitter. Instead, hold onto the transmitter housing when removing cable lead.

LIMITED WARRANTY

Wireless ChassisEAR™ is backed by a 1 year limited warranty. This warranty covers manufacturer defects and workmanship. The warranty excludes misuse or abuse and normal wear and tear. Exclusion is not allowed in some states and may not apply. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.