

ZONAR[®]

Systems



2010 USERS GUIDE



EVIR™ ELECTRONIC VEHICLE INSPECTION REPORTS

FCC PART 15 COMPLIANCE

Compliance Statement (Part 15.19)

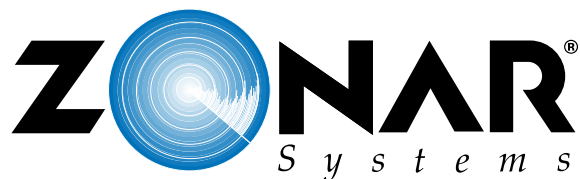
WARNING:

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.

Warning (Part 15.21)

Caution: Any change or modification not expressly approved by Zonar Systems could void the user's authority to operate the equipment.



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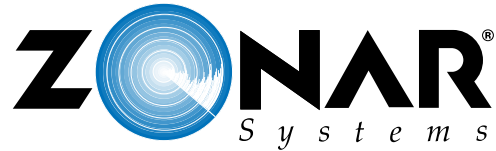
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LIMITED WARRANTY

Zonar does not represent or warrant that the hardware and software are free of bugs or errors and shall not be liable for any losses (financial or non-financial) occurring as a result of such bugs or errors. No other warranty express or implied, including any warranties of merchantability or particular purpose, is provided for any hardware or software provided pursuant to this contract. Zonar shall not be liable to customer, or any third-party for any general, special, punitive, incidental, indirect or consequential damages, or any loss of profits or business, arising out of this agreement. In no event shall Zonar's liability exceed the value of one month's subscription paid by customer to Zonar, not to exceed one thousand dollars, under this agreement.

Zonar warrants that the hardware and software comprise a verified safety inspection system which, when used according to Zonar's instructions, will allow the customer the ability to verify that safety inspections have occurred. However, Zonar disclaims any liability arising as a result of operator error (whether willful, negligent, or intentional) or misuse of the hardware or software. Customer shall have no other liability and customer shall have no other remedy, except as specifically provided in this paragraph; and in no event shall Zonar be liable for any consequential damages. The terms and conditions of this agreement shall apply to any replacement hardware and software furnished.



WHAT IT IS

The Zonar 2010 Replaces Paper Forms For Safety Inspections

The Zonar 2010 replaces all the paperwork that's required by Federal and State regulations for your pre and post-trip inspections. It's a handheld reader for radio frequency identification (RFID) tags. The RFID tags have been placed around the vehicle you drive in critical inspection areas or zones. So now as you go around the vehicle checking components, instead of paper forms, you'll use the Zonar 2010.

HOW THE ZONAR SYSTEM WORKS

The Zonar 2010's Part of An Electronic Safety Inspection System

The Zonar System is a paperless, electronic safety inspection system. In other words, the power of computers and the Internet eliminate the hassles of dealing with paperwork. Recording, reviewing, storing, and managing vehicle inspections becomes easier and faster. And most importantly, the Zonar System helps make sure that you're always driving a safe vehicle.

Specially Programmed Radio Frequency Identification (RFID) Tags

RFID tags have been put on the vehicle in critical inspection areas or zones. The RFID tags, which are weather-resistant—they can withstand mud, grease, and even ice—contain information about their location on the vehicle, fleet numbers, and the components you need to inspect.

The Zonar 2010 reads the tags and then prompts you to indicate whether the components in a particular zone are OK or BAD. When you find problems with components, you'll select descriptions of their defective conditions from a list. Then, you'll decide whether or not it's safe to operate the vehicle with the defective conditions.

If you're driving and stopped by a state trooper or police officer, you'll use the Zonar 2010 to provide on-road inspection verification.

Safety Inspection Information Stored In A Computer Instead of Boxes

The information about safety inspections that you record in the Zonar 2010 gets transmitted to computers at Zonar Systems via the Internet. How? You'll place the Zonar 2010 into a Reader Downloading Station (RDS) that's been installed where you work.

Management, safety, and maintenance personnel access the pre and post trip inspection reports from their computers. No more passing of paper, complaints about lost reports and illegible handwriting, and unnecessary delays in getting repairs made.

WHY IT MATTERS

The Zonar 2010 reads the tags and then prompts you to indicate whether the components in a particular zone are OK or BAD. When you find problems with components, you'll select descriptions of their defective conditions from a list. Then, you'll decide whether or not it's safe to operate the vehicle with the defective conditions. If you're driving and stopped by a state trooper or police officer, you'll use the Zonar 2010 to provide on-road inspection verification.

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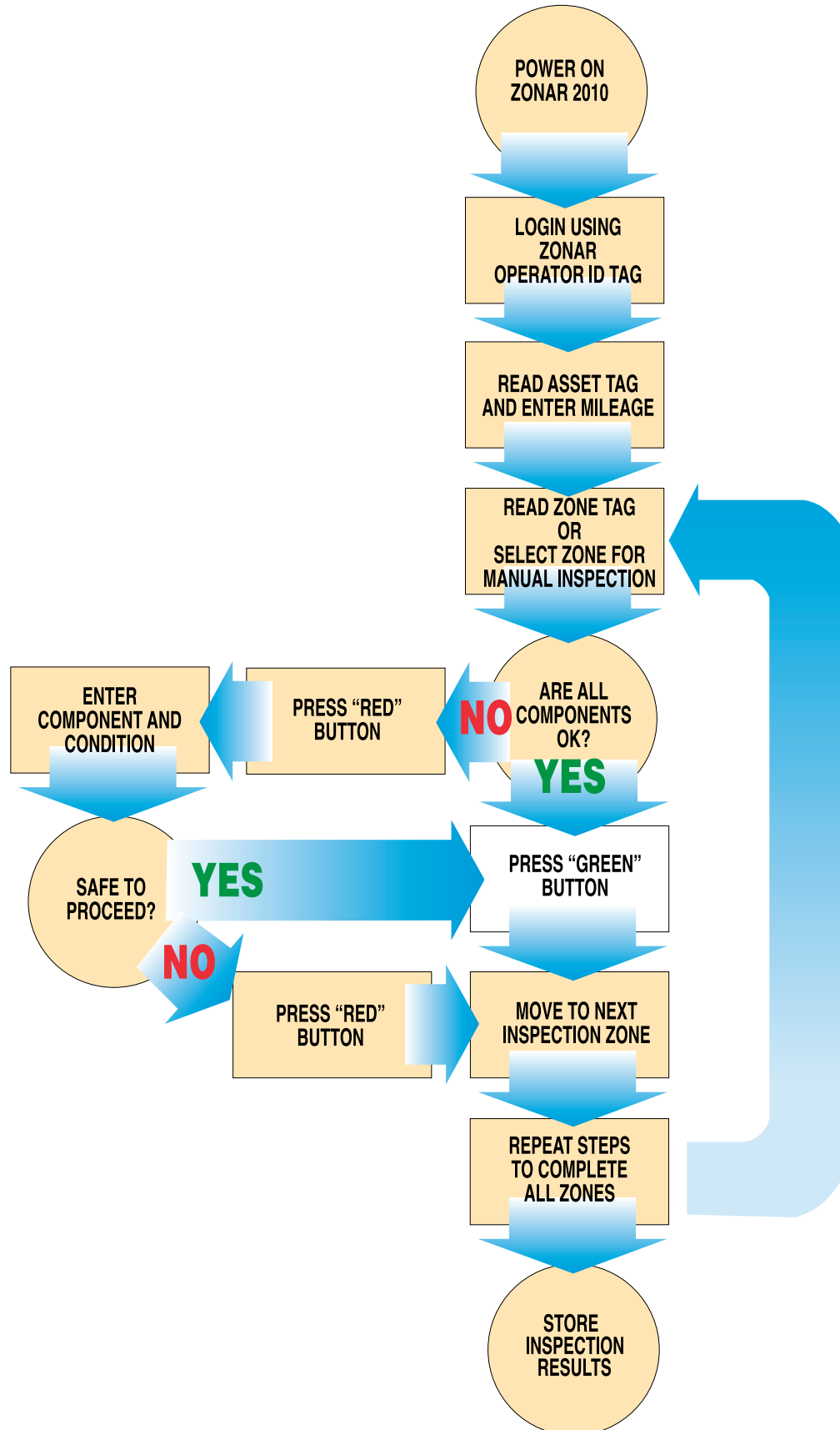
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EQUIPMENT DESCRIPTION



KEYPAD & NAVIGATION

	USE:	TO:
 ON/OFF	Power button	<ul style="list-style-type: none"> • Turn the Zonar 2010 on/off
 INFO	Info button	<ul style="list-style-type: none"> • Return to the main menu at any time (except when you're being prompted to enter a value or answer a question)
	READ/ENTER button	<ul style="list-style-type: none"> • Read a card or tag • Enter mileage/hours
 LIGHT	Light button	<ul style="list-style-type: none"> • Turn the spotlights on/off
	UP arrow	<ul style="list-style-type: none"> • Scroll up • Add by increments of 1 (e.g. for mileage or screen contrast) • Accelerate adding increments up to 10,000: hold after pressing
	DOWN arrow	<ul style="list-style-type: none"> • Scroll down • Decrease by increments of 1 • Accelerate decreasing increments: hold after pressing
	RIGHT arrow	<ul style="list-style-type: none"> • View the next screen for an item that has the cursor character > displayed • Add by increments of 10 • Accelerate adding increments up to 10,000: hold after pressing
	LEFT arrow	<ul style="list-style-type: none"> • Go back to previous screen • Decrease by increments of 10 • Accelerate decreasing increments: hold after pressing
	Red N (no button)	<ul style="list-style-type: none"> • Answer "No" to questions • Enter a "Red" condition (for components that are BAD)
	Green Y (yes button)	<ul style="list-style-type: none"> • Answer "Yes" to questions • Enter a "Green" condition (for components that are OK)
 CHARGING	Charging indicator light	<ul style="list-style-type: none"> • Check for a steady green light when the battery is charging • Check for a flashing green light when the batteries are fully charged



HOW TO USE THE ZONAR 2010 FOR SAFETY INSPECTIONS

Complete Pre/Post-trip Inspections

- Turn on the Zonar 2010
 - Remove the Zonar 2010 from its vehicle mount
 - Press Power button
- Log in
 - Press READ/ENTER button
 - Place your Zonar ID Card within 2 inches of the Zonar 2010's spotlights
 - Press any button after reviewing System Info screen
 - Select inspection configuration using the Right button on the desired inspection. (Multi configuration only)
 - Wait for Report History screen to appear
- Review previous inspection report (located at top of the list on Report History screen)

IF THE PREVIOUS REPORT IS:	THEN:
OK	Press Info to go to main menu
BAD	<ul style="list-style-type: none"> • Press RIGHT arrow to go to BAD report screen • Press RIGHT arrow to go to ZONES screen to view which zones have defective components • Use the UP/DOWN arrows to go to a defective zone (R or Y) <p>Note: Green = OK; Yellow = defective condition but safe to operate; Red = defective condition—not safe to operate</p> <ul style="list-style-type: none"> • Press RIGHT arrow to view display that lists defective components' conditions • Press Info to go to main menu

- Read the Asset tag
 - Position the Zonar 2010's spotlights within 2 inches of Asset tag; press READ/ENTER button
 - Verify that vehicle number appears on screen
 - Enter vehicle's mileage

TO:	THEN:
Add increments of 1	Press the UP arrow
Decrease increments of 1	Press the DOWN arrow
Add increments of 10	Press the RIGHT arrow
Decrease increments of 10	Press the DOWN arrow
Record the mileage in the report	Press READ/ENTER

Note: Holding the arrow buttons accelerates adding or decreasing increments.

- Inspect all the components in a zone
 - Go to a zone (following the order you've been given)
 - Position the Zonar 2010's spotlights within 2 inches of RFID tag
 - Press READ/ENTER
 - Inspect each component listed
 - Determine if each component is OK—no defects

IF THE CONDITION OF:	THEN:
All the components are OK	<ul style="list-style-type: none"> • Press the green Y (yes) button • Verify that there's a G for a green condition (OK) by the zone • Inspect the next zone
One or more of the components aren't OK	Press the red N (no) button

- Identify the defective condition(s) for each component that isn't OK

TO:	THEN:
View a list of defective conditions for a component	Highlight the component with the defective condition (by scrolling with the UP and DOWN arrows); press the RIGHT arrow
Select a defective condition from the list of defective conditions for a component	Highlight the defective condition from the list (by scrolling with the UP and DOWN arrows); press the RIGHT arrow

- Decide whether the vehicle is safe to operate with the defective condition(s)

IF:	THEN:
The vehicle is safe to operate with the defective condition	Press the green Y (yes) button to flag the defect as Yellow
The vehicle isn't safe to operate with the defective condition	Press the red N (no) button to flag the defect as Red

Note: If you need to enter a component that's not listed:

- 1) Scroll to OTHER
- 2) Press the RIGHT arrow to go to the next screen
- 3) Use the UP, DOWN, RIGHT, LEFT arrows to select the character you want
- 4) Press READ/ENTER to highlight the character (the maximum number of characters you can enter is 18)
- 5) Erase text or add a space using "<" or ">" characters
- 6) Press the Info button when you've completed entering text for the "OTHER" component. (A screen titled "OTHER" will be displayed with a list of defective conditions.)
- 7) Highlight the defective condition for this "OTHER" component (by scrolling with the UP and DOWN arrows); press the RIGHT arrow
- 8) Decide if the vehicle is safe to operate with this defective condition; press the red N (no) button if it isn't OR press the green Y (yes) button if the vehicle is safe to operate with this defective condition.

Note: If you need to enter a description of a condition that's not listed:

- 1) Scroll to OTHER
- 2) Press the RIGHT arrow to go to the next screen
- 3) Use the UP, DOWN, RIGHT, LEFT arrows to select the character you want
- 4) Press READ/ENTER to highlight the character (the maximum number of characters you can enter is 18)
- 5) Erase text or add a space using "<" or ">" characters
- 6) Press the Info button when you've completed entering text for the "OTHER" condition
- 7) Decide if the vehicle is safe to operate with this defective condition; press the red N (no) button if it isn't OR press the green Y (yes) button if the vehicle is safe to operate with this defective condition

- Continue inspecting the zones until the question mark in front of each zone on the ZONES screen has been replaced with a G, Y, or R

WHEN:	THEN:
You're ready to inspect the next zone	<ul style="list-style-type: none"> • Go to the next zone • Position the Zonar 2010 within 2 inches of RFID tag; press READ/ENTER • Follow the directions above for inspecting a zone

- Store the current report

IF:	AND:	THEN:
The Store Report screen appears after you've inspected all the zones	You're ready to make a permanent record of the inspection report	Press the green Y (yes) button
The Store Report screen appears after you've inspected all the zones	You're not ready to make a permanent record of the inspection report	Press the red N (no) button Note: You'll return to the Zones screen and can make changes
The Incomplete Report screen appears after selecting Store Curr Report from the Main Menu	You want to go back and complete inspecting the missing listed zone(s)	<ul style="list-style-type: none"> • Press the red N (no) button • Go back and inspect the missing components • Follow directions for storing the current report
The Incomplete Report screen appears after selecting Store Curr Report from the Main Menu	You don't want to go back and complete inspecting the missing listed zone(s)	Press the green Y (yes) button to make a permanent record of the incomplete report Note: An incomplete report is recorded as BAD on the Report History screen

- Turn off the Zonar 2010's power
 - Press Power button
- Return the Zonar 2010 to its vehicle mount between trip inspections
 - Transmit Completed Pre/Post-trip Inspections To Zonar Systems
- Place Zonar 2010 into Reader Downloading Station (RDS)

WHEN:	THEN:
The inspections reports are being transmitted	<ul style="list-style-type: none"> • The light on the cradle changes from green to red • The screen shows: 'Downloading...'
The light on the cradle is red	Don't remove the Zonar 2010 from the cradle
The light on the cradle changes from red to green	The transmission is complete and you can remove the Zonar 2010 from the cradle

Charge The Zonar 2010's Batteries

Place the Zonar 2010 into its vehicle mount (connected to the 12V power using a cigarette lighter adapter or wired directly to the electrical system)

Note: While the Zonar 2010 is in its vehicle mount or RDS, the CHARGING indicator light will be a steady green. When the batteries are fully charged, the CHARGING light flashes green. While the time to fully charge the batteries varies depending upon the beginning battery level, it typically takes four hours to fully charge the batteries.

INDEX of FUNCTIONS

TO:	THEN:
Activate the RFID tags so they can be read	Position the Zonar 2010's spotlights within 2 inches of tag; press READ/ENTER
Add incremental values of 1	Press the UP arrow
Add incremental values of 10	Press the RIGHT arrow
Accelerate adding/decreasing values	Hold the (UP/RIGHT/DOWN/LEFT) arrow after pressing
Answer "No" to questions	Press the red N (no) button
Answer "Yes" to questions	Press the green Y (yes) button
Charge the batteries	Place the Zonar 2010 into its vehicle mount, 10x charger or RDS
Darken the text on screens	<ul style="list-style-type: none"> • Highlight SET CONTRAST from main menu by scrolling the cursor with the DOWN arrow; press the RIGHT arrow • Press the UP arrow to increase the percentage • Press READ/ENTER to set contrast
Decrease incremental values by 1	Press the DOWN arrow
Decrease incremental values by 10	Press the LEFT arrow
Delete text	Use the "<" character
Determine the battery level of the main menu	Locate the drawing of a battery on the title line Note: Completely black = fully charged
Determine operator who stored previous report	<ul style="list-style-type: none"> • Press the RIGHT arrow after REPORT HISTORY on the main menu • Press the RIGHT arrow after the first report in the list on the REPORT HISTORY screen (to go to the next screen) • Highlight OPERATOR
Enter a "Green" condition (for components that are OK)	Press the green Y (yes) button
Enter mileage hold to accelerate adding increments	<ul style="list-style-type: none"> • Position the Zonar 2010's spotlights within 2 inches of Asset tag; press READ/ENTER button • Use the UP/RIGHT arrows to add increments; • Press READ/ENTER

INDEX of FUNCTIONS

TO:	THEN:
Enter text for an "OTHER" component or condition that's not listed	<ul style="list-style-type: none"> • Use the UP, DOWN, RIGHT, LEFT arrows to select the character you want (use the ">" character for a space; to erase text use the "<" character) • Press READ/ENTER • Press the Info button when you've completed entering text <p>Note: The maximum number of characters you can select is 18.</p>
Enter a "Red" condition (for components that are BAD)	Press the red R (no) button
Highlight your selection from a list	Scroll the UP/DOWN arrows to make your selection
Lighten the text on screens	<ul style="list-style-type: none"> • Highlight SET CONTRAST from main menu by scrolling the cursor with the DOWN arrow • Press the RIGHT arrow • Press the DOWN arrow to decrease the percentage • Press READ/ENTER to set contrast
Log in	<ul style="list-style-type: none"> • Press READ/ENTER button • Place your Zonar ID Card within 2 inches of the Zonar 2010's spotlights
Read a RFID tag	<ul style="list-style-type: none"> • Position the Zonar 2010's spotlights within 2 inches of tag • Press READ/ENTER
Review most recent inspection report	<ul style="list-style-type: none"> • Press the RIGHT arrow after REPORT HISTORY on the main menu • Press the RIGHT arrow after the first report in the list on the REPORT HISTORY screen
Store the current report	Press the green Y (yes) button when the Store Report screen appears
Transmit completed pre and post inspection reports to Zonar Systems	Place Zonar 2010 into Reader Downloading Station (RDS)
Turn the Zonar 2010 on/off	<ul style="list-style-type: none"> • Press the Power button once to turn the Zonar 2010 on or off
Turn the spotlights on/off	Press the Light button
View the next screen for an item that has the character > displayed	Press the RIGHT arrow