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**800.433.3487**



**EscortRadar.com**

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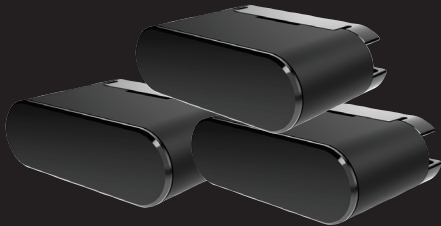
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# ESCORT® ZR6

LASER PROTECTION LIKE NO OTHER



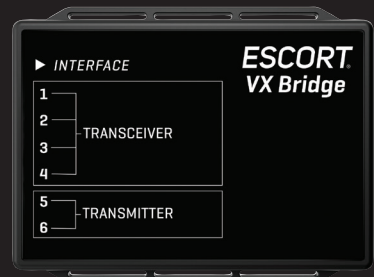
1 Shifter VX Transmitter and  
2 Shifter VX Transceivers



Button Controller



ZR6 Interface



Shifter VX Bridge Box

OWNERS MANUAL



# Safety Precautions

ZR6 was designed to meet high performance and quality standards; however, there are certain precautions that must be considered before approaching installation and operation:

- Use only original ZR6 parts included with your unit. Do not plug any third-party components into your unit, and do not plug any supplied components into any third-party products, as this may cause failure and will void warranty.
- Special care must be taken during installation of outer sensors, as damaging factory-installed cables or connectors may cause damage or device malfunction and may void warranty.
- While outer sensors are specially designed and manufactured to be installed externally and operate in harsh environments, the Interface and Controller must be installed and kept in a dry place, preferably somewhere inside the driver's cabin. Failures due to improper installation may void warranty.
- ZR6 cannot detect through glass or other transparent objects, and certain materials may absorb infrared light.

- Laser shifters should not be recessed (e.g. recessed in the grill) as they require having full exposure for receiving and transmitting signals.
- Check your local laws before using ZR6, as transmitted light can interfere with other laser equipment.

## Maintenance

Once ZR6 is installed, dirt can accumulate on the front covers of the sensors, especially during the winter. To ensure peak performance, check front covers of sensors often and, if necessary, wipe clean with a cloth.

## Warning

Never, under any circumstances, look at the sensors while powered on and operating. Do not view with optical instruments (like magnifiers).





# Introduction

## **Congratulations**

Your new ZR6 is the most advanced defense system against targeting laser guns. ZR6 comes complete with two VX Transceivers and one VX Transmitter front mounted laser Shifters, panel mounted controller, interface with integrated speaker, 6 port VX Bridge box, modular connections, complete wiring harness, and mounting hardware. ZR6 also interfaces with many Escort radar detectors for the ultimate in driving protection.

Please read this guide in detail to get the most out of your new ZR6's performance and features.

Please drive safely.

## **Important Installation Warning**

ZR6 requires professional installation. A select group of car specialists can install ZR6 for you. Visit [www.escortradar.com/pages/find-installer](http://www.escortradar.com/pages/find-installer) to find an authorized installer near you.

Attempting to install ZR6 without expertise in automotive electronic installations can cause personal injury during the installation, or damage the ZR6 and your vehicle. If your vehicle is damaged during installation, its safety systems may be compromised, which could cause personal injury or property damage.

## **Please Note**

This product may be limited or prohibited in some jurisdictions. Check applicable laws before installing or using.



# Introduction

## What's Included

### One Shifter VX Transmitter



- Weatherproof sensor
- 6-foot cables with waterproof connector
- Mounting hardware and bubble level

NOTE: The VX Transmitter can be identified by a yellow dot on the shifter housing or may be packaged in a different color bag from the Transceivers. The cable plug is also keyed differently than the VX Transceivers to prevent incorrect connections during installation.

### Two Laser Shifter VX Transceivers



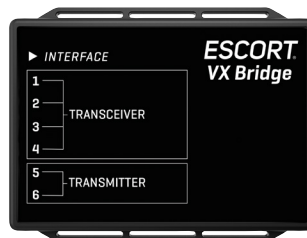
- Twin weatherproof sensors
- 6-foot cables with waterproof connectors
- Mounting hardware and bubble level

## Button Controller



- Button Controller mounts easily to instrument pod, dashboard, or console
- Adhesive pads provided for secure mounting

## Shifter VX Bridge Box



- Weatherproof Bridge Box is used to connect Shifter VX Sensors to main Interface

## One ZR6 Interface





# Introduction

## Button Controller Features



### Alert Indications

The Button Controller's LED will flash red when alerting. Since laser signals are a possible threat no matter how weak, ZR6 alerts you with a full continuous audible alert along with a voice notification. The voice will announce whether the laser signal is front or rear (rear laser shifters will need to be installed).

If shifting is disabled, when ZR6 receives a laser signal it will say “alert” instead of “shifting”.

### Power

Press the PWR button to turn ZR6 on. To turn ZR6 off, press and hold PWR until you hear “Powering Down”.

### Volume and Mute

Press and hold the VOL/MUTE button to adjust the alert volume level. The volume will gradually increase. To decrease the volume, release the VOL button and quickly press and hold the VOL button again.

Once you've reached your preferred audio level release the button. Your preferred audio level will be stored in memory, even after the detector is turned off.

To temporarily disable shifting for 30 seconds; double tap the mute button of the ZR6 or the connected detector. After 30 seconds elapse, ZR6 will announce that shifting is enabled again.

### Mode

Press the MODE button to switch between “shifting” and “receive-only” modes. When using “receive-only” mode, ZR6 will only alert to laser signals without shifting.

## System Behavior When Connected to an Escort Detector

When linked to a compatible Escort radar detector, all ZR6 alerts will appear on the detector's display screen as part of the radar interface.

The radar detector will indicate the direction (Front/Rear) and status (“Shift” or “Receive”) during alerts.

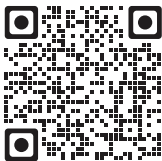
Muting or mode changes made on the radar detector will also apply to the ZR6 system and can be done through the ZR6 controller.



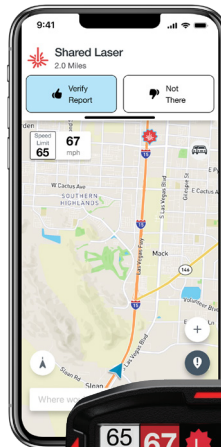
## Download and Connect to Drive Smarter®

- 1 Connect your ZR6 to an Escort radar detector using the supplied connector cable (from the interface to the detector).
- 2 Power on your detector.
- 3 Install and run the Drive Smarter® app on your smartphone.
- 4 In the Drive Smarter® app, press the Account button then select “Add Detector”.
- 5 Follow the prompts in the Drive Smarter® app to connect your detector and your mobile Wi-Fi hotspot.

**NOTE:** In order to use the app to change ZR6 shifter settings, you will need to have it paired with an Escort radar detector. The first time you run the app, you will be prompted to register a new account.



Download  
**DRIVE SMARTER®**



## ZR6 Shifter Setup in Drive Smarter® App

Shifters: Receive / Shift\* / Shift4 / Shift6 / Shift8 / Shift10 / Off

- Shifter mode. Receive = receive-only
- Shift – Continuous shifting during alert.
- Shift4/6/8/10 puts shifters in receive-only mode after 4/6/8/10 seconds from receiving an alert

Using Drive Smarter, go to your device settings. Select the Shifts option. This will bring up a separate menu screen with available options to choose.

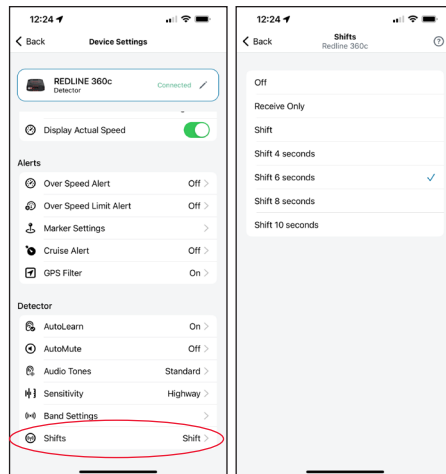
**NOTE:** only available when optional ZR6 shifters are connected.

## ZR6 Shifter Setup on Radar Detector

Manually using radar preferences: Using your preferences on your radar detector, manually scroll through the list until you find Shifters. Select the option from the available list.

**NOTE:** Shift time options (e.g. shift 4) are only available on MAX 3, MAX 4, MAX 360 MKII, MAX 360c MKII, MAXcam 360c, and Redline 360c.

For older models or when operating the ZR6 in stand-alone mode, just the basic modes of Off, Receive Only, and Shifting with Manual Override are available. To manually override Shifting, double tap the mute button while alerting.





# Sensor Installation

## Positioning Sensors

Install the two VX transceiver sensors between the side and center of the vehicle and install the one VX transmitter sensor in the center of the vehicle between the two transceiver sensors.

For optimal performance, sensors need to be facing straight forward (or backward, if installing optional rear sensors), not at an angle. Make sure that each sensor is parallel with the road (using supplied bubble level).

## Sensor Spacing

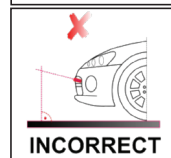
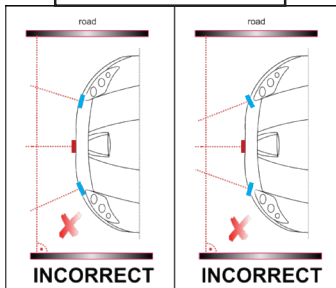
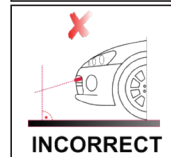
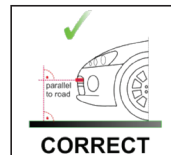
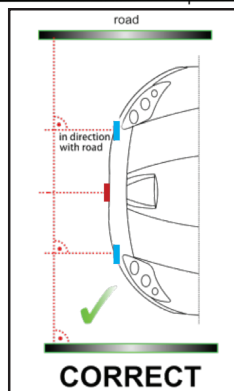
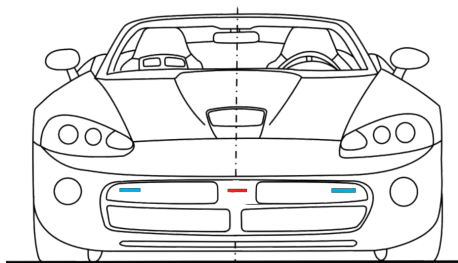
Maintain at least 9 inches of separation between sensors to prevent signal overlap and falsing.

Do not exceed 18 inches of distance between each VX Transceiver and the center VX Transmitter, or shifting performance may be reduced.

**NOTE:** Based on the overall width and surface area of the vehicle's front end, an additional VX Transceiver may be required to ensure complete coverage and protection.

## NOTE:

Vehicle must be positioned on a flat surface in order to position sensors parallel with the road. Make sure that sensors have an unobstructed "view" of the road so the unit can function properly. Do not install sensors behind a solid surface, which would block laser transmission/reception.





# Sensor Installation

- 1 Snap the mounting bracket onto the sensor and install the included bolts, but do not tighten them. If the bolts do not thread into the sensor, then the bracket is on backwards.
- 2 Check front alignment and mount the sensor to a solid surface of the vehicle.
- 3 Use the supplied bubble level to ensure the sensor is parallel to the road and tighten the sensor's mounting bracket bolts.



- 4 Repeat for additional sensor(s).

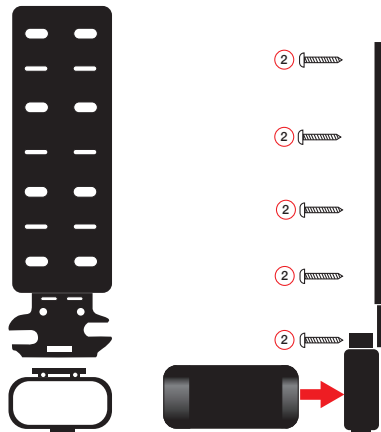
**IMPORTANT!** The VX sensors are shipped in “receive-only” mode. Shifting must be enabled in the bands settings. See the Settings section of the Owners Manual.

## Rear Shifter VX Sensors

Follow instructions above to install VX sensors on the rear of your vehicle.

The license plate area is typically the best mounting location for rear protection.

**See illustrations on page 8 for correct positioning.**



**Important!** Mount the VX Transmitter (Port 5) in the center or as close to the center of the vehicle as possible to ensure proper system operation and accurate shifting response.

## Securing Connector

Once you've installed all components properly and tested to ensure all parts are working properly, use cable ties to fasten sensor cables to a solid surface, keeping them away from heat and any moving parts.

**NOTE:** install the rear Shifter extension cables inverted so they plug into the sensors correctly (when a RX and TX standard installation is performed).



# Cable Routing & Securing

## CABLE ROUTING & SECURING

- Route all shifter cables to the Shifter VX Bridge Box.
- The Bridge Box serves as the weatherproof junction hub for all front and rear sensors.
- Use the provided cable ties to secure all wiring along solid surfaces, keeping cables away from moving parts, sharp edges, and heat sources.
- Avoid running cables near ignition components, fan motors, or headlight ballasts, as these can produce electromagnetic interference (EMI) that may cause falsing or erratic operation.
- Double-check that each connector is fully seated and oriented correctly, the Transceiver and Transmitter plugs are keyed differently to prevent incorrect connections.

## Default Port Assignments — Bridge Box to Interface

### Front Sensors

- Port 1 -> Front Transceiver
- Port 2 -> Front Transceiver
- Port 5 -> Front Transmitter
- Port 4 -> Optional extra Transceiver

### Rear Sensors (Optional)

- Port 3 -> Rear Transceiver
- Port 6 -> Rear Transmitter

### Configuration Note:

If ports are changed, you must update the Interface DIP switches so the system identifies Front vs. Rear alerts correctly.



# Interface Installation

- 1 Install the Interface under the dash using supplied zip-ties.



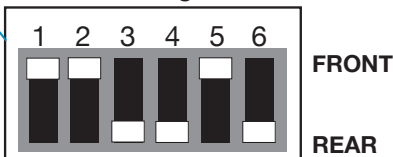
**NOTE:** Mount the Interface under the dash or inside a dry, protected location using the supplied zip ties or Velcro. Do not install the Interface in the engine bay or anywhere exposed to moisture.

- 2 Connect black wire (-) to ground, and red-striped wire (+) to a switched 12-volt supply. If wired to a switched 12-volt power supply, ZR6 will power on and off automatically with vehicle engine ignition. Avoid tying into high-current or noisy circuits such as blower motors or fuel pumps, as these can introduce electrical interference.

- 3 Shifter VX Bridge Box, Control Module, and optional radar detector all plug into the Interface.

- 4 It is recommended that after the Interface is installed and connected to power, all other components are plugged in and tested for proper operation before completing the installation.

## Default Configuration:



## IMPORTANT!

Important! When using optional rear shifter VX sensors, either 3 or 4 may be used for a VX Transceiver and 6 may be used for a VX Transmitter. The direction of the dipswitch should match the mounting location (front or rear) of vehicle.



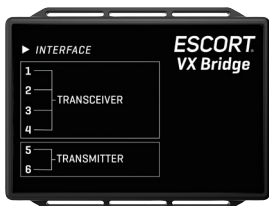
# Button Controller and Shifter Bridge Box Installation

## Button Controller



- 1 Determine the best location for the Controller. An optimal location is easily visible and accessible from the driver's position and does not interfere with normal driving. Avoid locations that require reaching through or around the steering wheel.
- 2 Clean the mounting surface thoroughly.
- 3 Mount the Button Controller using the pre-applied adhesive.
- 4 Route the cable to the Interface and plug into the port labeled "Controller".

## Shifter VX Bridge Box



- 1 The Shifter VX Bridge Box is weatherproof. To limit the number of cables routed through the firewall, we recommend installing the Bridge Box inside of the engine compartment.
- 2 Position it so that sensor cables can reach easily without strain or tight bends.
- 3 Avoid mounting it near extreme heat sources (radiators, turbo piping, etc.) or moving components.
- 4 Keep both the Bridge Box and all cable runs away from ignition components, fan motors, and headlight ballasts, as these can emit electromagnetic interference (EMI) that may cause falsing or erratic system operation.
- 5 Once positioned, connect each shifter cable to its proper port (see port assignment table).
- 6 Plug the Bridge Box/Interface cable into the Interface Port on the Bridge Box and route through the firewall to the ZR6 Interface Module inside the vehicle cabin and plug it into the port labeled "Shifters." Use a rubber grommet or existing pass-through to protect the cable from chafing.



# Updating the ZR6 Interface

## UPDATING THE ZR6 INTERFACE

### 1. Requirements

**Bridge Box MUST** be connected to the Interface during the update a computer with Detector Tools Pro installed is required

#### Download Detector Tools Pro

- Go to [EscortRadar.com](http://EscortRadar.com)
- Navigate to Support -> Update Your Device
- Select ZR6 from the device list
- Download and install the latest version of Detector Tools Pro

#### Critical Power-Up Sequence

##### Start with:

- Ignition OFF
- USB cable unplugged
- Detector Tools Pro closed

##### Then follow this order:

1. Connect the USB cable to the ZR6 Interface
2. Turn the ignition ON (apply 12V power)
3. Launch Detector Tools Pro

##### Update Process:

- Once Detector Tools Pro recognizes the ZR6

Interface: Select “Device” from the top menu (**do NOT** click the green automatic update buttons)

Select “Update All Software” Wait for the update to complete without disconnecting power or USB. After completion, disconnect the USB cable and cycle ignition power.

If you experience issues during the update, repeat the power-up sequence and try again. If problems continue, contact Escort support.



# Initial Power on Test

## INITIAL POWER-ON TEST

1. Reconnect the vehicle battery if it was previously disconnected.
2. Turn the vehicle ignition to the ON position.
3. The system should power on and announce "System Ready."
4. If the ZR6 is connected to a compatible Escort radar detector, the detector's display should show either "Shift" or "Receive" during its boot sequence, confirming communication between the detector and the ZR6 Interface.
5. If any sensors are not connected or detected, error messages will appear on the radar detector's display indicating which shifter(s) are missing or not communicating.
6. Recheck cable seating, connector orientation, DIP switch settings, and port assignments to correct any detected issues.

Important: Perform a full system test before securing trim panels or completing reassembly.

## TROUBLESHOOTING & MAINTENANCE

### 1. GENERAL OPERATION CHECKS

If the system does not power on, verify the following:

- The IGNITION source provides switched 12V power when the vehicle key is turned on.
- The GROUND connection is solid, clean, and connected to bare metal (no paint or corrosion).
- The CONTROLLER cable is securely plugged

into the Interface port labeled "CONTROLLER."

- The INLINE FUSE in the main power wire is intact and has 12V on both sides of the fuse.
- The INTERFACE MODULE is securely mounted and all plugs are fully seated.

### 2. SENSOR DIAGNOSTICS

If one or more sensors are not functioning correctly:

- Check all CABLE CONNECTIONS at the Bridge Box to ensure each connector is fully seated and locked.
- Inspect for PIN DAMAGE, corrosion, or moisture intrusion in the connectors.
- Confirm that the correct SENSOR TYPES (Transceivers and Transmitters) are installed in their designated PORTS.
- Verify that DIP SWITCH settings on the Interface are correctly configured for FRONT and REAR sensor locations.
- If connected to a compatible ESCORT RADAR DETECTOR, check the detector's DISPLAY during startup — any missing or misconfigured sensors will trigger an ERROR MESSAGE identifying the affected shifter.
- Recheck SENSOR MOUNTING alignment to ensure each unit faces straight forward (or backward for rears) and is horizontal to the ground.

### 3. FALSE ALERTS OR INTERFERENCE (EMI)

If the system produces false shifting or constant



# Troubleshooting

laser alerts:

- Ensure that all SENSOR CABLES and the BRIDGE BOX are routed AWAY FROM ignition coils, fan motors, alternators, and headlight ballasts.
- Verify that POWER and GROUND wires are not shared with high-current accessories such as amplifiers, lighting systems, or fuel pumps.
- Inspect for poorly grounded components or accessories that could introduce electrical noise.
- Make sure all SENSOR CONNECTORS are clean and dry.

Tip: Re-routing or separating the cables by several inches from high-EMI components typically resolves false alert issues.

## 4. CLEANING & MAINTENANCE

- Periodically inspect all SENSOR LENSES for dirt, debris, or bug residue — especially after driving in rain or snow.
- Clean lenses using a soft, lint-free cloth with soapy water.
- DO NOT use harsh chemicals, alcohol, or abrasive materials.
- Inspect SENSOR MOUNTS to ensure they are still tight and level.
- Periodically check all exposed CONNECTORS and CABLES for wear or damage.

## 5. SUPPORT & SERVICE

If troubleshooting does not resolve the issue:

- Visit [www.EscortRadar.com](http://www.EscortRadar.com) and navigate to Support -> Contact Us.
- You can also reach ESCORT directly at 1-800-433-3487 for service and repair inquiries.
- Be ready to provide your SYSTEM SERIAL NUMBER, PURCHASE DATE, and a brief description of the issue.



# Warranty

## LIMITED 1-YEAR WARRANTY

Escort, Inc. ("Escort") warrants that this product and the component parts thereof, will be free of defects in workmanship and materials for a period of one year from the date of first consumer purchase. This warranty may be enforced by the first consumer purchaser. If the product is under warranty, it will be repaired or exchanged depending on the model as determined at Escort's sole discretion. Such remedy shall be your sole and exclusive remedy for any breach of warranty.

The procedure for obtaining service and support, and the applicability of this warranty, will vary depending on the country or jurisdiction in which you purchased and utilize the product. For the details on obtaining product service, support and warranty please visit <https://www.escortradar.com/pages/contact-us>

Provided that the product is utilized within the U.S.A.- Escort will, without charge, repair or replace, at its option, defective products, products or component parts upon delivery to the Escort Factory Service department, accompanied by proof of the date of first consumer purchase, such as a duplicated copy of a sales receipt. You must pay any initial shipping charges required to ship the product for warranty service, but the return charges, to an address in the U.S.A., will be at Escort's expense, if the product is repaired or replaced under warranty.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state and country to country.

**Exclusions:** This limited warranty does not apply:

1) To any product damaged by accident; 2) In the event of misuse, ordinary wear, failure to follow directions, or improper maintenance of the product or as a result of unauthorized alterations or repairs; 3) If the serial number has been altered, defaced, or removed; 4) If the product was purchased or is utilized in a jurisdiction not covered by the limited warranty.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty. Escort shall not be liable for any incidental, consequential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

Some states and countries do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state and country to country



## FCC Statement

**FCC NOTE:** Modifications not expressly approved by the manufacturer could void the user's FCC granted authority to operate the equipment.

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 UNDESIRE OPERATION.

### **FCC Part 15.21 Warning Statement-**

**NOTE:** THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

### **FCC Part 15.105(b) Warning Statement- (ONLY Required for 15.109-JBP devices)**

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

### **Warning:**

This device should be installed and operated with minimum 20 cm between the radiator and your body.

### **DISPOSAL OF ELECTRONICS EQUIPMENT:**

This product may contain hazardous substances that could impact health and the environment if not disposed of properly.



The crossed out wheeled bin symbol indicates that the product should not be disposed of along with household waste. It should be handed over to an applicable collection point for the recycling of electrical equipment. By ensuring that this product is disposed of correctly you will help/prevent potential negative impact on the environment.

If you need more information on the collection, reuse and recycling systems, please contact your local civic office or the shop where it was originally purchased.

