

XROAD



**Owner's manual for MI4300**



**When using XROAD navigation in your vehicle, it is your sole responsibility to use the device in a manner that will not cause accidents, personal injury or property damage, or in any manner that may obstruct your view or interfere with operation of vehicle safety equipment. The user of this device is sole responsible for observing safe driving practices.**

**DO NOT operate XROAD while driving. Park the vehicle first and operate when necessary.**



**! Exposure to Radio frequency radiation; Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should no be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit. The device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.**



**There's a risk of explosion if battery is replaced by an improper way. Disposal of used battery should follow the instruction.**



**Please don't leave the navigation in the car when you don't use it for a long time. When it's overheated by sunlight, the battery may explode.**



**XROAD DISCLAIMS ALL LIABILITY FOR ANY USE OF THIS PRODUCT IN A WAY THAT MAY CAUSE ACCIDENTS, DAMAGE, OR THAT MAY VIOLATE THE LAW.**

## FCC Information

This device complies with Part 15 of FCC Results. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interface, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in commercial environment. 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 contact the interference by one or more of the following measures:

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

### **Warning**

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

## **1. Introduction**

This handbook is aimed to provide a quick guide to the XROAD's basic features and functions in respect to the unit hardware.

For Instructions on how to use the Navigation Software, please check out the Navigation Owners Manual which can also be found on this CD.

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## **2. Important Tips and Warnings**

### **2.1 General**

- a) Effective route planning prior to beginning each journey is highly recommended. If you need to setup or change your itinerary while on route, please ensure the vehicle is stopped. For your own safety and for others, please *DO NOT OPERATE THIS UNIT WHILE DRIVING*.
- b) The Navigation feature is intended to be used only as an aid, not as a precise measurement of direction, distance, location or topography. Because calculated routes and voice guidance are for reference only and may be different from the actual road circumstances, it is the user's responsibility to follow traffic signs, speed limits, road layout and local regulations at all times.
- c) When you leave your vehicle, please do not leave your unit on the dashboard in direct sunlight. This may cause the battery to overheat and malfunction. (It also may get stolen) Use the product within the recommended operational

temperature range (0°C ~ 55°C), and avoid exposing the unit to excessive heat or cold temperatures.

- d) GPS satellite signals cannot pass through solid materials other than glass. So when you are inside a tunnel or a building, the GPS positioning may not be available. (Signal will be lost) Signal (GPS) reception can also be affected by situations such as bad weather or dense overhead cover such as trees and buildings. Wireless units may also interfere with satellite signals, causing variable and inaccurate GPS reception.
- e) While you are driving, please ensure that you only look at the display when it's safe to do so.

## **2. Important Tips and Warnings**

- f) The mounting bracket is necessary when using the unit in a car and we strongly recommended that you mount the unit in an appropriate place so it doesn't obstruct your view, airbag panels and instrumentation.
- g) By taking good care of your unit, you will ensure trouble-free operation and you will reduce the risk of damaging the unit. When cleaning the unit, please ensure that you never clean it with the power on. Use a soft, lint-free cloth moistened with water when cleaning the screen and the exterior of your unit. Do not use paper towels or tissues to clean the screen. Do not rest or place anything on top of your unit. Do not drop your unit.
- h) Keep your unit away from excessive moisture and extreme temperatures. Do not subject your unit to sudden and severe temperature changes that could cause condensation inside the unit as this will damage the unit. In the event of moisture condensation, allow your unit to dry out completely. Avoid exposing your unit to direct sunlight or strong ultraviolet light for extended periods of time.

## **2. Important Tips and Warnings**

### **2.2 Safety Precaution**

#### **Main System**

Never attempt to disassemble, repair or make any modification to your unit as you may damage the unit and could harm yourself. Do not store or carry flammable liquids, gases or explosive materials in the same compartment as your unit and / or its parts and accessories.

#### **Backup Battery**

This unit contains a non-replaceable Lithium-Polymer internal battery that can burst or explode and can release hazardous chemicals if damaged. To reduce the danger of fire or burns, never disassemble, crush, puncture, or dispose of the unit in fire or water. Since there is a high risk of explosion if the battery is replaced by an incorrect type, the battery must only be replaced by an authorized XROAD service agent. (Please contact XROAD for further information regarding battery replacement) You must use the specified battery charger as approved by the manufacturer.

**AC Adapter (optional)**

Never use the AC adapter in a high-moisture environment, or touch the charger if you have wet hands or feet. Also, for cooling purposes, please ensure there is adequate ventilation around the adapter when in use. The AC Adaptor must never be covered up with paper, vinyl, cloth (including the carrying case) or any other material while in use. The adapter must be connected to the correct power source, according to the voltage requirements indicated on the case or packaging of the product. Do not attempt to service or repair this adaptor if it becomes damaged or exposed to excess moisture.

**SD Memory Card(optional)**

Keep the SD card in a well-protected case and avoid dust and humidity when you are not using it.

### **3. Hardware Accessories**

#### **3.1 Standard Accessories**

Quick start guide  
CD containing SW and manuals  
Cigar lighter DC power cable  
Cradle & Suction mount



#### **4. Getting it Started**

##### **4.1 Attaching to the suction mount**

Assemble the cradle with the mount and attach the unit to the cradle as the picture below.



**Please do not set up the mount while driving for your safety.**

#### 4.2 Power On/Off

Power On: Push the power button

Power Off: Press and hold the power button in 2 seconds.

Reset: Press and hold the power button in 5 seconds.

## 5. Specification of MI4300

MODEL NAME		MI4300
<b>Dimensions</b>	Dimension (main unit)	132.0(mm)x 83.0(mm) x 19.5(mm)
	Weight (main unit)	190g
<b>Operatiing conditions</b>	Operational temperature range	0°C ~ 55°C
	Storage temperature range	-10°C ~ 70°C
<b>Main CPU</b>	CPU	Centrality AtlasIII-396Mhz
<b>Operating System</b>	OS	Microsoft Windows CE 5.0

<b>Memory</b>	Flash Memory (including Map data)	4GB
	DRAM	
<b>Display</b>	Outline dimension & drive system	4.3" TFT active matrix system with touch panel
	LCD resolution	480H×272V×RGB (WQVGA)
	LCD Color depth	24bit color (16.7M)
	Back lighting	White LED , 400(min), 500(typ) cd/m <sup>2</sup> (without touch panel)
<b>GPS</b>	Positioning method	High-sensitivity GPS receiver
	Receiving frequency	1575.42MHz (C/A code )

	Acquisition times update rate (Open Sky)	Cold : < 60 seconds (Average) Warm : <45 seconds (Average) Hot : <15 seconds (Average)
	Update rate	1/second, continuous
	Accuracy	Position : < 10meters, typical
	Positioning method	GPS, WAAS(US), EGNOS(EU)
	Antenna	Built-in Patch antenna Socket for external antenna
<b>TMC</b>	Tuner	Built-in : SiLabs

<b>STD Condition</b>  <b>98.1MHz 64dBuV fmod</b>  <b>57kHz</b>	Channel selection system	PLL frequency synthesizer system
	Frequency range	87.5MHz ~ 108.0MHz (50KHz step)
	Sensitivity (RDS)	25dBuV max
	Seek stop level	25dBuV max
	Image rejection	35dB min
	I/F rejection	80dB min
<b>Light Sensor for backlight control</b>	Changeability range of brightness	40 to 100%
	Auto dimmer chattering reduction	3 sec
	Dimmer speed	1.5%/10ms

	Sensor porting cycle	20msec
<b>I/O</b>	SD Card	Standard SDHC upto 8GB / MMC2.0
	USB I/F	USB 2.0 Slave full speed
	Headphone	820mVp-p / 32 Ohms Stereo mini jack
	Microphone	Built-in : -40±1.5 dB
	Speaker	1.4W @Max
		fo=730Hz±15%
	Bluetooth	Bluetooth Ver.2.0+EDR
		+4.0/+1.0dBm(Max/Typ) Power Class 2
<b>Rechargeable battery</b>	Battery type & capacity	Li-polymer, 1150mAh (Typical)
	Battery life (navigation mode)	Up to 3 hours

	charging duration	Approx. 3-4 hours
<b>Car cigar cable</b>	Input voltage	DC 12V ~ 24V
	Output voltage	DC 5V @ 2A
<b>Power adapter</b>	Input voltage	AC 100V ~ 240V @0.5A
	Output voltage	DC 5V @ 2A