



A new Standard in recreational boating safety



# **A new Standard in recreational boating safety**

## **USER MANUAL**

Version 1  
May 2023

## 1. System Description

WATCHIT is an advanced system intended to assist the captain and skipper in operating the boat in a safer way by providing an alert about potential risks both over and under the water.

**NOTE** – WATCHIT is intended only as an aid to marine navigation and does not substitute safe and alert vessel navigation and operation. Please refer to the full warning and disclaimer in the appendix ( 3.1).

## 2. General

Once the system was installed onboard your boat and was calibrated, there is no need to actively operate the system. The only action needs to be taken before leaving your port or marine is making sure the power supply switch/fuse is ON and the system will automatically power up.

User may adjust some of the system's parameters in the setting menu as explained below. The WATCHIT system has 4 modes of operation:

- **Normal Mode** – In this mode the system will generate a vocal an obstacle alert in case it has detected a potential hazard on the vessel's path. The alert will be heard 30 seconds before impact in order to allow enough time for the skipper to react
- **Crowd Mode** – Whenever the system detects multiple objects in the near surrounding and the vessel speed is less than 15 Knots - the system will automatically switch to Crowd Mode and the vocal alerts will be replaced with Beeps to inform the captain about any potential risks. The beeps frequency will increase as the risking object will get closer to the vessel.
- **Anchor Mode** – Whenever the system has detected that the vessel has stopped – it will automatically switch to Anchor Mode. Incase the system has detected the vessel is drifting, it will popup a Drifting Notification. After 5 minutes incase no one acknowledge the notification – a drifting alert will be triggered
- **Marina Mode** – Whenever the vessel has entered a marina, the system will switch to Marina Mode. In this mode no vocal alerts will be heard

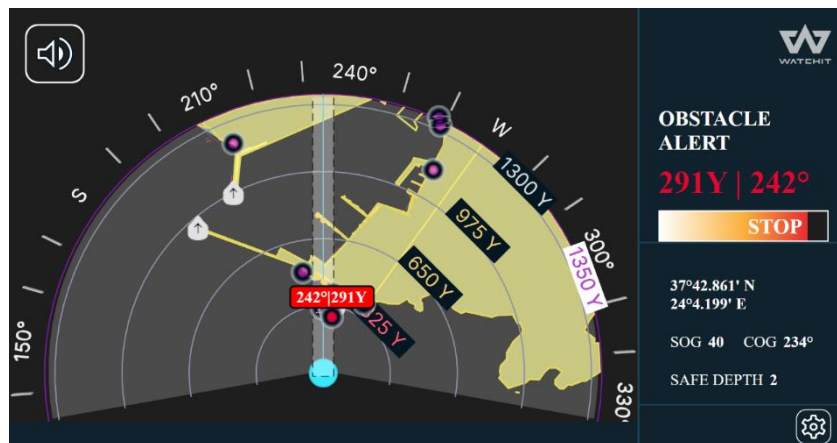


Image 1 - WATCHIT System

## 2.1. WATCHIT Main Screen

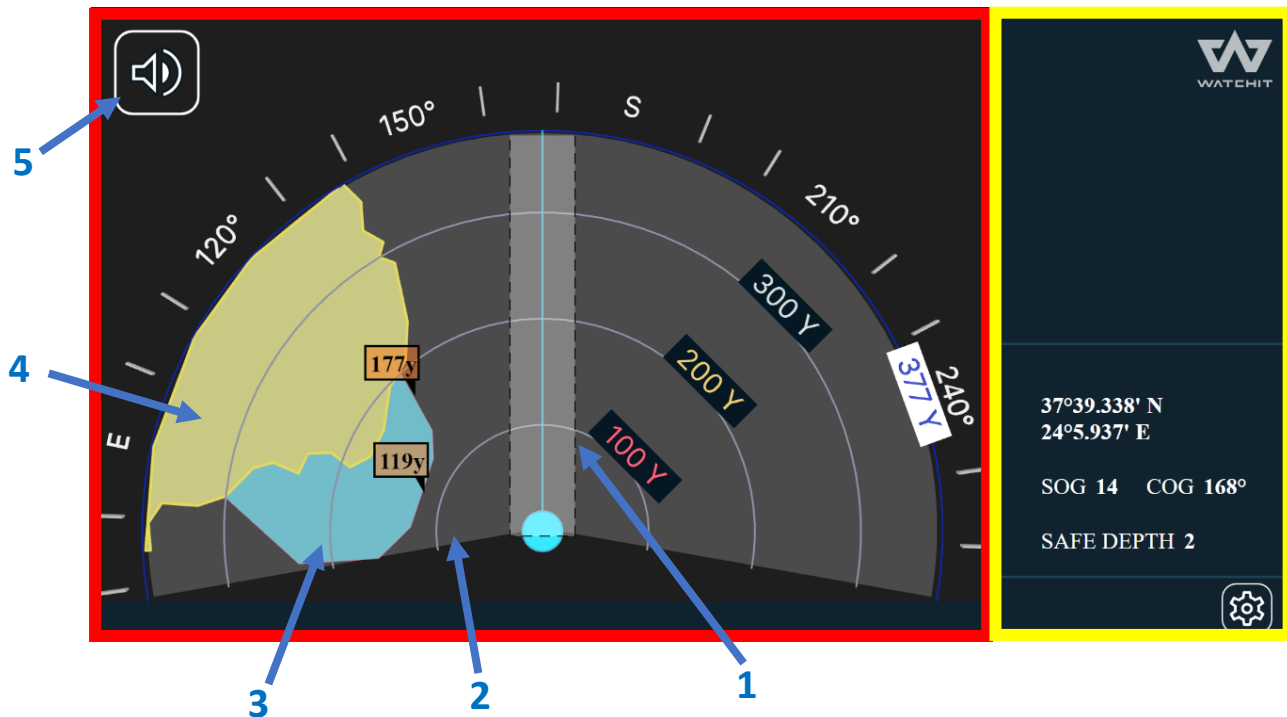


Image 2 – Main Screen

The WATCHIT display is divided to 2 parts. The left side (see the red colored sector in Image 2) presents the vessel near surrounding and its scale is constantly changing based on the vessel speed. The faster it sails – the greater is the monitoring area.

The gray rectangle [item 1 on the above image] is referred as the Dynamic Alert Zone (DAZ) and it represents the projected path the vessel is planned to cross in the next 30 seconds of sailing. Every potential hazard that will enter the DAZ will be marked in red and will trigger the alarm (based on the current system mode of work). The DAZ size is constantly being recalculated depends on the vessel navigational data, wind speed and direction, level of alert and more parameters that are taken in account in the WATCHIT algorithm.

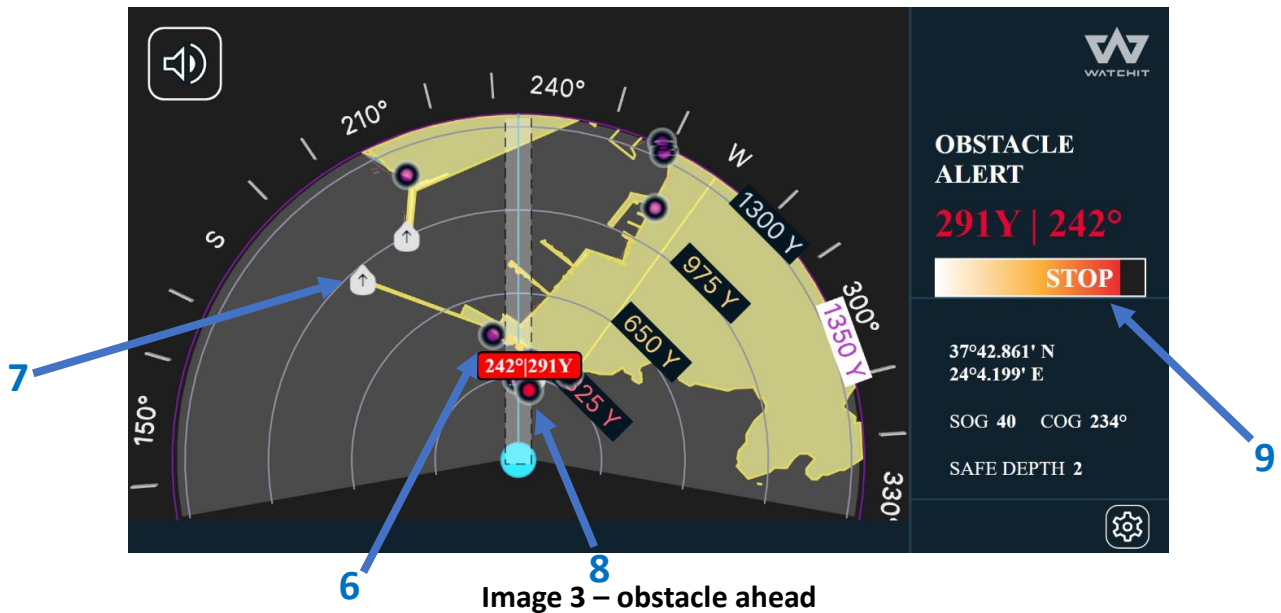
The display presents 3 colors levels:

- Dark gray [2] – deep water
- Blue [3] – shallow water based on the safety depth determined by user
- yellow [4] – dry land

On the top left corner there is a silent button [5] to stop the system from alerting on the specific obstacle the system is currently alerting about. New objects entering the DAZ will trigger the alert even if the previous one was silenced.

On the right side of the display (marked in yellow) there are 2 display fields – one for the alert data and the second for presenting the vessel navigational data including the alert safety depth as it was determined by the user.

**NOTE** – all depths are in meters and measured from the sea level, distances are in yards and speed is in Nautical Knots.



Other than shallow water and dry land, there are 2 icons for different obstacle types (see image 3):



- Underwater obstacle [6] (singular point off low water, shipwreck, underwater rock, etc.)

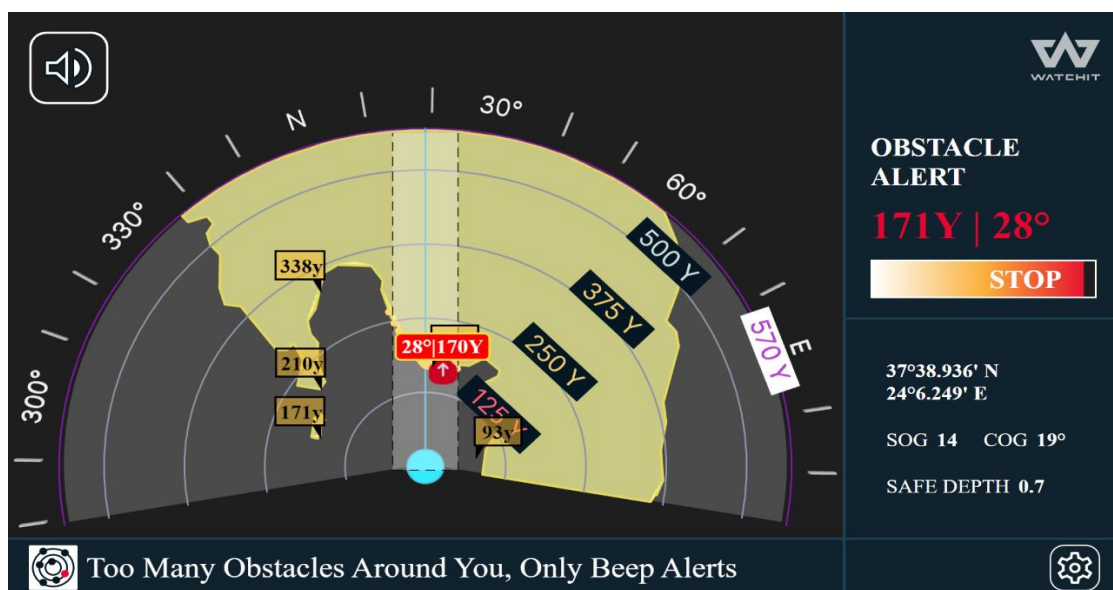


- Above water obstacle [7] (rock, buoy, floating platform, etc.)

When an obstacle has entered the DAZ, it will be marked in red [8] and a STOP progress bar [9] will appear on the alert data display. The bearing and distance to the object will also be presented.

## 2.2. Crowd Mode

Incase the system has detected that there are multiple potential hazards in the near surroundings – it will automatically switch to Crowd Mode (see image 4)



While the system is in Crowd Mode no vocal alerts will be heard and alerting beeps will inform the captain about any objects getting closer to the vessel. As the distance to the potential hazard is decreases, the beeps frequency will be increased.

### 2.3. Anchor Mode

When the system detects that the vessel has stopped, it will automatically switch to Anchor Mode (see image 5).

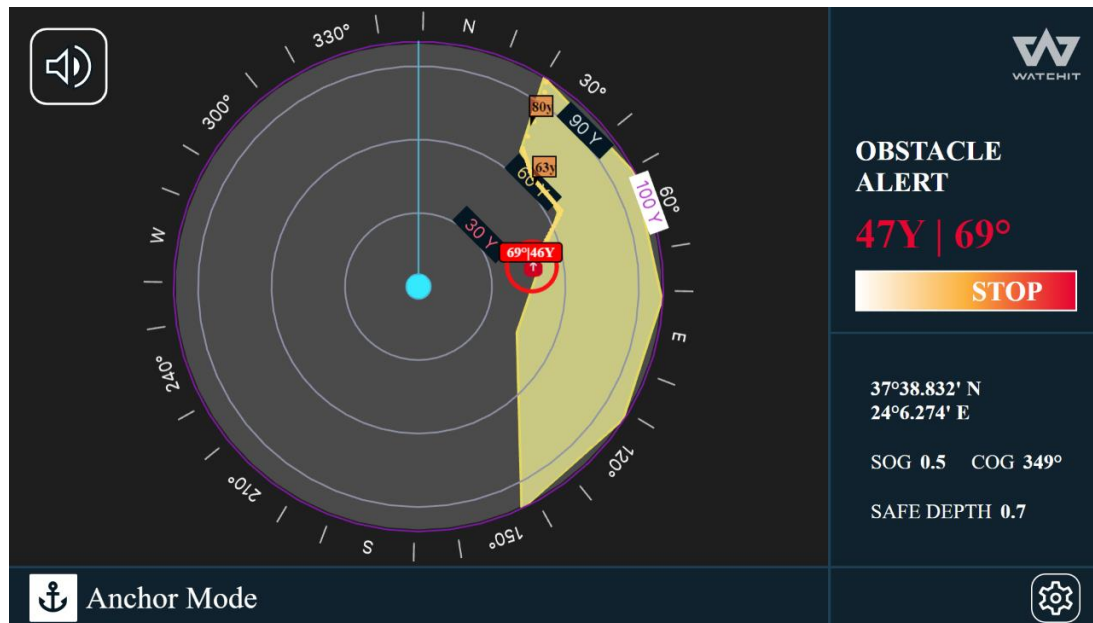


Image 5 - Anchor Mode

When the system is in Anchor Mode the monitoring sector will be extended to 360°. In case the system has detected that the vessel started to drift, it will pop up a notification alerting the captain.

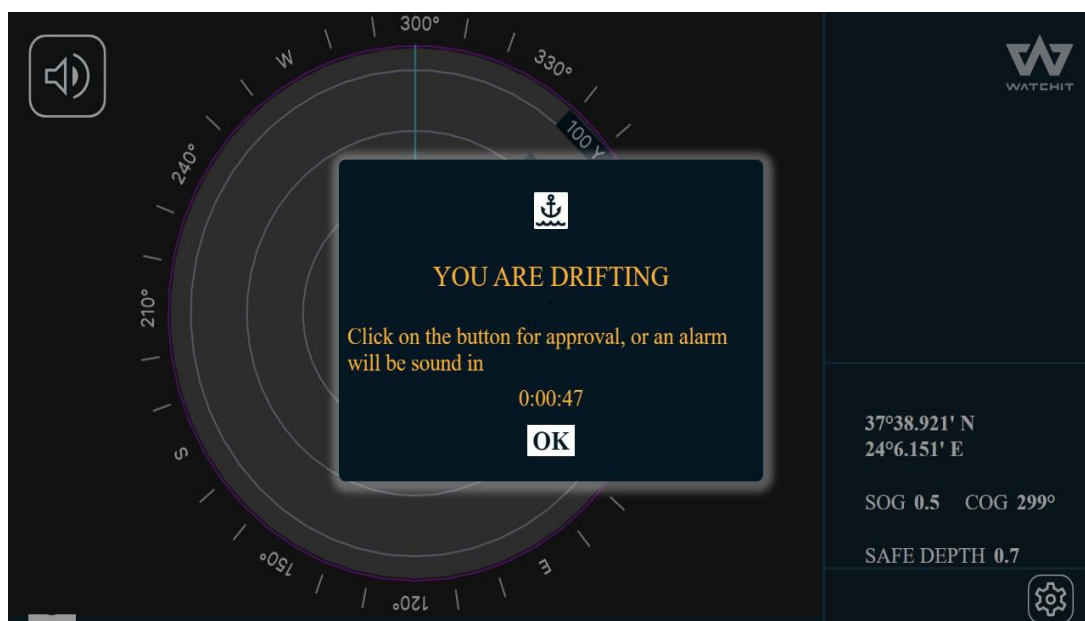


Image 6 – Drifting popup

If the operator won't acknowledge the drifting popup within 5 minutes – an alert will be sound.

## 2.4. Marina Mode

When entering a marina, the system will automatically switch to Marina Mode (see image 7) to avoid interference with the mooring maneuvers.



Image 7 - Marina Mode

**NOTE** – incase you've entered a marina and the system hasn't switched to Marina Mode – please contact [support@watchit.ai](mailto:support@watchit.ai) with the name and location of the marina and we'll have it added to our database for your better experience.

## 2.5. No GPS signal

In the event of no GPS signal (see image 8) the below popup will be presented.

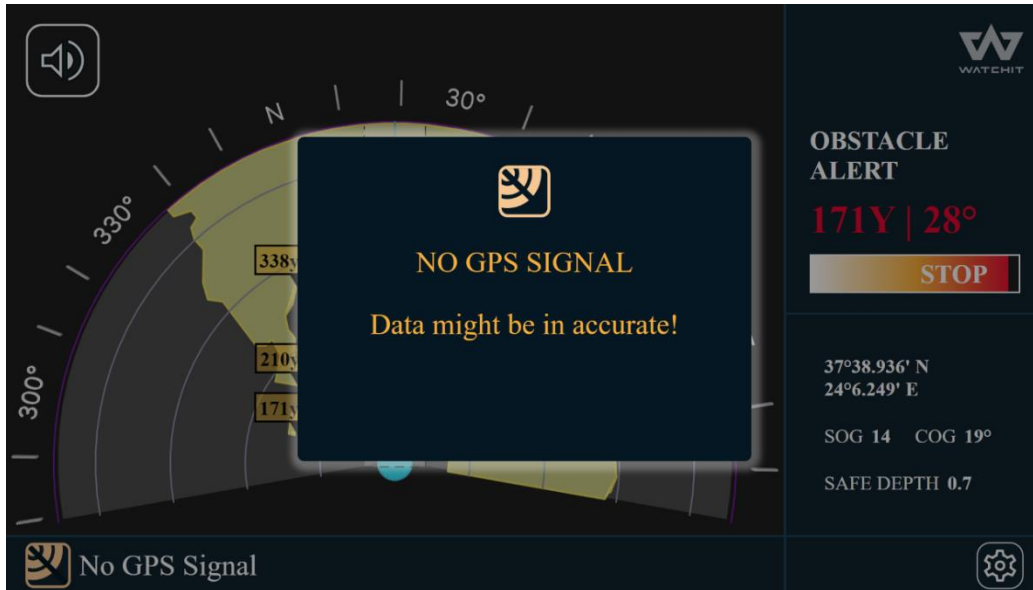


Image 8 – No GPS signal

## 2.6. WATCHIT User Settings Screen

In order to enter the User Setting screen, tap on the Setting button [10] on the bottom right corner of the screen.

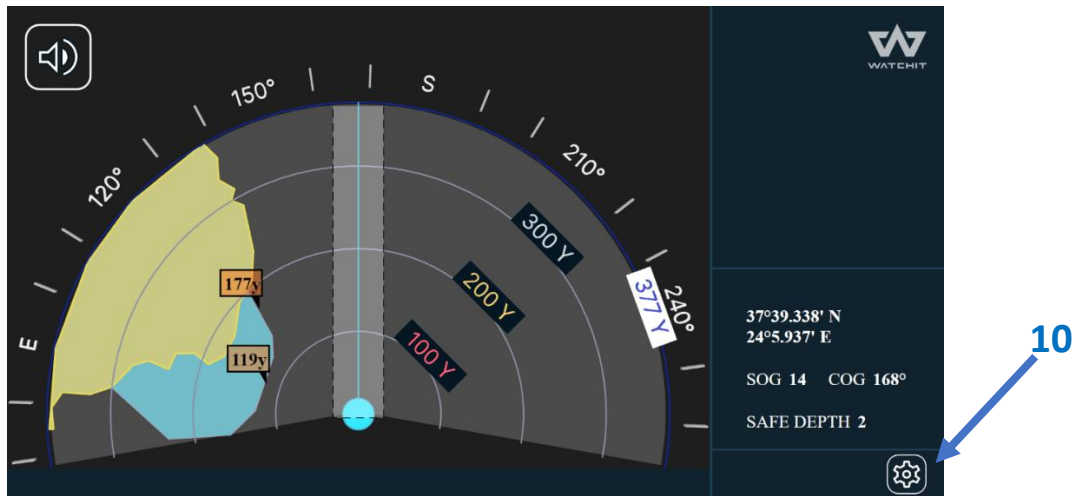


Image 9 – Entering the User Settings screen

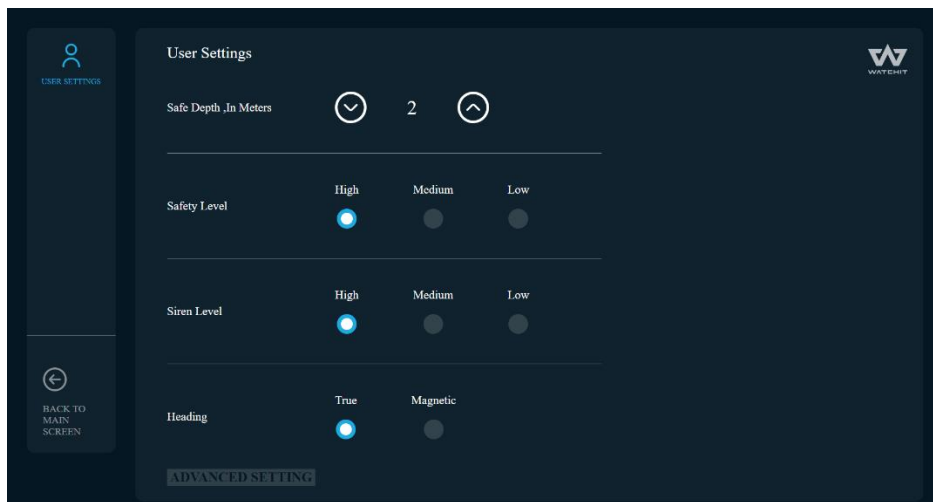


Image 10 – User Settings screen

In this screen the operator can set the depth alert threshold value.

**NOTE** – the water depth for alert is measured from the **sea level** and not below keel

While sailing, the WATCHIT algorithm evaluates the sensitivity level of the system. Through this screen the user can predefine the level of sensitivity manually.

Sound profiles can be determined as below:

- High level – The alert will be heard as long as there is an endangering object in the DAZ
- Mid level – The alert will be heard at the beginning and the end of the alert time and every few seconds.
- Low level – The alert will be heard only when the endangering object has entered the DAZ and another time once the progress bar was fully colored.

## 3. Appendix

### 3.1. Full warning and disclaimer information

#### **SAFETY WARNINGS**

**Failure to adhere to the following warnings may result in death, bodily injuries and property damages.**

This “WATCHIT” system is intended only as an aid to navigation and does not substitute safe and alert vessel navigation and operation by a qualified operator.

Always keep a permanent watch over the vessel’s course and operation, allowing you to control and respond to hazards and unexpected situations as they occur. Failure to keep a permanent watch puts the operator, the vessel, and others at serious risk of harm.

Do not use the “WATCHIT” system as a navigational tool as it is not intended as such. When operating a vessel, cross check information and warnings issued by the “WATCHIT” system with other navigation sources, such as visual sightings, official government charts, and waterway rules.

Only official government charts and notices contain all up-to-date information required for safe navigation and operation of a vessel, and the vessel operator is responsible to use them properly. It is the vessel operator’s responsibility to use official government charts, official notices, exercise caution and proper vessel operation and navigational skills when using the “WATCHIT” system.

#### **DISCLAIMER, WARRANTY AND LIMITATION OF LIABILITY**

THE WATCHIT SYSTEM IS WARRANTED TO BE MATERIALLY FREE FROM DEFECTS IN MATERIALS, DESIGN AND WORKMANSHIP FOR 12 MONTHS FROM THE DATE OF PURCHASE OR A LONGER PERIOD IF STATED IN YOUR TERMS OF SALE. IN CASE ANY SYSTEM COMPONENTS FAIL IN NORMAL USE WITHIN THIS PERIOD, WATCHIT WILL, AT ITS SOLE OPTION, (I) REPAIR THE SYSTEM USING NEW PARTS OR USED PARTS THAT SATISFY WATCHIT’S QUALITY STANDARDS, (II) REPLACE THE SYSTEM WITH A NEW SYSTEM OR A REFURBISHED SYSTEM THAT MEETS WATCHIT’S QUALITY STANDARDS, OR (III) EXCHANGE THE SYSTEM FOR A FULL REFUND OF ITS PURCHASE PRICE. SUCH REMEDY SHALL BE THE SOLE AND EXCLUSIVE REMEDY IN CONNECTION WITH THE WATCHIT SYSTEM. THIS LIMITED WARRANTY DOES NOT APPLY TO: (I) COSMETIC DAMAGE, SUCH AS SCRATCHES, NICKS AND DENTS; (II) CONSUMABLE PARTS; (III) DAMAGE CAUSED BY ACCIDENT, ABUSE, MISUSE, WATER, FLOOD, FIRE, OR OTHER ACTS OF NATURE OR EXTERNAL CAUSES; (IV) DAMAGE CAUSED BY INSTALLATION OR SERVICE PERFORMED BY ANYONE WHO IS NOT AN AUTHORIZED SERVICE PROVIDER OF WATCHIT; OR (V) DAMAGE TO A PRODUCT THAT HAS BEEN MODIFIED OR ALTERED WITHOUT THE WRITTEN PERMISSION OF WATCHIT.

THE WARRANTY AND THE REMEDIES EXPRESSLY SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF, AND WATCHIT AND ANY AND ALL PARTIES ACTING ON ITS BEHALF, EXPRESSLY DISCLAIM ANY AND ALL OTHER, REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS, IMPLIED, OR STATUTORY, REGARDING THE COMPLETENESS, ACCURACY, NON-INFRINGEMENT, OPERABILITY, QUALITY, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE OF THE WATCHIT SYSTEM AND THE SERVICES PROVIDED



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THE ABOVE TERMS AND CONDITIONS SHALL BE GOVERNED BY THE LAWS OF THE STATE OF ISRAEL, WITHOUT GIVING EFFECT TO ITS CONFLICT OF LAWS PROVISIONS. THE COMPETENT COURTS OF TEL AVIV DISTRICT, SHALL HAVE EXCLUSIVE JURISDICTION OVER ANY AND ALL DISPUTES, CLAIMS, AND ACTIONS ARISING FROM OR IN CONNECTION WITH THE WATCHIT SYSTEM AND THE SERVICES PROVIDED THEREBY.