

DS-PR1-60

Security Radar

HIKVISION

UD13647B-B

ENGLISH

Diagram References

1 Indicator

- a. Power Supply Indicator
- Solid Green: Detector Power on
- b. Fault Alarm Indicator
- Flashing Red: Fault Alarm Occurred
- Solid Green: Alarm Restored
- c. Zone Alarm Indicator
- Solid Red: Zone/Trigger Line Alarm Occurred
- Solid Green: Alarm Restored
- d. Formatting Indicator
- Red and Green LED Flashes 3 Times: Formatting Successfully

2 Formatting

Loosen the screws on the rear cover to remove the cover. Hold the Reset button while powering the radar on until the red and green LED flashes 3 times.

3 Wiring

- a. Alarm Output Wiring (Dry Contact Output)
 - a1: one for electrical load
 - a2: three for electronic load
- b. Alarm Input Wiring (Reserved)
- c. DC Power Supply Wiring
- d. Ethernet (PoE Port) Wiring
- e. Grounding

4 Installation

Before You Start:

- The recommended installation height is 2.5 m.
- Make sure that the mounting surface is strong enough to withstand at least 50 N, as well as four times the weight of the device and the bracket.

1 Ceiling Mounting

1. Attach the mounting bracket on the radar with four supplied screws.
2. Loosen the screws on both side of the bracket.
3. Adjust the angle of the radar.
4. Tighten the screws on both sides of the bracket to complete the installation.

2 Pole Mounting

1. Attach the mounting bracket on the radar with four supplied screws.
2. Loosen the screws on both sides of the bracket.
3. Adjust the angle of the radar.
4. Tighten the screws on both sides of the bracket to complete the installation.

5 Test

Test the radar after installation to make sure it is properly mounted.

Power on the radar and make sure there is no large object in the monitoring area. Make the radar access into the Internet. The radar and the PC that runs the software should be in the same IP segment.

1. Download and install the iVMS-4200 client software.
2. Enter Device Management page, and click **Online Device**.
- Note:** You should activate the device for the first usage. Select the device in the Online Device List, click **Activate**, create a password to activate the device.
- Scan the QR code to get the *User Manual of Security Radar*.
3. Select the radar in the Online Device List. Click **Add**, enter parameters, set the port as 80, and check **Import to Group**. If the IP segment of the radar is not the same as the PC's, click **Add** in the Device for Management list and enter the radar IP address and other parameters in the pop-up window to add the radar. You need to set the port as 80 and check **Import to Group**.
4. Add the camera to iVMS-4200 client software: In the client software, enter Device Management page, click **Add** in the Device for Management list, and enter the IP address, user name and password of the camera in the pop-up window. The port No. should be the actual port No. of the camera.
5. Upload Map: In iVMS-4200 client software, enter E-map, select a radar group and click **Add Map** to select a map.
6. Click **Edit Scale**, draw a path on the map and set the plotting scale.
7. Expand the device group in the list on the left, and drag the radar onto the map.
8. Move along the edge of the required monitoring filed. Make sure the target sign (red arrow) is moving within the radar area (gray sector) shown on the added map. If the target sign is not within the sector, you need to adjust the mounting position or angle of the radar.

6 Set Up

1 Add Zone or Trigger Line for the Radar

1. In iVMS-4200 client software, enter E-map.
 2. Click **Edit - Radar Settings - Draw Zone Manually or Edit - Radar Settings - Draw Trigger Line - Trigger Line/Dual-trigger Line**, and click to draw a zone or a trigger line on the radar detection area.
 3. Right-click to finish drawing.
 4. Set the parameters of the zone or trigger line in the pop-up window.
- Zone:** Edit the zone parameters in the pop-up window. Click **OK** to finish the settings.
- Trigger Line:** Set the rule of the line (left->right, left-<-right, left-<->right) and enter the distance (only for dual-trigger line). Click **OK** to finish the settings.
- Note:** The trigger line is not allowed to be crossed.

2 Calibrate the Speed Dome

Before the operation, you need to disable the parking function. You also need to click **Finish** on the **E-map** page to exit the editing mode. Click the radar and click **Disarm** to disarm the radar.

1 Initial Position settings

- Before calibration, set the initial position of the speed dome to ensure the tracking accuracy.
1. Select a reference object about 50 m away from the speed dome. On the reference object, select a point whose altitude is the same as the speed dome's.
 2. Enter the IP address of the speed dome in the web browser to enter the web client. Adjust the PTZ buttons on the Live View page to make the reference object displayed in the image, and click **Q+** to zoom in the reference object.
 3. Click **Q+**, and click the reference point to middle the point in the frame.
 4. Enter **Configuration - PTZ - Initial Position**, and click **Set** to set the initial position.

2 Calibration

If the speed dome is installed together with the radar within 2 m horizontal, select the calibration mode as **One-Point Calibration**. Otherwise, set the calibration as **Multi-Point Calibration** and add at least 4 calibration points. (Calibration points need to be evenly distributed on the radar center line)

For One-Point calibration, you can refer to the following steps, and see user manual for other calibration methods.

1. In iVMS-4200 client software, enter Device Management page, click **Group**. Click **Encoding Channels** in the group of the radar. Click **Import** and check cameras to link with the radar.
2. In iVMS-4200 client software, enter E-map page, click **Edit - Radar Settings - Master-slave Tracking Settings**.
3. Click the live view window, select the linked camera needs to be calibrated, and double click the live view window to maximum it.
4. Select **One-Point Calibration** as the calibration mode.
5. Ask the calibration staff to move in the radar detection field. Click the track of the calibrate staff, and the color of the selected track will change from red to white.
6. Ask the calibration staff to stand at the calibration point within 20 to 40 m directly in front of the radar.
7. Adjust the PTZ buttons on the right of the live view window to update the PTZ position; Click +/- to scale the calibration staff to a fit size (The altitude of the calibration staff is about 2/3 of the altitude of the window), and adjust the PTZ to make the object align with the sign + at the center of the frame. (Click on the center of the calibration staff and the screen will automatically adjust.)
8. Click **Add Calibration** to add a calibration point. A green marker will be added on the calibration point. The radar position and the PTZ position will be displayed in the **Info** list. **The tracking will be enabled after completing the settings will be checked.**
9. Click **Save**.

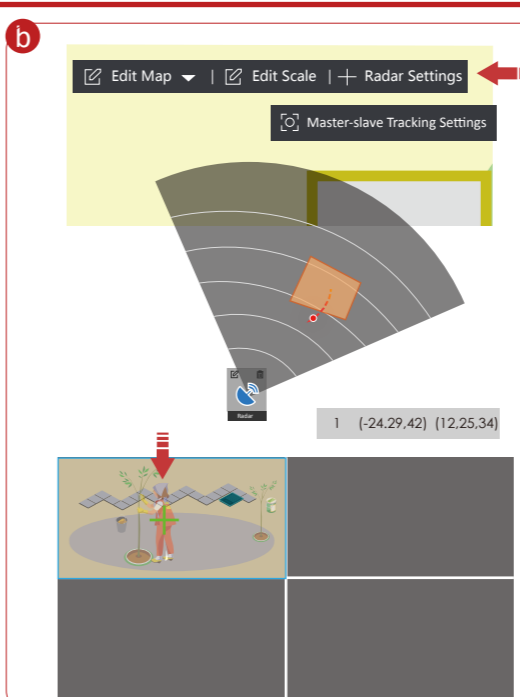
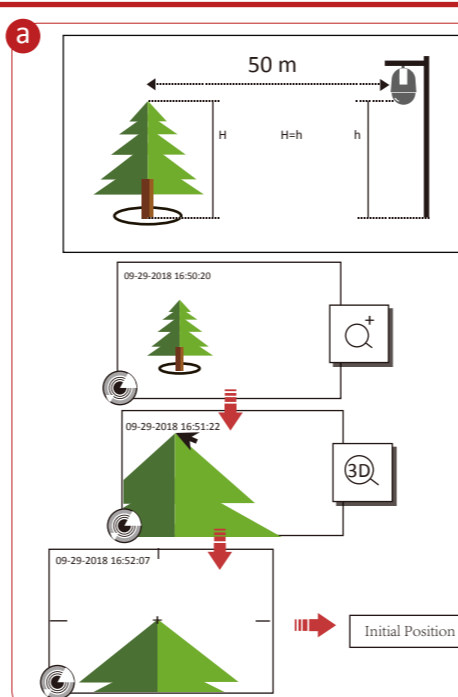
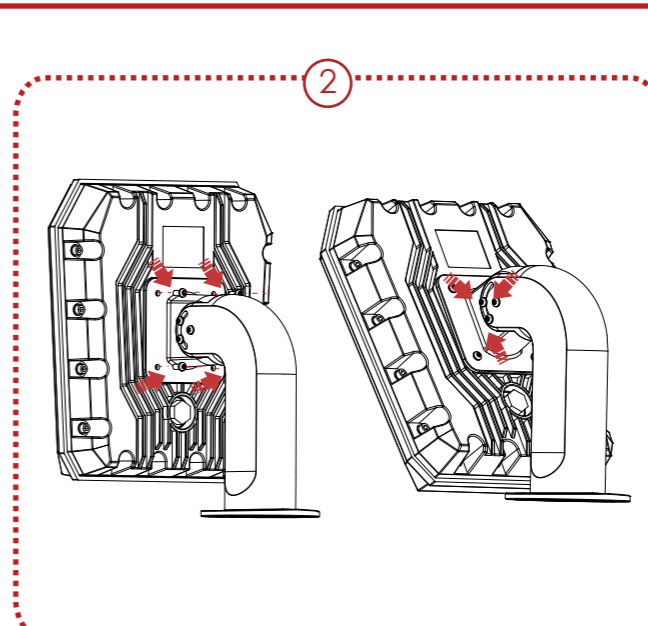
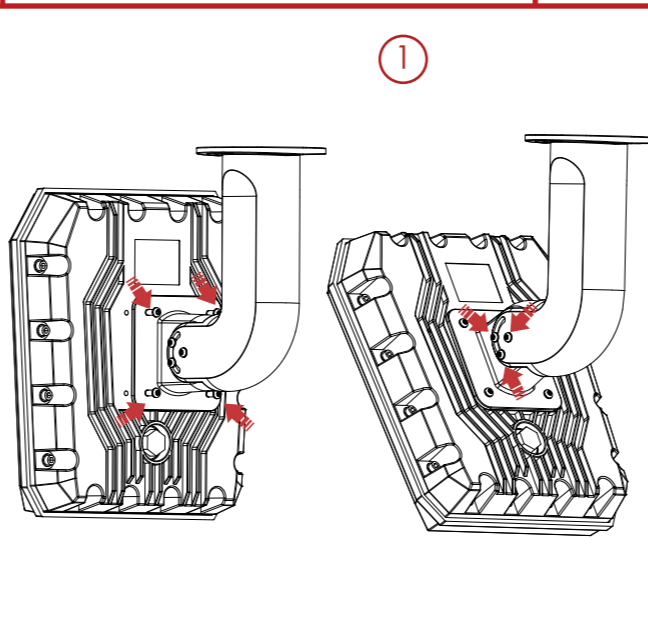
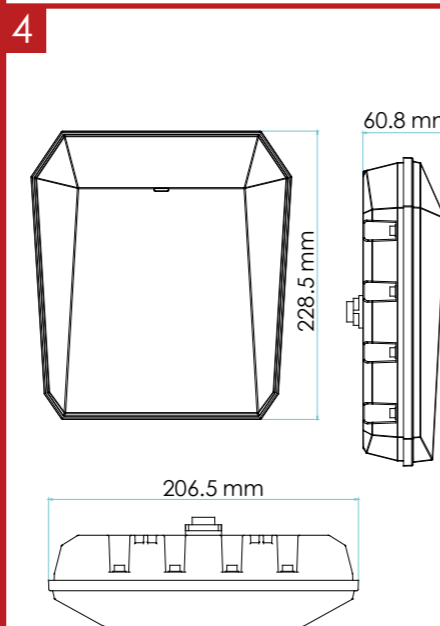
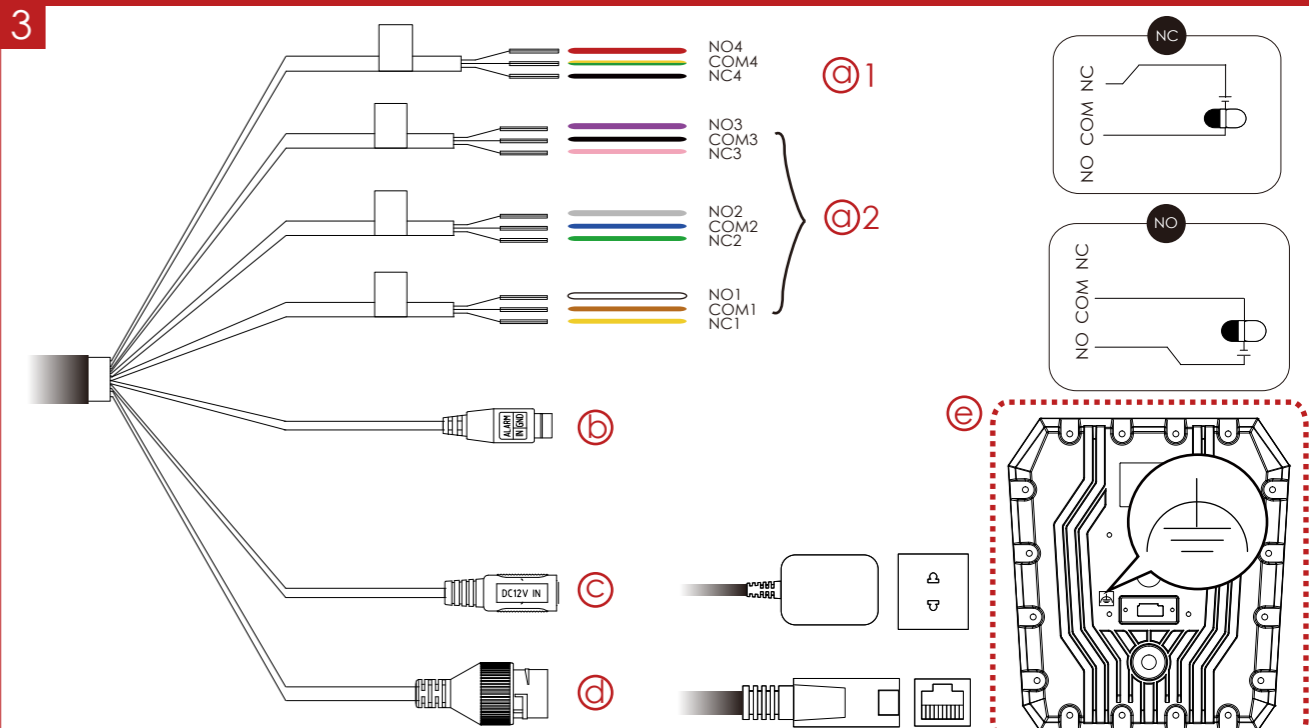
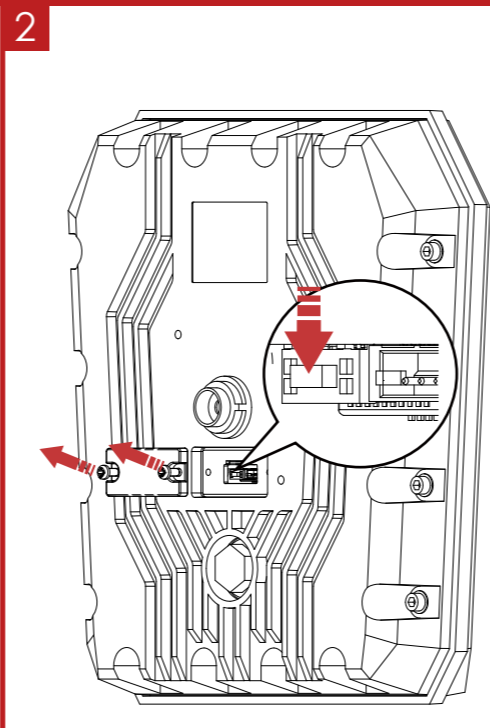
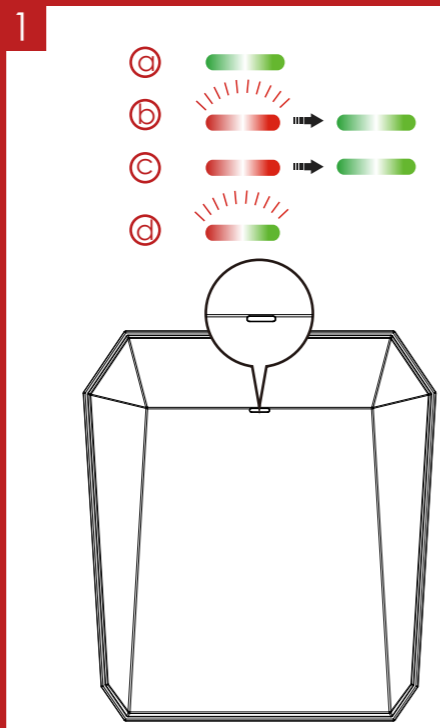
For detailed settings, scan the QR code to get the *User Manual of Security Radar*.

Specification

Model	DS-PR1-60	Communication Protocol	Standard ISAPI protocol, NAL2300, HTTP, DNS, NTP, UDP, DHCP, ARP and SSH
Detection Range	60 m	Exception Detection	Tampering alarm, moving alarm
Horizontal Angle	100°	Power Interface	DC 12 V/2 A
Angle Measurement Accuracy	16°	Operation Temperature	Operation temperature: -40°C to 65°C, storage temperature: -20°C to 65°C
Range Measurement Accuracy	5 m	Operation Humidity	10% to 90%
Velocity Measurement Accuracy	0.55 m/s	Dimension(L×W×H)	228 × 206 × 61 mm
Max. Target Number	8	IP Level	IP67
Trigger Line	4	Weight	1.84 kg
Zone	8	Installation	Bracket installation, installation Height: 1.2 m to 4 m, recommended height range: 2.5 m
Alarm Output	3-ch weak current output: 0.5 A/125 VAC, breakdown voltage: 1 kV 1-ch strong current output: 10 A/240 VAC, breakdown voltage: 2.5 kV		
Network Interface	1 RJ45 10M/100M self-adaptive, supports PoE		

Use only power supply listed below:
Manufacturer: MOSO Power Supply Technology Co.,Ltd

Model: MSA-C2000IC12.0-24P-GB, British standard
MSA-C2000IC12.0-24P-DE, European standard
MSA-C2000IC12.0-24P-US, American standard



FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. FCC compliance: 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.

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

FCC Conditions
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.
2. This device must accept any interference received, including interference that may cause undesired operation.

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio-exempt de licence. L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.
Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

Product Information

©2019 Hangzhou Hikvision Digital Technology Co., Ltd. All rights reserved.
About this Manual
The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (<https://www.hikvision.com/>).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

HIKVISION and other Hikvision's trademarks and logos are the properties of Hikvision in various jurisdictions. Other trademarks and logos mentioned are the properties of their respective owners.

Disclaimer
TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS MANUAL AND THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, ARE PROVIDED "AS IS" AND "WITH ALL FAULTS AND ERRORS". HIKVISION MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE USE OF THE PRODUCT BY YOU IS AT YOUR OWN RISK. IN NO EVENT WILL HIKVISION BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA, CORRUPTION OF SYSTEMS, OR LOSS OF DOCUMENTATION, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, OR OTHERWISE, IN CONNECTION WITH THE USE OF THE PRODUCT, EVEN IF HIKVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS.

YOU ACKNOWLEDGE THAT THE NATURE OF INTERNET PROVIDES FOR INHERENT SECURITY RISKS, AND HIKVISION SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER-ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKVISION WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

YOU AGREE TO USE THIS PRODUCT IN COMPLIANCE WITH ALL APPLICABLE LAWS, AND YOU ARE SOLELY RESPONSIBLE FOR ENSURING THAT YOUR USE CONFORMS TO THE APPLICABLE LAW, ESPECIALLY, YOU ARE RESPONSIBLE, FOR USING THIS PRODUCT IN A MANNER THAT DOES NOT INFRINGE ON THE RIGHTS OF THIRD PARTIES, INCLUDING WITHOUT LIMITATION, RIGHTS OF PUBLICITY, INTELLECTUAL PROPERTY RIGHTS AND OTHER PRIVACY RIGHTS. YOU SHALL NOT USE THIS PRODUCT FOR ANY PROHIBITED END-USES, INCLUDING THE DEVELOPMENT OR PRODUCTION OF WEAPONS OF MASS DESTRUCTION, THE DEVELOPMENT OR PRODUCTION OF CHEMICAL OR BIOLOGICAL WEAPONS, ANY ACTIVITIES IN THE CONTEXT RELATED TO ANY NUCLEAR OR UNSAFE NUCLEAR FUEL-CYCLE, OR IN SUPPORT OF HUMAN RIGHTS ABUSES. IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

CE This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the RE Directive 2014/53/EU, the EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU.

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the expiration of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info

1 This product operates in a European non-harmonised frequency band.