

## ROSCOPE i2000

ROSCOPE i2000



DE Bedienungsanleitung  
EN Instructions for use  
FR Instruction d'utilisation  
ES Instrucciones de uso  
IT Istruzioni d'uso  
NL Gebruiksaanwijzing  
PT Instruções de serviço  
DA Brugsanvisning  
SV Bruksanvisning

NO Bruksanvisning  
FI Käyttöohje  
PL Instrukcja obsługi  
CS Návod k používání  
TR Kullanım kılavuzu  
HU Kezelési útmutató  
EL Οδηγίες χρήσεως  
RU Инструкция по использованию



# Intro

## EU-KONFORMITÄTSEKTLÄRUNG

Wir erklären in alleiniger Verantwortung, dass dieses Produkt mit den angegebenen Normen und Richtlinien übereinstimmt.

## EU-DECLARATION OF CONFORMITY

We declare on our sole accountability that this product conforms to the standards and guidelines stated.

## DECLARATION EU DE CONFORMITÉ

Nous déclarons sous notre propre responsabilité que ce produit est conforme aux normes et directives indiquées.

## DECLARACION DE CONFORMIDAD EU

Declaramos, bajo nuestra responsabilidad exclusiva, que este producto cumple con las normas y directivas mencionadas.

## DICHARAZIONE DI CONFORMITÀ EU

Dichiaro su nostra unica responsabilità, che questo prodotto è conforme alle norme ed alle direttive indicate.

## EU-KONFORMITEITSVERKLARING

Wij verklaren in eigen verantwoordelijkheid dat dit product overeenstemt met de van toepassing zijnde normen en richtlijnen.

## DECLARAÇÃO DE CONFORMIDADE EU


Declaramos, sob responsabilidade exclusiva, que o presente produto está conforme com as Normas e Directivas indicadas.

## EU-KONFORMITETSEKTLÆRING

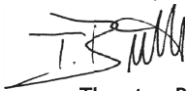
Vi erklærer som eneansvarlig, at dette produkt er i overensstemmelse med anførte standarder, retningslinjer og direktiver.

## EU-FÖRSÄKRAN

Vi försäkrar på eget ansvar att denna produkt uppfyller de angivna normerna och riktlinjerna.

 2014/30/EU, 2014/35/EU,  
2014/53/EU, 2011/65/EU,  
EN 300-328-1 V1.8.1,  
EN 301-489-1 V1.9.2,  
EN 60065

Herstellerunterschrift  
Manufacturer /  
authorized representative signature



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## EU-SAMSVARSERKLÆRING

Vi erklærer på eget ansvar at dette produktet stemmer overens med de følgende normer eller normative dokumenter.

## TODISTUS EU-STANDARDINMUKAISUUDESTA

Todistamme täten ja vastaamme yksin siitä, että tämä tuote on allalueteltujen standardien ja standardomisasiakirjojen vaatimusten mukainen.

## DEKLARACJA ZGODNOŚCI EU

Oświadczamy z pełną odpowiedzialnością, że produkt ten odpowiada wymaganiom następujących norm i dokumentów normatywnych.

## EU-PROHLÁŠENÍ O SHODĚ

Se vši zodpovědností prohlašujeme, že tento výrobek odpovídá následujícím normám a normativním dokumentům.

## EU UYGUNLUK BEYANI

Tek sorumlu olarak bu ürünün yönetmelik hükümleri uyarınca apađıdaki normlara ve norm dokümanlarına uygunluđunu beyan ederiz.

## EU-AZONOSSÁGI NYILATKOZAT

Teljes felelősségünk tudatában kijelentjük, hogy jelen termék megfelel a következő szabványoknak vagy szabványossági dokumentumoknak.

## ΔΗΛΩΣΗ ΠΙΣΤΟΤΗΤΑΣ EU

Δήλώνουμε με αποκλειστική μας ευθύνη, ότι αυτό το προϊόν ανταποκρίνεται στα ακόλουθα πρότυπα ή έγγραφα τυποποίησης.

## ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

СТАНДАРТАМ EU. Мы заявляем что этот продукт соответствует следующим стандартам.

No. 1500000696 ROSCOPE i2000 + Modul TEC

 **ROTHENBERGER**

# Intro

<b>DEUTSCH</b> Bedienungsanleitung bitte lesen und aufbewahren! Nicht wegwerfen! Bei Schäden durch Bedienungsfehler erlischt die Garantie! Technische Änderungen vorbehalten!	<b>Seite 2</b>
<b>ENGLISH - Original User Manual</b> Please read and retain these directions for use. Do not throw them away! The warranty does not cover damage caused by incorrect use of the equipment! Subject to technical modifications!	<b>page 21</b>
<b>FRANÇAIS</b> Lire attentivement le mode d'emploi et le ranger à un endroit sûr! Ne pas le jeter ! La garantie est annulée lors de dommages dus à une manipulation erronée ! Sous réserve de modifications techniques!	<b>page 38</b>
<b>ESPAÑOL</b> ¡Por favor, lea y conserve el manual de instrucciones! ¡No lo tire! ¡En caso de daños por errores de manejo, la garantía queda sin validez! Modificaciones técnicas reservadas!	<b>página 56</b>
<b>ITALIANO</b> Per favore leggere e conservare le istruzioni per l'uso! Non gettarle via! In caso di danni dovuti ad errori nell'uso, la garanzia si estingue! Ci si riservano modifiche tecniche!	<b>Pagina 74</b>
<b>NEDERLANDS</b> Lees de handleiding zorgvuldig door en bewaar haar goed! Niet weggooien! Bij schade door bedieningsfouten komt de garantieverlening te vervallen! Technische wijzigingen voorbehouden!	<b>bladzijde 92</b>
<b>PORTUGUES</b> Queiram ler e guardar o manual de instruções! Não deitar fora! Em caso de avarias por utilização incorrecta, extingue-se a garantia! Reservado o direito de alterações técnicas!	<b>pagina 110</b>
<b>DANSK</b> Læs betjeningsvejledningen, og gem den til senere brug! Smid den ikke ud! Skader, som måtte opstå som følge af betjeningsfejl, medfører, at garantien mister sin gyldighed! Ret til tekniske ændringer forbeholdes!	<b>side 128</b>
<b>SVENSKA</b> Läs igenom bruksanvisningen och förvara den väl! Kasta inte bort den! Garantin upphör om apparaten har använts eller betjänats på ett felaktigt sätt! Med reservation för tekniska ändringar!	<b>sida 145</b>
<b>NORSK</b> Les bruksanvisningen og oppbevar den vel! Ikke kast den! Oppstår skader på grunn av betjeningsfeil opphører garantiens gyldighet! Tekniske forandringer forbeholdes!	<b>side 162</b>
<b>SUOMI</b> Lue ja säilytä tämä käyttöohje! Älä heitä pois! Takuu ei kata käyttövirheistä aiheutuvia vahinkoja! Oikeudet teknisiin muutoksiin pidätetään!	<b>sivulta 179</b>
<b>POLSKI</b> Instrukcję obsługi proszę przeczytać i przechować! Nie wyrzucac! Przy uszkodzeniach wynikających z błędów obsługi wygasa gwarancja! Zmiany techniczne zastrzeżone!	<b>strony 196</b>
<b>CESKY</b> Navod k obsluze si prosim přečtete a uschovejte jej! Nevyhazujte jej! V případě poškození způsobenem chybnou obsluhou zanika záruka! Technické změny jsou vyhrazeny!	<b>Stránky 214</b>
<b>TÜRKÇE</b> Kullanım açıklamarını lütfen dikkatlice okuyunuz ve bir yerde muhafaza ediniz! Çöpe atmayınız! Kullanımında yapılan hatalar, garantinin silinmesine neden olur! Teknik değişiklikler yapma hakkımız saklıdır!	<b>sayfa 233</b>
<b>MAGYAR</b> Kérjük, olvassa el és őrizze meg a kezelési utasítást! Ne dobja el! A helytelen kezelésből származó károsodások esetén megszűnik a jótállás! Műszaki változtatások fenntartva!	<b>oldaltól 250</b>
<b>ΕΛΛΗΝΙΚΑ</b> Οδηγίες χειρισμού παρακαλείσθε να τις διαβάσετε και να τις φυλάσσετε! Μην τις πετάξετε! Σε ζημιές από σφάλματα χειρισμού παύει να ισχύει η εγγύηση! Με επιφύλαξη για τεχνικές αλλαγές!	<b>Σελίδα 268</b>
<b>РУССКИЙ</b> Прочтите инструкцию по эксплуатации и сохраняйте её для дальнейшего использования! В случае поломки инструмента из-за несоблюдения инструкции клиент теряет право на обслуживание по гарантии! Возможны технические изменения!	<b>Страница 287</b>



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## Markings in this document:



### **Danger!**

This sign warns against the danger of personal injuries.



### **Caution!**

This sign warns against the danger of property damage and damage to the environment.



### **Call for action**

**This product is covered by U.S. Patents: 7,384,308; 7,431,619 B2; 7,581,988 B2; 7,584,534; Chinese Patents: ZL200620147826.1; ZL200620147827.6; ZL2007200004596.8; and other patents pending.**

## USA

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.

### FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures.

This equipment has been tested and found to comply with the limits for Class A digital devices, 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.
- Consult the dealer for help.

Use of shielded cable is required to comply with Class A limits in Subpart B of Part 15 of the FCC rules.

## Canada

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 harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts 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.

### NOTE:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## 1.1 General Safety Rules

It is recommended to read the entire manual before operating the ROSCOPE i2000:



**WARNING!** Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term „power tool“ in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

**SAVE THESE INSTRUCTIONS.**

### 1) Work area

- a) **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Do not expose to corrosive chemicals.**
- d) **The imager is water-proof to 9 m depth however the use of the handheld device should be limited to dry environments (as it is not water proof).**
- e) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

### 2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

### 3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- b) **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, nonskid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- d) **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.

### 4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Store idle power tools out of the reach of children and do not allow persons**

unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

- d) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- e) **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- f) **Do not place tool into anything or anywhere that may contain a live electrical charge.**

#### 5) Battery tool use and care

- a) **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b) **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- c) **Under abusive conditions, liquid may be ejected from the battery; avoid contact.** If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

#### 6) Service

**Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

- 7) **Battery is designed to be serviceable by a trained technician (service center), and should not be removed in the field.**

## 1.2 Safety Instruction

### A/C Power Supply Safety

- Do not probe A/C power supply with conductive objects. Shorting of battery terminals may cause sparks, burns and/or electrical shock.
- Do not use the A/C power supply if damaged. A damaged A/C power supply increases the risk of electrical shock.
- Use an appropriate power source. Do not attempt to use a step-up transformer or an engine generator. Doing so may cause damage to the A/C power supply or the ROSCOPE i2000 resulting in electrical shock, fire or burns.
- Do not allow anything to cover the A/C power supply while in use. Proper ventilation is required for correct operation of the A/C power supply. Allow a minimum of 4" (10 cm) of clearance around the charger for proper ventilation.
- Unplug the A/C power supply when not in use. Reduces the risk of injury to children and untrained persons.
- Unplug the A/C power supply from outlet before attempting any maintenance or cleaning. Reduces the risk of electrical shock.
- Do not use the A/C power supply in a damp, wet or explosive environment. Do not expose to rain, snow or dirt. Contaminants and moisture increase the risk of electrical shock.
- Do not open the A/C power supply or ROSCOPE i2000 housings. Have repairs performed only at authorized locations.
- Do not carry the A/C power supply by the power cord. Reduces the risk of electrical shock.

### Battery Safety

- The battery in the ROSCOPE i2000 is NOT designed to be user replaceable. Call your Service Center if you believe the ROSCOPE i2000 battery is in need of service.
- Properly dispose of the ROSCOPE i2000. Exposure to high temperatures can cause the battery to explode, so do not dispose of in a fire. Some countries have regulations concerning battery disposal. Please follow all applicable regulations.



- Charge battery in temperatures above 32°F (0°C) and below 113°F (45°C). Store ROSCOPE i2000 in temperatures above -4°F (-20°C) and below 140°F (60°C). Storage for a long time at temperatures above 95°F (35°C) will reduce the capacity of the ROSCOPE i2000. It is recommended to store the ROSCOPE i2000 at 77°F (25°C) to maximize battery life. Proper care will prevent serious damage to the battery. Improper care of the battery may result in battery leakage, electrical shock and burns.
- If the ROSCOPE i2000 is damaged, do not plug the A/C power supply into it. Do not attempt to charge.
- Never use a home-made or incompatible battery pack. This may result in damage to unit and/or cause injury.
- Never disassemble the ROSCOPE i2000 unit. There are no user-serviceable parts inside. Disassembling the ROSCOPE i2000 may cause electrical shock or personal injury.
- Avoid contact with fluids leaking from the ROSCOPE i2000 unit. Fluids may cause burns or skin irritation. Thoroughly rinse with water in case of accidental contact with fluid. Consult doctor if fluid comes into contact with eyes.

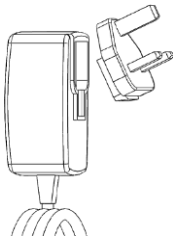


Figure No. 1 - Power Supply

## 2 Technical Data / Specification

Viewable Distance ..... 5 cm – 30 cm (2" to 12")

**A/C Power Supply** ..... (See Figure No. 1 – Power Supply)

Input voltage 100 - 240 VAC, 50 - 60 Hz, 0.3 Amp

Maximum inrush current 15 A @ 115 VAC, 30 A @ 230 VAC

5V DC 1.2 Amp Max Output voltage

No Load Standby power < 0.3 W

Operating Temperature 32°F to 104°F (0°C to 40°C)

Storage Temperature -4°F to 140°F (-20°C to 60°C)

Relative Humidity 20% to 80% non-condensing

The charger is supplied with a selection of adaptors for use in multiple countries. Before first use, select the appropriate adaptor for your country and attach it to the charger.

**Internal Li-Ion Battery** ..... 3.7V, 5200 mAh, 19.24 watt-hours

Estimated run time 3 - 5 hours\* of continuous use (\* actual battery life will vary depending on the intensity of the Imager LEDs and the usage of the Exterior Handheld Device Lights). Battery charge time approximately 5 hours when units is turned off. (Note - Actual charge time will be considerably longer if unit is turned on while charging).

Weight ..... 0.95 kilograms

### Dimensions:

Length ..... 35 cm (13.80")

Width ..... 10.8 cm (4.25")

Height ..... 7 cm (2.75")

**Display:**

Resolution ..... 320 x 240 RGB  
 Screen Type ..... 3.5" TFT LCD with touch panel

**Operating Environment:**

Temperature ..... 0°C to 40°C (32°F to 104°F)  
 Humidity ..... Maximum of 95% non-condensing (display unit)  
 Storage Temperature..... -20°C to 60°C (-4°F to 140°F)  
 Water Resistance ..... Imager head and extensions to 9m (30') water depth  
 (When properly assembled.)

**NOTE:** Hand-held unit is not moisture and water proof!

Cable Length ..... 1.2 m (4') up to 9.7 m (32') with Optional Extensions  
 Image Resolution ..... 720 x 480  
 Video Resolution ..... 640 x 480  
 Memory ..... SD card provided for memory storage  
 Computer Interface ..... USB (Cable Included)

### 3 Function of the unit

#### 3.1 Description

The ROSCOPE i2000, a handheld inspection device, displays live color video from an imaging source. This device is designed as a remote inspection tool to look into hard to reach areas such as home inspection, cable routing and plumbing inspections. It allows the user to capture still-images and full-motion video, along with audio. This device is equipped with an imaging and lighting source that features self-leveling, image rotation (with respect to gravity), zoom and LED light adjustment. These features ensure a detailed and accurate visual inspection. This unit is also equipped with the capability to wirelessly transmit either images or video to a secondary (local) handheld device, such as a Wi-Fi enabled smart phone or tablet, through the use of a simple app which can be downloaded from the internet. Accessories (mirror, hook, magnet, sold separately – see Figure No. 8 / Figure No. 9).



Figure No. 2 - ROSCOPE i2000

#### 3.2 Standard Equipment

The ROSCOPE i2000 inspection device comes with the following items (Figure No. 2):

- Handheld unit
- Internal Rechargeable Li-Ion Battery
- Charger - supplied with a selection of adaptors for use in multiple countries (Figure No. 3)
- USB Cable
- 1.2 m (4') Imager (Connector Style A, Black Color)
- Manual, CD & SD card
- Blow Mold Case

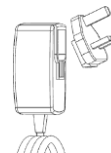


Figure No. 3 - Power Supply

### 3.3 Charging the ROSCOPE i2000

Open silicon cover on handheld unit and insert External Power Supply into the mini USB socket (Figure No. 4).



Figure No. 4 - USB Socket

**NOTE:** The ROSCOPE i2000 will only charge the battery if the temperature is between 0°C and 40°C (32°F and 113°F). Outside of this temperature range the ROSCOPE i2000 may continue to operate but the batteries will not charge and the Charge Status LED will be off.

1. Make sure the charger is unplugged. Inspect the power cord, charger and battery for damage or modifications, or broken, worn, missing, misaligned or binding parts. If any problems are found, do not use charger until the parts have been repaired or replaced.
2. Clean any oil, grease or dirt from the equipment as described in the Maintenance section, especially handles and controls. This helps prevent the equipment from slipping from your grip and allows proper ventilation.
3. Check to see that all warning labels and decals on the ROSCOPE i2000 and A/C Power Supply are intact and readable.
4. Select the appropriate location for the A/C Power Supply before use. Check work area for:
  - Adequate lighting.
  - Flammable liquids, vapors or dust that may ignite. If present, do not work in area until sources have been identified and corrected. The charger is not explosion proof and can cause sparks.
  - Do not use the device in wet or damp areas.
5. With dry hands, plug the charger into the appropriate power source.
6. When the battery is fully charged, the LED indicator will change from red to green.
  - Once the battery is charged, the ROSCOPE i2000 may remain plugged into the charger until it is ready to be used. There is no risk of over-charging the battery. When the battery has been fully charged, the charger automatically switches to retention charging.

**NOTE:** Internal Battery delivered with partial charge. It is recommended that the battery be fully charged for at least 5 hours before initial use.

**NOTE:** Any service or replacement of the internal battery pack should be done by an authorized ROTHENBERGER service facility.

### 3.4 Installing the Imager Head Cable



Only one imager should be connected to the unit at a time. Always make sure the unit is off when installing or removing an imager.

To use the ROSCOPE i2000 inspection device, the imager head cable must be connected to the handheld device. To connect the cable to the handheld device, make sure the key and slot (Figure No. 6 ) are properly aligned. Once they are aligned, hand-tighten the knurled nut to hold the connection in place. Note – The ROSCOPE i2000 is equipped with (2) different style connectors, making backward compatible with a variety of ROTHENBERGER imagers.



Figure 6 - Cable Connections (Connector Style "A", Black 9-Pin Style Connector)  
(For use with standard Imager provided with i2000 and with Module 25/16 Imager)



Figure 7 – Cable Connections (Connector Style "B", Silver 5-Pin Style Connector)  
(Connector Style "B" is used to attach previous versions of ROSCOPE Imager Cable to the ROSCOPE i2000)

**NOTE:** 1.2 m (4') cable extensions are available, for Connector Style "A" imager only, to increase the length of your cable up to 9.7 m (32') in length. To install an extension, first remove the imager cable from the handheld device by loosening the knurled nut. Connect the extension(s) to the handheld device as described above (Figure 6). The keyed end of the imager head cable connects to the slotted end of the extension.

### 3.5 Installing the Camera Accessories

(Figure No. 8) shows a mirror, hook and magnet (accessories sold separately). Each accessory attaches to the (provided) Connector Style "A" Imager Head the same way.



Figure 8 – Connector Style "A" accessories (sold separately)

To attach an accessory, hold the imager head as shown in (Figure No. 8). Slip the semicircle end of the accessory over the flats of the imager head as shown in Figure 8. Then rotate the accessory a 1/4 turn so the long arm of the accessory is extending out as shown (Figure No. 9).



Figure 9 – Installing an Accessory on the Connector “A” imager

### 3.6 Installing the SD Memory Card

Locate the tab on the port cover (Figure No. 10), lift and pull to remove the cover and expose the SD card slot. (SD card is included). Insert the SD card into the slot (Figure No. 11) making sure the contacts are facing towards you and the angled portion of the card is facing down.

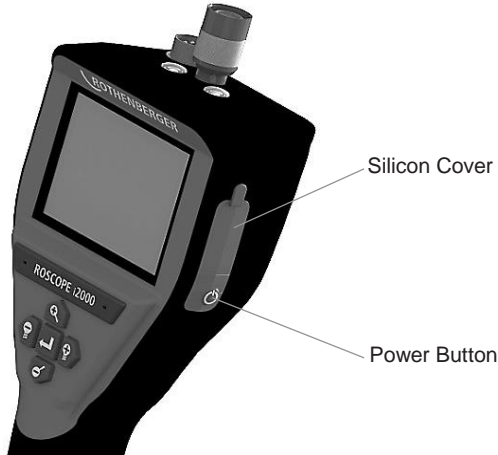


Figure 10 – Port Cover and Power Button

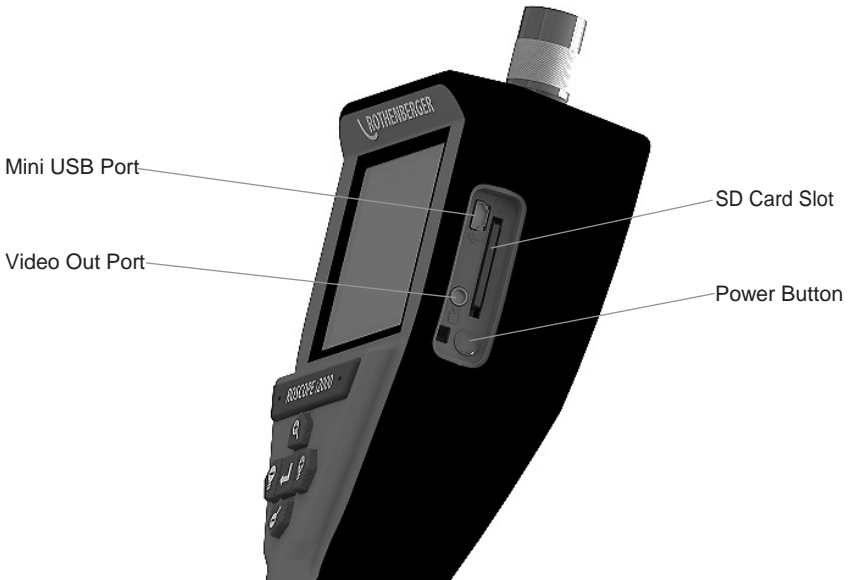


Figure No. 11 – Unit Inputs / Outputs

#### 4 On-Screen Navigation

When the ROSCOPE i2000 inspection device is powered on, the first screen that is displayed is referred to as the splash screen (Figure No. 12). This screen tells you the device is booting up. Once the product is fully powered up, the screen will automatically switch to the live screen.



Figure No. 12 – Start-up / Splash Screen – Indicates Current Firmware Version on the Handheld Unit

#### 5. Navigation Buttons



Capture Picture or Video (on/off)



LED Brightness +/-

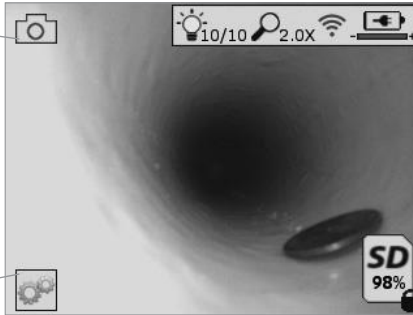


Zoom Image

## 6. On-Screen Icons / Settings and Navigation

### 6.1 Live Screen Display

Capture Mode Indicator and Button (Touch screen to select camera or video)



Tools/Menu Button (Touch screen to access Tools Menu)

**NOTE** - All icons will appear when the user touches the screen or presses a hardware button and will disappear after 3 seconds.



Video Capture Mode Selected



Image Capture Mode Selected (Default Setting)



Image LED intensity



Zoom level



Wi-Fi Connection established



Battery level



Indicates the amount of memory remaining on the installed SD card

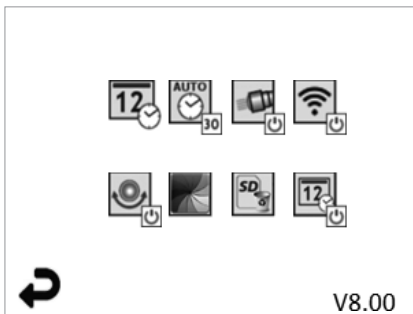


Indicator that the SD card is write-protected

No icon will appear when there is no SD card installed (SD card required for memory storage).  
**(Touch screen to access saved files)**

**NOTE** - Actuating the power button while video is recording, may corrupt the SD card.

### 6.2 Tools / Menu



**NOTE** - All icons will appear when the user touches the screen or presses a hardware button and will disappear after 3 seconds.



Back Button (Touch screen to return to Live Image)

**V8.00** Firmware version



Set Time and Date (Touch screen for settings)



Auto-off Timer Function (Touch screen to select)

- **∞** Disabled

- **30** Device will turn off after 30minutes

- **20** Device will turn off after 20minutes

- **10** Device will turn off after 10minutes



ROSCOPE "Headlight" Function (Touch screen to turn headlights on/off)



Wi-Fi Connection (Touch screen to turn on/off)

**NOTE** - To save the battery, turn off when not in use.



Up-is-Up Function (Touch screen to turn self-leveling on/off)



Black and White/Color (Touch screen to select)

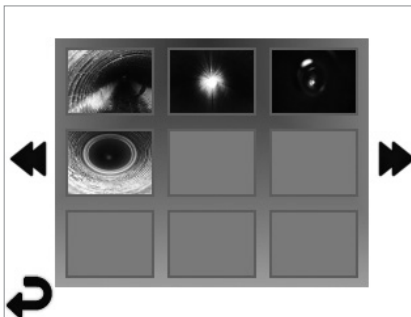


Format SD Card



Add Time and Date to picture (Touch screen for on/off feature)

### 6.3 Saved Pictures and Video



**NOTE** - All icons will appear when the user touches the screen or presses a hardware button and will disappear after 3 seconds.

Selecting a Thumbnail will open the image/video to full-screen mode (Touch screen to select)



Back Button (Touch screen to return to Live Image)



Indication of a video file/audio file



Move to the previous page

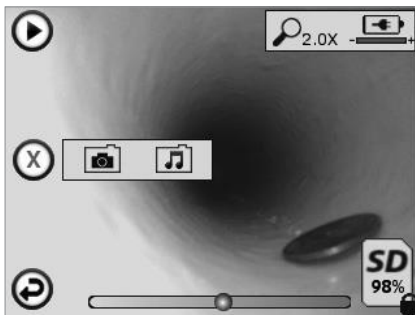


Move to the next page



## 6.4 Playback Still Image / Adding an Audio Annotation

**NOTE** - Sound-Bite can be recorded on live video. / It cannot be added to saved video.



**NOTE** - All icons will appear when the user touches the screen or presses a hardware button and will disappear after 3 seconds.



Back Button (Touch screen to return to Live Image)



Video or audio playback progress bar



Indicates the amount of memory remaining on the installed SD card



Indicator that the SD card is write-protected

Audio Notation Functions (Touch screen for choice of following commands)



Record an audio notation



Play an audio notation if one is present



Pause playing an audio notation



Stop the recording of an audio notation or a playing audio notation

Status Indicators



Zoom level



Battery level



Wi-Fi Connection established

Delete current image or video



Delete both image and video notation (Touch screen to delete)



Delete just the audio notation (Touch screen to delete)

Touch screen to confirm deleting or cancel selection:



yes



no

## 7. Touch Screen Navigation / Settings

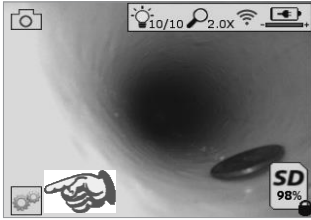


Figure No. 13 - Tools Menu Screen

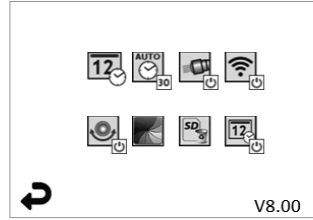


Figure No. 14 - Tools Menu Screen



Touch screen (Touch Tools icon / lower left corner - Figure No. 13) to enter the interactive menu (Figure No. 14).



Touch the date & time icon (top left) to set date and time

- Tap each individual entry to select
- Tap up / down arrows repeatedly to desired entry
- Tap “Back” arrow to main menu



Touch “Auto Time-Out” icon (top center) to select feature:

- 10 minute time-out
- 20 minute time-out
- 30 minute time-out
- No time-out / unit must be manually turned off



Touch head lights icon (top right) to turn lights on / tap again to turn lights off



Touch to turn the Wi-Fi Connection on/off



Touch patented “Up-is-Up” self-leveling feature icon (bottom left) to turn feature on / tap again to turn feature off.

**NOTE:** You may witness black regions around the perimeter as the live image rotates within the LCD. This is a normal result of the format of the imager, zooming in on the live image will reduce this.



Touch the black & white / color icon (bottom center) to switch between black & white and color modes.



Touch SD card (bottom right) - confirm yes/no to clear “ALL” SD card memory storage (100%).



Touch to turn feature for the time/date stamp on/off

## 8. Wireless Transfer of Images / Video

The ROSCOPE i2000 has the ability to wirelessly transfer saved images and video from the hand-held device to a secondary Wi-Fi enabled smart phone, such that you can share data.

**NOTE** - Radio interference and the range between ROSCOPE i2000 and external devices can impact the transfer of data.

Go to [www.rothenberger.com](http://www.rothenberger.com) for complete details and a FREE firmware download or search App-store.

## 9. Transferring Images to a computer

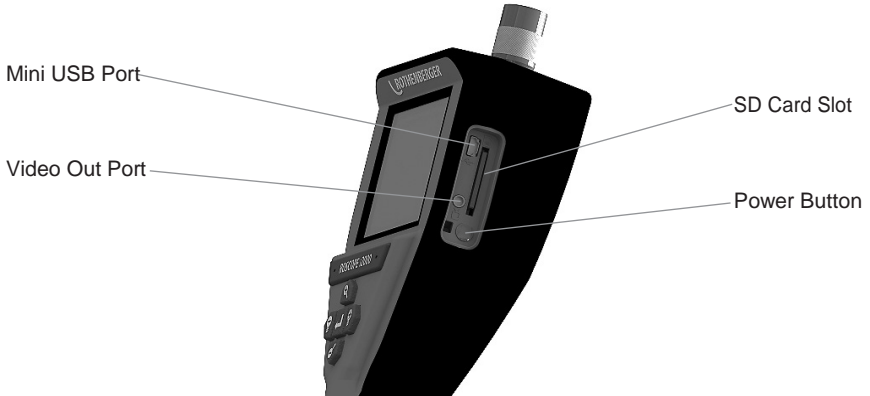


Figure No. 14 – USB Connection for Transfer

1. Use the Mini USB cable to connect the ROTHENBERGER handheld device to the computer (Figure No. 14).
2. Power the device ON, a splash screen saying “USB Connected” will appear on the LCD screen - follow the appropriate prompts from your computer (platforms and / or versions may vary)
3. You may also remove the SD Card memory storage device and load directly into your computer - follow the appropriate prompts from your computer (platforms and / or versions may vary).

## 10. How to update

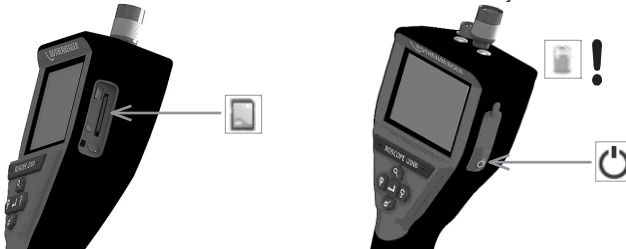
Periodically check for the latest version of firmware on [www.rothenberger.com](http://www.rothenberger.com).

### Step 1

Copy folder DCIM on an empty SD card.

### Step 2

Insert SD card and start the unit. Make sure that battery level is at least 50%.



### Step 3

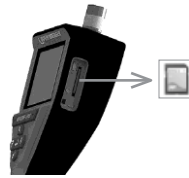
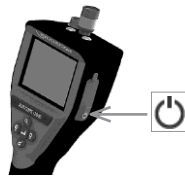
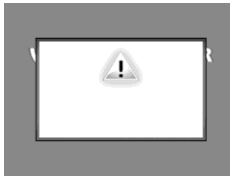




**Do not press the power button when the “hour glass” is on the screen!** The firmware is updating (45 seconds).

#### Step 4

Firmware updated successfully, OK to turn power off and remove SD card.



## 11. Operation of the ROSCOPE i2000 App

### Use of the app with an iOS device:

- ➔ Switch on the ROSCOPE i2000, select the Extras/Menu button and activate the WLAN.
- ➔ Activate the WLAN (RO2K.....) on the iOS device over Settings.

Settings:

Autom. connection ON

IP address:

Static

IP-address 192.168.10.241 (iOS device)

Subnet mask 255.255.0.0

Router 192.168.10.240 (ROSCOPE i2000)

- ➔ Press the Home button on the iOS device twice and remove the programme(s) running in the background. Press the Standby On/Off button twice to close all connections.
- ➔ Restart ROSCOPE i2000 and open the app on the iOS device.

The connection is created and Live Picture is now available.

### Use of the app with the Android device:

- ➔ Set up a “Hotspot” (mobile WLAN) on the Android device over Settings:

- Further settings
- Tethering and mobile hotspots
- Activate/select a mobile WLAN hotspot
- Click Configure in order to navigate to the hotspot settings.
- Establish the name of the hotspot and the password for the mobile network.

- ➔ Switch on the ROSCOPE i2000, select the Extras/Menu button and activate the WLAN (IP address of the ROSCOPE i2000 visible under the hotspot name).

Then connect with the mobile WLAN hotspot (the Android device):

- ➔ Open the app on the Android device, select Live Picture and enter the IP address of the ROSCOPE i2000 and then confirm.

The connection is created and Live Picture is now available.

## 12. Cleaning Instruction

1. Alcohol wipes or mild detergent and water to remove dirt and grease from the product.
2. Recommend soft optical cloth for cleaning the LCD window.
3. Recommend cotton cloth for cleaning imager head.
4. Allow appropriate drying time before operating handheld device.

## 13 Storage

1. It is good practice to clean the unit prior to long term storage.
2. It is best to store the unit in a cool dry location.

## 14. Troubleshooting

Symptom	Possible Reason	Solution
Display unit does not turn on	Battery is discharged	Recharge battery
	Faulty electronics	Contact ROTHENBERGER Service Center
Display turns on, but does not show image	Loose cable connection	Check cable connections
	Imager head covered by debris	Clean imager head
Display shows an unresponsive image	Image processor encounters an error	Turn OFF unit/turn ON to reset processor
Battery does not hold a charge	Battery may have discharged slightly during storage	Recharge battery
	Run time dependent on LED usage	Recharge battery more often when extensive use of LEDs
	Battery may be damaged	Contact service center and replace battery
	Life cycles of battery may have expired	Contact service center and replace battery

## 15. Accessories

Accessory Name	ROTHENBERGER Part Number
Replacement Module TEC 1000	69601
Hook Magnet and Mirror	69615
Charger	1500001227
Module 25/16 (16 m Imager Reel)	1500000052
Module ROLOC Plus (Line Finder)	1500000057

## 16. Disposal

Components of the unit are of recyclable material and should be put to recycling. For this purpose registered and certified recycling companies are available. For an environmental friendly disposal of the non-recyclable parts (e.g. electronic waste) please contact your local waste disposal authority or contact your local ROTHENBERGER authorized service center.

### For EU countries only:



Do not dispose of electric tools with domestic waste. In accordance with European Directive 2012/19/EC on waste electrical and electronic equipment and its implementation as national law, electric tools that are no longer serviceable must be collected separately and utilised for environmentally compatible recycling.

## 17. Customer service

The ROTHENBERGER service locations are available to help you (see listing in catalog or on-line) and replacement parts and service are also available through these same service locations.

Order your accessories and spare parts from your specialist retailer or using our after-sales hotline:

**Phone: + 49 (0) 61 95 / 800 - 0**

**Fax: + 49 (0) 6195 / 800 - 3500**

**[www.rothenberger.com](http://www.rothenberger.com)**

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