

## Leica Detection DD Series Locators & Accessories



Quick Guide  
Version 1.0  
English

- when it has to be **right**

**Leica**  
Geosystems

# 1

## Important Information about your Instrument

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Read and follow the User Manual on the accompanying USB card before using the product.

- This Quick Start Guide contains first use directions as well as initial, basic instructions for setting up the product and operating it.
  - Keep all documentation for future reference!
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### Intended use

The products are intended to be used for the following applications:

#### **General**

- Detection and localisation of underground utilities: metallic cables and pipes.

#### **Locator**

- Detection and localisation of utilities with the use of approved accessories or a signal transmitter.
- Estimation of the depth of an underground utility, or accessory.

#### **Locator with Bluetooth:**

- Data communication with external appliances.

#### **Locator with Internal Memory:**

- Recoding and storage of product usage.

#### **Locator with GPS:**

- Localisation, recoding and storage of product usage.
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The product must not be disposed with household waste.

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### Conformity to national regulations

For products without radio transmitter or receiver:

- FCC Part 15 (applicable in US)



- Hereby, Leica Geosystems AG declares that the product/s is/are in compliance with the essential requirements and other relevant provisions of the applicable European Directives. The full text of the EU declaration of conformity is available at the following Internet address:  
<http://www.leica-geosystems.com/ce>.
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### Conformity to national regulations

- FCC Part 15 (applicable in US)
- Hereby, Leica Geosystems AG declares that the radio equipment type DD120/DD130/DD220/DD230 is in compliance with Directive 2014/53/EU and other applicable European Directives. The full text of the EU declaration of conformity is available at the following Internet address: <http://www.leica-geosystems.com/ce>.



- Class 1 equipment according to European Directive 2014/53/EU (RED) can be placed on the market and be put into service without restrictions in any EEA member state.
  - The conformity for countries with other national regulations not covered by the FCC part 15 or European Directive 2014/53/EU has to be approved prior to use and operation.
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 **WARNING**

The absence of a positive indication does not guarantee the non-existence of a utility. Utilities without a detectable signal may be present.

The locators can only locate non-metallic utilities such as plastic pipes, typically used by the water and gas utilities, with the use of appropriate accessories.

**Precautions:**

- ▶ Always excavate with care.
- 

 **WARNING**

A hazardous signal can be present at the transmitter output when used in connection mode and on the attached accessories and live utility itself.

**Precautions:**

- ▶ Take care when handling exposed or non-insulated connections. Notify others who may be working on or around the utility.
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 **WARNING**

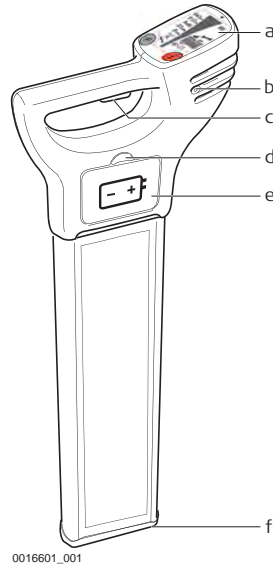
Working on or near live electrical utilities may cause you to receive an electric shock.

**Precautions:**

- ▶ Do not exceed equipment's recommended ratings and instructions of use.
  - ▶ Inspect equipment's cables and accessories for damage, do not use if faulty.
  - ▶ Do not work on electrically live power utilities unless you are properly qualified.
  - ▶ Use personal protective equipment rated for the utilities voltage and current.
  - ▶ Familiarise yourself with National and Work regulations governing safety and accident prevention.
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## 2

## Instrument Components

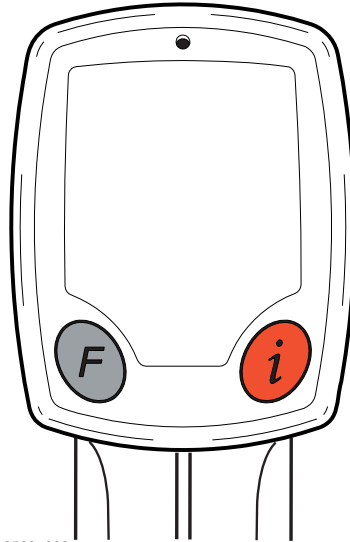
Description of  
components DD120/  
DD130 locators

- a **Display panel**  
Contains the operational controls.
- b **Speakers**  
(mounted internally left and right)  
Active at power on and when a signal is detected.
- c **On/Off trigger**  
Press and hold the trigger to activate the Locator.  
Release the trigger to deactivate.
- d **Battery hatch release**  
Pressing the release button unlocks the battery hatch allowing access to the battery compartment.
- e **Battery compartment**  
6 x LR6 (AA) alkaline batteries are used. Replace all batteries when indicated.
- f **Case foot**



The case foot can be replaced if it is worn.  
Contact your agency or Leica Geosystems authorised service workshop.

## DD120/DD130 locator keyboard



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### Function key

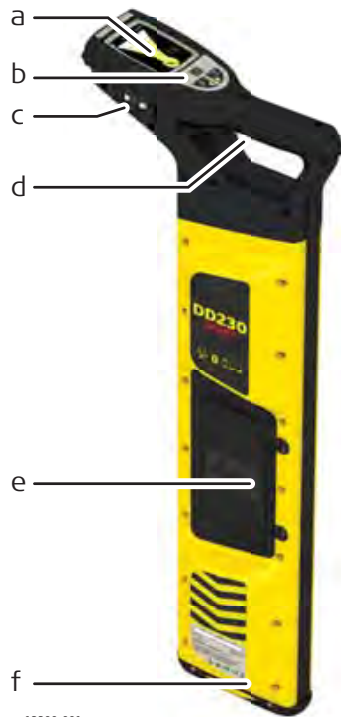
Press and release to change the search mode.



### i key

Used to access the user settings and to provide a depth readout for depth locators.

## Description of components DD220/ DD230 locators



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- a Display
- b Locator keyboard
- c USB port
- d Trigger
- e Battery compartment
- f Locator foot (wear part)



## DD220/DD230 locator keyboard



13162\_001



### Function key

Press and release to change the search mode.



### Depth Estimation key

Press and release to take a depth reading.



### Menu key

Press and hold to display the Locator main menu or to return back to the locate screen.  
Press and release to select a menu option.



### Left navigation key

Press and release to select the previous menu option.



### Right navigation key

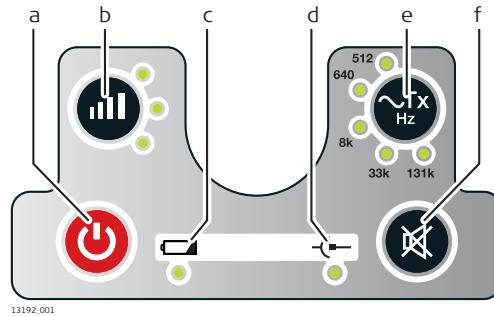
Press and release to select the next menu option.

## Description of transmitter components



- a Accessory compartment
- b Connection socket
- c Battery compartment and USB port
- d Signal transmitter keyboard
- e Speaker
- f Induction arrow

## Transmitter keyboard



- a Power key
- b Power Output key and LED indicators
- c Low Battery LED indicator
- d Connection Mode LED indicator
- e Frequency key and LED indicators
- f Mute key

## Alkaline batteries

- Refer to "Technical Data" for information about storage temperature range.
- Protect batteries from damp and wetness. Wet or damp batteries must be dried before storing or use.
- Before storing the product for a long time, remove batteries from the product in order to avoid the danger of leakage.

## Li-Ion battery pack

The Li-Ion battery pack is delivered with an energy content as low as possible and needs to be woke up prior to use.

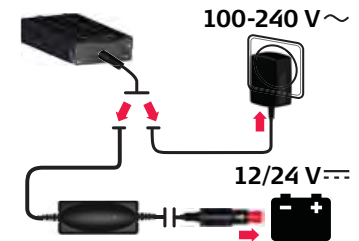
To wake up the Li-Ion battery pack, do the following:

1. Connect the charger plug into the charge jack on the battery pack.



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2. Plug the connector into a suitable power source.



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The battery pack should be fully charged before use.

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**Result:**

The small LED next to the charge jack flashes at a fast rate to indicate the wake up process, then flashes at a slower rate to indicate that the battery pack is active and charging.

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Applicable to the DD220/DD230 locators and DA Signal Transmitters.

### 3

#### Environmental specifications

## Technical Data

For locator and transmitter:

#### Temperature

Operating temperature [°C]	Operating temperature [°F]
-20 to +50	-4 to +122

#### Protection against water, dust and sand

Protection		
DD120/DD130	Locator	IP54 (IEC 60529)
DD220/DD230	Locator	IP66 (IEC 60529)
DA220/DA230	Transmitter	IP67 (IEC 60529)

#### Humidity

Protection
Max 95 % RH non condensing
The effects of condensation are to be effectively counteracted by periodically drying out the instrument.

## 4

## Care and Transport

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### Transport in a road vehicle

Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its container and secure it.

For products for which no container is available use the original packaging or its equivalent.

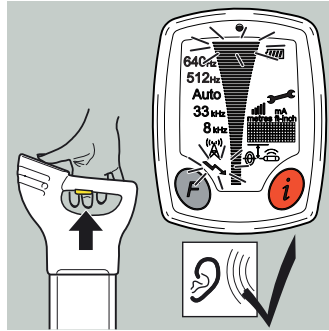
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## 5

## Operation

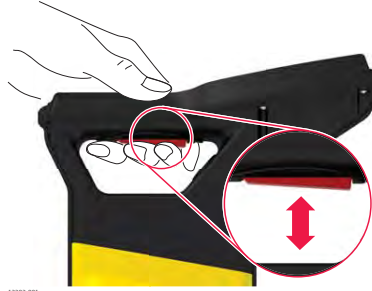
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### Turning on and off the DD120/DD130



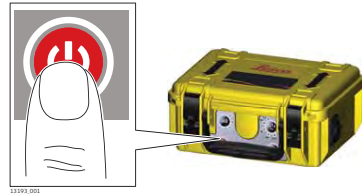
### Turning on and off the DD220/DD230

Press and hold the trigger to turn on and operate the locator.  
Release the trigger to turn off the locator.



### Turning on and off the transmitter

Press the Power key to turn the transmitter on or off.







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