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REFERENCE DOCUMENTATION

For further information regarding the Rhino II refer to the SDK Help on-line, downloadable from our developer portal: https://developer.datalogic.com/mobile-computers and to the Rhino II User's Manual, downloadable from our website www.datalogic.com.

SUPPORT THROUGH THE WEBSITE

Datalogic provides several services as well as technical support through its website.
Log on to www.datalogic.com.
For quick access, from the home page click on the search icon 🔍, and type in the name of the product you're looking for. This allows you access to download Data Sheets, Manuals, Software & Utilities, and Drawings.
Hover over the Support & Service menu for access to Services and Technical Support.

RHINO™ II

QUICK START GUIDE

◆DATALOGIC

Rugged Vehicle Mount Computer

See the Safety & Regulatory Addendum included with your product for additional regulatory, safety and legal information.

www.datalogic.com

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OUT OF THE BOX

The Rhino II package contains:
- Rhino II vehicle mount computer.
- Power cable (2.9m ≈ 9.5').
- Bag: 4 mounting screws and washers for use with RAM mounts.
- Bag: rubber cable slot seals and cable ties.
- Quick Start Guide.
- Safety & Regulatory Addendum.

Remove all the components from their packaging; check their integrity and compare them with all the packing documents.

⚠️ **CAUTION: Keep the original packaging for use when sending products to the technical assistance center. Damage caused by improper packaging is not covered under the warranty.**
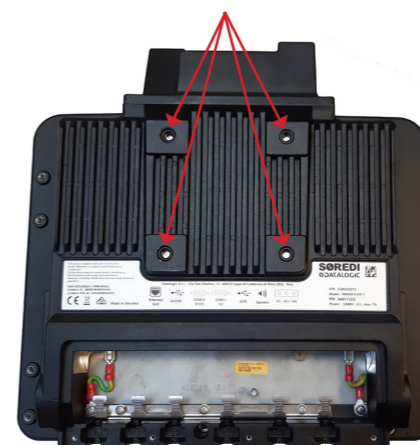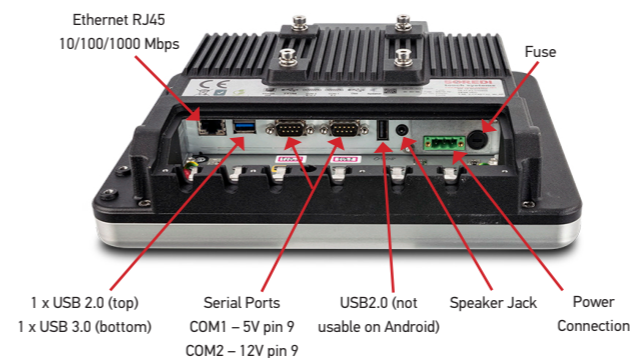
GENERAL VIEW

Front

- Manual Screen Blank Mode
- Brightness/Volume Control
- 4 Programmable Keys
- Windows models: Show/hide the virtual keyboard
  Android models: Home

Capacitive Touch Display 3 mm non-reflecting armored glass

Back

VESA 75 Mounts

Bottom - Battery Powered Models

- Ethernet RJ45 10/100/1000 Mbps
- Fuse
- 1 x USB 2.0 (top)
  1 x USB 3.0 (bottom)
- Serial Ports
  COM1 – 5V pin 9
  COM2 – 12V pin 9
- USB2.0 (not usable on Android)
- Speaker Jack
- Power Connection

Bottom - Mains Powered Models

- Ethernet RJ45 10/100/1000 Mbps
- 1 x USB 2.0 (top)
  1 x USB 3.0 (bottom)
- Serial Ports
  COM1 – 5V pin 9
  COM2 – 12V pin 9
- Speaker Jack
- Socket Connector for AC Power Cord
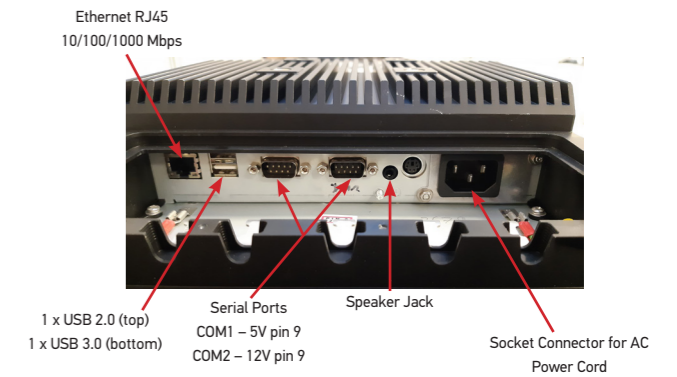
GETTING STARTED

Power On

Connect a power source to the Rhino II and press and hold the power button for a few seconds to start the device.

📝 **NOTE: The Rhino II has 3 different startup mode settings. Power on may require the presence of the ignition signal.**

To shutdown the device, press and hold the power button for a few seconds. The device will power off according to its current shutdown mode.

Main Window

As soon as the mobile computer is on, the desktop appears on the screen. Wait for a few seconds before starting any activity, so that the device completes its startup procedure.

Windows Desktop   **Android Desktop**

Adjust the Screen Brightness
To adjust the screen brightness:
- Press the + button to increase the brightness.
- Press the - button to decrease the brightness.

ADJUST THE VOLUME

To adjust the volume, press the FN button first.
- Press the + button to increase the volume. The device will play the Default Sound at the new volume setting.
- Press the - button to decrease the volume. The device will play the Default Sound at the new volume setting.

FRONT PANEL KEYS

The keys FN, 1/3, 2/4 and KEY, on the right side of the device, are programmable. The programming is set by command lines in the "/data/Datalogic/UtilConfig.cfg" file.

1/3 and 2/4 are programmable as two keys each, giving a total of four available keys.

When directly pressed, 1/3 and 2/4 keys enable respectively functions 1 and 2.

After a FN key press, the device is set into function mode, the blue function LED lights up and 1/3 and 2/4 keys enable respectively functions 3 and 4.

To turn off function mode press FN. The function mode is automatically disabled if not used for 8 seconds (configurable in UtilConfig.cfg).

By default, the keys have the following functions:

- Power – Starts and shutdowns the terminal according to the current Startup/Shutdown mode.
- 1 – Up arrow
- 2 – Down arrow
- 3 – Back
- 4 – Return
- KEY – Windows models: Show/hide the virtual keyboard; Android models: Home

POWER CONNECTION

The power connector can be used to connect the computer to the vehicle's power. The device can be connected to 12–48 VDC. An optional external 110/220 VAC – 24 VDC power supply is also available. In case of a 12V–48V power source, the internal power supply is electrically isolated. The wires are already connected to the provided cable. The wires of the 3-pole input connector must be connected to DC Plus, DC minus and ignition.
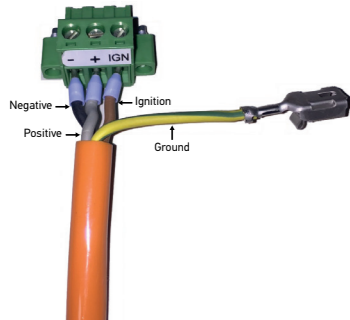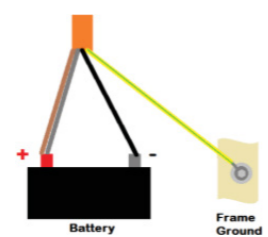
The ground wire (yellow - green) inside the cable must be connected to the ground contact.
If using the ignition sense, positive power should go to a non-switched connection.
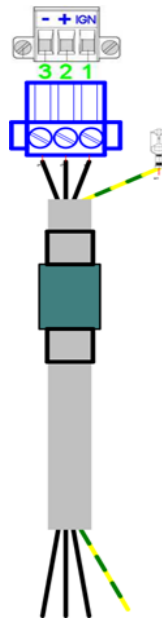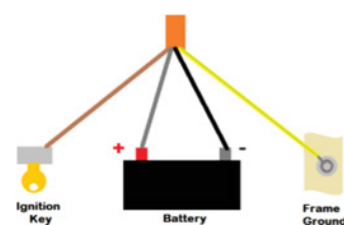
1.	IGN	Ignition	Grey
2.	+	Positive charge	Brown
3.	-	Negative charge	Black
4.	GND	Mass	Yellow/ Green

Autostart:

Start with the ignition key:

VEHICLE CONNECTION

For vehicles with 12 to 48 VDC power available, the Rhino II should be connected directly to the battery or to a main power connection.

Before connecting, verify that you have the correct model (12–48 VDC) for your vehicle. Consult your vehicle manufacturer or local representative for the best location to connect to power.

1. Disconnect the power cable from the Rhino II.
2. Run the cable from the Rhino II to the power connection location and secure the cable at several points with wire ties. Leave a little slack at the Rhino II to allow for mount adjustment and for the cable to be disconnected from the Rhino II.
3. Either cut off any excess cable or coil the excess cable in a convenient location and secure with wire ties. Coiling the cable is recommended as it allows for moving the location of the Rhino II on the vehicle at a later date.
4. Strip enough of the outside jacket to allow the positive (grey), negative (black) and ignition (brown) connections to reach the vehicle attachment sources.
5. Connect all wires to the proper source. If the unit will not be connected to an ignition switch, connect the ignition cable to the + source.
6. The yellow and green ground wire must be attached to the vehicle frame, not to the negative port of the battery. This is critical to make sure that the outside frame of the Rhino II is properly grounded.
7. Connect the cable to the Rhino II. The Rhino II can be powered up at this point.

USB 1, 2 AND 3

Rhino II has three USB Host ports to connect USB peripheral devices to the Rhino II. Power is provided on the USB ports at 5VDC up to a maximum 500 mA per connector.

COM 1 & 2

Rhino II connects to RS-232 devices such as barcode scanners, PC's or printers via two DB-9 male serial connectors with standard PC style pin-out with the addition of power on Pin 9. COM1 is set to 5 VDC, and COM2 is set to 12 VDC.

⚠️ **CAUTION: Connecting a 5 VDC device to COM2 can damage the device.**

📝 **NOTE: In units shipped from factory, a warning label covers the COM2 connector; customers shall remove the label, to connect a barcode scanner able to work at 12VDC.**
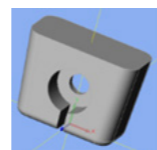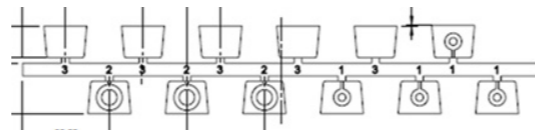
BLUETOOTH

When active, the Bluetooh radio allows the Rhino to connect to BT 4.0 compliant devices.
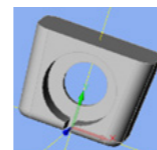
ETHERNET

When active, the Ethernet connector allows the Rhino II to communicate with 10/100/1000 Base-T full duplex standard Ethernet interfaces.
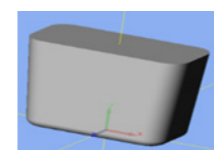
FASTEN THE CABLES

There are three different types of gaskets. Choose the right one according to the size of the cable.

Type 1:
e.g. USB cable

Type 2:
e.g.power cable

Type 3:
no cable

Type 1 and Type 2: cut the cable at its thinnest point (see the left picture below). After the rubber gasket is cut off, nothing must protrude from it (see the middle picture below). Slide the sealing rubber over the cable (see the right picture below).

Place the sealing rubber into the appropriate cut-out (wide side up). The upper edge must be flush with the housing. Fix the cable to the corresponding tab with the cable tie, and then cut off the protruding cable tie. Seal unused cable glands with rubber seal type 3.

The cable cover is mounted in 3 steps:

1. Place the cable cover at an angle and slide it into the groove provided.

2. Push the cable cover downwards (ensure it doesn't slip out of the groove).

3. Fix with the screws provided.

CLEANING THE SCREEN

To keep the Rhino II in good working order, you may need to clean the screen whenever necessary depending on the environment in which you use the computer.

- Use a soft lint-free cloth or paper towel.
- The cloth may be used dry or lightly damped with a mild cleaner or Ethanol.
- Suitable cleaning products are commercially available pre-packaged for use; one example of such a product is Klear Screen™, or off the shelf products such as Glass Plus® Glass and Surface Cleaner.
- Be sure the cloth is only lightly damped, not wet. Never apply cleaner directly to touch panel surface.
- Wipe dry.

⚠️ **CAUTION: Never apply cleaner directly to touch panel surface!**

Never use acidic or alkaline cleaners, products that contain Ammonia, Phosphates, or Ethylene Glycol, or organic cleaners such as paint thinner, acetone, toluene, xylene, propyl or isopropyl alcohol, or kerosene.

Products containing less than 4% Isopropyl Alcohol are acceptable if all excess cleaner is removed.