



advanced
PANMOBIL[®]
systems

powerlineECC0:Lite
Manual



manufactured by:



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Improving our products

Continuous improvement of products is a policy of advanced PANMOBIL systems GmbH & Co. KG. All specifications and signs are subject to change without notice.

Declaration of conformity to the FCC

These devices 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 in-stalled and used in accordance with the instructions, may cause harmful interference to radio communications. The appearance of disturbance in particular installations is not excluded. In the case that these devices should disturb your surroundings by their powering on and off, please inform advanced PANMOBIL systems GmbH & Co. KG immediately.

The user is cautioned that any changes or modifications not expressly approved by advanced PANMOBIL systems GmbH & Co. KG could void the user's authority to operate the equipment.

Consumer electronics

These devices has been tested and found to comply with the limits for class B digital devices, pursuant to the CE EMC directive.

For more information, please contact us at:

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PRODUCT REFERENCE

powerlineECCO:Lite



No.	Description	Function
1	Green LED	Lights up green when powerlineECCO:Lite is powered ON. Is flashing green (2 sec.) if battery is low.
2	Yellow LED	Lights up yellow while Barcode reader is on Off if read was successful.
3	Red LED	Lights up red if connect to ext. power (USB or power adapter) Red = Battery charging Off = Battery fully charged
4	Blue LED	If Bluetooth is enabled Blinking for 2 seconds when the device is booting. (initializing Bluetooth) Constant blue when Bluetooth initialization failed (wait for the device to power off then restart the unit) Constant blue when ECCO:Lite is connected by Bluetooth

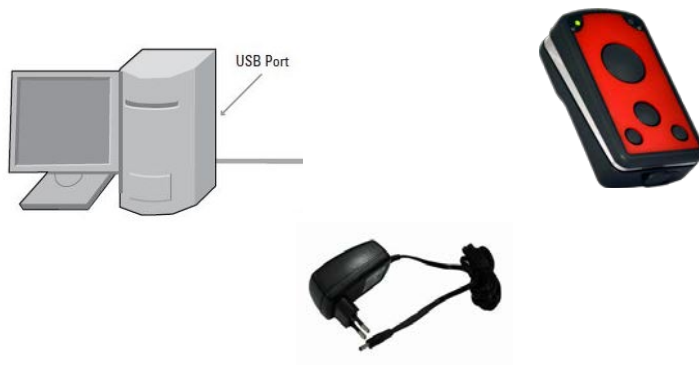
5	Key 1 (Trigger button) Power ON and Scan	<p>Batch mode Press for 1 second to power on the device. The device will immediately start the Barcode Laser to read a Barcode. Captured Barcodes will be stored in the device memory.</p> <p>Bluetooth mode Press for 1 second to power on the device. LED 4 (blue LED) will blink for 2 seconds to initialize Bluetooth</p> <p>Bluetooth connected LED 4 (blue) constantly on Captured Barcodes will be send to the paired Bluetooth device.</p> <p>Bluetooth not connected Cache Mode activated Captured Barcodes will be stored in the device memory Cache Mode deactivated Captured Barcodes will be rejected</p> <p>Bluetooth connected Captured Barcodes will be transmitted to the paired Bluetooth device according to the profile configured.</p>
6	Key 2 (Delete button)	<p>Batch mode Press for 1 second to power on the device. The device will immediately start the Barcode Laser to read a Barcode. Captured Barcodes will be deleted from the device memory.</p> <p>Bluetooth mode Press for 1 second to power on the device. LED 4 (blue LED) will blink for 2 seconds to initialize Bluetooth.</p> <p>Bluetooth connected LED 4 (blue) constantly on Pressing key 2 shortly = no function Pressing key 2 for 2 seconds = send static data</p> <p>Bluetooth not connected Cache Mode activated Pressing key 2 shortly = no function Pressing key 2 for 2 seconds = save static data</p>

		<p>Cache Mode deactivated Pressing key 2 shortly = no function Pressing key 2 for 2 seconds = no function</p> <p>Bluetooth connected Pressing key 2 shortly = no function Pressing key 2 for 4 seconds = send static data</p>
	Key 1 + key 2 Batch mode only	<p>Batch mode Pressing key 1 + key 2 for 4 seconds deletes all captured data from the data file</p>
7	Key 3 (Custom1)	<p>Batch mode Pressing key 3 shortly = no function Pressing key 3 for 4 seconds = save static data</p> <p>Bluetooth mode Bluetooth connected HiD mode LED 4 (blue) constantly on Pressing key 3 shortly = toggle Apple keyboard Pressing key 4 for 4 seconds = send static data</p> <p>Bluetooth mode Bluetooth connected HiD SPP / iAP mode LED 4 (blue) constantly on Pressing key 3 shortly = no function Pressing key 3 for 4 seconds = send static data</p> <p>Bluetooth not connected Cache Mode activated Pressing key 3 shortly = no function Pressing key 3 for 4 seconds = save static data</p> <p>Cache Mode deactivated Pressing key 3 shortly = no function Pressing key 3 for 4 seconds = no function</p>
8	Key 4 (Custom2)	<p>Batch mode Pressing key 4 shortly = no function Pressing key 4 for 4 seconds = save static data</p> <p>Bluetooth mode Bluetooth connected HiD mode LED 4 (blue) constantly on Pressing key 4 shortly = no function Pressing key 4 for 4 seconds = send static data</p>

		<p>Bluetooth mode Bluetooth connected HiD SPP / iAP mode LED 4 (blue) constantly on Pressing key 4 shortly = no function Pressing key 4 for 4 seconds = send static data</p> <p>Bluetooth not connected Cache Mode activated Pressing key 4 shortly = no function Pressing key 4 for 4 seconds = save static data</p> <p>Cache Mode deactivated Pressing key 4 shortly = no function Pressing key 4 for 4 seconds = no function</p>
11	Key 3 + Key 4 Bluetooth mode only	<p>Bluetooth mode Bluetooth connected HiD or SPP / iAP mode LED 4 (blue) constantly on Pressing key 3 + key 4 for 1 second Send data stored while Bluetooth was not connected</p>
	Key 1 + key 2 + key 3 + key4	<p>System reset Press all four buttons for 5 seconds to reset the device. Please note! The device clock will be reset too! The device configuration will not be effected by a system reset.</p>
9	Mini USB interface	USB communication interface and battery charging (USB profile = USB memory stick)
10	Clip holder (accessory)	Holder for fixing the shirt clip, belt clip or neck belt (accessory)

CHARGING THE BATTERY

Before the first operation, the main battery should be charged through the USB interface of the PC or by using the optional power adapter. The red LED (1) lights solid red as long as the battery is charging. After the battery is fully charged the red LED (1) turns off.



1. Remove the USB protection clip (9) from the device
2. Connect the device to the USB port of a PC or to the USB power adapter (accessory)
3. The red LED (2) lights solid red as long as the battery is charging
4. The battery is fully charged when the red LED (2) turns off

A full recharge of the battery takes approximately 4 hours when using the external power adapter (accessory). Recharging the battery from USB interface of a PC may take longer.

POWERING UP THE DEVICE

Make sure the battery is fully charged before powering up the device for the first time.

To power up the device keep pressed key 1 / trigger key (5) for 1 second. The power indicator LED green (1) lights solid green. The startup sequence takes approximately 1 second. The device plays a beep sequence as soon as the operating system has booted and started the installed application. The device is now ready to operate.

When Bluetooth is activated the blue LED (4) blinks twice for 1 second to initialize Bluetooth.

SCANNING BARCODE (1D Laser)

1. Aim the scanner at the barcode
2. Press the Trigger button (5)
3. Ensure the scan line crosses every bar and space of the symbol



The device beeps and the right LED (3) turns green to indicate a successful decode.

BLUETOOTH CONNECTION

Pairing

For Bluetooth enabled devices to pair to a Bluetooth enabled host

1. Connect the device to the host using the USB port and use the MasterSetup Tool to set the data output mode to Bluetooth.
Select the Bluetooth profile supported by the host or required by the application.

- **Serial Port Profile (SPP)**

- The host connects to the scanner via Bluetooth and emulates a serial connection. The scanner accepts an incoming connection requested from a Bluetooth host.

- **Serial Port Profile (SPP) iAP (connection to Apple devices)**

- The host connects to the scanner via Bluetooth using the Apple MFI authentication mode. The scanner accepts an incoming connection requested from a Bluetooth host.

- **Bluetooth Keyboard Emulation (HID) -**

The host connects to the scanner via Bluetooth and emulates a keyboard. The Scanner accepts an incoming connection requested from a Bluetooth host.

2. Save the settings and disconnect the device from the PC-
On the host PC, launch the third party Bluetooth pairing application and place the application into discover Bluetooth device mode.
3. Select the powerlineECCO:Lite from the discovered device list.
4. The right LED (4) lights constant blue as long as the device is connected.

DEVICE CONFIGURATION

The powerlineECCO:Lite comes with preinstalled default firmware which can easily be configured to meet the application requirements. The device function can be determined by modifying the settings in the file "*Config.ini*" which is stored on the device memory or using the PC software tool "*Master Setup*" which is available for download from www.PANMOBIL.com

CONFIG.INI CONFIGURATION

Connect the powerlineECCO:Lite device to your PC by using a mini USB to USB A cable. The device will automatically power ON after 2 seconds when the device is connected to the PC.

Brows the removable drive "SCANNDY" and open the file "Config.ini" with the text editor.

[General]

PwrOffDelay=0

- Set the timeout in minutes you want the device to power off when it is not in use

Minimum value for Batch mode = 0 minutes

Minimum value for Bluetooth mode = 3 minutes (values less than 3 will be ignored)

LeftKeyText="LEFT"

- Set the static data you want to be saved or send by Bluetooth if key 3 is pressed for 4 seconds

MiddleKeyText="MIDDLE"

- Set the static data you want to be saved or send by Bluetooth if key 2 is pressed for 4 seconds

RightKeyText="RIGHT"

- Set the static data you want to be saved or send by Bluetooth if key 4 is pressed for 4 seconds

DeviceID="0000"

- Set the custom device ID

OutputFormatDB="%t;%b"

- Set the record format for the data record (Batch mode)

OutputFormatBT="%b"

- Set the record format for the data record (Bluetooth mode)

TimestampFormat="%Y-%m-%d %H:%M:%S"

- Set the time format

Signal=63

- reserved

PureScan=0

- activate PureScan mode. In PureScan mode all keys can read barcode. The barcode will be saved or send with the button name the code has been read with.

PurScan=0 // PureScan mode deactivated

PurScan=1 // PureScan mode activated

KeyBeep=1

- KeyBeep = 1 // key click activated
- KeyBeep = 0 // key click deactivated

[BT]

Available=1

- Automatically determined value from the Hardware initialization
Available = 1 // Bluetooth module present
Available = 0 // Bluetooth module not found

Enabled=1

- Enable = 1 // Bluetooth mode activated
- Enable = 0 // Bluetooth mode deactivated

Mode=1

- Mode = 1 // Bluetooth communication profile Bluetooth HiD
- Mode = 0 // Bluetooth communication profile Bluetooth SPP

Autoreconnect=0

- Autoreconnect = 0 // do not reconnect when Bluetooth connection is lost
- Autoreconnect = 1 // try to reconnect automatically when Bluetooth connection is lost

Note! Autoreconnect function must be supported by the paired device and the application running on the paired device

Cache=0

- Cache = 0 // do not save captured data when Bluetooth is not connected
- Cache = 1 // save captured data in the device memory when Bluetooth is not connected

Scomp=0

- SComp = 0 // do not use Scomp communication protocol
- SComp = 1 // use Scomp communication protocol

Note! Scomp protocol must be supported by the application running on the paired device!

Please refer to the Scomp protocol description

DevName="Eccolite"

- DevName = ECCOLiteXXXXXX // set the friendly name for Bluetooth

iAP=0

- iAP = 0 // APPLE MFI authentication disabled
- iAP = 1 // APPLE MFI authentication enabled

Note! For Bluetooth communication over SPP profile Apple devices require iAP to be enabled. Otherwise it will not be possible to connect the powerlineECCO:Lite to an Apple device.

For Bluetooth connection to Android or Windows devices, iAP must be disabled!

ProtocolID=""

- set the protocol ID configured in the APP running on the Apple device

Service=""

- set the service name configured in the APP running on the Apple device

[Laser]

- set the Barcode options required by the application

GlobalMaxCodeLen=99

GlobalMinCodeLen=4

UPCA_Enable=0

UPCA_Verify=1

UPCA_XmitCheck=0

UPCA_SupplDgt=0

UPCA_TruncExp=0

UPCE_Enable=0

UPCE_Verify=1

UPCE_XmitCheck=0

UPCE_SupplDgt=0

UPCE_TruncExp=0

UPCE1_Enable=0

UPCE1_Verify=1

UPCE1_XmitCheck=1

UPCE1_SupplDgt=0

UPCE1_TruncExp=0

EAN13_Enable=1

EAN13_Verify=1

EAN13_XmitCheck=1

EAN13_SupplDgt=0

EAN13_ISBN_ISSN=0

EAN8_Enable=1

EAN8_Verify=1

EAN8_XmitCheck=1

EAN8_SupplDgt=0

EAN8_TruncExp=0

C39_Enable=1

C39_Verify=0

C39_XmitCheck=0

C39_MaxLen=99

C39_MinLen=1
C39_FullASCII=0
C39_XmitSS=0
I25_Enable=1
I25_Verify=0
I25_XmitCheck=0
I25_MaxLen=99
I25_MinLen=6
Codabar_Enable=0
Codabar_Verify=0
Codabar_XmitCheck=0
Codabar_MaxLen=55
Codabar_MinLen=5
Codabar_SSType=0
Codabar_XmitSS=1
C128_Enable=1
C128_Verify=1
C128_XmitCheck=0
C128_MaxLen=99
C128_MinLen=1
EAN128_Enable=1
EAN128_Verify=1
EAN128_XmitCheck=0
EAN128_MaxLen=99
EAN128_MinLen=1
C93_Enable=1
C93_Verify=1
C93_XmitCheck=0
C93_MaxLen=55
C93_MinLen=4

Transmitting Barcode data to a host

Batch mode

All Barcode data scanned in batch mode are saved in the file *“Output.txt”* on the removable drive *“Scanndy”*. Connect the device to the host PC via USB and use the Windows-Explorer to navigate to the device *“SCANNDY”*. Copy the file *“Output.txt”* to the host.

To clear the data from the device, delete the file *“Output.txt”*

Transmitting data from a Bluetooth device

When the scanner is paired to a host via Bluetooth, data transmits to the host after each scan and is not stored on the scanner unless the scanner moves out of range of the host. For out of range usage you can configure the device to either store the data in a cache memory or do not allow scanning.

If the device was configured to store the out of range captured data, it stores the data in the file OUTPUT.txt. After reconnect press key 3 + key 4 for 2 seconds to transmit all cached data to the host.

REGULATORY INFORMATION

Interference statement:

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.

Modification statement:

The FCC requires the user to be notified that any changes or modifications made to this device and are not explicit approved by advanced PANMOBIL systems GmbH & Co. KG, may void the user's authority to operate the equipment.

Class B digital devices regulatory notice:

This equipment has been tested and confirmed 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 or television technician for help

Wireless notice

This product emits radio frequency energy, but the radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact with the antenna during normal operation is minimized. The system antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

EU:

This equipment is intended to be commercialized in all the countries of the European Union and there is no commercialization or operational restrictions in any of the countries. Hereby, advanced PANMOBIL systems GmbH & Co. KG declares that this Bluetooth barcode scanner is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC

European countries, where this equipment can be used are : Austria (AT) - Belgium (BE) - Bulgaria (BG) - Switzerland/Liechtenstein (CH) - Cyprus (CY) - Czech Republic (CZ) - Germany (DE) - Denmark (DK) - Estonia (EE) - Finland (FI) - France (FR) - Greece (GR) - Hungary (HU) - Ireland (IE) - Iceland (IS) - Lithuania (LT) - Luxembourg (LU) - Latvia (LV) - Malta (MT) - Netherlands (NL) - Norway (NO) - Portugal (PT) - Romania (RO) - Sweden (SE) - Slovenia (SI) - Slovak Republic (SK) - United Kingdom (UK)-Italy (IT)-Poland (PO)-Spain (SP).

HEALTH AND SAFETY RECOMMENDATIONS



Ergonomic Recommendations

Caution: In order to avoid or minimize the potential risks of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Keep Objects that are used frequently within easy reach
- Reduce or eliminate repetitive motion
- Reduce or eliminate excessive force
- Maintain a natural position
- Improve work procedures
- Perform tasks at correct heights
- Provide adjustable workstations
- Provide adequate clearance
- Reduce or eliminate direct pressure
- Reduce or eliminate vibration
- Provide a suitable working environment

Vehicle Installation

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. You should consult the manufacturer of any equipment that has been added to your vehicle.

An air bag inflates with great force. DO NOT place objects in the area over the air bag or in the air bag deployment area. Improperly installed wireless equipment could result in serious injury when the air bag inflates.

Position your device in easy reach. Make sure your device is accessible without removing your eyes from the road.

Safety on the Road

Do not take note or use the device while driving. When driving a car, driving is your first responsibility – GIVE FULL ATTENTION TO DRIVING –

Warnings for Use of Wireless Devices

Please observe all warning notices with regard to the usage of wireless devices.

Potentially Hazardous Atmospheres – Vehicle Use

You are reminded to observe restrictions on the use of radio devices in fuel depots, chemical plant and areas where the air contains chemical or particles such as grain, dust or metal powders and any other area where you would be advised to turn off your vehicle engine.

Safety in Aircrafts

Switch off your wireless device whenever you are instructed to do so by airport or airline staff. Consult airline staff and ask for its use in flight.

Safety in Hospitals

Wireless devices transmit radio frequency and may affect medical electrical equipment. Wireless devices should be switched off wherever you are requested to do so in hospitals or healthcare facilities to prevent interference with sensitive medical equipment.

Pacemakers

It is recommended by Pacemaker manufacturers to maintain a minimum of 15cm (6 Inches) between a handheld wireless devices and a pacemaker to avoid potential interference. These recommendations are consistent with independent research and recommendations by Wireless Technology Research.

Persons with Pacemakers:

- Should not carry the device in a breast pocket
- Should use the ear furthest from the pacemaker to minimize the potential of interference.

- Should ALWAYS keep the device more than 15cm (6 Inches) from their pacemakers when turned on.
- Turn OFF your device if you have any reason to suspect that interference is taking place.

Other Medical Devices

Please consult the manufacturer of the medical device to determine if the operation of your wireless product may interfere with the medical device.



RF Exposure Guidelines

Safety Information

Reducing RF-Exposure – Use properly

Only operate the device in accordance with the instructions supplied.

International

The device complies with international standards covering human exposure to electromagnetic fields from radio devices.

EU

To comply EU RF exposure requirements, this device must be operated in the hand with a minimum separation distance of 20cm from a person's body. Other operation configurations should be avoided.

US and Canada

To comply with FCC exposure compliance requirement, the antenna used for this transmitter must not be co-located or operating in conjunction with any other transmitter/antenna except those already approved in this filing.

Handheld Devices

To comply with FCC RF exposure requirements the device must be operated in the hand with a minimum separation distance of 20cm from a person's body. Other operation configurations should be avoided.



Laser Devices

Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light. The laser scanner utilizes a low-power laser diode. Although staring directly at the laser

beam momentarily causes no known biological damage, avoid staring into the beam as one would with any very strong light source, such as sunlight. Avoid that the laser beam hits the eye of an observer, even through reflective surfaces like mirrors, etc.

The following information is shown on the laser scanner device class label:



Limited Warranty

The manufacturer warrants that the product will be free of defects in material and workmanship for 2 years from the date of shipment. The manufacturer will, at its option, either repair, replace the defective products. Such repair or replacement shall be buyer's sole remedy in the event of manufacturer's breach of this limited warranty. Repaired or replaced parts or product may include new, reconditioned or remanufactured parts and equipment at manufacturer's option. All costs associated with shipment to manufacturer for warranty service, including but not limited to freight, duties, insurance and customs fees are buyer's responsibility. Manufacturer will pay the freight costs (duties, insurance, customs and any other fees) associated with the return shipment to buyer. The method of shipment will be at the manufacturer's discretion. Repair or replacement of any parts or equipment does not extend the period of warranty provided for herein.

THIS LIMITED WARRANTY IS MANUFACTURER'S ONLY WARRANTY.
MANUFACTURER DOES NOT GIVE WARRANTIES OF MERCHANTABILITY OR
WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

To take advantage of this warranty, buyer should contact the seller not the manufacturer. The warranty set forth herein does not cover and manufacturer will have no obligations hereunder if any non-conformance is caused in whole or in part by; accident, transportation, neglect, misuse, alteration, modification, or enhancement of the products or incorporation, interfacing, attachment of any feature, program, or device to the products by a person or entity other than manufacturer, failure to provide a suitable installation environment, use of the products for other than the specific purpose for which the products are designed or any use of the product not in accordance with the User Guide or other misuse or abuse of the product. The warranty does not cover problems linked to batteries.

Declaration of conformity

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