

Trackunit DualID II

User Guide

Version 1.2, Marts 2017



Content

Content.....	2
Introduction.....	5
Safety information.....	5
Simple Guidelines	5
Interference	5
Qualified Service	5
Water-Resistance and environmental compliance.....	5
Specific Human Absorption Rates (SAR).....	5
Delivered standard content.....	6
User guide	7
Using key pad:.....	7
Installation check using “Verify my Trackunit”	7
Step by step guide	8
Customer care	8
Approvals and certificates.....	9

Corporate Office

M-Tec Trackunit A/S
Industrivej 10
9490 Pandrup
Denmark.
www.trackunit.com

Copyright and Trademarks

© 1998-2017, M-Tec Trackunit A/S. All rights reserved.

M-Tec, the red M hyphen TEC logo, Trackunit, Trackunit logo and Trackunit are trademarks of M-Tec Trackunit A/S, registered in the United States and in other countries. All other trademarks are the property of their respective owners.

Release Notice

This document is release 1.1 of the DualID II, User guide.

THIS MANUAL IS INTENDED FOR USE BY SYSTEM INTEGRATORS, SERVICE PROVIDERS AND APPLICATION DEVELOPERS (COLLECTIVELY, "RESELLERS"). IT IS NOT INTENDED FOR END-USERS OF THE DUALID II. ANY END-USER DOCUMENTATION IS TO BE PREPARED AND FURNISHED BY THE RESELLERS.

The following Product Limited Warranty gives Resellers specific legal rights. You may have others, which vary from state/jurisdiction to state/jurisdiction.

Product Limited Warranty

Subject to the terms and conditions set forth herein, M-Tec Trackunit A/S ("*Trackunit*") makes the following warranty only to its Resellers who purchase the DUALID II hardware product ("*Product*") directly from Trackunit: for a period of one (1) year from the date of shipment from Trackunit, the Product will substantially conform to Trackunit's standard published specifications for the Product and the Product hardware will be substantially free from defects in materials and workmanship. The foregoing warranty shall not apply to embedded software/firmware components.

THIS PRODUCT LIMITED WARRANTY IS PROVIDED TO RESELLERS AND TO RESELLERS ONLY. RESELLER IS SOLELY RESPONSIBLE FOR ANY AND ALL WARRANTIES MADE TO ITS CUSTOMERS, AND TRACKUNIT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND SHALL HAVE NO OBLIGATIONS OR LIABILITY TO RESELLER'S CUSTOMERS OR END-USERS OF THE PRODUCT. RESELLER SHALL NOT MAKE ANY REPRESENTATIONS OR WARRANTIES ON TRACKUNIT'S BEHALF, AND SHALL FULLY INDEMNIFY, DEFEND AND HOLD TRACKUNIT HARMLESS FROM ANY BREACH OF THE FOREGOING. IF RESELLER DISTRIBUTES PRODUCT TO END-USER CUSTOMERS, RESELLER SHALL BE SOLELY RESPONSIBLE FOR PREPARING AND PROVIDING PRODUCT WARRANTIES AND PRODUCT LITERATURE TO END-USERS.

Warranty Remedies

If the Product fails during the warranty period for reasons covered by this Product Limited Warranty and Reseller notifies Trackunit of such failure during the warranty period, Trackunit at its option will repair OR replace the nonconforming Product, OR refund the purchase price paid by Reseller for the Product, provided that Reseller returns the Product to Trackunit in accordance with Trackunit's standard return material authorization procedures or as otherwise instructed by Trackunit.

Warranty Exclusions and Disclaimers

The foregoing Product Limited Warranty shall only apply in the event and to the extent that (i) the Product is properly and correctly installed, configured, interfaced, maintained, stored and operated in accordance with Trackunit's specifications, and (ii) the Product is not modified or misused. This Product Limited Warranty shall not apply to, and Trackunit shall not be responsible for, defects or performance problems resulting from: (a) the combination or utilization of the Product with hardware or software products, information, data, systems, interfaces, services or devices not made, supplied or specified by Trackunit; (b) the operation of the Product under any specifications other than, or in addition to, Trackunit's standard published specifications for the Product; (c) the unauthorized installation, modification or use of the Product; (d) damage caused by: accident, lightning or other electrical discharge, water immersion or spray, or exposure to environmental conditions for which the Product is not intended; or (e) normal wear and tear on consumable parts, including by way of example and without limitation, batteries.

TRACKUNIT DOES NOT WARRANT OR GUARANTEE THE RESULTS OBTAINED THROUGH THE USE OF THE PRODUCT. THE FOREGOING TERMS OF THE PRODUCT LIMITED WARRANTY STATE TRACKUNIT'S ENTIRE LIABILITY, AND RESELLER'S EXCLUSIVE REMEDIES, RELATING TO THE USE AND PERFORMANCE OF THE PRODUCT EXCEPT AS OTHERWISE EXPRESSLY PROVIDED FOR IN THIS PRODUCT LIMITED WARRANTY, THE PRODUCT, ACCOMPANYING DOCUMENTATION AND MATERIALS, AND/OR ANY EMBEDDED SOFTWARE/FIRMWARE AND UPDATES THERETO ARE PROVIDED "AS-IS" AND WITHOUT EXPRESS OR IMPLIED WARRANTIES OF ANY KIND, BY EITHER TRACKUNIT OR ANYONE WHO HAS BEEN INVOLVED IN ITS CREATION, PRODUCTION, INSTALLATION OR DISTRIBUTION, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NONINFRINGEMENT. THE STATED EXPRESS WARRANTIES ARE IN LIEU OF ALL OBLIGATIONS OR LIABILITIES ON THE PART OF TRACKUNIT ARISING OUT OF, OR IN CONNECTION WITH, THE PRODUCT. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING:

TRACKUNIT IS NOT RESPONSIBLE FOR THE OPERATION OR FAILURE OF OPERATION OF GPS SATELLITES OR WIRELESS SERVICE OR THE AVAILABILITY OF GPS SATELLITE SIGNALS OR WIRELESS SERVICE. THE PRODUCT MAY

CONTAIN TECHNOLOGY THAT IS NOT FAULT TOLERANT AND IS NOT DESIGNED, MANUFACTURED OR INTENDED FOR USE IN ENVIRONMENTS OR APPLICATIONS IN WHICH THE FAILURE OF THE PRODUCT WOULD LEAD TO DEATH, PERSONAL INJURY OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE OR SEVERE FINANCIAL LOSS. ANY USE OR DISTRIBUTION BY RESELLER OR ITS CUSTOMERS IN CONNECTION WITH ANY SUCH ENVIRONMENT OR APPLICATION SHALL BE AT RESELLER'S AND ITS CUSTOMERS' SOLE RISK, AND TRACKUNIT SHALL HAVE NO LIABILITY WHATSOEVER IN CONNECTION THEREWITH. RESELLER SHALL INDEMNIFY AND HOLD TRACKUNIT AND ITS SUPPLIERS HARMLESS FROM ANY CLAIM BROUGHT AGAINST TRACKUNIT WHICH ARISES FROM RESELLER'S USE OR DISTRIBUTION OF THE PRODUCT IN CONNECTION WITH SUCH ENVIRONMENTS OR APPLICATIONS. SOME STATES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON DURATION OR THE EXCLUSION OF AN IMPLIED WARRANTY, SO CERTAIN OF THE ABOVE LIMITATIONS MAY NOT APPLY TO EVERY RESELLER.

Embedded Software/Firmware

The Product and associated tools, if any, may contain embedded software/firmware, which is licensed, not sold, and is only for use within the Product as an integral part thereof. Such embedded software/firmware (which includes all updates thereto) contains valuable trade secrets and is proprietary to Trackunit and its suppliers. To the greatest extent permitted by law, such embedded software/firmware may not be modified, copied, disassembled, decompiled or reverse engineered. Trackunit reserves all other rights.

Limitation of Liability

TRACKUNIT'S ENTIRE LIABILITY REGARDING THE PRODUCT SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY RESELLER FOR THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL TRACKUNIT OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER UNDER ANY CIRCUMSTANCE OR LEGAL THEORY RELATING IN ANY WAY TO THE PRODUCTS, ACCOMPANYING DOCUMENTATION AND MATERIALS, AND ANY EMBEDDED SOFTWARE/FIRMWARE AND UPDATES THERETO (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF DATA OR ANY OTHER PECUNIARY LOSS), REGARDLESS OF WHETHER TRACKUNIT HAS BEEN ADVISED OF THE POSSIBILITY OF ANY SUCH LOSS AND REGARDLESS OF THE COURSE OF DEALING BETWEEN TRACKUNIT AND RESELLER. BECAUSE SOME STATES AND JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO EVERY RESELLER.

Notices

Class B Statement – Notice to Users. 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 communication. 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 the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.

Regulatory Approvals

CE

The DUALID II product comply with the essential requirements of the RED Directive 2014/53/EC as stated by the EC Declaration of Conformity (CE 0682). The DUALID II product comply with the European Telecommunications Standards Institute Specifications EN 301 489-1, EN 301 489-3 (EMC for RFID 13.56 MHz for Radio Equipment and Systems).

EC/ International

The DUALID II complies with the essential requirements of the 2011/65/EC directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

FCC

The DUALID II product comply with the FCC Part 15.225 and the Industry Canada requirements RSS-GEN, RSS-210.

The DUALID II product comply 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.

DUALID II:

FCC ID: ZMF-DUALID-II

IC-ID: 9746A-DUALIDII

Introduction

This manual contains the functional installation guide for the DualID II product after mounting on the the outside of the vehicles, machinery, tractor etc. The DualID II provides access control for starting the vehicles, machinery using either an RFID identification card or a PIN code.

The DualID II operates in conjunction with the Trackunit tracking devices of the models ME500-x (2G) or the ME501-x (2G+3G) and it will also be interfaced for future tracking devices from Trackunit.

Safety information

Simple Guidelines

Please follow these guidelines when configuring, using or recycling the DualID II. Violating these guidelines may be dangerous, illegal or otherwise detrimental. Further detailed information is provided in this manual.

Interference

Like all wireless devices, the DualID II may encounter electrical interference that may affect its performance, however it is unlikely as the RFID interface operates in very close range from the identification card (Approx less than 1 cm - Typically).

Qualified Service

The DualID II contains no user serviceable or replaceable parts. Non-functioning units must be returned to an authorized service center for repair or replacement.

Water-Resistance and environmental compliance

The DUALID II is water-resistant according to the IP-66, IP67 and IPx9K requirements. The DualID II is designed to withstand the rough environmental conditions defined in the SAE J1455 Heavy Truck environmental standard for outside mounting. The environmental compliance to SAE J1455 covers vibration and shock, humidity and temperature, salt mist and certain chemicals etc.

It is however recommended that the DUALID II is to be mounted and used where it is relatively dry and not subjected to either water streams or submersion.

Specific Human Absorption Rates (SAR)

The DualID II is declared RF Exposure Compliance for Exemption from Routine Evaluation Limits.

ATTESTATION: It is attested that the radio communication apparatus meets the exemption from the routine evaluation limits in RSS102 Section 2.5 of this standard; that the Technical Brief was prepared and the information contained therein is correct; that applicable measurement methods and evaluation methodologies have been followed; and that the device meets the SAR and/or RF field strength limits of RSS-102.

Delivered standard content

The delivered standard package content includes the following items:

1 x DualID II unit.

2 x Mounting screws.

1 x Mounting instruction.

Typical mounting example:




User guide

Trackunit DualID II



Using key pad:


1. Type pin code
2. Confirm with 
3. Green light in LED3 indicates authorized ID
Begin operation.

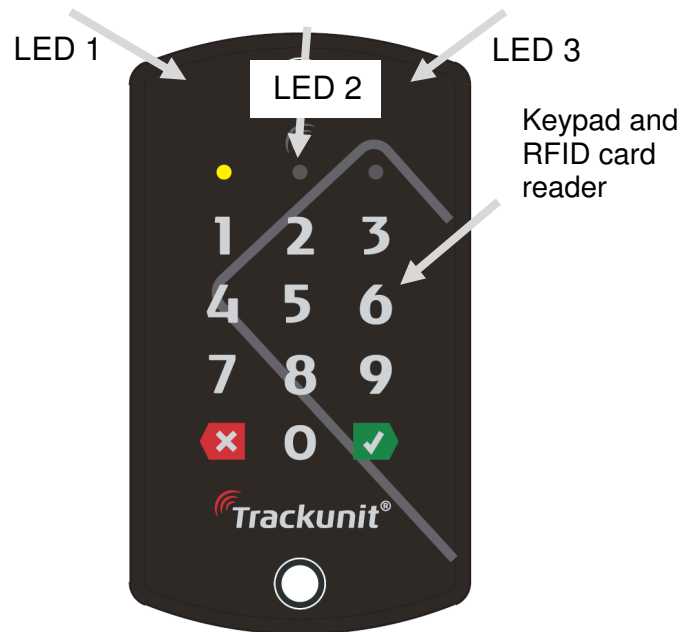


Using RFID card:




1. Present card in front of reader
2. A beep signal indicates card is read ok
3. Green light in LED3 indicates authorized ID
Begin operation.

Info:



- Yellow light in LED1 indicates the unit has power
- Cancel key input with  (start again)
- Red flash in LED3 when input is cancelled
- There is a 10 sec. time out for pin input
- Don't use RFID card and pin simultaneously
- LED2 is not in use



LED indications

	LED 1	LED 2	LED 3
	Power	-	-
	-	-	ID ok
	-	-	ID cancel

Installation check using “Verify my Trackunit”

Action	Screen
<p>Go to : http://verify.trackunit.com/</p> <p>Login with designated username and password</p> <div></div> <p>Enter serial number of the unit being installed.</p>	<div><div></div><div><div>Logout</div></div></div> <div><div>Verify my Trackunit</div><div><div></div><div>Find</div></div></div> <div><div>Unit Info:</div><div><div>Data received: 16-06-2015 14:45:00</div><div>Last GPS Fix: 16-06-2015 14:45:00</div><div>GPS Signal: 42 (> 30 = Good)</div><div>Mobile Signal: 30 (> 15 = Good)</div><div>Mobile Number:</div><div>Power Supply: 12.5V</div><div>Battery: 4.1V</div></div><div><div><div>Digital</div><div>Analog</div><div>Name of input</div></div><div><div>Input 1: Off</div><div>Input 2: Off</div><div>Input 3: Off</div><div>Input 4: Off</div><div>Output 1: Off</div></div><div><div>Hours</div><div>Ignition</div><div>Input 3</div><div>Input 4</div></div></div><div><div>Input Filtering:</div><div>Current Status = OFF Click here to change</div></div></div>

Step by step guide

All green fields should be filled out

	Action	Result	Check
1	Connect power (Main switch / breaker on)	<ul style="list-style-type: none"> - Beep sound - LED 1: Yellow light - Power Supply min. 9 Volt according "Verify tool" - GPS Signal min. 30 according "Verify tool" - GSM Signal min. 15 according "Verify tool" 	
2	Ignition on	<ul style="list-style-type: none"> - Relay "clicks" on - LED 1: Yellow light - LED 3: Green light - Input2 is "on" according "Verify tool" 	
3	Start engine	<ul style="list-style-type: none"> - Engine starts - LED 1: Yellow light - LED 3: Green light - Inputs 1 and 2 are "on" according "Verify tool" 	
4	Ignition off	<ul style="list-style-type: none"> - Engine stops - Relay "clicks" off - LED 1: Yellow light - LED 3: No light - Inputs 1 and 2 are "off" according "Verify tool" 	
5	Main switch / breaker off	<ul style="list-style-type: none"> - LED 1: Yellow light - Power Supply min. 10 Volt according "Verify tool" - Inputs 1, 2 are "off" according "Verify tool" 	
6	Read and enter data into "Verify tool"	<ul style="list-style-type: none"> - Set "Engine hours – start" at other data in Trackunit Manager using the "Verify tool". 	
7	Register machine data	<ul style="list-style-type: none"> - Complete machine data below. 	

Machine brand	Model	Technician	Label
			Place the label from cardboard box containing serial number and GSM number here.
Machine ID	Hour counter	Date / time	

Customer care

If you have a problem and cannot find the information you need in the product documentation, please contact your local Trackunit representative or customer care in your area:

Denmark and other countries:

Trackunit A/S
Telephone: +45 9673 7400
E-mail: support@trackunit.com

Germany:

Trackunit GmbH
Telephone: +49 5321/74340-0
E-mail: supportde@trackunit.com

United Kingdom:

Trackunit Ltd
Telephone: +44 118 929 8061
Email: supportuk@trackunit.com

NOTE: Please have the unit serial number ready when contacting customer care.

Approvals and certificates

The DualID II product is certified according to the following recommendations:

C €0682

FCC-ID: ZMF-DUALID-II
IC-ID: 9746A-DUALIDII

FCC and IC Statements

The DualID II product contains radio transmitters that comply with CFR 47 Part 15.225 of the FCC rules and with RSS-GEN, RSS-210 of Industry Canada requirements for RFID reader equipment.

Notice statements according to CFR 47 Part 15.19 / RSS-GEN:

The DualID II product complies with Part 15 of the FCC rules and with Industry Canada license exempt 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 DualID II 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.

NOTICE statements according to CFR 47 Part 15.21:

Changes or modifications made to this equipment not expressly approved by Trackunit may void the FCC authorization to operate this equipment.

Statements according to CFR 47 Part 2.1091 / 2.1093 and OET bulletin 65 / RSS-102:

The DualID II is declared RF Exposure Compliance for Exemption from Routine Evaluation Limits.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

ATTESTATION: It is attested that the radio communication apparatus meets the exemption from the routine evaluation limits in RSS102 Section 2.5 of this standard; that the Technical Brief was prepared and the information contained therein is correct; that applicable measurement methods and evaluation methodologies have been followed; and that the device meets the SAR and/or RF field strength limits of RSS-102.

EC/ International

- The DualID II product complies with the essential requirements of the RED directive 2014/53/EC directive with respect to the EMC requirements, safety and radio spectrum matters.
- The DualID II complies with the essential requirements of the 2011/65/EC directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Including:

(EN/IEC 60950-1:2006 + A11, A1, A12, A2):2013

ITE Safety

And environmental testing covering SAE J1455 heavy trucks for mounted outside the cabin of the vehicles/machinery:

SAE J1455, EN/IEC 60068-2-1:2007	Cold
SAE J1455, EN/IEC 60068-2-2:2007	Dry Heat
SAE J1455, EN/IEC 60068-2-27:2008	Shock
SAE J1455, EN/IEC 60068-2-32:	Drop
SAE J1455, IEC 61701:	Salt Spray
SAE J1455, EN/IEC 60068-2-64:2008	Random vibration
SAE J1455, EN/IEC 60068-2-78:2001	Damp heat steady state
SAE J1455, IEC 60529:2001	Degrees of protection (IP code): IP66, IP67, IPX9K
SAEJ1455 (Motor oil, Gasoline, Diesel fuel, Hydraulic fluid, Brake fluid, Transmission fluid , Glycol and water mixture)	Chemicals/oils protection

CE marking:

The DualID II product complies with the essential requirements of the RED Directive 2014/53/EC as stated by the EC Declaration of Conformity.

Certificates and Declaration of conformity (DOC) statements can be downloaded from the Trackunit website:

<http://www.trackunit.com/en/trackunit/approvals/approvals.htm>