MiX Telematics BLEDID Bluetooth Driver Identification Device Instruction Manual

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MiX Telematics BLEDID Bluetooth Driver Identification Device

Product Information

Specifications:

- Driver identification and assist/panic notification solution
- Supported by MiX mobile devices
- Communicates via bi-directional Bluetooth Low Energy link
- Three-part plastic enclosure secured by two screws
- Protects to IP54
- LED provides feedback on button presses and system acknowledgements
- Replaceable coin cell battery

Environmental Requirements:

- Avoid leaving the BT DID in direct sunlight as it contains a battery
- Do not immerse the BT DID in water as it is not guaranteed to be waterproof
- If accidentally immersed in water for less than 60 minutes, open the unit, remove the battery, and allow it to dry. Replace the battery if wet (refer to section 6 for instructions)

Installation:

Installation Requirements:

1. The system should only be installed by a suitably qualified vehicle technician with a basic knowledge of

telematics equipment operation
2. Refer to the firmware release notes to verify compatibility with the intended mobile host

Installation Steps:

Step	Action
1	Install host (e.g. MiX 3000/MiX 4000/MiX 6000) as per the Installation Manual
2	Remove the spare serial number labels. Attach one label to the contract and the other label to the customer copy of the contract
3	Capture the BT DID Unique ID in the software system and allocate it to a Driver as per the software system documentation. Additionally, configure any required Driver Assist/Panic system or custom events as per the software system documentation. Ensure that this updated configuration is uploaded to the on-board computer

FAQ:

- **Q: What are the variants of the BT DID?**
  A: The variants of the BT DID are P0022MT Bluetooth Driver ID and P0032MT Bluetooth HOS Driver ID.
- **Q: What should I do if the battery compartment does not close securely?**
  A: If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Introduction

1. This document applies to the BT DID which is a driver identification and assist/panic notification solution. The BT DID is supported by
2. MiX mobile devices that communicate via a bi-directional Bluetooth low-energy link.

Features

The BT DID comprises of:

1. Green Button (upper): Transmit the Driver Identification message to identify the driver in the vehicle.
2. Red Button (lower): Roadside Assist/Panic

The BT DID has a 3 part plastic enclosure, secured by two screws, which protects to IP54. An LED provides feedback on button presses and acknowledgements from the system. The coin cell battery is replaceable by the customer.

- This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- Do not ingest battery, Chemical Burn Hazard.
- Keep new and used batteries away from children.
- If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Variants

- P0022MT Bluetooth Driver ID
- P0032MT Bluetooth HOS Driver ID

Environmental Requirements

- Do not leave the BT DID in the sun as it contains a battery.
- Do not immerse the BT DID in water, as the housing is not guaranteed to be waterproof. If the BT DID is accidently immersed in water for less than 60 minutes, it should however survive. However, should such an event occur: open the unit remove the battery and allow the BT DID to dry. If wet, replace the battery as described in section 6.

Installation

Installation Requirements

- The system should only be installed by a suitably qualified vehicle technician with a basic knowledge of the operation of telematics equipment.
- Refer to the firmware release notes to verify whether the intended mobile host is compatible with the BT DID.

Installation Steps

Step	Action	Software Tools
1	Install host (e.g. MiX 3000/MiX 4000/MiX 6000) as per Installation Manual.	Refer to host Installation Manual
2	Remove the spare serial number labels. Attach one label to the cont ract and the other label to the customer copy of the contract.	N/A
3	Capture the BT DID Unique ID in the software system and allocate t o a Driver as per the software system documentation. Additionally, c onfigure any required Driver Assist/Panic system or custom events as per the software system documentation. Ensure that this updated configuration is uploaded to the on-board c omputer.	Refer to software system docume ntation.
4	Test the Installation	See section 4

Verification
After the installation, verify that no interference is caused to the vehicle's electrical system. Check dashboard warning lights and error messages. Should any error conditions exist, remove the on board computer and contact MiX Telematics for assistance.

LED Flash codes
The LED provides an indicator on the battery life of the BT DID.

State	LED Flash sequence	Remark
Healthy Battery	LED lights up while the button is pu shed down. If the host acknowledges the BT DID it will flas h rapidly.	Battery voltage healthy

Testing Installation

Driver Identification button
Ensure that the BT DID is within the vehicle cabin in range of the OBC. Press the GREEN button for at least 50 milliseconds until the LED illuminates. The LED will illuminate in GREEN for approximately 1 s indicating an identification attempt, followed by 5 rapid GREEN flashes to indicate that the device identified correctly. Complete a trip and ensure that the Driver ID is allocated to the trip on the software system.

Panic/Roadside Assist button
Ensure that the BT DID is within the vehicle cabin in range of the OBC. Press the RED button for at least 50 milliseconds until the LED illuminates. The LED will illuminate in GREEN for approximately 1 s indicating an identification attempt, followed by 5 rapid GREEN flashes to indicate that the device identified correctly. Complete a trip and ensure that the Driver ID is allocated to the trip on the software system.

Troubleshooting

A large assortment of application information, in the form of Knowledge Base Articles (KBAs), can be accessed from the Support section of: **http://www.mixtelematics.com**.

Symptom	Probable Cause	Action
LED does not light up when the alarm button is pressed or the BT DID is not functional	The battery is flat or incorrectly inserted.	· Verify that the battery is inserted correctly (as per markings) · Verify that the battery voltage is > 2.8 V. If not, replace the battery as per section 6

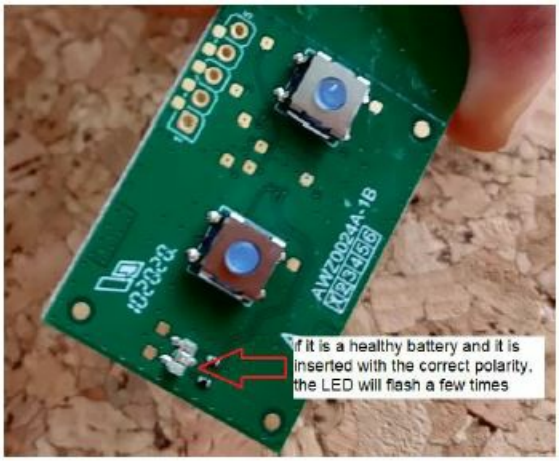
Maintenance

Replacing the Battery

- Disposal of a battery into a fire or a hot oven, or mechanically crushing or carrying of a battery, can result in an explosion
- Ensure that the battery is replaced by an approved type, i.e., one of the following: Panasonic CR2032 Lithium batteries (3.0V, 190 mAh) or Murata CR2032X Lithium batteries (3.0V, 225 mAh)
- Leaving a battery in an extremely high temperature surrounding environment can result in an explosion or the leakage of flammable liquid or gas
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas

1. Replace the battery when the LED starts flashing slowly (low battery indication).
2. **Important:** To avoid Electro Static Discharge (ESD), first touch a grounded metal surface to avoid possible ESD damage to the electronic circuit.
3. To replace the battery, use a suitable star screwdriver as indicated below (unscrew the 2 screws and remove the lid):

4. Replace the battery (polarity indicated on battery holder, “+” side away from printed circuit board (PCB))



5. If it is a healthy battery and it is inserted with the correct polarity, the LED will flash a few times. If not, ensure the battery is healthy and inserted correctly.
6. Replace the PCB back into the enclosure with the buttons facing towards the button side of the enclosure.
7. Replace the lid and fasten screws (torque specification: 0.28 N/m).

Technical Description

Battery Voltage Range	2.1 – 3.0 V DC. CR2032X Lithium coin cell battery (225 mAh)
Battery Current	Sleep: <5 µA @ 3.0V Tx/Rx: 7.5/5.4 mA @ 3.0V
Battery Backup Life	>2 Years (typically at 20°C)
Reverse voltage protection	Yes
RF Transceiver	Operating frequency: 2400 – 2480 MHz RF Transmit current: 7.5 mA @+4 dBm RX Receive Power: 5.4 mA @1 Mbps BLE
Dimensions	Approximately: 67 x 35 x 15 mm
Weight	~ 25 g

Technical specifications

ENVIRONMENT	
Temperature	-10 to 60°C
IP Rating	IP54 (IEC 60529)
Shock	Mil-Std-810F: 30g Pulse duration 11mS
Vibration	ISO 16750-3:2007(e): 9h 3 axes, Vertical 2.13grms, Longitudinal 1.18grms, Lateral 1.31grms
Free Fall	DIN EN 60068-2-32 (100 drops from a 1 m height)
REGULATORY	
EMC/RF Tests	**CE RED 2014/53/EU** Art 3.1 (a) RF Exposure assessment by EN 50665 referencing EN 62311 Safety assessment by IEC/EN/UL/CAN/CSA 62368-1 Art 3.1 (b) ETSI EN 301 489-1/17, also covering EN 55032 Article 3.2 RF testing by ETSI EN 300 328 covering the Bluetooth (Low Energy) device **FCC** FCC CFR 47 / ISEDC testing per Part 15B/ICES-003 & RSS-Gen covering the un-intentional radiator FCC CFR 47/ISEDC testing per Part 15.247/RSS-247 covering the Bluetooth (Low Energy) transmitter.
Type Approvals	
ICASA CE	TBD

www.mixtelematics.com.

Documents / Resources

	MiX Telematics BLEDID Bluetooth Driver Identification Device [pdf] Instruction Manual BLEDID Bluetooth Driver Identification Device, BLEDID, Bluetooth Driver Identification Device, Driver Identification Device, Identification Device, Device

References

- Telematics Solutions - MiX Telematics North America
- User Manual