



CANKEY-100-MB

CANkey used for Toyota, BT and Cesab

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Table of Contents

1	Introduction.....	3
1.1	Use	3
1.2	Warnings	3
2	General information	3
3	Intended use.....	4
3.1	Correct operating conditions.....	4
3.2	Discouraged use	4
4	Commissioning and safety.....	4
4.1	Warnings for each use	4
5	Installation instructions	4
6	Operating instructions.....	5
6.1	Supported operating modes	5
7	Absolute Maximum Ratings	5
7.1	Power supply.....	5
7.2	CAN bus CAN-H & CAN-L.....	5
8	Maintenance.....	5
9	Storage.....	5
10	Solving problems.....	5
11	Transport.....	6
12	Warranty.....	6

1 Introduction

1.1 Use

The CANKEY-100-MB enables the user to amend the factory settings of certain industrial trucks.

The CANKEY-100-MB must be used together with the cable supplied by UMS. Any other use is not authorized.

Remark: Drawings and images in this CANKEY-100-MB Manual may differ from your model

1.2 Warnings

Amending factory settings of an industrial truck can cause material and physical injury. Therefore, the CANKEY-100-MB must only be used by skilled, trained and authorized staff.

The users of the CANKEY-100-MB must have access to the user manual at all times.

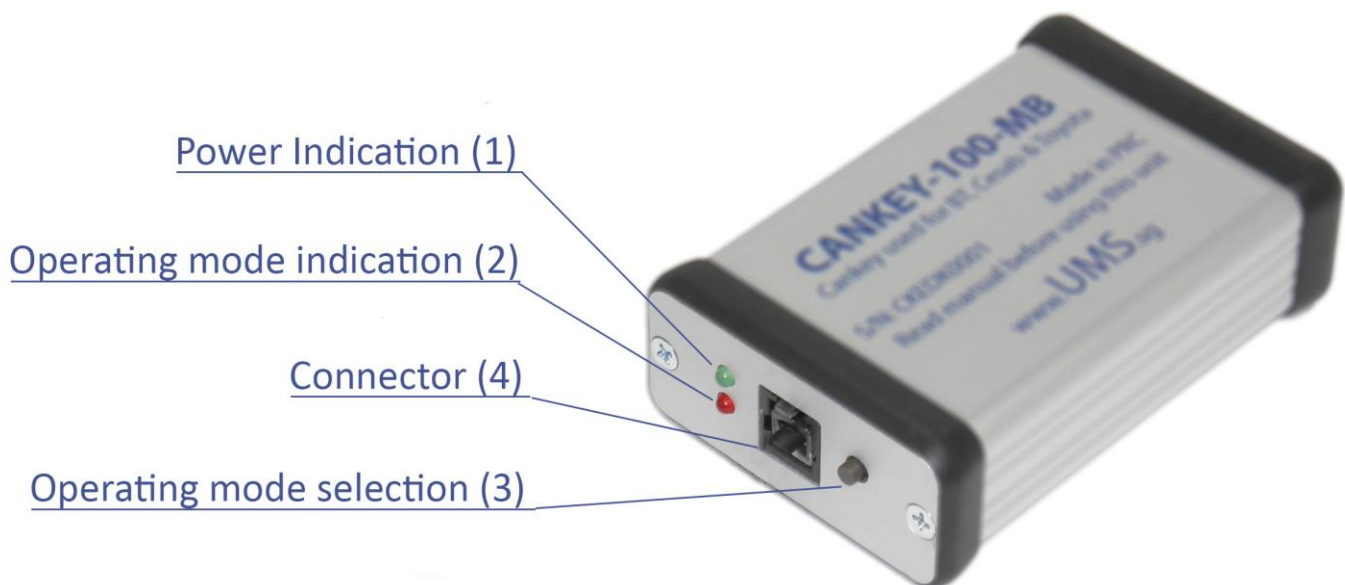
Read this CANKEY-100-MB Manual carefully before connecting, maintaining or using the CANKEY-100-MB. Strictly follow the safety instructions in the truck manufacturer's maintenance manual prior to connecting the CANKEY-100-MB to the truck.

Warning: Failure to comply with the instructions and warnings in this manual could result in serious injury to the user or other persons in the vicinity of the truck.

People working with the CANKEY-100-MB, and using procedures, work methods or tools that are not described in this manual, are solely responsible for the safe and good operation of the CANKEY-100-MB.

2 General information

The CANKEY-100-MB module is a multifunctional product that supports a multitude of CAN communication protocols. At this moment the CANKEY-100-MB module supports BT, Toyota and Cesab protocols.



3 Intended use

The CANKEY-100-MB is a diagnostic device that allows a qualified repairer of industrial trucks to perform diagnostics on certain types of industrial trucks.

Although we have made efforts to support as many truck types as possible, it could be that certain trucks are not supported.

Only use the CANKEY-100-MB as described in this Manual. Read the 'Solve Problems' section at the end of this Manual when encountering problems.

3.1 Correct operating conditions

The CANKEY-100-MB may only be used with an ambient temperature between 0°C and 40°C (32°F – 104°F).

The user has to be a qualified repairer of industrial trucks.

The user must always have sufficient working space, in order to prevent him from getting stuck between the industrial truck and a wall or other object.

The values on the rating sticker must under no circumstances be exceeded. If the data on the type of sticker is unreadable, please immediately order a new rating sticker at UMS through www.ums.sg. Always specify the serial number on the sticker.

3.2 Discouraged use

Do not use the CANKEY-100-MB on industrial trucks which show severe signs of damage.

4 Commissioning and safety

4.1 Warnings for each use

Be sure that the CANKEY-100-MB is only used by trained staff. People that have insufficient knowledge of the truck on which the CANKEY-100-MB is connected, can make changes as such that the safe working of the truck can no longer be guaranteed.

Prior to each use, all parts of the CANKEY-100-MB must be checked for cracks or other damages. Don't forget to check the cable: it cannot show any signs of deformation. Only use the CANKEY-100-MB when it is in a perfect condition.

When connecting the CANKEY-100-MB to the truck, both devices must be switched off. Connecting the devices when powered on can lead to malfunction and possibly dangerous situations.

5 Installation instructions




When connecting the CANKEY-100-MB to the truck, following sequence must ALWAYS be used:

- Make sure that the truck is blocked up, and no wheels touch the ground
- Make sure that the industrial truck is powered off
- Connect the appropriate cable to the CANKEY-100-MB
- Connect the cable to the service connector of the truck. Refer to the service manual of your truck for the location of the service connector.

6 Operating instructions

Selection between different protocols can be made by pressing the push-button. The actual protocol selected can be observed via the on-board RED led.

6.1 Supported operating modes

Protocol	Red LED
Idle mode (startup)	No led (off)
Protocol 1: used for BT	
Protocol 2: used for Toyota	
Protocol 3: used for Cesab	

NOTE:

Actual CAN communication starts about 5 seconds after CAN communication protocol selection !

7 Absolute Maximum Ratings

7.1 Power supply

Minimum DC voltage = 9V

Maximum DC voltage = 48V

7.2 CAN bus CAN-H & CAN-L

Maximum DC voltage = 48V

Minimum DC voltage = -48V

8 Maintenance

The CANKEY-100-MB (including cable) is an electronic device and can be damaged by contact with liquids. Keep the device away from liquids when using or storing it.

Only clean the device with a damp cloth. Do not use any solvents, gasoline, strong detergents and other.

All warning symbols and labels must be readable at all times. Change broken/unreadable labels. Contact UMS to obtain new labels.

9 Storage

Store the CANKEY-100-MB and cable in a dry frost-free room.

10 Solving problems

The cable is damaged	The cable can be ordered on www.ums.sg Never attempt to repair the cable!
I can't find the service connector on the machine	Please refer to the service manual of the machine to locate the service connector.

11 Transport

When transporting the CANKEY-100-MB, make sure the cable towards the truck are disconnected to prevent damage.

12 Warranty

UMS warrants the CANKEY-100-MB for a period of six (6) months from the date of purchase. The warranty is strictly limited to the replacement or the repair of the CANKEY-100-MB, or parts thereof, showing a manufacturing defect according to the final judgment of UMS.

UMS shall never accept a warranty claim if the user has carried out repairs or modifications to the CANKEY-100-MB; or if the defect results from assembly, maintenance, storage, or use in a manner which is inconsistent with the indications and recommendations by UMS, or from use for purposes other than those described in the User Manual, abnormal use, overloading, or normal wear; or if the original UMS identification, label or serial number has been removed; or if the warranty period has lapsed.

The warranty excludes all costs for transportation.

Warranty claims are administered through Universal Machine Solution Pte. Ltd., company registration number 201201400E

Contact: www.ums.sg