



# User Manual UPI-JH Interface

*Used for Jungheinrich industrial trucks*

(Last updated in (07/2013))

Date	Description	Rev.nr
01/10/2012	Initial release	A
11/07/2013	Updated machine list	B

## Table of Contents

1	Introduction.....	3
1.1	Use.....	3
1.2	Warnings.....	3
1.3	Contents and first use.....	3
2	Supported trucks .....	3
3	Locating the service connector on the truck.....	5
3.1	Trucks with CANbus .....	5
3.2	Trucks with CurrentLoop .....	5
4	Starting up the UPC-100 Handset .....	5
5	Structure of the display .....	6
5.1	CANbus JUSTCAP.....	6
5.1.1	Diagnostics (Zone D).....	6
5.1.2	Parameters (Zone G).....	6
5.1.3	Errors (Zone H) .....	6
5.1.4	Handset (Zone I) .....	6
5.1.5	Information field (Zone C).....	6
5.2	CANbus CAN-OPEN .....	7
5.3	CurrentLoop .....	7
5.3.1	Diagnostics (Zone D).....	7
5.3.2	Parameters (Zone G).....	7
5.3.3	Errors (Zone H) .....	7
5.3.4	Handset (Zone I) .....	7
5.3.5	Information field (Zone C).....	7
6	Cleaning the UPI-JH Interface .....	7
7	Maintenance.....	7
8	Storage.....	7
9	Problem solving.....	8
10	Transport.....	8
11	Regulatory compliance .....	8
12	Warranty.....	8

## 1 Introduction

### 1.1 Use

The UPI-JH Interface and the UPC-100 Handset enable the user to amend the factory settings of certain Jungheinrich industrial trucks.

The UPI-JH Interface must be used together with the UPC-100 Handset. Any other use is not authorized.

Remark: Drawings and images in this UPI-JH Interface manual may differ from your model.

### 1.2 Warnings

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

The users of the UPI-JH Interface must have access to the user manual at all times.

Read this UPI-JH Interface manual carefully before connecting, maintaining or using the UPI-JH interface.

Strictly follow the safety instructions in the truck manufacturer's maintenance manual prior to connecting the UPC-100 Handset and the UPI-JH Interface 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.

### 1.3 Contents and first use

The package contains the UPI-JH Interface, a UPA-JH-CNJ cable and a UPA-JH-SER cable.

## 2 Supported trucks

The UPI-JH Interface fully or partially supports trucks of the types listed below.

Warning: The UPI-JH Interface does not fully support all truck configurations, in particular less common configurations. The UPI-JH Interface is under constant scrutiny, development and improvement and feedback of user experiences is extremely valuable. In case of doubt or concern, please contact UMS.

Truck type	From date	To date	Remarks
ECC 10 ac	10/2001	11/2004	
ECC 20 SH	10/2001	11/2004	
ECE 116	04/2005	07/2006	
ECE 118	08/2006	05/2010	
ECE 20	04/1998	09/2001	
ECE 20 AC XL	10/2001	11/2004	
ECE 20 HP	05/2002	04/2004	
ECE 220/225	10/2004	(*)	
ECE 220/225 XL	10/2004	01/2009	
ECE 220/225 HP	02/2008	01/2009	
ECE 310	10/2004	01/2008	
ECE 320 SH	10/2004	04/2008	
ECR 327-336	10/2005	02/2012	
EFG 110/115	1/2004	11/2009	
EFG 213-220	01/2004	12/2008	
EFG 213-220 AC	01/2004	08/2004	

EFG 316-320	08/2004	12/2008	
EFG 316-320 AC	01/2004	(*)	
EFG 422-430	12/2003	10/2009	
EFG DF 13-20	05/1999	12/2003	
EFG DF AC 13-20	07/2002	01/2004	
EFG DH 12.5-15B	05/1996	01/2003	Requires cable UPA-JH-SER (white AMP connector)
EFG DH AC 10-15	01/2003	12/2003	
EFG VAC 16-20	06/1999	12/2003	
EFG VAC 22-30	01/2003	12/2003	
EFG VDC 16-20	06/1999	10/2004	
EJC 110-112	01/2005	05/2012	
EJC 212-220	12/2005	(*)	
EJC Z14/Z16	06/1998	06/2005	
EJD 20/3	02/2001	04/2005	
EJD 220	05/2005	12/2009	
EJD K18	02/2005	(*)	
EJE 116-120	10/2003	(*)	
EJE 220-235	05/2007	(*)	
EJE 30TC	08/1999	09/2003	
EJE C20	08/2003	(*)	
EJE R 20/22/25	08/1999	09/2003	
EJE R 220-230	10/2003	04/2007	
EKC 12,5-16	12/1999	12/2004	
EKD 20TC	12/1999	12/2004	
EKE 20 (B/TC)	05/1999	12/2004	
EKE 30 48V	11/1997	12/2004	
EKE 30-2 AC	08/2002	10/2004	
EKE KMS	02/2001	04/2004	
EKS 110	07/2004	(*)	
ELE ac 16-20	08/2002	09/2003	
ERC 212/214/216	02/2004	02/2011	
ERC Z12/Z14/Z16	10/2001	02/2011	
ERD 20 TC	10/2003	10/2003	
ERD 220	10/2003	06/2010	
ERE 20	11/1998	09/2003	
ERE 120	09/2005	07/2012	
ERE 220	10/2003	08/2005	
ERE 224	09/2005	09/2007	
ERE K20	03/2005	(*)	
ESC	01/2005	07/2009	
213/216/Z13/Z16			
ESD 120	01/2005	(*)	
ESD 20 TC	11/1999	12/2004	
ESD 220	01/2005	03/2010	
ESE 120	01/2005	(*)	
ESE 20	04/1999	12/2004	
ESE 220	01/2005	03/2010	
ESE 320	01/2005	03/2010	
ESE 420-430	11/2004	(*)	
ESE 530	11/2004	03/2010	
ETM/V 10-12	10/1997	03/1999	
ETM/V 214-216	04/2000	11/2005	
ETM/V 214-216 DC	01/2004	10/2004	
ETM/V 214-325	04/2000	(*)	
ETM/V 320-325	04/2000	11/2005	

ETM/V 320-325 DC	06/1999	10/2004
ETR 314-320	03/2006	11/2009
ETV 110-116	04/1999	(*)
ETV C16/C20	05/1999	(*)
ETV C16/C20 DC	05/1999	12/2004
ETV-Q 20/25	04/2002	09/2010
EZS 130	04/2006	07/2009
EZS 330-350 XL	04/2006	07/2009
EZS 570	07/2008	(*)

(\*) End date not known at the time this manual was released.

## 3 Locating the service connector on the truck

### 3.1 Trucks with CANbus

The service connector is of the type SUBD-9. Depending on the type of truck, the connector often has a standard location:

- For 3-wheeler and 4-wheeler forklift trucks: when standing behind the truck, on the right side next to the controllers
- For reach trucks: underneath the steering wheel
- For pallet trucks: next to the battery indicator
- For newer trucks (2008-...), the service connector can sometimes be found under the armrest.

Sometimes, the service connector may have a different location, or may even not have been installed at all. In that case, we advise you to install a service connector in accordance with the instructions of the truck manufacturer.

### 3.2 Trucks with CurrentLoop

On this type of trucks, the service connector is often located close to the LISA display, or where a LISA display can be fitted. The service connector is a white, 15-pole AMP connector.

The service connector may have a different location, or may even not have been installed at all. IN that case, we advise you to install a service connector in accordance with the instructions of the truck manufacturer.

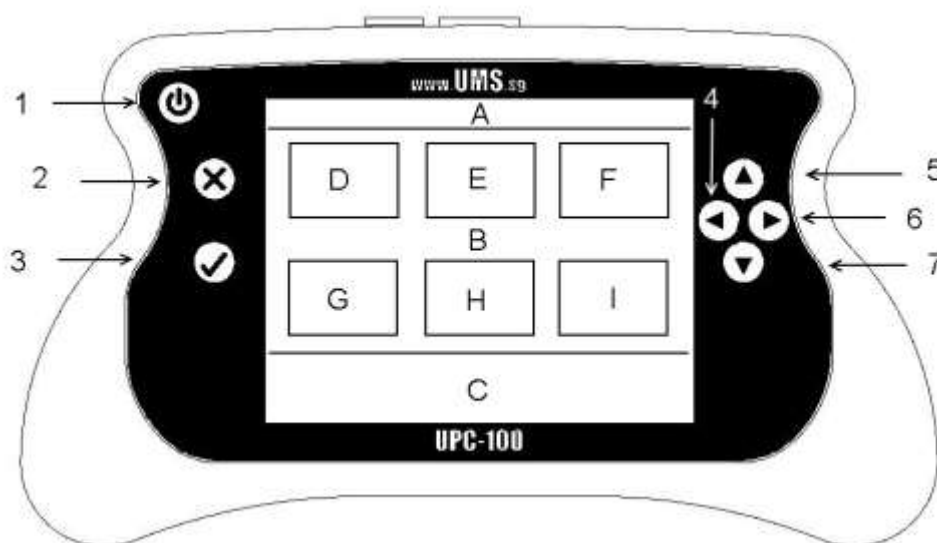
## 4 Starting up the UPC-100 Handset

Carefully read the installation instructions in the UPC-100 Handset User Manual, before starting up the UPC-100 Handset.

Upon start-up, the UPC-100 Handset immediately initializes the communication. The status hereof is shown in zone C of the display (see chapter 'structure of the display').

After initialization, the UPC-100 Handset will expect you to confirm that all safety precautions described in the truck manufacturer's instructions have been taken (blocking up, jacking up, etc.). Press OK only if this is the case.

## 5 Structure of the display



### 5.1 CANbus JUSTCAP

#### 5.1.1 Diagnostics (Zone D)

Diagnostics show the present condition of a given input/output (e.g. switch status, motor current, motor voltage ...). Values are read only. Highlight a value to refresh it.

The submenu 'software versions' shows the version of the software for those controllers that are present in the truck.

#### 5.1.2 Parameters (Zone G)

In this menu, the user can read out as well as manipulate parameters that influence the behaviour of the truck.

Warning: wrongful manipulation of the parameters can result in uncontrolled behaviour of the truck, possibly causing severe injury or death.

Use the submenu 'store/restore parameters', to copy all truck parameters onto the UPI-JH Interface. These parameters can further be copied on any other truck of an identical type at any time. Use this functionality to set the parameters of all trucks in a fleet identical, instead of manually adjusting every single parameter over and over.

#### 5.1.3 Errors (Zone H)

This menu has two main functionalities: reading the error logs, and clearing them. The error log displays all available information. This information depends on the truck type. Generally, this includes an error number, a frequency and a timestamp.

#### 5.1.4 Handset (Zone I)

(Consult the UPC-100 Handset User Manual)

#### 5.1.5 Information field (Zone C)

Zone C displays the two most recent errors or warnings supported by the UPI-JH Interface.

## 5.2 CANbus CAN-OPEN

Upon installation of a new or replacement controller in the truck, use the UPI-JH Interface to configure the newly installed controller to the truck using the menu 'set truck type'.

For configuration of IN-MOTION controllers, use the submenu 'set truck code' (Zone E) to set the pin code (or truck code).

## 5.3 CurrentLoop

### 5.3.1 Diagnostics (Zone D)

- Drive diagnostics
- Lift diagnostics

### 5.3.2 Parameters (Zone G)

- Drive parameters
- Lift parameters
- Store/restore parameter sets
  - o Read & store parameter sets
  - o Restore parameter sets
  - o Delete parameter sets
- Factory defaults
  - o Default drive parameters
  - o Default lift parameters

### 5.3.3 Errors (Zone H)

- Drive errors
- Lift errors

### 5.3.4 Handset (Zone I)

(Consult the UPC-100 Handset User Manual)

### 5.3.5 Information field (Zone C)

Zone C displays the two most recent errors or warnings supported by the UPI-JH Interface.

## 6 Cleaning the UPI-JH Interface

Only use a damp cloth to clean the housing and the cable. Do not use any solvents or liquid.

## 7 Maintenance

There are no user serviceable parts present in the UPI-JH Interface. Upon defect, the unit must be returned to UMS for repair. If the UPI-JH Interface is damaged, return it to UMS.

Any attempt to unscrew, alter, repair or interfere otherwise with the UPI-JH Interface, will invalidate any warranty.

## 8 Storage

The unit must be stored in a dry, frost-free room.

## 9 Problem solving

Problem	Solution
I only see the 'handset' icon in the main menu.	Make sure the cable towards the truck is connected to the interface
The display shows "can't locate the interface"	Make sure the cable towards the UPC-100 Handset is connected.

If your problem is not listed, try the FAQ section on [www.ums.sg](http://www.ums.sg).

## 10 Transport

When transporting the UPI-JH Interface, make sure it is not connected to the UPC-100 Handset. The cables towards the machine must also be disconnected to prevent damage.

## 11 Regulatory compliance

This UPI-JH Interface complies with the Electromagnetic Compatibility Directive 2004/108/EC, in particular with the harmonized standards listed below:

- Emission: EN 55022 (2006) + A1 (2007), class B
- Immunity: EN 55024 (1998) + A1 (2001) + A2 (2003)
- Emission: EN 61000-3-2 (2006)
- Emission: EN 61000-3-3 (1995) + A1 (2001) + A2 (2005)

## 12 Warranty

UMS warrants the UPI-JH Interface 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 UPI-JH Interface, 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 UPI-JH Interface; 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](http://www.ums.sg)