

Setting Instruction

SWG1



**IFM CR1074 LED display programmed as a
forklift truck with 3 load storage units**

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Hints

General remark

This document is part of the system provided by KST Engineering GmbH.
The documentation includes information for the CR1074 control console

Product identifications

Product Type:	IFM CR1076 Console
Software product name:	KST Engineering GmbH SWG-2 Display
Firmware System:	Codesys 3.5.16.5 Package FW2221

Document identifier

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Manufacture

KST Engineering GmbH

Am Dwarstief 15

26826 Weener

Germany

Tel.: +49 (0) 4953 990725

foreword

About this manual

This document is a component of the devices or systems provided by KST Engineering GmbH. Keep this manual in a safe place and ensure that it is freely accessible to all users.

Disclaimer

The contents of this manual are subject to change. KST Engineering GmbH provides no warranties for this material, including any warranties of merchantability or fitness for a particular purpose. KST Engineering GmbH assumes no liability for errors contained in this manual or for direct or indirect damages in connection with the provision or use of these materials.

Copyright notices

This manual is copyrighted. All rights reserved. The manual may not be copied, reproduced or translated into another language without the prior written consent of KST Engineering GmbH.

Use for the intended purpose

This device/system may only be used for the purpose specified in this manual. Any other use will be considered inappropriate. The manufacturer assumes no liability for damage caused by inappropriate or unauthorized use. This device/system may only be used in a technically perfect condition.

Qualifications of the operating personnel

This device/system may only be operated by appropriately qualified personnel, i.e. H. People that:

1. are familiar with the operation or installation and commissioning
2. know the applicable legal regulations to prevent accidents
3. read and understood the documentation or received appropriate training or instruction have received.

Safety information

Warning information and symbols

Information of particular importance is marked within the user manual using the following names and symbols:



This symbol refers to hazards associated with the activity described that could result in injury.



This symbol indicates hazards that could cause property damage, e.g. B. Damage to the equipment or the environment.



The hand icon points to sections where you can find more information or tips.



This symbol informs you that the warranty may be void. Make sure you have read all safety instructions in this document and follow them when operating the system.

Make sure you have read all safety information in this documentation and observe it when using the system.

Always keep these instructions in a safe place. Provide a copy of the instructions to each operator.

The control system may only be operated with your hands. Never use sharp objects to press the buttons.

If the device is damaged, the system may no longer be used.

Disconnect it from the power supply. The limiter must be protected from steam, liquid and dust, especially if the display window is damaged.

Only clean the device with mild cleaning agents. Never use cleaning agents containing solvents or aggressive or abrasive agents.



When disposing of the limiter, the electronic components must be removed and disposed of as hazardous waste in accordance with local regulations.

Purpose of use



This system was developed in accordance with recognized safety standards. However, improper use of the device can result in injury or death to the operator and others, as well as damage to equipment and other property.

The system may only be used for its intended purpose and must be in perfect technical condition. There should be no doubt that this system contains both electronic and mechanical components and therefore the risk of errors cannot be completely ruled out.

Errors that lead to a possible security risk must be corrected immediately.

This system is designed exclusively for the tasks described in this documentation. It may not be used for any other purposes.

Caution: This system is not intended to replace the operator's lack of practical experience or common sense in the use of the equipment. Responsibility for the entire operating process and all resulting consequences lies solely with the operator.

The manufacturer assumes no liability for any damage or injury caused by unreasonable use or unauthorized use of the system occurs. The risk lies solely with the user.

General information

The SWG-1 system must be calibrated upon completion of system installation, after machine changes, or any time an inaccuracy is detected. During calibration, the sensors installed in the machine are tuned.

Before starting calibration, you should read the procedure completely. The purpose of this manual is to provide necessary calibration information prior to operating the system. For a description of the system and console controls, see the Operator's Manual.

Warnings

Always follow the crane manufacturer's operating instructions and load tables for specific information on operating the crane and load limits.

However, the SWG-2 is not, and should not be construed as, a substitute for operator common sense, experience, and application of proper operating procedures.

The operator is responsible for operating the truck in accordance with the manufacturer's specified parameters.

The machine operator must ensure that all warnings and instructions provided by the manufacturer are fully understood, observed and retained with the machine.

Before operating the truck, the operator must carefully read and understand the information contained in the Operator's Manual to ensure they are familiar with the operation and limitations of the SWG-2.



BEFORE STARTING THE MACHINE, THE SYSTEM MUST BE CALIBRATED. ALL STEPS MUST BE PERFORMED AND COMPLETED. TO AVOID MATERIAL DAMAGE AND SERIOUS OR EVEN FATAL ACCIDENTS, PROPER ADJUSTMENT OF THE SYSTEM MUST BE ENSURE BEFORE OPERATION OF THE MACHINE.

MAKE SURE ALL SETTINGS/DATA HAVE BEEN ENTERED CORRECTLY!

Installation



Before using the device, ensure that you have read all relevant instructions provided by the device manufacturer regarding updating and using the device.



This manual and the device manufacturer's manuals must be read carefully and fully understood before starting work.



All entries must be made in accordance with the actual conditions of the device. If incorrect entries are made, the device cannot function properly and will not provide the necessary information in dangerous situations necessary protection for the operator or equipment.

Before making any changes to the system, always check the sensor and power cable. The system may only be adjusted by KST Engineering GmbH customer service or an authorized KST representative. Incorrect adjustment may result in inaccurate data or device malfunction. In this case all guarantees expire.

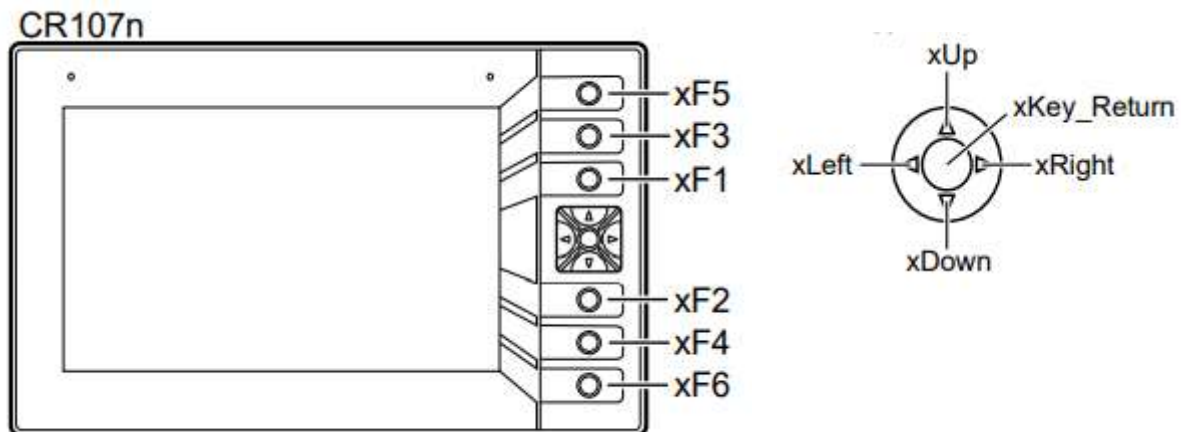
Settings

The function keys

The display is controlled with the function keys F1-F6. The exact functions of the function keys are explained in the Display chapter. The rocker switch is used in the submenus and settings.

Function keys:

Cross rocker:



System Settings & Password

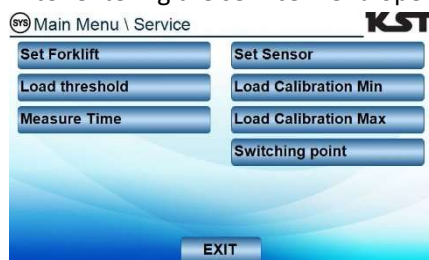
To get to the system settings, you must press the button  in the operating display to get to the main menu.



Once you have reached the main menu, you will find the “System Settings” menu item at the bottom. Use the rocker switch to navigate there and confirm your selection. Now the system will ask for the password. To access the settings, enter the following password:

Password: 45259

After entering the service menu opens.



In order for the load display to show the correct load, the sensor must be calibrated. First with the minimum load value then with the maximum load value. The menu items load threshold and measurement time Can be adjusted independently of load calibration.

Sensor selection

In the Sensor Selection menu you can select the sensor you have installed.

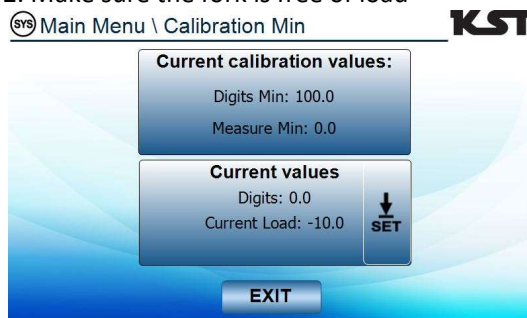
1. The DAVS 600 1510 is a hydraulic pressure transducer.
2. The C5_Force is a ring force transducer



You can select the sensor using the rocker switch

calibration

1. Use the rocker switch to click on the “Load Calibration Min” button.
2. Make sure the fork is free of load



Current comparison data:

The current comparison data is displayed here

Current Values:

The current digits are displayed here
And the current load from the existing calibration value.

3. Press “SET” and enter the current load (fork load free = 0t)
4. Press OK. Now the system adopts the current digits to those previously entered Load Value.
5. Now press “EXIT” to return to the system menu
6. Use the rocker switch to click on the “Load Calibration Max” button.



Current comparison data:

The current comparison data is displayed here

Current Values:

The current digits are displayed here
And the current load from the existing calibration value.

7. Press “SET” and enter the current load (fork + test weight = 10t)
8. Press OK. The system now adopts the current digits for the previously entered load value.
9. The load balancing is finished. Exit takes you back to the system menu

Load switching point

Go to the “Switching point” menu to configure the switch-off threshold.

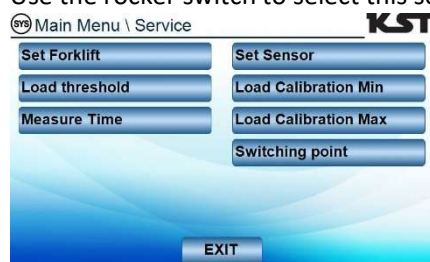


1. Switch-off limit : Specifies at what load value the switching point should be set
2. Hysteresis : Indicates how many % of the maximum rest value must be undershot, to reset the switching point again.
3. Shutdown delay: switch-off delay in seconds
4. Shut-on delay : Switch-on delay in seconds

The settings are selected with the cross rocker and entered with the numpad that opens

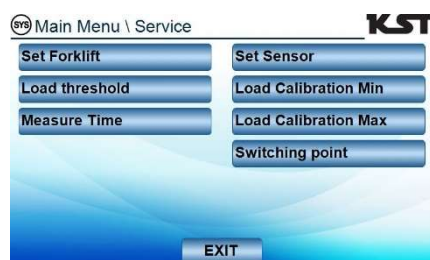
load threshold

The load range indicates the threshold of how high the minimum load must be to start the measurement. Use the rocker switch to select this setting and use the numpad that opens to set the load threshold



Measure Time

With the measurement time you specify how long the measurement should last. The longer the value, the longer the measurement takes.



Set Forklift

In this submenu you can select the truck number. As soon as you confirm the forklift number, the display will restart.

After the restart, the forklift number you selected will be displayed on the start screen



Set date & time

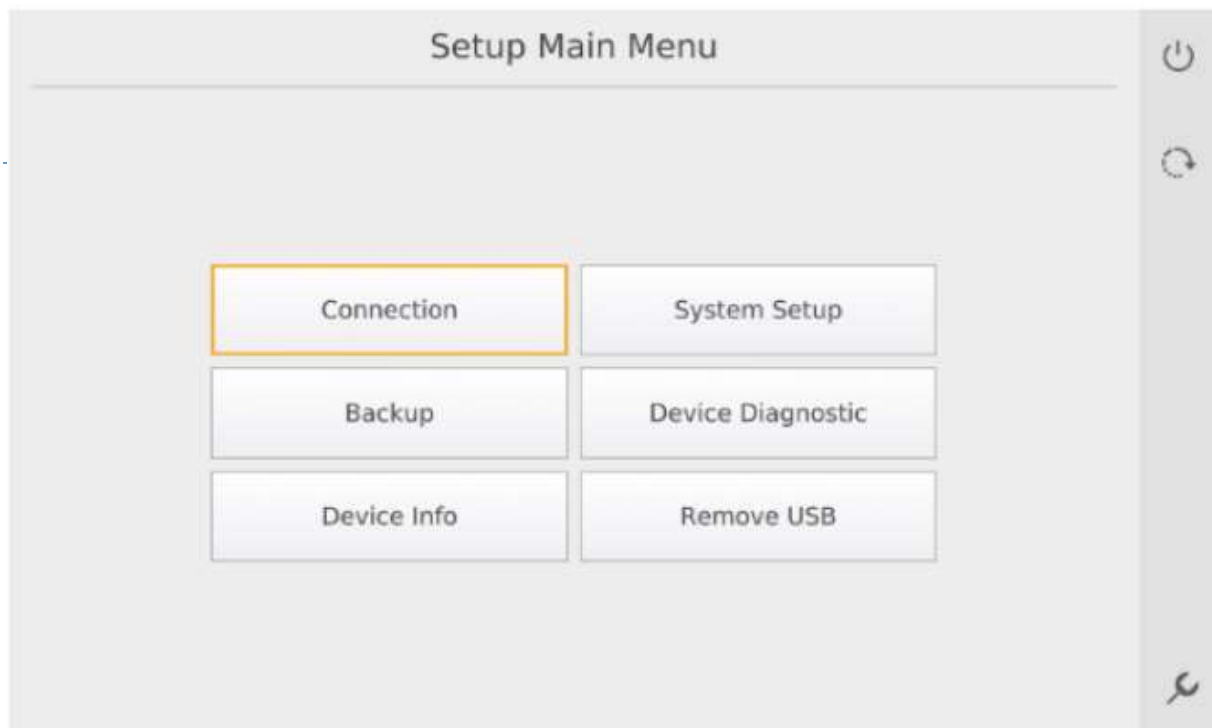
Start setup mode



MAKE ONLY THE SYSTEM SETUP CHANGES DESCRIBED HERE. ADJUSTING THE DISPLAY CAN RESULT IN SYSTEM FAILURE.

Disconnect the device from the circuit. u Carry out the following actions at the same time:

Press and hold any 2 buttons on the device at the same time. Turn on a device. Device restarts. Select the “Launch Setup” button in the menu and confirm. Device is in setup mode.



Set time zone

To set the date and time (system time):

Navigation path: [Launch Setup] > [System Setup] > [Date and Time] > [Time Zone] tab

Menu page shows the following information

[Time Zone Category] Preselection of the time zone region. Selecting a region acts as a filter on the List e.g. All, America, Asia, Australia, Europe, US

[Time Zone] Time zone e.g. US/Michigan, Europe/London, Europe/Berlin

Setting date and time

To set the date and time (system time):

Navigation path: [Launch Setup] > [System Setup] > [Date and Time] > [System Time] tab

Menu page shows the following information:

[Year] Year 2000...2100

[Month] Month 1 ... 12

[Day] Day 1...31

[Hour] Hour 0...23

[Min] Minute 0...59

[Sec] Second 0...59

[Time Zone] Time zone list

Select the desired number field. Marked number field has black frame. u Use [▲] / [▼] to set the desired value.

When you leave the page, the changes are saved.

Notizen

[illegible]

[illegible]