ALGE-TIMING

Version: E23-11-08

Manual
Safe Driving 2

Important Information

General

Before using your ALGE-TIMING device read the complete manual carefully. It is part of the device and contains important information about installation, safety and its intended use. This manual cannot cover all conceivable applications. For further information or in case of problems that are mentioned not at all or not sufficiently detailed, please contact your ALGE-TIMING representative. You can find contact details on our homepage www.alge-timing.com

Safety

Apart from the information of this manual all general safety and accident prevention regulations of the legislator must be taken into account.
The device must only be used by trained persons. The setting-up and installation must only be executed according to the manufacturer's data.

Intended Use

The device must only be used for its intended applications. Technical modifications and any misuse are prohibited because of the risks involved! ALGE-TIMING is not liable for damages that are caused by improper use or incorrect operation.

Power supply

The stated voltage on the type plate must correspond to voltage of the power source. Check all connections and plugs before usage. Damaged connection wires must be replaced immediately by an authorized electrician. The device must only be connected to an electric supply that has been installed by an electrician according to IEC 60364-1. Never touch the mains plug with wet hands! Never touch live parts!

Cleaning

Please clean the outside of the device only with a smooth cloth. Detergents can cause damage. Never submerge in water, never open or clean with wet cloth. The cleaning must not be carried out by hose or high-pressure (risk of short circuits or other damage).

Liability Limitations

All technical information, data and information for installation and operation correspond to the latest status at time of printing and are made in all conscience considering our past experience and knowledge. Information, pictures and description do not entitle to base any claims. The manufacturer is not liable for damage due to failure to observe the manual, improper use, incorrect repairs, technical modifications, use of unauthorized spare parts. Translations are made in all conscience. We assume no liability for translation mistakes, even if the translation is carried out by us or on our behalf.

Disposal

If a label is placed on the device showing a crossed-out dustbin on wheels (see drawing), the European directive 2002/96/EG applies for this device.
Please get informed about the applicable regulations for separate collection of electrical and electronical waste in your country and do not dispose of the old devices as household waste. Correct disposal of old equipment protects the environment and humans against negative consequences!

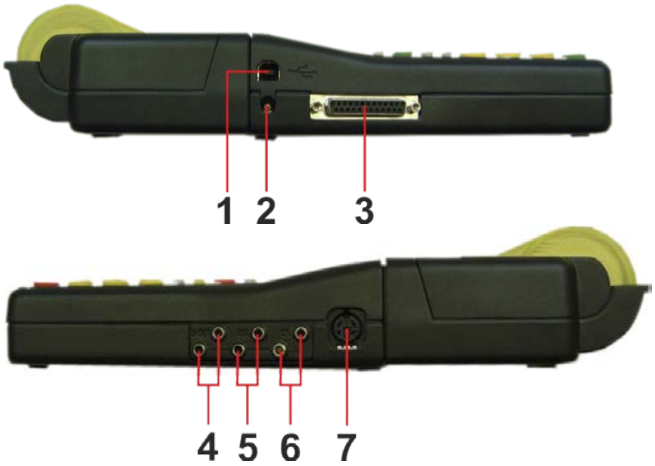
Table of Content

1 General Information about the Timy3

A device description for the TIMY3 is available in the manual “General”. This includes general information about the device and operating instructions. This manual is specific made only to the operation instruction when using the program “Save Driving 2”.

1.1 Control elements

1...... USB interface
2...... charging socket
3...... ALGE-TIMING multiport
4...... connection for display board
5...... connection for start impulse
6...... connection for finish impulse
7...... standard ALGE-TIMING photocell socket



1.2 Timy3 Models

Both Timy3 models are equipped with a temperature compensated quartz-oscillator and therefore suited for highest accuracy. The extended temperature range allows operating the Timy3 from +50°C until -20°C (for summer and winter sports).

Timy3 W (left):

Timy3 W is a timing device without printer.

Timy3 WP (Design2 / right):

Timy3 WP is a timing device with integrated printer.

1.3 TIMY3 Software

Available programs for the Timy3:

Stopwatch: universal timing program which is suitable for several heats (run/total time)
Backup: to measure time of day times (e. g. as backup-system or as time reference for the computer)
PC-Timer: to measure time of day times with simultaneous output of the running time in 1/10 seconds via the RS232 interface; ideal as an accurate timing device for the computer
LapTimer: timing program with run times and lap times (e. g. for motor sport)
TrackTimer: timing program for events with several lanes, e. g. athletics and swimming
Training Lite: universal training software (several intermediate times are possible)
Training REF: training software with reference run (several competitors on course)
Speed: speed measurement
Commander: terminal for diverse subprograms (see manual)
CycleStart: program for track cycling with countdown and lap counter
Terminal: terminal for judges (e. g. gymnastics)
Track + Field: for measuring the wind speed with anemometer WS2, to control a concentration clock and infield display board
Parallel-Diff: timing for parallel slalom (difference time of both slopes)
Dual Timer: timing of two separate courses
Timeout: timing with timeout, also applicable for show jumping (with start countdown)
Swim Trainer: training program for swimming
Jumping: training program for jump trials, measures jumping height on the basis of time between jump and landing on a contact mat (several subprograms)
Speed-Climbing: timing for parallel competitions at speed climbing with false start
Start-Liner: to control a Startclock ASC3 or display boards D-LINE when using individual start time (e.g., Gundersen start)
Parallel-Start: to control and input start doors for opening with a different time delay
TV-Timer: simple timing program for controlling a display board or TV time flashes
Voting: radio judging console (WTN) for judges, voting, etc. (e.g., ski jumping)
Safe Driving 2: to control a display board and speed measurement for driver training
CC False Start: false start detection for cross country skiing sprint events

1.4 Installation of Device Drivers

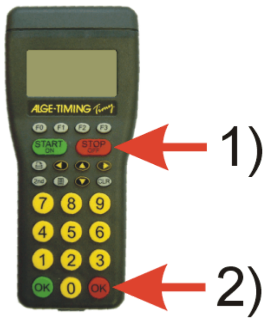
Separate operating instructions are available for installing the drivers (e.g. for USB). You can request these instructions from your ALGE-TIMING representative or download from our homepage www.alge-timing.com.

1.5 Switch On

- Press „START/ON "key.
- Display shows:
  "Really switch-on? Press the green OK button! "
- If you press the green OK key within 10 seconds, the Timy3 switches on, otherwise it automatically switches off again.

1.6 Switch Off

You have got two possibilities to switch off the Timy3:



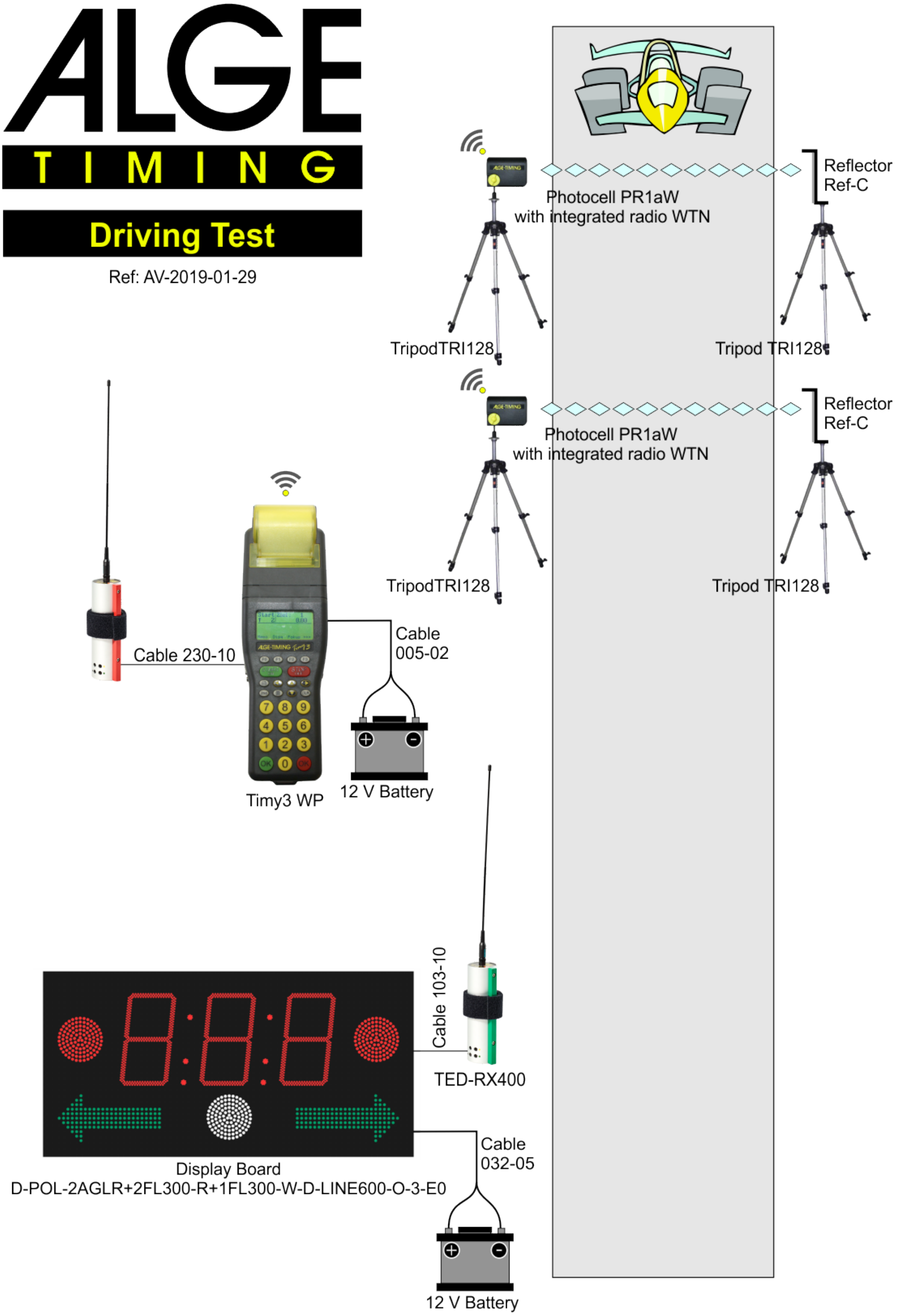
Method 1:

- Press „STOP/OFF "key for 3 seconds.
- Display shows:
  "Really switch-off? Press the red OK button! "
- If you press the red OK key within 10 seconds, the Timy3 switches off, otherwise it returns to the program.

Method 2:

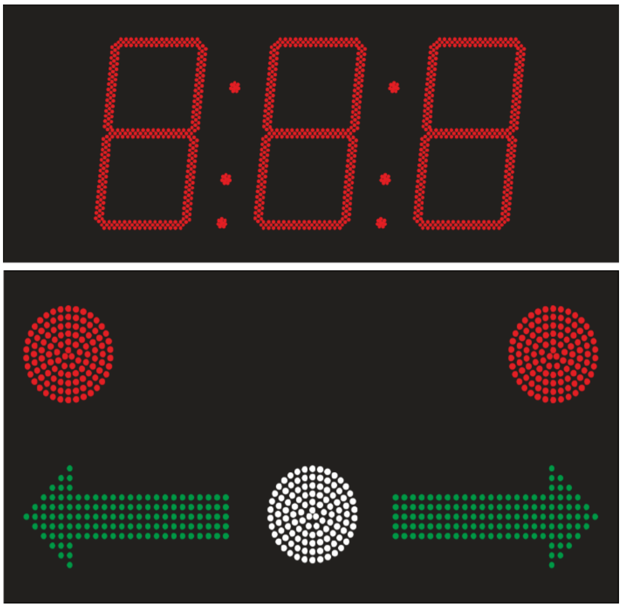
- Press „2nd "and „STOP/OFF "keys
- Display shows:
  "Really switch-off? Press the red OK button! "
- If you press the red OK key within 10 seconds, the Timy3 switches off, otherwise it returns to the program.

2 Setup of the System

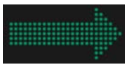


3 Program “Save Driving 2”

The "SAFE-DRIVING 2" program is used for safe driving training. The speed at a certain point is measured. Arrows, stop lights or a brake light indicate how the driver should react.

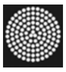


............evasive manoeuvre to the left

............evasive manoeuvre to the right

 Left Side .....obstacle left, swerve to the right

 Right Side...Obstacle left, swerve to the left

...................break

When channel C0 (first photocell) is triggered, the white brake signal (white dot) appears immediately on the display panel (delay adjustable). After the set delay, the other signals are displayed. If the speed measurement (SPEED) is activated, the speed measurement starts and appears in the Timy3 display <Speed =   ---.->.

If channel C1 (second photocell) is triggered, the speed will appear on the display panel after the set delay. If the pulse from C1 is not triggered within 10 seconds after C0, the measurement is aborted.

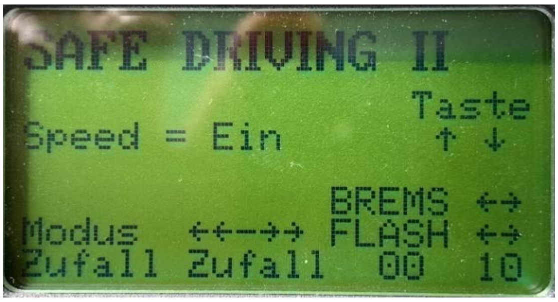
The speed is shown on the display board 1. A breaking light (white), two direction arrows (green) and two stop lights (red) are shown on display board 2 (lower display).
If the direction arrows or stop lights show up, additionally the breaking light goes on.

From the four symbols () comes up, only one of these will be shining, but always together with the breaking light.

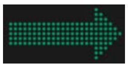
3.1 Symbol Adjustment

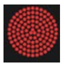
The control of the scoreboard was programmed in such a way that the user can control it flexibly.

Switch between both displays with  and .



F0 after impulse from C0 shows the display 

F1 after impulse from C0 shows the display 

F2 after impulse from C0 shows the display the left 

F3 after impulse from C0 shows the display the right 

3.1.1 Mode <Mode> (F0)

Select the mode for the display control:

- with „change“ everything is possible, the software pics a direction by coincidence
- with „arrrow“ it shows only the green arrows (right or left)
- with „light“ it shows only the two red stop lights (left or right)
- ***Adjustment:*** change / arrow / light

3.1.2 Direction <←← →→> (F1)

Select the direction that is shown:

- with „change“ everything is possible, the software pics a the direction left or ritht by coincidence
- with „left“ it shows only the signs of the left side of the display board
- with „right“ it shows only the signs of the right side of the display board

Adjustment: change / left / right

3.1.3 Break Light Delay <BREAK FLASH> (F2)

You can set the delay time between the impulse of the photocell (channel C0) and the appearance of the brake light (white) between 0 and 9.9 seconds.
Adjustment: 0 to 99 (adjustment in 1/10th seconds)

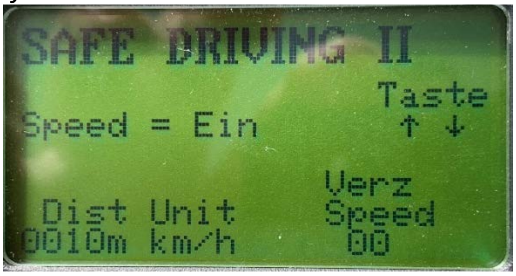
3.1.4 Symbol Delay <⇇⇉> (F3)

It is possible to adjust the delay between the break light and the appearance of the red stop lights or green arrows between 0 and 9.9 seconds
Adjustment: 0 to 99 (adjustment in 1/10th seconds)

3.2 Speed Measurement Adjustments

Two photocells at a defined distance are responsible for measuring the speed. The distance between the photocells can be set between 1 and 9999 m. The first photocell has the impulse channel C0 and the second the impulse channel C1. The measuring unit for the speed can be set (km/h, m/s or mph). The speed is displayed with three digits without a comma.

Switch between both displays with and .



F0	distance between photocells in meter. Adjustable between 0 and 9999 m
F1	output of speed in km/h, m/s or mph
F2	Delay of speed output in 1/10 sec. Adjustable: 0 – 99
F3	Delay of sign output (arrows and red light) in 1/10 sec. Adjustable: 0 – 99
CLR	Clear the display board (Blank)

3.2.1 Measuring distance <Dist> (F0)

The measurement distance between the two photocells can be adjusted in from 1 to 9999 m. The greater the measurement distance, the more precise is the speed of the measured distance.

3.2.2 Measuring Unit <Unit> (F1)

It is possible to show the speed in km/h, mph or m/s.

3.2.3 Speed Display Delay <Verz Speed> (F2)

You can set a delay for displaying the speed between 0 and 9.9 seconds. If you press the F3 button in this menu, the speed display will be switched off.
Adjustment: 0 to 99 (adjustment in 1/10th seconds)

3.3 Operation

- After switching on, the system is immediately ready.
- If an impulse from the photocell on channel 0 reaches the Timy3 it activated the brake light on the display.
- The green direction arrows or the red traffic lights are depending on the setting and delay (from 0 to 99 tenths of a second).
- An arrow and a traffic light can never be controlled at the same time.
- The settings are visible in the bottom line of the Timy3 display.
- Directly below the display are the function keys F0, F1, F2 and F3.

3.3.1 Display Time on the Display Board

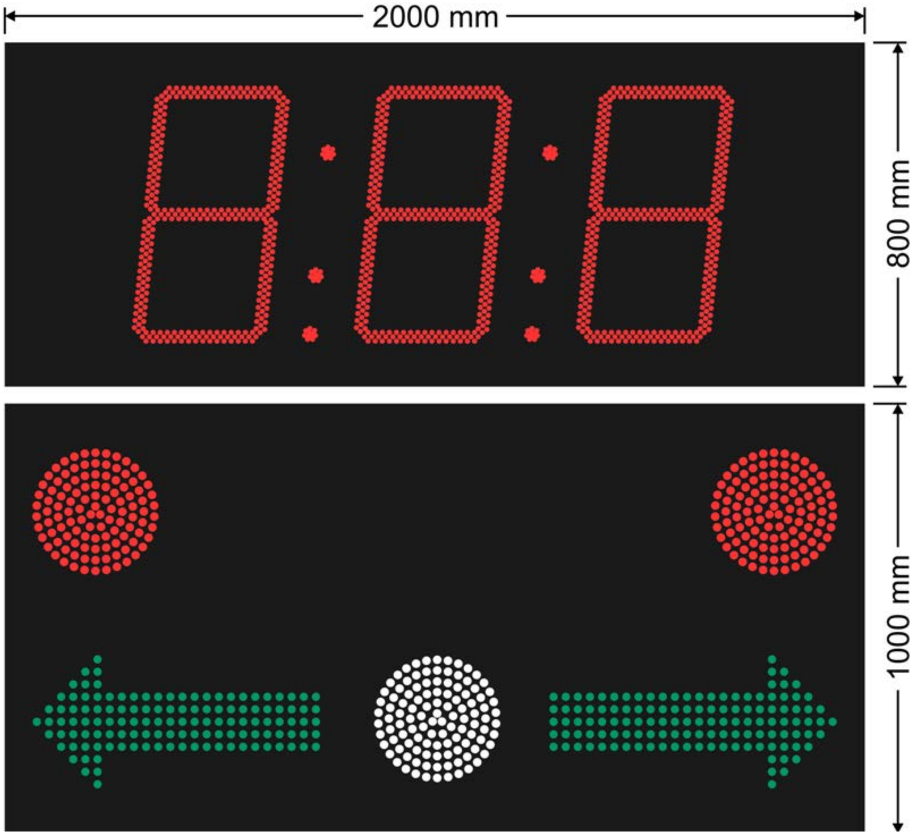
When pressing <MENÜ> <DISPLAY> and <DELAY TIME 1> you can select the display duration of the speed. If you set zero (0), then the speed will be shown until the next measurement. Otherwise, the display will be cleared after the duration of the delay time.

3.3.2 Other Adjustments

The settings are not saved after switching off and on.

PLEASE NOTE:
If you set red light on “left” the right red light will be shown, since the driver has to swerve to the left.

4 Display Board



The „Save Driving 2“ Display Board consists of two displays.
Display 1 - Top Part: D-LINE600-O-3-E0
Display 2 - Bottom Part: D-POL-2AGLR+2FL300-R+1FL300-W

4.1 Display Board Interface

RS232 interface for the display board (banana sockets). The characters are output in ASCII-Code. Each data string ends with a carriage return.

RS232 Interface: 2400 Baud, no Parity Bit, 8 Data Bit,1 Stop Bit
Data Package: 2 Byte ASCII package (AX)

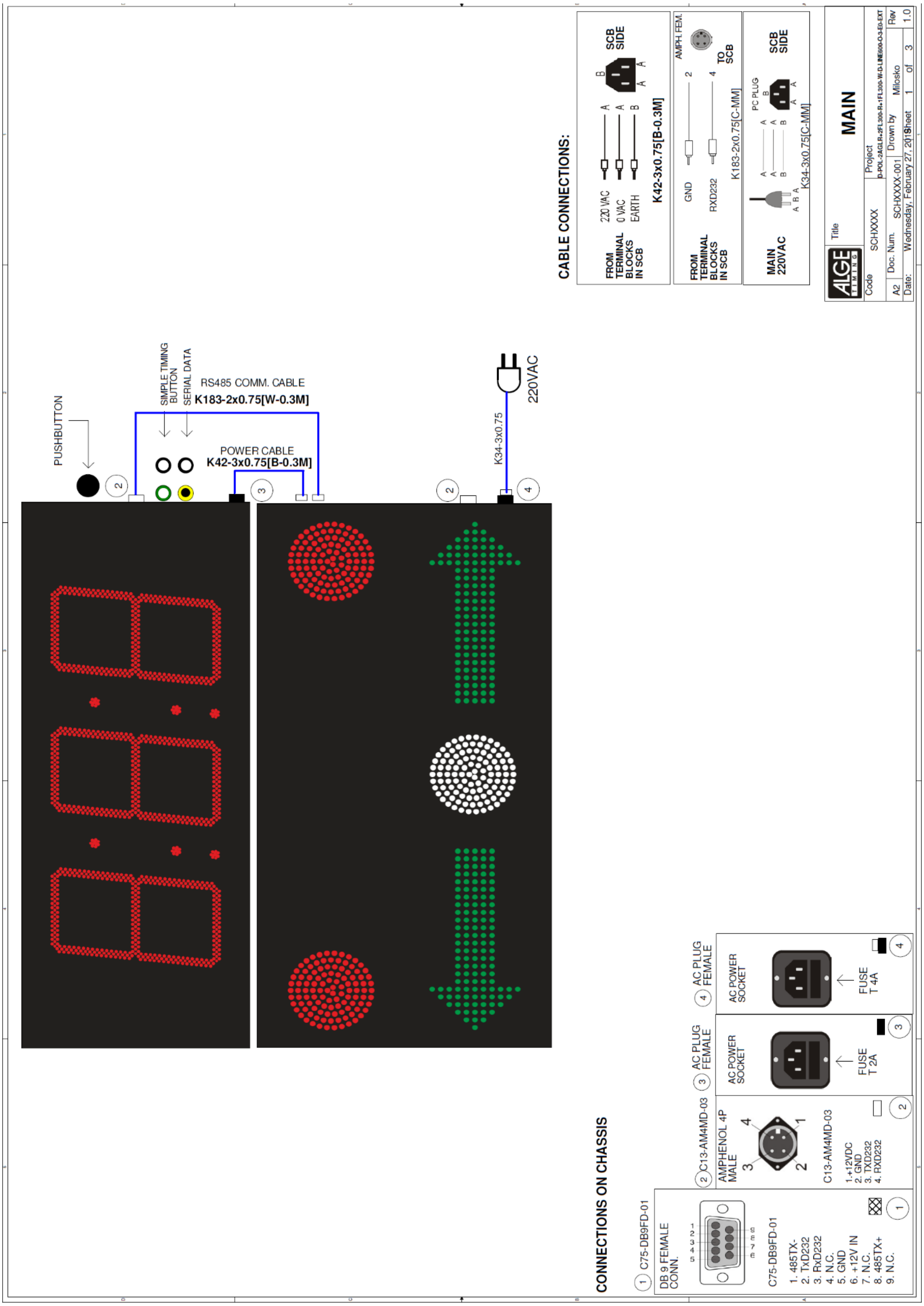
	Arrow	red Light
Left	A,	A%
Right	A&	A4
Off	A$	A$

Leerzeichen = nur die rote Ampel ist an

A .... ASCII 'A'=0x41=package start
X .... State
In the „State Byte“ has each bit under 6 a function (arrow on, break light on, red light on).
bit1 .... left arrow
bit2 .... white light (breaking light)
bit3 .... right arrow
bit4 .... right red light
bit 5 .... left arrow
bit 6 .... left red light

There is a timeout of 2 seconds. If the entire packet does not arrive within these 2 seconds, the system waits for the next packet start.

4.2 Display Board Connections

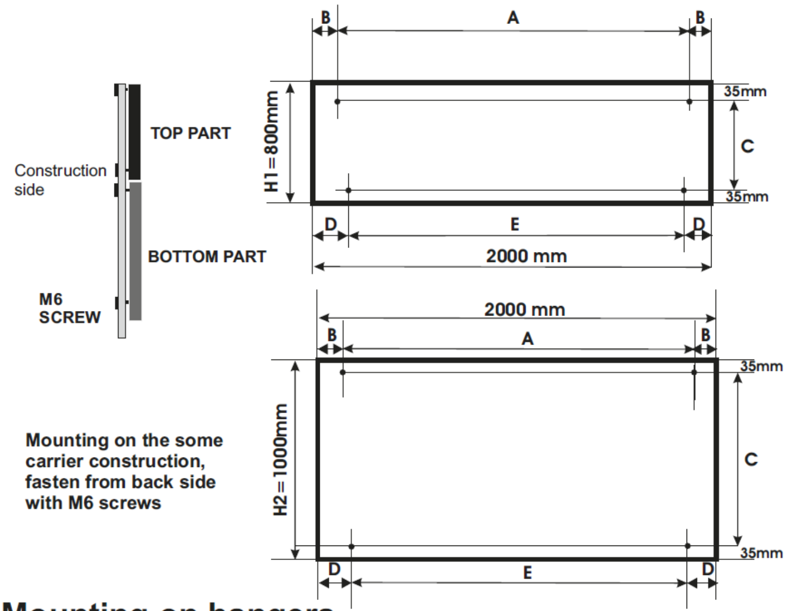


4.3 Mounting of the Display Board

D-POL-2AGLR+2FL300-R+1FL300-W-D-LINE600-O-3-E0-EXT, consist of 2 modules,
Total dimensions are (LxHxD): 2000 x 1800 x 70 mm
Weight: ~ 90 kg (50 + 40)

All mounting holes are for M6 screw
All sketches are front view look

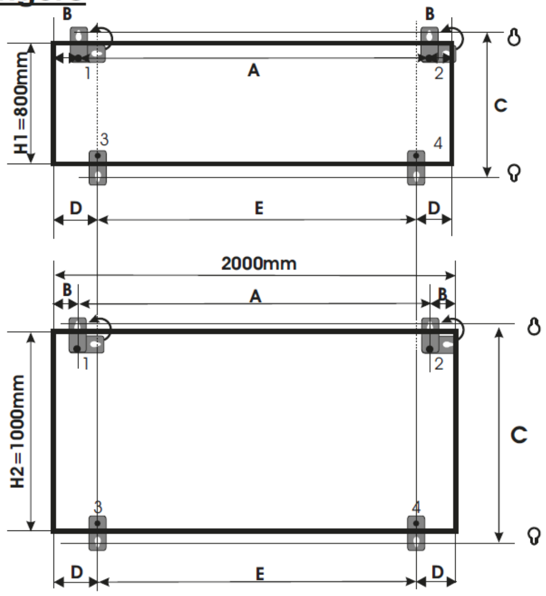
<u>Mounting on the some carrier construction, fasten from back side</u>



TOP part D-LINE600-3:
Dimensions (LxH1xD):
2000 x 800 x 70 mm
A = 1600 mm
B = 200 mm
C = 730 mm
H1 = 800 mm
D = 250 mm
E = 1500 mm

BOTTOM part - Display:
Dimensions (LxH2xD):
2000 x 1000 x 70 mm
A = 1600 mm
B = 200 mm
C = 930 mm
H2 = 1000 mm
D = 250 mm
E = 1500 mm

<u>Mounting on hangers</u>



TOP part - D-LINE600-3:
Dimensions (LxH1xD):
2000 x 800 x 70 mm:
A = 1600 mm
B = 200 mm
C = 850 mm
D = 250 mm
E = 1500 mm
H1 = 800 mm

BOTTOM part - Display:
Dimensions (LxH2xD):
2000 x 1000x 70 mm
A = 1600 mm
B = 200 mm
C = 1050 mm
D = 250 mm
E = 1500 mm
H2 = 1000 mm

Subject to changes and misprints

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