

# CountDown Trainer D-CDT



## 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](http://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!



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## Declaration of Conformity

We declare that the following products comply with the requirements of the listed standards. Parts that we use in the product are CE certificated by the manufacturers and **ALGE-TIMING GmbH** does not change them.

We, **ALGE-TIMING GmbH**  
**Rotkreuzstrasse 39**  
**A-6890 Lustenau**

Declare under our sole responsibility, that the display board:

### **D-LINE**

and its models of the series 57, 100, 150, 250, 300, 450, 600, 1000, 1500, SDA1 produced from 01.01.2005 and later

is in conformity with the following standard(s) or other normative documents(s):

Safety: IEC 60950:1999 / EN 60950:2000  
EN 60335-1:2002 + A11:2004 + A1:2004 + A12:2006 + A2:2006

EMC: EN55022:2006+A1:2007  
EN55024:1998+A1:2001+A2:2003  
EN61000 3-2:2006  
EN61000 3-3:1995+A1:2001+A2:2005

#### **Additional Information:**

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC, also the EMC Directive 2004/108EG and accordingly carries the CE-marking.




















Lustenau, 30.11.2010

**ALGE-TIMING GmbH**



Albert Vetter  
General Manager

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**[Parameter list of old models]**

**(Parameter list for 3-digit models) some parameters are not available at 3-digit models!**

## 1 General

The CountDown Trainer D-CDT consists of a display board D-LINE250-O-4-E0-?? and an operating console D-CKNC-WTN-A.

The console D-CKNC-WTN-A has a built-in radio (Wireless Timing Network WTN) and rechargeable batteries. The battery will be charged with the charger PS12A. The console can be charged during the operation or run from the internal battery. When using the internal battery, the operator can move around the trainings field (max. distance of radio about 300 m).

The actual countdown times will be stored when switching off.



Display Board D-LINE250-O-4-E0-??

Console D-CKNC-WTN-A

## 2 Keys of the Console D-CKNC-WTN-A

- Black key „PARAMETERS“: to adjust the parameters of the display board
- Red key „C1“: Start of countdown time 1
- Red key „C2“: Start of countdown time 2
- Red key „C3“: Start of countdown time 3
- Green key „START/STOP“: To start and stop the time and adjust the countdown time

## 3 Function

The Countdown display board has four red 7-segment LED digits. Between the digits is a column and point to use the display board universal.



The display board has a built-in radio receiver. The operation console has a built-in radio transmitter.

### 3.1 Showing the Countdown

The maximum countdown time is 99 minutes and 59 seconds.



Between the minutes and seconds, it shows a column.



For the last minute it moves the seconds to the left and a point divides the seconds from the 1/10th seconds.



## 3.2 Countdown

Three different countdown times are stored for the three red keys C1, C2 and C3. If you press one of the three keys it starts the countdown. With the green key START/STOP it is possible to stop and start the countdown.

### 3.2.1 Adjusting the Countdown Time

Each of the three keys stores one countdown time. This countdown times you can change yourself.

Example: We change the countdown time C1:

- Press key C1 for 5 seconds until the first digit is blinking
- Press key C1 to adjust the first digit of minutes
- Press key C1 for 5 seconds to until the second digit is blinking
- Press key C1 to adjust the single minutes
- Press key C1 for 5 seconds to until the third digit is blinking
- Press key C1 to adjust the first digit of the seconds
- Press key C1 for 5 seconds to until the fourth digit is blinking
- Press key C1 to adjust the single seconds
- Press key C1 for 5 seconds and it shows the adjusted countdown time and to store it
- Press key C1 to start the adjusted countdown time.

### 3.2.2 Countdown-Horn

The horn honks in the standard software at the countdown start and 5 seconds before the countdown is finished and then every second to the end.

In the parameters you can adjust that the horn honks every second at the countdown (parameter SS).

## 4 Parameter

The parameter list is made that the user can understand the parameter function when switching through it.

The parameter you can change using the push button at the side of the display board, on the console D-CKNC-TXA using the push button parameter or from a PC (use connection cable 145-05).

To change the parameters with the internal button, press the button until the first parameter appears on the display. If you wait for a few seconds, the value of the parameter starts blinking. You can now change the parameter or value that is blinking. To save the changings you need to pass all parameters until leaving the menu.

### 4.1 Standard Parameters (Factory Setup)

The score boards are delivered with a standard setting optimized for the countdown purposes. To reset the factory settings, keep the internal button pressed until the software version appears on the display!

**br 09** .....max. brightness  
**t0 00**.....time of day, date and temperature is off  
**Ad 00** .....address is on 0  
**AL 0c** .....horn (alarm) is active  
**SS 05** .....horn-countdown starts 5 seconds before countdown end  
**C1 01** .....amount of impulses for alarm1 = 1  
**A1 02** .....impulse durations in 1/10 seconds for alarm1 = 1 = 1/10 seconds  
**P1 01** .....breaks duration between impulses of alarm1 in 1/10 seconds = 1  
= 1/10 second  
**C2 01** .....amount of impulses for alarm2 = 1  
**A2 10** .....impulse duration in 1/10 seconds for alarm2 = 1 = 1/10 seconds  
**P2 01** .....breaks duration between impulses of alarm2 in 1/10 seconds = 1  
= 1/10 second

### 4.2 Parameter List

The parameter list is designed in such a way as to showing the user by the name of the parameter the one he would like to change.

#### 4.2.1 **hh** Set Daytime Hours [P0]

This parameter is to adjust the hours of the daytime.

#### 4.2.2 **EE** Set Daytime Minutes [P1]

This parameter is to adjust the minutes of the daytime.

#### 4.2.3 **SS** Set Daytime Seconds [P2]

This parameter is to adjust the seconds of the daytime.

#### 4.2.4 **dd** Set the Day of the Date [P3]

This parameter is to adjust the day of the date.

#### 4.2.5 **de** Set the Month of the Date [P4]

This parameter is to adjust the month of the date.

#### 4.2.6 **09** Set the Year of the Date [P5]

This parameter is to adjust the year of the date.

#### 4.2.7 **07** Display Time for Daytime [P6]

Display time of daytime being shown. Switch off daytime being displayed by setting value to 00.

#### 4.2.8 **0d** Display Time for Date [P7]

Display time of date being shown. Switch off date being displayed by setting value to 00.

#### 4.2.9 **0E** Display Time for Temperature [P8]

Display time of temperature being shown. Switch off temperature being displayed by setting value to 00. Only available if temperature sensor is connected.

#### 4.2.10 **0E** Calibration of Temperature

This parameter it shows only when the temperature is on (e.g. tt 05). The shown temperature can be adjusted by up to +/-9 degrees.

#### 4.2.11 **0H** Display Time for Relative Humidity

Display time relative humidity being shown. This parameter is only available if a sensor is connected.

#### 4.2.12 **0E** Calibration of Relative Humidity

This parameter it shows only when the sensor adjustment is on (e.g. tH 05). The shown relative humidity can be adjusted by up to +/-9 percent.

#### 4.2.13 **0h** GPS Offset Hours to GMT

This parameter it shows only when there is a connection for a GPS. With this parameter you can adjust the offset to GMT in hours.

#### 4.2.14 **0E** GPS Offset Minutes GMT

This parameter it shows only when there is a connection for a GPS. With this parameter you can adjust the offset to GMT in minutes.

#### 4.2.15 **0r** Area Settings for Temperature and Time

Area parameter for setting the display mode for time and temperature. The first digit in the setting is for automatically changing the clock to summertime, the second one is for the display mode. Following settings are possible.

##### 4.2.15.1 **0r0** Summertime Switching [P9]

The first digit of the area setting is responsible for internally changing the clock to summer and wintertime.

###### 4.2.15.1.1 **0r0** Summertime Switching [0x]

No internal changing, used for DCF-controlled clocks.

###### 4.2.15.1.2 **0rE** European Summertime [1x]

Change to summertime for Europe, used with internal clock, GPS and NTP-synchronization.

**4.2.15.1.3** **RU** **USA Summertime [2x]**

Change to summertime for USA, used with internal clock, GPS and NTP-synchronization.

**4.2.15.1.4** **RA** **Australian Summertime [3x]**

Change to summertime for Australia, used with internal clock, GPS and NTP-synchronization.

**4.2.15.2 Time and Temperature Setting**

The second digit of the area setting is used for the display mode of the time and temperature. 12 h, 24 h, Celsius or Fahrenheit.

**4.2.15.2.1** **RC** **Celsius and 24 h [x0]**

Time in 24 h mode and temperature in Celsius.

**4.2.15.2.2** **RE** **Celsius and 12 h [x1]**

Time in 12 h mode and temperature in Celsius

**4.2.15.2.3** **RF** **Fahrenheit and 24 h [x2]**

Time in 24 h mode and temperature in Fahrenheit

**4.2.15.2.4** **RH** **Fahrenheit and 12 h**

Time in 12 h mode and temperature in Fahrenheit

**4.2.15.2.5** **RL** **Celsius and 24 h**

Time in 24 h mode and temperature in Celsius but on 6-digit D-LINE time is centred and without running seconds.

**4.2.15.2.6** **RE** **Celsius and 12 h**

Time in 12h mode and temperature in Celsius, but on 6-digit D-LINE time is cantered and without running seconds.

**4.2.15.2.7** **RF** **Fahrenheit and 24 h**

Time in 24 h mode and temperature in Fahrenheit but on 6-digit D-LINE time is centred and without running seconds.

**4.2.15.2.8** **RH** **Fahrenheit and 12 h**

Time in 12 h mode and temperature in Fahrenheit but on 6-digit D-LINE time is centred and without running seconds.

**4.2.16** **br** **Brightness [A0] (b)**

With this parameter brightness settings and effects can be set. The first digit is for the appearance, the second one for the brightness.

**4.2.16.1 First digit of setting**

The first digit is defining the type of changing between time and temperature. Fade-in will changeover with brightness effect from time to temperature.

**4.2.16.1.1** **br0** **Fade-in off**

Fading is not activated.

**4.2.16.1.2** **br1** **Fade-in on**

Fading is activated.

**4.2.16.2 Second Digit of Setting**

This setting is defining the brightness mode of the display.

**4.2.16.2.1** **br 8** Manual setting

The second digit of the brightness settings can be adjusted manually from 0 to 9. Value 0 is minimum brightness and value 9 is maximum brightness. This adjustment you can also be affected by using the menu of TdC8001 or TIMY.

**4.2.16.2.2** **br d** Daytime Dependent Brightness [x3]

Brightness is set automatically, depending on the daytime.

**4.2.16.2.3** **br A** Light Sensor Dependent Brightness [x4]

With this setting, the brightness depends on the light sensor. If no light sensor is connected, maximum brightness is set.

**4.2.17** **EO** Time-Out Time-Temperature-Date [A2]

This setting defines the time after which the display board switches from serial display mode back to time-temp mode. If it is set on 00, the parameters described from point 1.3.1 to point 1.3.15.2.7 are no longer visible. The display modes for daytime, temperature and date are thus deactivated. Up to version 3.7 the specifications are in seconds and from version 3.8 the value is multiplied by 10, so an adjustment of 24 is 240 seconds!

**4.2.18** **Ad** Address Setting [A3] (A)

To use more than one D-LINE on an addressed protocol, you have to define the addresses of every single display board. Normally, the first line is address 1 **Ad 01**, second line address 2 **Ad 02**, etc.

Depending on the sport, this setting can be important to display the serial data of your timing device correctly. Please also refer to the manual of the corresponding timing device. The sport specific instructions for controlling the score board can be found there.

**4.2.19** **AL** Horn Alarm**AL 00**

Horn alarm is not active

**AL 0c**

Horn alarm for countdown clock is active (without start tone)

**AL 0C**

Horn alarm for countdown clock is active (with start tone)

For the countdown we have two alarms. Alarm 1 is for the countdown of the last seconds, alarm 2 for the countdown start and the countdown end. Each alarm adjustment consists on the amount of impulses, impulse duration and break duration.

**4.2.19.1** **SS** Horn-Countdown

Adjust the time when the countdown honk starts. The factory setup is 5 seconds. -

**SS 05.****4.2.19.2** **C1** Amount of impulses for alarm 1**4.2.19.3** **A1** Impulse duration for alarm 1**4.2.19.4** **P1** Break duration between impulses of alarm 1**4.2.19.5** **C2** Amount of impulses for alarm 2**4.2.19.6** **A2** Impulse duration for alarm 2**4.2.19.7** **P2** Break duration between impulses of alarm 1

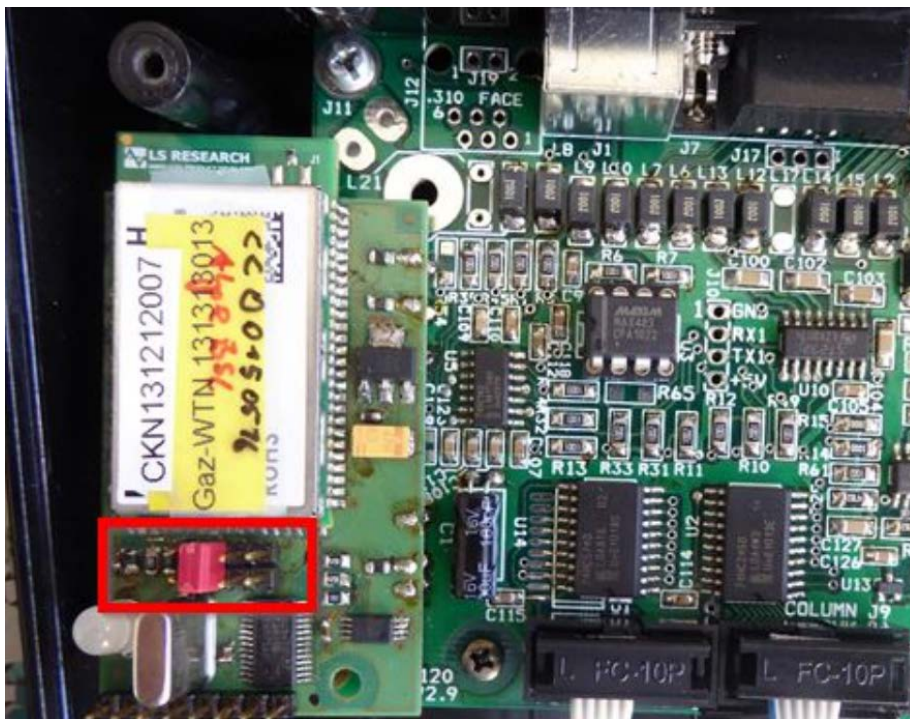
## 5 Settings WTN Radio Model in the Console

The D-CKNC-WTN-A has an integrated WTN Wireless Timing Network radio module. This module is by default set to team 4. The required WTN-DB for scoreboards is also set to team 4.

In special cases it could be necessary to change the team. This might be caused by an interfering transmitter or further systems within radio range.

If that is the case and you have to switch the team, please proceed as follows:

- Disconnect the power supply; turn off the terminal.
- Remove the 4 rubber feet from underneath the terminal.
- Loosen the screws that are at the places where the rubber feet were.
- Now you can remove the bottom of the terminal.



- You can see the integrated WTN module (see picture). You can choose the desired channel by setting the jumper (see red box at the picture).
- On the picture the jumper is set to team 4.
- For switching teams, set the jumper one to the right for team 2, two to the right for team 1, one to the left for team 8 and so on.
- After setting the suitable team for your requirements, close the terminal by following the above steps in reverse order.

2420 MHz	S1
2425 MHz	S2
2430 MHz	S3
2435 MHz	S4
2440 MHz	S5
2445 MHz	S6
2450 MHz	S7
2455 MHz	S8
2460 MHz	S9
2475 MHz	AA-AF

All WTN channels are on 2.4 GHz band.

## 6 Technical Data

### 6.1 Connections of the Display Board



2 x horn

push button (identical with „Parameters“ on console)

connection for external push button for „START/STOP“

Battery Status:           green LED – battery full  
                                  yellow LED – battery will be charged  
                                  red LED – battery almost empty

On/Off switch

100-240V, 50-60Hz  
1.0A fuse

### 6.2 Measurements of the Display Board

1100 x 350 x 100 mm

### 6.3 Wireless Timing Network WTN (integrated radio)

Frequency:                2.4 GHz band (16 adjustable frequencies)  
Power Output:           10 mW or 10 to 100 mW (adjustable)  
Maximum Distance:     about 350 m at free sight

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