



# Training



### **Important Information**

### General

Before using your *A*LGE-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 *A*LGE-TIMING representative. You can find contact details on our homepage <u>www.alge-timing.com</u>

### 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!



### Copyright by ALGE-TIMING GmbH

All rights reserved. Any duplication, either in full or in part, requires the prior written consent of the copyright holder.

### Subject to changes!

Copyright by: **ALGE-TIMING** GmbH Rotkreuzstrasse 39 A-6890 Lustenau Austria <u>office@alge-timing.com</u> <u>www.alge-timing.com</u>

# Timy TRAINING



# Table of contents

1	Keyboard and getting started	3
2	Programs	3
3	Count-Impulse	3
3.1	System-Sketch	. 4
3.2	Program Operation	. 6
3.3	Display	. 6
3.4	Printer	. 7
4	C1-Finished	7
4.1	System-Sketch	. 8
4.2	Program Operation	. 9
4.3	Display	. 9
4.4	Printer	. 9
5	Training REF	.11
5.1	Operation and Pre-adjustments	12
5.1.1	Example:	13
5.2	Display	14
5.3	Printer	15
5.4	Display Board Interface	15
5.5	RS 232-Interface	16

# **1** Keyboard and getting started

See Timy manual "GENERAL"

# 2 Programs

Any Timy has various software included as standard. Whenever you update your Timy all the programs will be updated. Each program has its own manual. You can download any actual manual from our website <u>www.alge-timing.com</u>.

The program *Training Light* has two separate program parts to use the timing device specificly for your use.

- Impuls-counter will finish the run after a desired amount of impulses.
- C1-End will finish the run as it receive an impulse on channel C1(stop)

The program *Training REF* is a program especially designed for Ski training with teams.

**Reference-timer** is a very complex program, developed together with the Austrian Ski Team. It allows that more than one competitor is on the slope for timing. The timing impulses are given to the correct racer by checking different parameter internal.

# 3 Count-Impulse

This program is developed for training with several measuring-points on one single channel or different channels. It is only possible to measure one competitor on the slope at a time.



# 3.1 System-Sketch

Depending on the Sport you want to use your Timy, the peripheral devices can vary. Subsequently, we will show you some possible system-setups for different sports.

Skiing



# Timy TRAINING







## 3.2 **Program Operation**

- Select program <TRAINING LIGHT>
- Select program <COUNT-IMPULSE>
- Impulses: Input the amount of impulses between 1 and 9999.
  If you input 1 impulse, it stands for start and finish.
  If you input 2 impulses, it stands for start, 1 intermediate time, and finish.
  If you input 2 impulses, it stands for start, 2 intermediate times, and finish.
- Clear the memory with key 💿 or 🐵 and press key 🔼 or 🤒 (red or green).
- Input the time of day and date for synchronisation and confirm it with A, (green or red) or (. Make a synchronisation start (e.g. with key START (STA)).
- You are ready to start the timing. For the start impulse you need always channel C0. For intermediate times and finish times you can use any channel (including C0).
- After a competitor has reached the finish, the timer resets and goes to the next IDnumber. Of course you can input any 4 digit ID-number.
- It is possible to start the same ID-numbers more than once. Intermediate times always a continuous number of intermediate time show at the display and printer. The finish time shows how many times the same competitor had started (e.g. at the 3<sup>rd</sup> run it shows 3).

### Important Adjustments:

- Select a suitable display time in the menu: press menu, display, and delaytime 1. You can select any time between 0 and 99 seconds.
- Select a suitable delay time in the menu: press menu, channels, internal, and DELAY START C0, and DLEAY C1-C9.
- Select a suitable automatic time in the menu: press menu, gerneral, STN-Automatic, Automatic-Time, and AUTOTIME-MIN, as well as AUTOTIME-MAX. If you select one of these adjustments you can avoid wrong finish impulses. The finish impulse (last impulse) is only valid if it is in within the AUTOTIME window (e.g. between 30 and 40 seconds).

### 3.3 Display

Actual ID-Numbe ↓	Running Time er and Final Time ↓	_	
STNO: 2	Fin 0:30.38		
1FT 2FT 1FT	0:10.14 0:20.35 0:30.38	+++	Intermediate Time 1 Intermediate Time 2 Final Time (1st. Run)

If you input a ID-number (competitor) that had already a run before (or more runs) it shows all times of this competitor on the display. With the arrow key *a* and *c* you can see all times of the competior. This is also a nice function to check the previous times for an athlete.



# 3.4 Printer

With the Timy P and Timy PXE you can print all data of the training.

It is possible to print online or to print all data after the training. Especially with bad weather (rain, snow) you should switch the printer off and print the results after the training. To switch the printer off, press the key menu and select <PRINTER>, <PRINTER MODUS>, and <PRINTER OFF>. Do the same to activate the printer again, but select <PRINTER ON>.

0001	ST	10:50:31.49	Start Time of ID-Number 1
1	FT	0:10.14	Intermediate Time 1
2	FT	0:20.35	Intermediate Time 2
1	FT	0:30.38	First Finish Time of ID-Number 1
0002	ST	10:51:10.34	Start Time of ID-Number 2
1	FT	0:10.32	Intermediate Time 1
2	FT	0:20.49	Intermediate Time 2
? 0	FT	0:25.34	Wrong Impulse (outside of adjusted Autotime)
1	FT	0:30.67	First Finish Time of ID-Number 2
0001	ST	11:05.32.43	Start Time of ID-Number 1
1	FT	0:10.12	Intermediate Time 1
2	FT	0:20.22	Intermediate Time 2
2	FT	0:30.30	Second Finish Time of ID-Number 1

To print the data at a later point go into the menu and select <CLASSEMENT> and <ALL>.

# 4 C1-Finished

This program is developed for training with several measuring-points for different timing channels. The start timing channel is always C0, the finish timing channel is always C1. For intermediate time you can use C2 up to C8.

Compared to the Count-Impulse this program needs more cabling, but due to the different cannels you always know which impulse device (e.g. photocell) was triggered.



### 4.1 System-Sketch

Depending on the Sport you want to use your Timy, the peripheral devices can vary. Subsequently we will show you some possible system-setups for different sports.

Skiing





# 4.2 **Program Operation**

- Select program <TRAINING LIGHT>
- Select program <C1-FINISHED>
- Clear the memory with key 🗇 or 🐵 and press key 🜈 or 🤒 (red or green).
- Input the time of day and date for synchronisation and confirm it with A, (9) (green or red) or (10). Make a synchronisation start (e.g. with key START (511)).
- You are ready to start the timing. For the start impulse you need always channel C0. For intermediate times use different channels from C2 up to C8. For the finish time use channel C1.
- After a competitor has reached the finish, the timer resets and goes to the next IDnumber. Of course you can input any 4 digit ID-number.
- It is possible to start the same ID-numbers more than once. Intermediate times always a continuous number of intermediate time show at the display and printer. The finish time shows how many times the same competitor had started (e.g. at the 3<sup>rd</sup> run it shows 3).

### Important Adjustments:

- Select a suitable display time in the menu: press menu, display, and delaytime 1. You can select any time between 0 and 99 seconds.
- Select a suitable delay time in the menu: press menu, channels, internal, and DELAY START C0, and DLEAY C1-C9.
- Select a suitable automatic time in the menu: press menu, gerneral, STN-Automatic, Automatic-Time, and AUTOTIME-MIN, as well as AUTOTIME-MAX. If you select one of these adjustments you can avoid wrong finish impulses. The finish impulse (last impulse) is only valid if it is within the given AUTOTIME window (e.g. between 30 and 40 seconds).

### 4.3 Display



If you input a ID-number, on which one or more rims are already saved, it shows all times of this competitor on the display. With the arrow key *a* and *c* you can see all times of the competior. This is also a nice function to check the previous times for an athlete.

# 4.4 Printer

With the Timy P and Timy PXE you can print all data of the training.

It is possible to print online or to print all data after the training. Especially with bad weather (rain, snow) you should switch the printer off and print the results after the training. To switch the printer off, press the key menu and select <PRINTER>, <PRINTER MODUS>, and <PRINTER OFF>. Do the same to activate the printer again, but select <PRINTER ON>.



0001	ST	10:50:31.49	Start Time of ID-Number 1 (Channel C0)
1	C2	0:10.14	Intermediate Time 1 (Channel C2)
2	C3	0:20.35	Intermediate Time 2 (Channel C3
3	C4	0:30.38	Intermediate Time 3 (Channel C4)
1	FT	0:40.56	First Finish Time of ID-Number 1 (Channel C1)
0002	ST	10:51:10.34	Start Time of ID-Number 2 (Channel C0)
1	C2	0:10.32	Intermediate Time 1 (Channel C2)
2	C4	0:11.49	Wrong Impulse (Channel C4)
3	C3	0:20.34	Intermediate Time 2 (Channel C3
? 4	C4	0:30.39	Intermediate Time 3 (Channel C4) - ? because 2nd Impulse of C4
1	FT	0:40.67	First Finish Time of ID-Number 2 (Channel C1)
0001	ST	11:05.32.43	Start Time of ID-Number 1 (Channel C0)
1	C2	0:10.12	Intermediate Time 1 (Channel C2)
2	C3	0:20.22	Intermediate Time 2 (Channel C3)
3	C4	0:30.21	Intermediate Time 3 (Channel C4)
2	FT	0:40.30	Second Finish Time of ID-Number 1 (Channel C1)

To print the data at a later point go into the menu and select <CLASSEMENT> and <ALL>.



# 5 Training REF

The software is designed for skiing. It allows to time a couple of races at the same time on the slope. The complete timing is done automatically. It is possible to connect up to 9 impulse devices (e.g. photocells), that means start, up to 7 intermediate times and finish. Each impulse device has its own channel.

ATTENTION!! This works only with cables 000-xx or 002-xx.





# 5.1 Operation and Pre-adjustments

The program Training REF needs some adjustments and a reference run before you start the timing. Make the adjustments carefully and choose an average competitor for the reference run. If you do these preparations correctly you will have a smooth and easy-going training.

### **NEW REF-RUN**

The reference run should be done by an average athlete. The times of this runner are reference and should be average. If the times are too good or too bad, your other athlets may be out of the accepted limit and it will not use the time as valid. It is also very important that the reference runner has all impulses!

### **CLR MEMORY**

To clear the memory cache

### SETUP TEST

To check the different channels

### **MEAS-POINTS**

Before you do the reference run, it is necessary to input the amount of measuring points. You can have any amount of measuring points between 2 and 9. 2 measuring points: start and finish impulse 9 measuring points: start, 7 intermediate points, finish You can use the channels in any sequence.

### **DEV IN S and DEV IN PERCENT**

The deviation of each runners time to the reference time is given in seconds and percent. It always takes the higher value. If a time exceed both values, than this time is not valid.

### WITH SPEED

It is possible to measure at each timing point the speed as well. The speed is measured with two photocells that use the same timing channel. The distance between the photocells has to be 10 m.

After the reference run, the Timy calculates the minimum start intervall time. This is calculated so that it is never possible that two competitors can be at the same photocell within the allowed time. The minimum start intervall time is used to allow a new start. As soon as somebody is allowed to start the Timy makes a beep. It also shows an arrow in the start section of the display.

The Timy is locked for new starts until the start intervall time expires.

If there are problems during the reference run, it is possible to repeat it. Select the menu and select <TRAINING-REF> and <NEW REF-RUN>

### SINGLE STN

The display shows only the times from the current runner



### 5.1.1 Example:

Course with start, 2 intermediate times and finish (4 impulses):

**Reference Run:** 

umber 1
>
•

Adjustment:

DIV IN S: DIV IN PERCENT:	3 seconds 10%
Intermediate Time 1:	min. allowed time = $12,12$ 15,12 - 10% = 13,60 sec. 15,12 - 3,00 = 12,12 sec. max. allowed time = $18,12$ 15,12 + 10% = 16,63 sec. 15,12 + 3,00 = 18,12 sec. Only times e.g. from channel C2 are allowed! In this case the 3 seconds diviation is used.
Intermediate Time 2:	min. allowed time = $29,01$ 32.24 - 10% = 29,01 sec. 32.24 - 3,00 = 29,24 sec. max. allowed time = $35,46$ 32.24 + 10% = 35,46 sec. 32.24 + 3,00 = 35,24 sec. Only times e.g. from channel C3 are allowed! In this case the 10% diviation is used.
Run Time:	min. allowed time = $45,44$ 50,49-10% = 45,44 sec. 50,49-3,00 = 47,49 sec. max. allowed time = $55,53$ 50,49 + 10% = 55,53 sec. 50,49 + 3,00 = 53,49 sec. Only times e.g. from channel C1 are allowed! In this case, the 10% diviation is used.

### Max. Start Intervall Time:

The program TRAINING REF allows that you have more than one racer on course. The Timy gives a peep tone to signal that the next racer is allowed to go. Further an arrow in the ID-number part is indicating that the start is free. **Attention:** 

It is important to adjust the delay time (time after which a impulse is locked) to prevent multiple impulses at one photocell.



# 5.2 Display

### Start Window Section:

Shows the ID-No. of the next runner. An arrow up means that this number can start (start intervall time).

### Finish Window Section:

Shows the ID-No. of the competitor on course. It also shows how many runs he had did. List Window Section:

It shows the times in chronological order with the ID-number and channel.

### **Run Time Window Section:**

It shows for each competitor on the corse the running time (up to four runners).

You can switch between the List Window Section and the Run Time Window section by pressing key  $F0^{\circ}$ .

### Example 1:

Reference Run with List Window Section

S	tart \ Se	Windo ction	w Fi	nish Wind Section ↓	low		
	ST ♠	'NO: 2	Fin	1 0:50.	L:0 48		
	R	100	)	14:01:0	)5.86	←	
	R	2C2	2	0:1	15.88	◄	Time List of
	R	3C3	\$	0:3	32.82	◄-[	Reference Run
	R	4C2		0:5	50.48	∣≁⊔	

### Example 2:

Timing with List Window Section

St	art Windo Section ↓	w Fi	nish Wind Section ↓	low		
	STNO: ↑ 4	Fin	3 0:21	L:0		
	5C0 6C2 7C0	) 2 )	14:03:0 0:1 14:03:2	02.16 16.02 20.87	+++	Start Time ID-No. 2 Intermediate Time 1, DNF Start Time ID-No. 3
	8C2	2	0:1	15.94	-	Intermediate Time 1, time is still running

### Example 3:

Timing with Run Time Window Section

- Ciu	Section		Section			
S A	STNO:	Fin	3 0:50	L:0		
	3		0:50		-	Runing Time ID-No. 3
	4		0:33.	54	->	Intermediate Time 2 StNr. 4
	5		0:20		-►	Runing Time ID-No. 5
	6		0:05		->	Runing Time ID-No. 6



## 5.3 Printer

It you use a Timy model with printer (Timy P or Timy PXE), it is possible to protocol the times. Using the Timy outside with bad weather conditions (rain, snow), we recommend to switch the printer off. It is possible to print the protocol of the times at a later point out of the memory.

### **Online Printing:**

The Timy prints the times of a racer as soon as a racer reaches the finish or the maximum time expires.

**:	* F	FINISH:REF ***	
0001	. RUN	N MP: 4	
1	Str	11 : 12 : 18 . 5907	
1	Zw1	0:09.39	
1	Sq2	2 0 : 10 . 19	
1	Zw2	2 0:19.59	
1	Sqd	0:06.51	
1	End	0:26.10	
***	******	*****	

Run 1 with 4 meas-points Start time (day time) of StNr. 1 Intermediate 1 Sequential Time IT 1 and IT 2 Intermediate 2 Sequential Time IT 2 to Finish Run time

# The printing has the following look, if you also use speed measurement at intermediate times:

***	FIN	IISH ********
0004.	RUN	MP: 4
1	Str 1	1:39:02.4906
1	Sp1	39.33 km/h
1	Zw1	0:09.63
1	Sq2	0:09.93
1	Sp2	49.27 km/h
1	Zw2	0:19.56
1	Sqd	0:06.08
1	End	0:25.65
***	*******	*****

Run 4 with 4 meas-points Start time(day time) of StNr. 1 Speed at IT 1 Intermediate 1 Sequential Time IT1 to IT2 Speed at IT 2 Intermediate 2 Sequential Time IT 2 to Finish Run time

### **Protocol Printing:**

It is possible to print a protocol of all times at any time (also after switching the Timy off and moving e.g. to the hotel). This feature helps especially if you do not want to use the printer during training (e.g. bad weather conditions). The protocoll mode prints all times in chronological order.

- Press key MENU
- Select <CLASSEMENT> and confirm with OK-key
- Select and confirm with red OK-key
- Select <PRINT MEMORY> and confirm with red OK-key
- Select <START> and confirm with red OK-key

### 5.4 Display Board Interface

It shows always the same time as in the Finsih Window Section. After a finish arrival, the run time is shown for the duration of the adjusted Displaytime 1. Afterwards it shows the next racer .



It always shows the time with the highest running time on course, who is within the maximum allowed time.

### 5.5 RS 232-Interface

All times will be sent online. It is also possible to resend the data of the RS 232 interface by using the <PRINTER> and <SEND MEMORY>.