

ALGE

TIMING



THE SPORTS
TIMING EXPERTS

Ski Jumping



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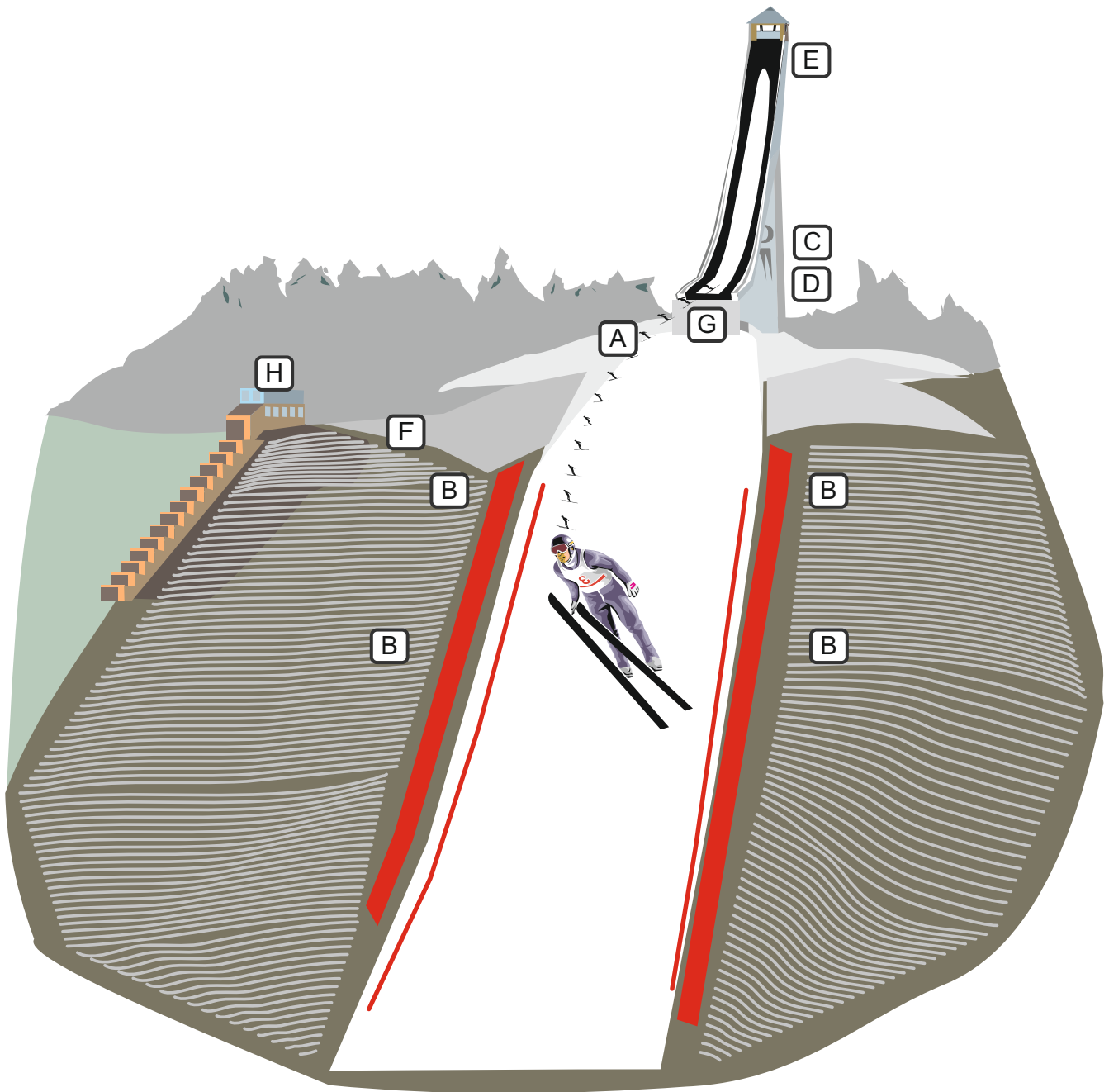
The handling of ski jumping competitions requires the right technical equipment that is very unique. A system for speed measurement, a start display board D-SDA1S, a wind measuring system, judges terminals and a video width

measuring system might be necessary depending on the importance of the event. Further ALGE-TIMING supplies also the connection boxes for all devices that are used all over the jumping hill for a fix cable installation.



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Installation

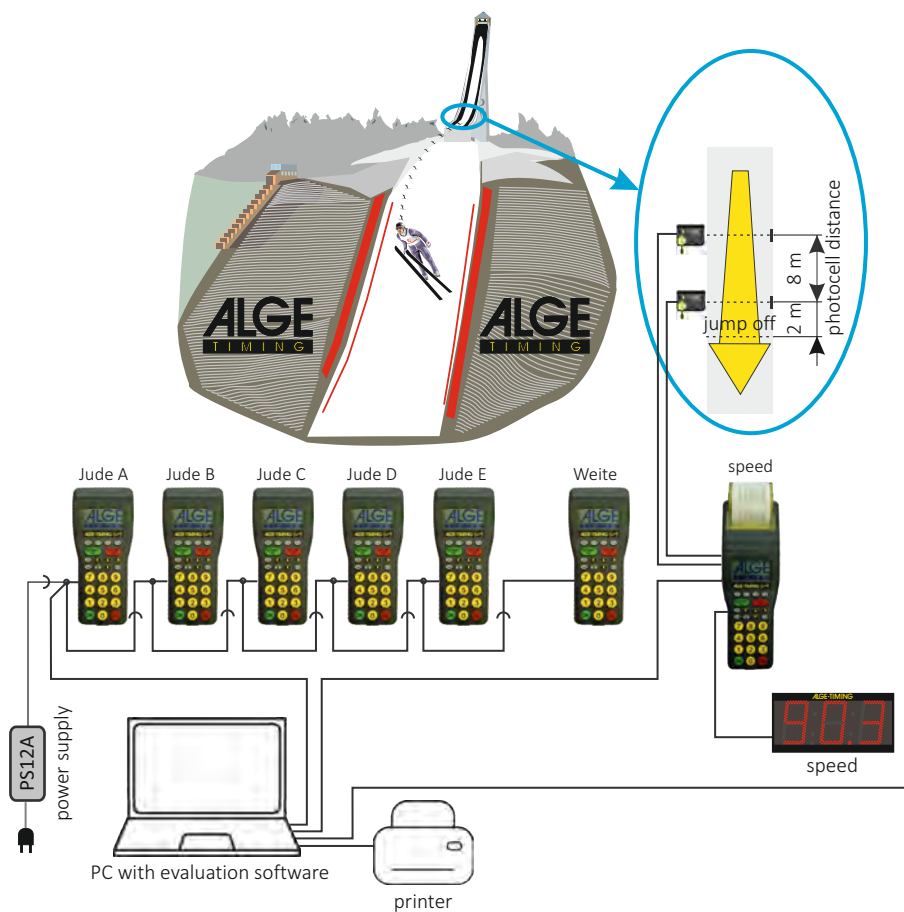


- A SJB-Wind take off area distribution box for anemometer
- B SJB-Wind landing area distribution box for anemometer
- C SJB-Speed take off area distribution box for speed- photocell 1
- D SJB-Speed take off area distribution box for speed- photocell 2
- E SJB-SD tower (start area) distribution box for start display at take off
- F SJB-TD trainer sector distribution box for trainer display board
- G SJD-Jump take off area jumping hill distribution box
- H SJD-Cent judges tower central distribution box



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Judge Terminals and Speed Measurement



ALGE-TIMING	
103	17
ID-number	Rank
ALGE-TIMING	
125.0	
Width	
ALGE-TIMING	
128.5	
Total Points	
Jude A	19.0
Jude B	18.5
Jude C	19.8
Jude D	18.0
Jude E	18.5
Speed	90.3

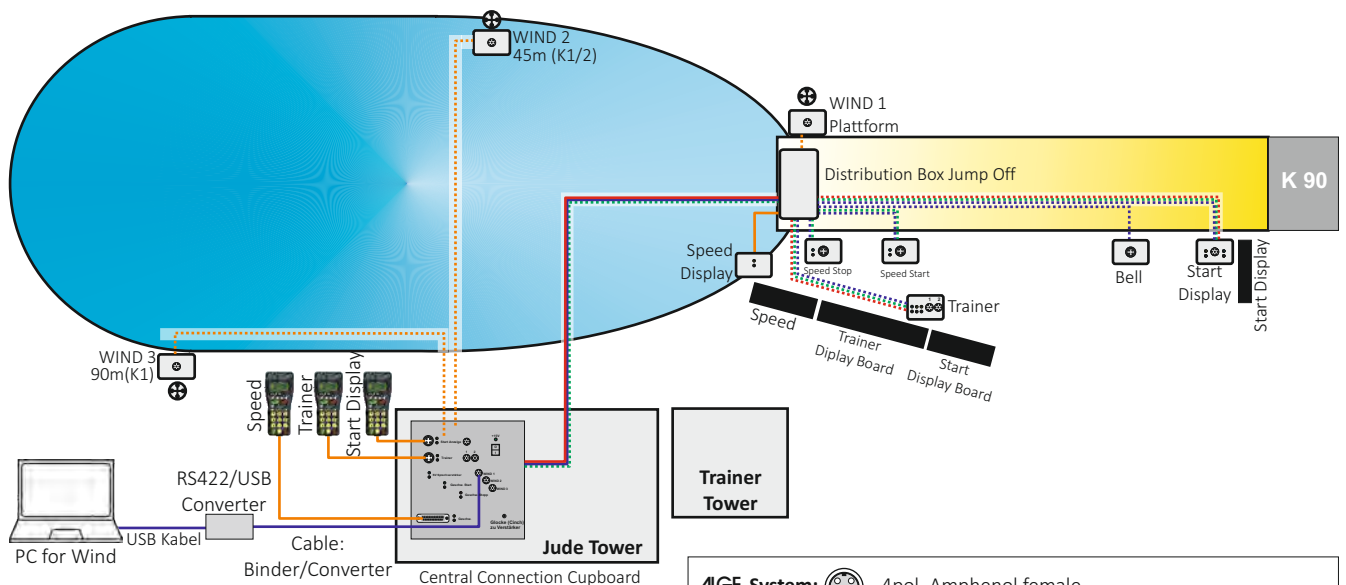
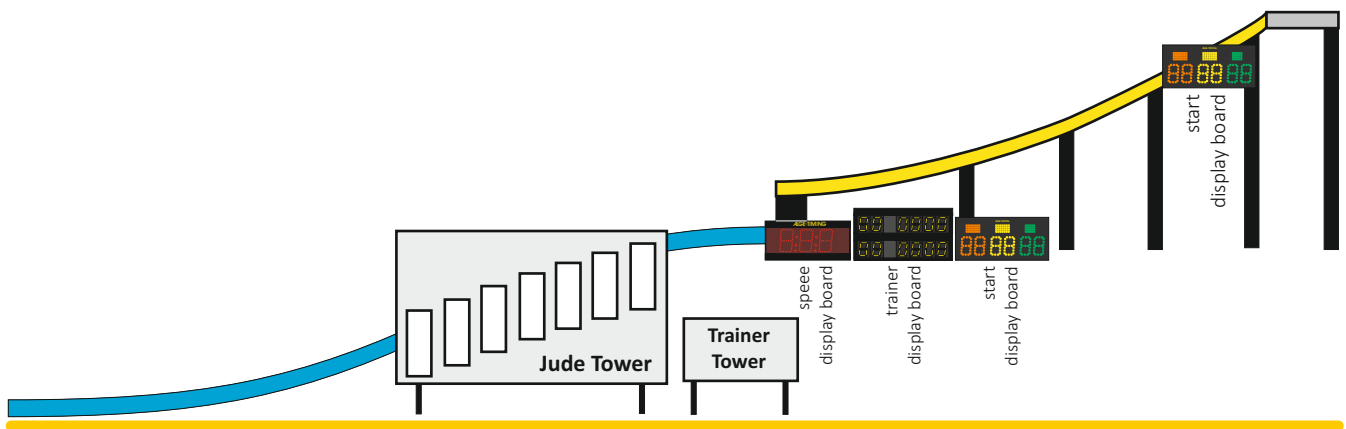
Each judge has a Timy3 W terminal for input of points. The terminals are connected by a Wireless Timing Network (cable free radio network) to each other and the PC. On the PC runs a ski jumping results software. The display boards are controlled directly from the PC.

The speed measurement is also carried out via a Timy3, which directly controls the speed display board and therefore can also be used for training.

The jumping distance can be input manually through a terminal Timy3 or directly at the PC. When using a video distance measuring system, the distance is received online from this system (FIS homologated video distance measuring systems on demand).

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System Overview



Weltcup:	female 7pol. Miniatur Connector Series 723- IP 67 Pin1..R+, Pin2..T+, Pin3..T-, Pin4..R-, (crossed) Pin6..+15V, Pin 7..GND
	cable 6x2x0.6 drilled (DM 12mm)
	cable 20x2x0.6 drilled (DM 19mm)

ALGE System:	4pol. Amphenol female Pin1..Start, Pin2..Stop, Pin3..GND, Pin4..+5V
	Banana Plug
	cable 5x0.75 mm ² (alternative: 6x2x0.6 drilled)
	cable 12x0.75 mm ² (alternative: 20x2x0.6 drilled)
	cable 2x0.75 mm ² for SV speech amplifier)
	cable 6x2x0.6 drilled (DM12mm)
	4p. Amphenol male Pin1..+15V, Pin2..GND, Pin4..Data

The Anemometer (Wind Speed Indicator)

A three-dimensional anemometer with PC software that indicates the wind direction is needed for the ski jumping hill. Three to seven points exist where a wind anemometer can be installed.

For events, one to three anemometers are used depending on the size of the ski jumping hill and the event level. A PC reads the anemometer data and displays the wind information. This PC is situated with the chief of race.





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Terminal Timy3

The Timy3 is a compact timing device with unique high-quality technology. The Timy3 impresses with an ergonomic design and absolute reliability, thanks to its robust design.

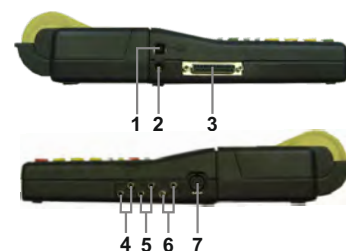
Despite its handy dimensions, the Timy3 has a large and easy-to-use silicone keypad, which can be used in any weather conditions. The printer is integrated into the Timy3 WP and logs times of the entire competition. It has an internal wireless modem of the WTN Wireless Timing Network series and can be connected via radio to all devices of the WTN series. For example, it can receive start impulses, intermediate times and finish impulses, control a display board and send data to a PC with result software. The low power consumption allows it to be used even in cold weather with internal batteries independent from mains.

The Timy3 is equipped with interfaces for communication with external devices, a USB interface, an interface for a display board, an RS232 and an RS485 interface.



Technical Data

Crystal frequency: TCXO, +/-1 ppm (+/-0.00036 s/h)
 Time resolution: 1/10,000 s
 Timing: 9 timing channels
 Program memory: flash memory with 16 Mbit
 Data memory: RAM with 4 Mbit (about 30,000 times)
 Display: monochrome LCD graphic display with backlight, 128 x 64 pixels
 Keypad: silicone keypad, 26 keys
 Radio module WTN: built-in 2.4 GHz radio, 15 adjustable frequencies and power output from 10 to 100 mW, 5 timing channels, for distances up to 350 m
 Power supply: internal: NiMH power pack 7.2 V/2 Ah or 6 x AA alkaline (Timy3 W) external: power supply PS12A, 12 V battery or 8- 22 VDC
 Power consumption: without printer about 100 hours with printer about 47 hours
 Printer: graphic thermal printer, max. 5 lines per second
 Temperature range: -20°C to +60°C
 Measurements: Timy3 W: 204 x 91 x 50 mm Timy3 WP: 307 x 91 x 65 mm



Connections:

- 1- 1 x USB
- 2- 1 x power supply 8- 22 VDC
- 3- 1 x D-Sub 25-pin
- 4- 1 x pair of banana sockets- scoreboard
 - 9 time measuring channels
 - RS232 (PC connection)
 - display board
 - RS485 (network)
 - power supply (8- 24 VDC in/out)
- 5- 1 x pair of banana sockets- start input
- 6- 1 x pair of banana sockets- finish input
- 7- 1 x DIN socket for photocell

Display

The Timy3 has a monochrome LCD graphic display with 128 x 64 pixels and back light. With this, displaying up to 8 lines of text is possible. Different character sizes, and also graphic symbols for easier operation, can be displayed.

Keypad

Despite its compact dimensions, the Timy3 has a large and easy-to-use silicone keypad, with 26 keys. Even with gloves on, an easy use is ensured.

Accuracy

The Timy3 works on a time of day basis and records it with an accuracy of 1/10,000 seconds. That means that calculated net times of a precision of 1/1,000 seconds are exactly calculated. Highest accuracy at any temperature is guaranteed by a temperature-compensated quartz.

Printer

The Timy3 WP has an integrated thermal printer. This quiet and extremely fast printer allows easy and simple paper change.

Memory

Approximately 30,000 times can be stored with the corresponding bib and timing channels. Updates of the software are available free of charge, via the Internet.

Radio Network - Wireless Timing Network WTN

An integrated WTN module allows to communicate with all devices of the WTN series (WTN wireless radio, WTN-PB wireless push button, PR1aW photocell, WTN-DB and Windspeed WTN-WS scoreboard).

Software

There is a great number of programs for the Timy3. The device is able to cover the entire spectrum for time measurement starting from a hand timer up to the main timer at major events.

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Display Board



Start Display Board D-SDA1-S

The LED display board D-SDA1 shows the red, yellow and green phase, each with a two-digit countdown with a digit height of 9 cm and a start light.

The system consists of a controller Timy3 W and one or two display boards, which are usually set up at the start and at the coach platform. The time of the countdown phases can be set individually in the controller and stopped at any time. The operation of the lights corresponds with the FIS-specifications.



Trainer Display Board D-LINE80-2x7-E2-RO

The trainer display is mounted at the trainer platform and alternative at the start ramp and finish area. It shows the most important data like bib, rank, speed, total points and width.

It is offered with a figure height of 150 mm (5.9 in) or 250 mm (9.8 in). Alternative we offer custom designed boards.



Display Board D-LINE

The D-LINE is an universal display board to show numerical data. It can be used to show the bib, rank, speed, total points points of a judge and width.

It is offered with figure height of 85 mm (3.3 in), 150 mm (5.9 in) or 250 mm (9.8 in), 450 mm (17.7 in), 600 mm (24.6 in) or 1000 mm (39.4 in). The D-LINE is available with 3 digits or 6 digits.



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