

OPERATING INSTRUCTIONS: SPEED CONTROL (S.C. Transmitter) Skier

Thank you for choosing the "**Speed Control Trainer + Speed Control**" radio controlled timing system.

This new system for testing ski smoothness allows you to directly transmit the name of the athlete, test time, speed, and temperature to the coach via radio, the stored times may then be reviewed at any moment.

To turn on: press the ON/OFF button

To turn off: press the ON/OFF button

When the unit is turned on, there will be a beep and the **red LED** will flash. This indicates that the instrument is in operation. The **red LED** flashes every 10 seconds to indicate that it is in communication with the "**Speed Control Trainer (SCT)**" receiver.

Place the instrument in a suitable position on your leg using the leg wrap provided for this purpose. To

get one time reading, set up two poles (Start - Finish)

When the first pole is detected, the **blue LED** lights up and you will hear a beep. When the second pole is detected, the **blue LED** turns off and you will again hear a beep. The time is then transmitted to the "**Speed Control Trainer**" unit. The maximum transmission distance between the "Speed Control Trainer" and "Speed Control" units should be no more than 90 meters.

Recharging the battery: Insert the jack at position A

Time to charge battery: 2 - 4 hours

IMPORTANT: When the instrument has not been used for several days, the battery should be recharged before use; use the supplied power supply unit (the power supply unit may be used to charge up to 4 instruments at once).

OPERATING INSTRUCTIONS: SPEED CONTROL TRAINER (S.C.T. Receiver) Coach

To turn on: press the ON/OFF button

To turn off: press the ON/OFF button

New function: erase wrong time.

On the low left of display we can read F1= Menü, when a new time comes we read F3= CLR Last. If I want to erase the time I press F3, appear the message F1=CLR Last and F2= Exit. If I press F1 I erase the time, if I press F2 I exit without erase the time.

When the unit is turned on, the display screen shows the message: **S.C.T.** (Speed Control Trainer) – **Batt:** # # # (Battery fully charged)

Temperatures: 0.00 C° (Air temperature)

Speed (Km/h) * * *, * * (The speed detected at a fixed distance of 150 m)

TX: P : indicates the letter sent by the "**Speed Control**" corresponding to the athlete during the test. (e.g. for a skier named Peter, by entering the letter "P" into the **Speed Control** each test will display the time, temperature, speed and the letter "P")

All tests are divided and grouped by athlete name (for example Pietro does 10 tests and Luca does 10 tests). When tests are reviewed they will be in a sequence, beginning with the results of one athlete and then those of another athlete and so on for a total of eight athletes.

The center of the display shows the times coming from the **Speed Control** (S.C.) unit, to the left appears TX: (skier initial), and, at bottom left **F1:** Choose menu.

By pressing **F1** you enter the menu and you can make two choices: **F1 = Go to Times menu, or F2: Erase Times Press F1 again to enter the next menu; press F1 again to Show Times** and see the first four stored times from "000 to 004", the first letter of the skier's name and the time; quickly advance the times by pressing **F1 (PgUp)** up to 83 times, press **F2 (PgDw)** to quickly see times in reverse. Press **Exit** to exit the menu and return to the start screen Press **F2** to Erase Times choose the menu option **yes / no**, pressing **F1** will erase all times, **while pressing F2 will return you to the previous screen.**

F3: Exit

Programming the TX = transmitter (Speed Control skier)

Here it is important that the "Speed Control" transmitter is turned on and near the "Speed Control Trainer"; if other transmitters are nearby, be certain that they are turned off as you do not want to program them all with the same letter.

Press **F1:** choose menu, then press **F2:** Program TX

This screen will display "**Choose TX name**" **A** (choose the transmitter name) and two choices; the first, by pressing **F1:** "change", changes the name of the transmitter, holding down **F1** scrolls down the alphabet corresponding to the skiers.

Press **F2:** "Send", this confirms the letter choice and the TX transmitter **Speed Control will beep. F3:**

Exit

Installation of "Speed Control System" software

I insert the software CD "**Speed control system**". I then install the software by clicking on **setup speed control system**, then on **setup**. I then follow the programme instructions.

I click on the newly created icon Speed Control System and start the programme.

Data management software: times, snow conditions, temperature, materials used and skis.

With this software it is possible to create a database of all the tests performed on the field and create a classification in order to facilitate the selection of the **absolute fastest skis**.

I click on the newly created icon "**Speed Control System**". Once the programme is launched, the screen consists in: at the top: **File, Print, Communications**, and 3 **red** sections: "Upload Times", **green**: "Averages Manager", **grey**: "Remarks"

I start the "Speed Control Trainer", I connect the USB port of my PC to the USB port of the Speed Control Trainer. On the display the writing "**USB Communications**" appears. I click on **communications**, then **serial port** and select the communication port (only 2 choices. If no data is received on one port, a message will inform me that I need to try the other one).

At the bottom left there are the following comments: serial port, and a bar which is activated; **Status** : I press "**Upload Times**". The bar on the bottom left (Status) is activated. The times received appear on the top screen, to the right of the 4 keys and they are divided by test number, name of athlete and times (all tests by athletes A - B - C and so on up to a maximum number of eight athletes). Using the side bar I scroll the times up and down.

To analyse the times previously memorised during tests on the snow; I click on the **green key, "Averages Manager"** and a comment window "**Calculates average**" opens where I can insert whatever number of tests I like. I can insert them either manually or by using the cursor arrows, (for example I insert 4 tests from 1 to 4), then I press the key "**Calculates average**". In the box "**Average**" a time appears which is calculated using the average of the **4 times** inserted and in the box "**average two times**" the average of two times appears, eliminating the highest and lowest times and working out the average of the two remaining times.

I press "**Save average in table**" and another screen appears, "**information**" where if I complete the form I have the possibility of inserting various information about the test, or else I can save without making any other selections.

When I save the selections (**save**) in the table under "**Averages table**" all the data appears and a classification of the fastest skis is created with the difference as a percentage with respect to the first.

Example: after 4 tests by the "**red**" ski, the average time was calculated as **5.97 seconds**. After 4 tests by the **yellow** ski, the average time was calculated as **6.83 seconds** and the average time for the **green ski** was calculated as **9.55 seconds**. A classification is then created with the **red ski in first place** and the **yellow ski in second place** with a difference of **14.41%** with respect to the first. The **green ski is in third place** with a difference of **59.97%** with respect to the first.

For the two times, I only have the values of the test without the classification.

The use of this calculation system offers the possibility to always select the fastest material thanks to the availability of accurate calculations for analysis and due to the creation of a history which is always available for viewing.

The times memorised in the table **Average table** can be cancelled by clicking on **clear row** in the **calculates average** screen, by inserting the number you wish to cancel.

By clicking on "**Remarks**" I have the possibility to insert a series of information to complete the tests performed on the field, creating a historical database which is always available for viewing. This information is: type of wax, ski wax, paraffin wax used, with the possibility to insert the product brand, the temperature and humidity range, the name of the trainer or athlete who performed the test with his/her physical characteristics, as well as information including: the location and date of test, environmental conditions and characteristics of snow, type of crystal hardness etc. etc. I complete the form and click on OK and all the information is saved.

I click on **Print**, then on "**Print PDF**" and a box opens where I can insert a comment. I click on Ok and a "**PDF**" file is generated which can be saved or printed.

When I close the programme I am provided with **another opportunity to save the information in addition to the PDF**. This can be utilised or **ignored by pressing OK**.

A message informs me that if I **press OK I will exit the programme and I will lose all the information inserted**. If I press on the other key I will exit the message and I will have the opportunity to **save all the information** by clicking "**file**" in the curtain menu. I select **save with name**, I choose where I want to save the file "**Speed control 1**", give it a name and save.

This option can prove to be very useful in the event I need to download the information but I don't have time to analyse it straight away. This way I can do it at a later stage.

To review and analyse the saved data, I open the programme "**Speed control system**", I click on **file** in the drop-down menu and select "**open**". I look for the saved file, **I click on open** and all the data is available for viewing. Eventually the data can be modified and then saved again.

When using the instrument during competitions, the "**Speed Control Trainer**" device must be at least **150 meters away** from other "**Speed Control Trainer**" devices to prevent interference with reception.

When the **Speed Control** (S.C.) unit battery is low a message will appear on the **Speed Control Trainer** (S.C.T.) display: "**Low battery**" (this indicates about one hour of battery life remaining)

Recharging the battery: Insert the jack at position B

Time to charge battery: 2 - 5 hours

IMPORTANT: When the instrument has not been used for several days, the battery should be recharged before use; use the supplied power supply unit (the power supply unit may be used to charge up to 4/5 instruments at once).