



## **Silva Ski Speedometer Instruction Manual**

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## **1 – Quick Start Guide**

### **READ THIS FIRST**

If at any point in these instructions you have questions, please call 1-800-572-8822 and a Silva customer support representative will assist you.

Your speedometer arrives in sleep mode; this is pre-set at the factory to conserve battery life. Press any button to awaken the watch display.



### Quick Start Time:

- a. In Time Mode **T**, press SET button - upper left.
- b. Toggle through the various options- 12/24hr time, time, date, etc. with START/STOP button (upper right).
- c. Press setting change **+** button (upper left) and **-** button (lower right).
- d. Press START/STOP button - upper right- to confirm each selection
- e. Press MODE when finished with all changes.

### Reading a Heart Rate: (optional heart rate monitor only)

- a. Fit the heart strap on your chest with the logo right side up. Wet the flexible rubber bands.
- b. Toggle to the heart rate mode.
- c. Your heart rate will now display.

## Speed and Distance:

- a. The button on the Radar Module toggles the unit on/off. Press and hold the button on the Radar Module until the red light flashes. It is now on.
- b. Press MODE (lower left on the watch) to scroll to the **S** Speed setting. Press START/STOP (upper right) to begin data collection.
- c. Within a few seconds, a speed will display whenever the pod is moved around. Affix the pod to your boot and you are ready to go. The Radar Module will shut off if there is no movement for 30 min.

**Getting Started:** Your speedometer has a user friendly menu system. The lower left button will toggle you through the MODES, and the lower right button will toggle through the OPTIONS within each MODE. The different Modes are:

**T**- TIME

**S** – SPEED

**D** – DISTANCE

**♥** - HEART RATE

**M** – MEMORY

Familiarize yourself with the lower left button and toggle through the five modes. The OPTIONS within each MODE are listed below. When in a particular mode, press OPTION/- button to view the various options. Press MODE to return to the main view at any time.

## Time:

Time/Date	Alarm 1
Alarm 2	Countdown Timer
Stopwatch	Stopwatch Data Mode
Second Time Zone	

## Speed:

Current Speed	Average Speed
Maximum Speed	Current Pace
Average Pace	

## Distance:

Trip Distance	Trip Time
Total Distance	Trip Calories
Total Calories	Lap Counter

## Heart Rate:

Current Heart Rate
Average Heart Rate
Maximum Heart rate

## Seven Day Memory: (Daily Record)

Distance	Average Speed
Maximum Speed	Average Heart Rate
Max Heart Rate	Time
Average Pace	Calories

- 2. Strap Removal:** Your speedometer has an innovative removable strap system that allows use as with a watch style wrist band, lanyard, or carabiner boot.

It is important to take care when removing or installing the receiver piece in the watch band. This should always be done from the front. Insert the light (bottom) button into the band first and then work your way up both sides to the top. Once the bottom button and the lower left and lower right buttons are in the strap, pull the top of the band to fit the receiver into the band.



This band is designed and tested to last over 1000 times - if installed and removed properly.

### **3. Setting the time:** Activate Time Mode **T**

- a. Press SET (upper left) Hr: 12 or Hr: 24 will appear.
- b. Press **+** (upper left) or **-** (lower right) to select format; the watch is pre-set to 12 Hr.
- c. Press START/STOP (upper right) to confirm.

Actual time will display and the Hour digit will flash.

- d. Press **+** or **-** to change the Hour digit.
- e. Press START/STOP (upper right) to confirm.

The minutes digits will flash.

- f. Adjust using the same method and confirm.
- g. Adjust the date and confirm.

### **4 - Time Mode T Options:**

Alarm 1

Alarm 2

Countdown Timer

Stopwatch

Data (stopwatch individual Lap data memory)

#### **4A – Setting the Alarms:**

- a. In Time Mode **T**, press OPTION/- (lower right) once to view Alarm 1.
- b. Press SET (upper left) to change the time – select a time using the **+** & **-** (upper left and lower right).
- c. Press START/STOP (upper right) to confirm each time (hr/min) selection .
- d. Press START/STOP again to turn the alarm on (A1 on) or (A1 off).
- e. Set Alarm 2 (A2 on) or (A2 off) using the same method.

#### **4B – Using the Countdown Timer:**

- a. In Time Mode **T** press the Option (lower right) to view the countdown timer.
- b. Press the SET (upper right) then press **+** & **-** to change the hours, minutes and seconds.
- c. Press START/STOP (upper right) to confirm.
- d. Press START/STOP again to activate countdown timer.

**4C – Stopwatch:** The stopwatch in your speedometer is very powerful and is able to store up to 12 intermediate or lap times.

**a.** In the main stopwatch mode, press Set (upper left) to select either Intermediate or Lap times.

**b.** Press OPTION/- to toggle between either int or lap.

**c.** Press START/STOP ( upper right) to confirm.

#### **4D – Stopwatch Basic Functions:**

**a.** In the stopwatch mode, press START/STOP to activate and start logging data.

**b.** Press START/STOP to log a second set of data (lap or intermediate time). The circumference ring displays the number of data sets you have stored (second hand normally) – there are 12 maximum. Once the twelve sets are full, the stopwatch will overwrite the previous data points, one at a time.

**c.** Press SET (upper left) to clear all stopwatch memory press at any time.

**4E – Stopwatch Lap Memory:** Once you have logged various lap and split times in the stopwatch mode, they are logged in the stopwatch data mode.

**a.** When in the Time Mode **T**, press OPTION/- five times and you will see data .

**b.** Press START/STOP (upper right) to view stored data in this mode.

**c.** Designated lap time (1-12) is indicated by the outer ring starting at the 1 o'clock position. (Normally this is the second hand indicator)

**d.** Press START/STOP to scroll through the lap times and select a particular set of data.

**e.** Once you reach the appropriate split time (1-12), press the OPTION/- (lower right) to view the data in each one. You can view the following:

Distance

Average speed

Average pace

Time (hours/minutes/seconds)

- f. Press START/STOP while viewing pace to compare one set of data for all lap times – this will then toggle through the individual paces for all lap times.

**4F – Second Time Zone:** Your Speedometer is equipped with a clock for an alternate time zone. This is the sixth option in the Time Mode.

- a. Press OPTION/- six times to toggle to the second time zone.
- b. Press SET and then press + & - to adjust the hours and minutes.
- c. Press START/STOP to confirm each selection.

Note: The AM or PM designation will appear in as a **P** or **A** in front of the time. The time displayed at the bottom is the main time in the watch.

## 5 - Speed Mode **S**

**5A - Speed mode setup:** Program the following items while in Speed Mode **S**:

View Option – Heart Rate or Time

Calibration multiplier (if you choose- for  
Competitive cross country skiing)

Units (miles or kilometers)

Weight (Lbs or Kilograms)

- a. Scroll to any view on the Speed Mode **S**.
- b. Press SET.
- c. **Hrt** or **t** will appear. This is a choice between heart rate or time in the smaller display area on the screen. (Speed will be displayed in large digits on the bottom of the display)
- d. Press OPTION/- to select one and press START/STOP to confirm.
- e. Skip to **6** unless you are a competitive cross country skier. Press START/STOP to confirm 100. The next number displayed is the calibration multiplier.

TO DETERMINE YOUR CALIBRATION MULTIPLIER  
SEE SECTION 9 NOW!

Program your calculated number, from section **9**  
press **+** & **-** and then press START/STOP to con-  
firm.

**f.** Select miles or kilometers on the next screen **M**  
or **KM** and press START/STOP to confirm.

**g.** Confirm the weight in either pounds or kilo-  
grams. ( **Lbs** for pounds or **51** for kilograms )  
– Press START/STOP to confirm.

**h.** Press **+** & **-** to enter weight and then press  
START/STOP to confirm.

**5B – Speed mode options:** The following options are  
available in Speed mode:

Current Speed

Average Speed

Maximum Speed

Current Pace

Average Pace

Press OPTION/- (lower right) to toggle through the  
various options.

**5C – Memory Reset:** To reset the average speed,  
maximum speed, and average pace functions scroll  
to the Memory **M** mode and hold SET (upper left)  
for 3 seconds. For a total memory reset (clear  
"lifetime" data), press all 4 left and right buttons the  
same time. Note: This also clears the time, date,  
and calibration multiplier. Make note of these items  
prior to reset because you will need to re-enter  
these numbers.

**6 – Distance Mode D:**

**6A – Distance mode setup:** If you've completed sec-  
tion **5A**, skip this (the data is already stored). See  
**5A –speed mode setup–** this is the same procedure.

## **6B – Distance mode options:**

Trip Distance

Trip Time

Total Distance (lifetime memory)

Trip Calories

Total Calories (lifetime memory)

Lap Counter

## **6C – Memory reset:**

To reset the trip distance, trip time and trip calorie functions scroll to the Memory Mode **M** and hold SET (upper left) for 3 seconds. For a total memory reset (clear "lifetime" data), press all 4 left and right buttons the same time. This also clears the time, date, and calibration multiplier. Make note of these items prior to reset because you will need to re-enter them.

## **7 – Heart Rate Mode (♥):**

(Only with the optional Heart rate monitor)

### **7A – Heart rate mode setup:**

- a.** Press SET (upper left) when in heart rate mode.
- b.** Select whether you want the hi/low alarm (beep) turned on with **+** & **-** and press START/STOP (upper right) to confirm.
- c.** Select the upper heart rate alarm limit max with **+** & **-** and press START/STOP to confirm.
- d.** Select the lower heart rate alarm limit min with **+** & **-** and press START/STOP to confirm.
- e.** Heart rate setup is now complete.

### **7B – Heart rate mode options:**

Current Heart Rate

Trip Average Heart Rate

Trip Maximum Heart Rate

**7C – Heart Rate Memory Reset:** To reset the average and maximum heart rate functions scroll to the

Memory Mode **M** and hold the SET (upper left) for 3 seconds.

**8 – Memory Mode M:** Your speedometer is equipped with an automatic internal seven calendar day memory. This allows you to track your performance history on a daily basis within the receiver watch itself. Each daily internal memory record consists of the following:

- Distance
- Average Speed
- Maximum Speed
- Average Heart rate in Beats per Minute
- Maximum Heart rate in Beats per Minute
- Trip Time
- Average Pace
- Trip Calories

**8A – Memory mode data retrieval:**

- a. Press MODE to toggle to **M** – data will display.
- b. Press OPTION/- to view the most recent data set. (either yesterday or today)
- c. Continue pressing OPTION/- to view all of the recorded data.
- d. Press START/STOP (upper right) to switch days.

Hint: To view a weekly performance history of one item (example: average speed) – continue pressing START/STOP. This feature allows you to easily see a comparison of your daily performance.

The memory works on a rolling seven day calendar memory – data will automatically be erased after seven days to save storage space on the receiver watch.

**9 – Calibration Methods:**

(Cross Country / Nordic Skiers only)

The speedometer requires a simple calibration to program the unit to your individual style. The current

correction factor is pre-programmed to "average". To ensure the highest level of accuracy, we recommend that you complete the following procedure:

**Procedure: (takes only 2 or 3 minutes)**

- a.** Go to a location where there is a measured distance – a local track or community walking trail with marked intervals is ideal.
- b.** Scroll to Memory Mode **M** and press SET for 3 seconds to clear the trip distance in your speedometer.
- c.** Ski the measured distance as you normally would. Make sure this distance is at least 1/4 mile. The longer the measured distance, the more accurate the results.
- d.** Scroll to the Distance Mode **D** and read the distance. If you went 1/4 mile and the distance reads .25 miles, no programming is needed. However, it is likely that the result will read differently than the actual distance covered.
- e.** Take the actual distance and divide by the distance on the watch. (example: assume the display reads .30 mile when the distance was actually .25 )  
Correction factor =  $.25 \div .30$   
Correction factor = .83
- f.** Multiply this by 100 and you have your correction factor!  
Correction factor =  $.83 \times 100$   
Correction factor = 83

There is a chart is available at the end of this section.

- g.** Enter this correction factor into the receiver watch. Scroll to the Distance Mode **D** – and press SET (upper left). Press the START/STOP (upper right) once to skip over **hrt** or **t**. The personal multiplier will blink. It should say 100 - if nothing has been previously programmed.

**h.** Press **+** & **-** (upper left and lower right) to program in your number. Press **START/STOP** (upper right) to confirm.

**i.** Press **MODE** (lower left) to exit the programming mode.

**j.** Test your new correction factor by scrolling to the Memory Mode **M** and resetting the trip distance to zero. (hold the **SET** [upper right] for 3 seconds)

**k.** Ski at the same rate and distance and this reading should be more accurate than the previous.

Accuracy can be increased if you repeat this procedure again.

**IMPORTANT!** Write this number down in a place you will not forget – you may need to re-enter it after a battery change or a total watch reset.

### Personal Skiing Style Correction Factor List:

actual distance miles	display distance miles	correction factor	actual distance miles	display distance miles	correction factor
0.25	0.14	179	1.0	0.80	125
0.25	0.15	167	1.0	0.82	122
0.25	0.16	156	1.0	0.84	119
0.25	0.17	147	1.0	0.86	116
0.25	0.18	139	1.0	0.88	114
0.25	0.19	132	1.0	0.90	111
0.25	0.20	125	1.0	0.92	109
0.25	0.21	119	1.0	0.94	106
0.25	0.22	114	1.0	0.96	104
0.25	0.23	109	1.0	0.98	102
0.25	0.24	104	1.0	1.00	100
0.25	0.25	100	1.0	1.02	98
0.25	0.26	96	1.0	1.04	96

0.25	0.27	93	1.0	1.06	94
0.25	0.28	89	1.0	1.08	93
0.25	0.29	86	1.0	1.10	91
0.25	0.30	83	1.0	1.12	89
0.25	0.31	81	1.0	1.14	88
0.25	0.32	78	1.0	1.16	86
0.25	0.33	76	1.0	1.18	85
0.25	0.34	74	1.0	1.20	83
0.25	0.35	71	1.0	1.22	82
0.25	0.36	69	1.0	1.24	81
0.25	0.37	68	1.0	1.26	79

**10 - Water Resistance:** Your Speedometer has a water resistance of 30ft. / 10m. It is not meant to be submerged for long periods. If under water for more than 15 minutes damage to electronic components may occur. If this happens, turn the unit off, remove the battery from the pod and allow to dry.

**11 – Battery Replacement- Radar Pod:** The Radar Pod takes a standard AAA battery. To change this battery, use a coin to remove the cover, replace the battery with the (-) side of the battery going into the pod first. Insert the cover. To maintain water resistance, take care that the rubber O-ring is still in place .

**Watch:** The receiver watch has a battery life of 100+ hours (depending on temperature) when used as a speedometer. The life of the battery when used only as a watch will be approximately 2 years.

We recommend that you take the product to a jeweler or where you purchased it for professional battery service. However, if you choose to do the battery service yourself, a battery replacement kit (model

number 2831050) is available. Purchase this from the retailer who sold you the product or directly from Silva by calling 1-800-572-8822. This kit includes all necessary gaskets and batteries. If you are confident that you can do the job yourself, you will need the following:

- 1 very small Philips head screwdriver
- 1 US Quarter
- 2 lithium 2032 coin batteries (readily available )
- 1 pair of tweezers

**Procedure:** We recommend that you change both chest strap and watch batteries at the same time – they are designed to have approximately the same useful life.

**Chest Strap:**

- a.** Remove the back cap of the accelerometer module with the Quarter.
- b.** Gently tap the module against the palm of your hand to pop the battery out of the module.
- c.** Replace the battery with the + side face up and replace the cap.

**Receiver Watch:**

- a.** Remove the back cover the watch. There is a notch at the top use a finger nail or small screwdriver to lift the cover off. Be careful, do not damage the circuit board or the thin antenna inside.
- b.** Remove the two battery retaining screws. Take extra care, do not lose these.
- c.** Remove the old battery and replace it with a new one. Fit it inside the metal holder and set it back on the circuit board.
- d.** Using tweezers, place the small screws in the holes and then tighten with the screwdriver. (do not over tighten)

**e.** Replace the back cover and align the two notches. ( the one on the cover with the one on the watch case) Make sure that the rubber gasket on the back cover has not come lose.

Note: If the "beep" does not work after you finished, the back cover was not properly replaced. Check the alignment and adjust as necessary. Always properly dispose of old batteries – local laws will vary.

## **12 – FCC Information:**

FCC ID: OWURADAR915 (ski only)

FCC ID: OWUACAMP915 (ski heart rate strap)

Microsport AG

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference and;
- This device must accept any interference received, including interference that may cause undesired operation.

Caution: Changes or modifications not expressly approved by Johnson Outdoors Inc. could void the user's authority to operate the device.

## 13 – Limited Warranty:

What is Covered? Johnson Outdoors Inc. warrants your Silva Speedometer to be free from defects in materials or workmanship, and to perform accurately for a minimum of 1 year. (not including batteries)

What is Not Covered? Normal wear and damage due to abrasion, melting, misuse, alteration, and abuse (including and disassembly not detailed in this manual) is not covered by this warranty.

How to Obtain Warranty Service or Repair: Should a defect covered by this warranty appear in your Silva product, call our Consumer Service Department toll-free at 1-800-572-8822 for return authorization and instructions. (You must pay the cost of returning the product to us.) If the product is found to be defective in material or workmanship, we shall, at our option either repair or replace it without charge, and will pay the cost of return shipment to you. If repairs are required to correct any problem not covered by this warranty, we will contact you for approval to proceed and to charge you for the components repaired or replaced, plus a nominal charge for labor.

THERE ARE NO EXPRESS WARRANTIES ON YOUR SILVA PRODUCT THAT ARE NOT CONTAINED IN THIS DOCUMENT. IN NO EVENT SHALL WE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM USING OR LOSS OF USE OF YOUR SILVA PRODUCT.

Some states do not allow exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.