

Polar RS400™

Getting Started Guide

POLAR®
LISTEN TO YOUR BODY

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1. RUNNING COMPUTER PARTS

Congratulations! You have purchased a complete training system to tailor-fit your training needs. For complete instructions on your running computer, see the User Manual.

1. Polar RS400/RS800 Running Computer: The running computer displays and records your heart rate and other exercise data during exercise.
2. Polar WearLink® 31 transmitter (Polar RS400) or Polar WearLink® W.I.N.D. transmitter (Polar RS800): The transmitter sends the heart rate signal to the running computer. The transmitter consists of a connector and a strap.
3. Polar S1 foot pod™ (Polar RS400): The sensor transmits the running speed/pace and distance measurements to your running computer.

4. Polar s3 stride sensor™ W.I.N.D. (Polar RS800): The sensor transmits the running speed/pace and distance measurements to your running computer. The sensor also measures your running cadence and stride length.
5. CD-ROM: The CD includes Polar ProTrainer 5™ and a complete user manual to help you make the most out of your running computer.

The full user manual and the latest version of this getting started guide can be downloaded at www.polar.fi/support.

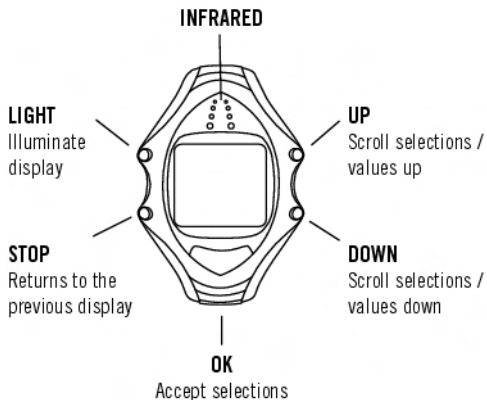
2. GETTING STARTED

Basic Settings

Before exercising with your running computer, customize the basic settings. Enter as accurate data as possible to ensure correct performance feedback based on your personal metrics.

To adjust the data, use UP, DOWN and accept with OK. The values scroll faster if you press and hold UP or DOWN.

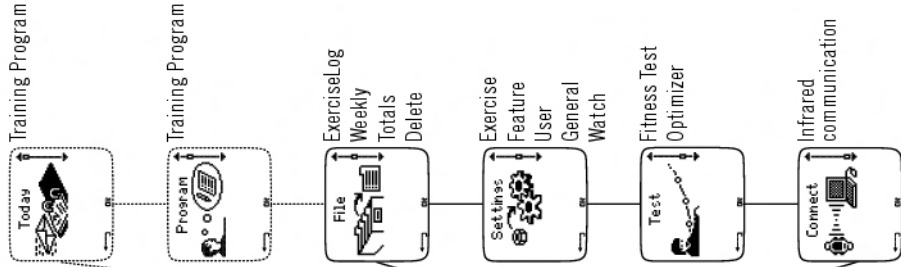
1. To activate your running computer, press OK twice.
2. **Welcome to Polar Running World!** is displayed. Press OK.
3. **Language:** Select **English**, **Deutsch**, **Español** or **Français**.



4. **Start with basic settings** is displayed. Press OK.
5. **Time**: Select either **12h** or **24h**. With **12h**, select **AM** or **PM**. Set the local time.
6. **Date**: Set today's date, dd=day, mm=month, yy=year.
7. **Units**: Select metric (kg/cm/km) or imperial (lb/ft/mi) units.
8. **Weight**: Enter your weight. To change units, press and hold LIGHT.
9. **Height**: Enter your height. If you use imperial units, first set feet (ft) then inches (in).
10. **Birthday**: Enter your date of birth, dd=day, mm=month, yy=year.
11. **Sex**: Select **Male** or **Female**.
12. **Settings OK?** is displayed. Select **Yes**: Settings are accepted and saved. The running computer displays time of day. Select **No** if settings are incorrect and need to be changed. Press STOP to return to the data you want to change.

Menu Structure

Menu visible when you have transferred programmed exercises from software to the Running Computer.



To scroll the menu, press UP and DOWN.



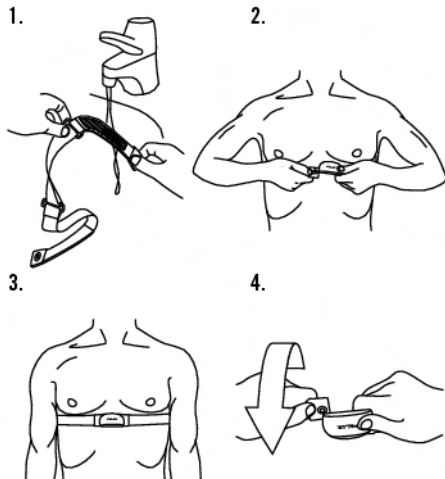
To return to time of day display, press and hold the STOP button.

3. PREPARE FOR TRAINING

Wear the Transmitter

Wear the transmitter to measure heart rate.

1. Moisten the electrode areas of the strap under running water and make sure that they are well moistened.
2. Attach the connector to the strap. Position the connector's letter L to the word LEFT on the strap and snap the fastener. Adjust the strap length to fit snugly and comfortably. Secure the strap around your chest, just below the chest muscles, and snap the second fastener.
3. Check that the wet electrode areas are firmly against your skin and that the Polar logo of the connector is in a central, upright position.
4. To detach the connector from the strap, apply pressure with your thumb and forefinger and turn your hand as indicated in the picture.



Position the Polar S1 Foot Pod

Install Foot Pod Battery

Before using the foot pod* for the first time, insert the battery (included in the product package).

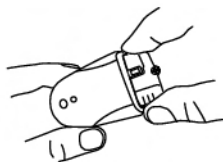
1. Lift the small flap, detach the fork from the foot pod* and lift the black cover off (pic 1).
2. Carefully slide the battery case out of the footpod (pic 2) and insert the battery (AAA) in the case.
3. Slide the battery case inside the foot pod. **Be careful not to touch the switch on the battery case.** Keep the sealing ring in its groove to ensure water resistance.
4. Secure the black cover on the foot pod.
5. Press and hold the red button to switch the foot pod on. Green light indicates it is working. Switch it off to save battery.
6. The old batteries should be properly disposed of according to local regulations.

*Optional S1 foot pod required.

1.



2.



Attach Foot Pod on Shoe

To measure speed/pace and distance accurately, make sure the foot pod is correctly positioned.

1. Undo the flap and detach the foot pod from the fork.
2. Loosen your shoelaces and place the fork underneath them, on top of the tongue of the shoe. Tighten the laces.
3. Fit the front part of the foot pod (closest to the red button) to the fork and press from the rear end. Fasten the flap. Make sure the foot pod does not move and is aligned with your foot. The more secure the sensor, the more accurately speed and distance are measured.
4. Turn the foot pod on before exercising. Press and hold the red button on the foot pod until the green light starts flashing.
5. After exercising, turn the foot pod off by pressing and holding the red button until the green light switches off.

i *Optional calibration of the foot pod can improve the accuracy of speed, pace and distance measurements. For further information, see Calibrate the Foot Pod in the User Manual.*

1.



2.



3.



4.



Position the Polar s3 Stride Sensor W.I.N.D.

Install Stride Sensor Battery

Before using the stride sensor* for the first time, insert the battery (included in the product package).

1. Open the battery cover by turning it counterclockwise to OPEN using the sensor fork or a coin (see picture 1).
2. Place the battery inside the cover with the positive (+) side facing the cover (see picture 2). Make sure the sealing ring is in the groove to ensure water resistance.
3. Place the cover with the battery inside it into the sensor.
4. Press the cover in place and close it by turning clockwise from OPEN to CLOSE using the sensor fork or a coin.

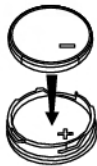
The stride sensor can be positioned either on the shoelaces or in the sole cavity of a specific running shoe.

*Optional s3 stride sensor W.I.N.D. required.

1.

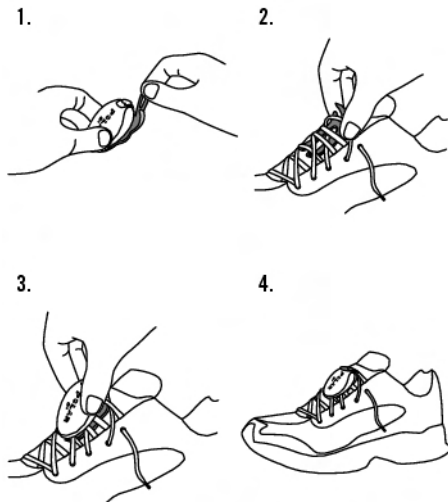


2.



Attach Stride Sensor on Shoelaces

1. Undo the flap and detach the fork.
2. Loosen your shoelaces and place the fork underneath them, on top of the tongue of the shoe. Tighten the laces.
3. Fit the front part of the sensor onto the fork and press from the rear end. Fasten the flap.
4. Make sure the sensor does not move and is aligned with your foot. The more secure the sensor, the more accurately speed and distance are measured.



Attach Stride Sensor in Sole Cavity

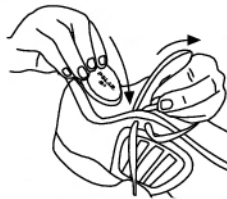
1. Undo the flap and detach the fork.
2. Lift the insole. Place the sensor with the Polar logo facing upwards and the rear end of the sensor facing the shoe heel inside the sole cavity. Note that you can place the sensor in only one way, without using too much force.

 *Optional calibration of the sensor can improve the accuracy of speed, pace and distance measurements. For further information, see Calibrate the Stride Sensor in the User Manual.*

1.



2.



4. RECORD TRAINING

Wear the transmitter and foot pod/stride sensor* as instructed. Make sure the S1 foot pod is on (RS400) and that the foot pod or stride sensor in your running computer (**Settings > Features > Footpod / S sensor**) is activated.

1. Start by pressing OK on the running computer.
2. Within 15 seconds, your heart rate appears on the display. Stand still and wait until the running computer finds the foot pod/stride sensor signal (runner symbol stops flashing).
3. Start exercise recording by pressing OK. Different displays and data appear on the display. Scroll the displays by pressing UP or DOWN.
4. Stop exercise recording by pressing STOP twice. For further information on functions during exercise, see the User Manual.

*Optional S1 foot pod/s3 stride sensor W.I.N.D. required.



5. AFTER TRAINING

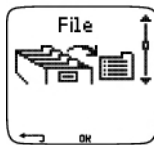
Detach the connector from the strap after use. Keep the transmitter dry and clean. For further information, see Care and Maintenance.

Review exercise data under **File**.

- The **Exercise Log** lists a maximum of 99 exercise files.
- The **Weekly** summary displays summaries for the past 16 weeks.
- **Totals** include cumulative values recorded during training sessions.
- **Delete** files. To view exercise data, press OK and scroll UP or DOWN.

For complete analysis, transfer data to Polar ProTrainer 5.

For further information on how to review training information, see the User Manual.



6. CUSTOMER SERVICE INFORMATION

Care and Maintenance

Caring of Your Product

Like any electronic device, the Polar running computer should be treated with care. The suggestions below will help you fulfill guarantee obligations and enjoy this product for many years to come.

Detach the transmitter connector from the strap after use. Clean the connector with a mild soap and water solution. Dry it with a towel. Never use alcohol or any abrasive material (steel wool or cleaning chemicals).

Rinse the transmitter strap with water after every use. If you use the strap more than three times a week, wash it at least once every three weeks in a washing machine at 40°C / 104°F. Use a washing pouch. Do not soak, and use neither detergent

with bleach nor fabric softener. Do not dry-clean or bleach the strap.

Wash the strap before long-term storage, and always after use in pool water with high chlorine content. Do not spin-dry or iron the strap. Never put the connector in a washing machine or a drier! **Dry and store the strap and the connector separately.**

Keep your running computer, transmitter, foot pod and stride sensor in a cool and dry place. Do not keep them in a damp environment, in non-breathable material (a plastic bag or a sports bag) nor with conductive material (a wet towel). Do not immerse the foot pod or stride sensor in water. Do not expose to direct sunlight for extended periods.

Operating temperatures are -10 °C to +50 °C / +14 °F to +122 °F.

Service

During the two-year guarantee/warranty period, we recommend that you service the product at an authorized Polar Service Center only. The warranty does not cover damage or consequential damage caused by service not authorized by Polar Electro. For further information, see "Limited International Polar Guarantee".

Changing Batteries

To change the batteries of the running computer, transmitter, and stride sensor* yourself, carefully follow the instructions in Install Stride Sensor Battery. All batteries are changed the same way. For further information on changing the foot pod* battery, see Install Foot Pod Battery.

If you would prefer Polar to replace the battery, contact an authorized Polar Service Center. The Service will test the sensor after replacing the battery.

Excessive use of the backlight drains the running computer's battery more rapidly. In cold conditions, the low battery indicator may appear,

and disappear again when you return to a warmer environment. To ensure the maximum lifespan of the battery cover, open it only when changing battery. When changing the battery, make sure the sealing ring is not damaged, in which case you should replace it with a new one. Battery kits with sealing rings are available at well-equipped Polar retailers and authorized Polar Service Centers. In the USA and Canada, sealing rings are available at authorized Polar Service Centers only.



Keep batteries away from children. If swallowed, contact a doctor immediately. Batteries should be properly disposed of according to local regulations.

*Optional S1 foot pod/s3 stride sensor W.I.N.D. required.

Precautions

Interference During Exercise

Electromagnetic Interference and Exercise

Equipment. Disturbance may occur near high-voltage power lines, traffic lights, overhead lines of electric railways, electric bus lines or trams, televisions, car motors, bike computers, some motor-driven exercise equipment, cellular phones, or when you walk through electric security gates. Microwave ovens, computers and WLAN base stations may also cause interference when exercising with RS800. To avoid erratic readings, move away from possible sources of disturbance.

Exercise equipment with electronic or electrical components such as LED displays, motors and electrical brakes may cause interfering stray signals. To solve these problems, try the following:

1. Remove the transmitter from your chest and use the exercise equipment as you would normally.
2. Move the running computer around until you find an area in which it displays no stray reading or does not flash the heart symbol. Interference is often worst directly in front of the display panel of the equipment, while the left or right side of the display is relatively free of disturbance.
3. Put the transmitter back on your chest and keep the running computer in this interference-free area as much as possible.

If the running computer still does not work with the exercise equipment, it may be electrically too noisy for wireless heart rate measurement.

RS400 Crosstalk. A heart rate symbol without a frame indicates non-coded heart rate transmission. When in non-coded mode, the running computer picks up transmitter signals within 1 m / 3 ft. Simultaneous non-coded signals from more than one transmitter can cause an incorrect reading.

If another person with a running computer or a heart rate monitor is causing interference, move away from that person and continue your exercise normally.

Alternatively, to avoid other people's heart rate signals:

1. Take the transmitter off your chest for 30 seconds. Move away from the other device.
2. Put the transmitter back on and bring the running computer up to your chest near the transmitter's Polar logo. The running computer will start searching for a heart rate signal again. Continue your exercise normally.

Using RS400 Running Computer in Water. The running computer may be worn when swimming. It is not, however, a diving instrument. To maintain water resistance, do not press the buttons of the running computer under water. When measuring heart rate in water, you may experience interference for the following reasons:

- Pool water with a high chlorine content, and seawater, are very conductive. The electrodes of a transmitter may short-circuit, preventing ECG signals from being detected by the transmitter.
- Jumping into water or a strenuous muscle movement during competitive swimming may shift the transmitter to a location on the body where ECG signals cannot be picked up.
- The ECG signal strength is individual and may vary depending on the individual's tissue composition. Problems occur more frequently when measuring heart rate in water.

The S1 foot pod can be used in any wet running environment, including rain, but it is not intended for underwater use.

Using RS800 Running Computer in Water. The running computer is water resistant. However, heart rate measurement does not work in water. You can use the running computer under water as a watch but it is not a diving instrument. To maintain water resistance, do not press the buttons of the running computer under water. Using the running computer in excessive rainfall may also cause interference.

Minimizing Risks When Exercising

Exercise may include some risk. Before beginning a regular exercise program, it is recommended that you answer the following questions concerning your health status. If you answer yes to any of these questions, we recommend that you consult a doctor before starting any training program.

- Have you been physically inactive for the past 5 years?
- Do you have high blood pressure or high blood cholesterol?
- Are you taking any blood pressure or heart medication?
- Do you have a history of breathing problems?
- Do you have symptoms of any disease?
- Are you recovering from a serious illness or medical treatment?
- Do you use a pacemaker or other implanted electronic device?
- Do you smoke?
- Are you pregnant?

ENGLISH

Note that in addition to exercise intensity, medications for heart conditions, blood pressure, psychological conditions, asthma, breathing, etc., as well as some energy drinks, alcohol, and nicotine may also affect heart rate.

It is important to be sensitive to your body's responses during exercise. **If you feel unexpected pain or excessive fatigue when exercising, it is recommended that you stop the exercise or continue at a lighter intensity.**

Notice to individuals with pacemakers, defibrillators or other implanted electronic devices. Individuals who have a pacemaker use the Polar running computer at their own risk. Before starting use, we always recommend a maximal exercise stress test under a doctor's supervision. The test is to ensure the safety and reliability of the simultaneous use of the pacemaker and the Polar running computer.

If you are allergic to any substance that comes into contact with your skin or if you suspect an allergic reaction due to using the product, check

the listed materials in Technical Specifications. To avoid any skin reaction to the transmitter, wear it over a shirt, but moisten the shirt well under the electrodes to ensure flawless operation.

Your safety is important to us. The shape of the foot pod/stride sensor is designed to minimize the possibility of it getting caught in something. In any case, be careful when running with the foot pod/stride sensor in brushwood, for example.



The combined impact of moisture and intense abrasion may cause a black color to come off the transmitter's surface, possibly staining light-colored clothes. If you use insect repellent on your skin, you must ensure that it does not come into contact with the transmitter.

Technical Specifications

Wrist unit

	Class 1 Laser Product
Battery life:	Average 1 year (1h/day, 7 days/week)
Battery type:	CR2032
Battery sealing ring:	O-Ring 20.0 x 1.1, material silicone
Operating temperature:	-10 °C to +50 °C / 14 °F to 122 °F
Wrist band and buckle material:	Polyurethane, stainless steel
Back cover:	Polyamide, stainless steel complying with the EU Directive 94/27/EU and its amendment 1999/C 205/05 on the release of nickel from products intended to come into direct and prolonged contact with the skin.
Watch accuracy:	Better than ± 0.5 seconds / day at 25 °C / 77 °F temperature.
Accuracy of heart rate monitor:	$\pm 1\%$ or 1 bpm, whichever larger.
Heart rate measuring range:	Definition applies to stable conditions. 15-240
Current speed display range:	Foot pod: 0-29,5 km/h or 0-18,3 mph Stride sensor: 0-36 km/h or 0-22,3 mph

Altitude display range: -550 m ... +9000 m / -1800 ft ... +29500 ft

The Polar wrist unit calculates altitude by using the standard average altitude at defined air pressures according to ISO 2533.

Ascent resolution: 5 m / 20 ft

Wrist unit limit values

Maximum files:	99
Maximum time:	99 h 59 min 59 s
Maximum laps:	99
Shoes 1 total distance:	999 999 km / 621370 mi
Shoes 2 total distance:	999 999 km / 621370 mi
Total distance:	999 999 km / 621370 mi
Total duration:	9999h 59min 59s
Total calories:	999 999 kcal
Total exercise count:	9999
Total ascent:	304795 m / 999980 ft

ENGLISH

Transmitter

Battery life of WearLink 31 transmitter:	Average 2 years (1h/day, 7 days/week)
Battery life of WearLink W.I.N.D. transmitter:	Average 2 years (3h/day, 7 days/week)
Battery type:	CR2025
Battery sealing ring:	O-ring 20.0 x 1.0, material silicone
Operating temperature:	-10 °C to +40 °C / 14 °F to 104 °F
Connector material:	Polyamide
Strap material:	Polyurethane/ Polyamide/ Polyester/ Elastane/ Nylon

Foot Pod

Battery life:	Average 20 hours of use
Battery type:	One AAA sized battery
Operating temperature:	-10 °C to +50 °C / 14 °F to 122 °F
Accuracy:	±3 % or better once calibrated. Definition applies to stable conditions.

Stride Sensor

Battery life:	Average 50 hours of use
Battery type:	CR2430
Battery sealing ring:	O-Ring 25.0 x 1.2, material silicone
Operating temperature:	-10 °C to +50 °C / 14 °F to 122 °F

Accuracy: ±3 % or better once calibrated, definition applies to stable conditions.

Polar WebLink using IrDA Communication, Polar ProTrainer 5™

System Requirements:	PC Windows® 2000/XP (32bit) IrDA compatible port (an external IrDA device or an internal IR port) Additionally, for the software your PC must have a Pentium II 200 MHz processor or faster, SVGA or higher resolution monitor, 50 MB hard disk space and a CD-ROM drive.
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The Polar running computer indicates the level of physiological strain and exercise intensity. It displays performance indicators and environmental conditions such as altitude and temperature. It also measures speed and distance when used with S1 foot pod, and running cadence when used with s3 stride sensor. No other use is intended or implied.

The Polar running computer should not be used for obtaining environmental measurements that require professional or industrial precision. Furthermore, the device should not be used to obtain measurements when engaged in airborne or underwater activities.

Water resistance of Polar products is tested according to International Standard ISO 2281. Products are divided into three different categories according to their water resistance. Check the back of your Polar product for the water resistance category, and compare it to the chart below. Please note that these definitions do not necessarily apply to products of other manufacturers.

Marking on case back	Wash splashes, sweat, raindrops etc.	Bathing and swimming	Skin diving with snorkel (no air tanks)	SCUBA diving (with air tanks)	Water resistant characteristics
Water resistant	x				Splashes, raindrops etc.
Water resistant 50m	x	x			Minimum for bathing and swimming*.
Water resistant 100m	x	x	x		For frequent use in water but not SCUBA diving.

*These characteristics also apply to Polar WearLink 31 and Polar WearLink W.I.N.D. transmitters marked Water resistant 30m.

Limited International Polar Guarantee

- This guarantee does not affect the consumer's statutory rights under applicable national or state laws in force, or the consumer's rights against the dealer arising from their sales/purchase contract.
- This limited Polar international guarantee is issued by Polar Electro Inc. for consumers who have purchased this product in the USA or Canada. This limited Polar international guarantee is issued by Polar Electro Oy for consumers who have purchased this product in other countries.
- Polar Electro Oy/Polar Electro Inc. guarantees the original consumer/purchaser of this device that the product will be free from defects in material or workmanship for two (2) years from the date of purchase.
- **The receipt of the original purchase is your proof of purchase!**
- The guarantee does not cover the battery, normal wear and tear, damage due to misuse, abuse, accidents or non-compliance with the precautions; improper maintenance, commercial use, cracked, broken or scratched cases/displays, elastic strap and Polar apparel.
- The guarantee does not cover any damage/s, losses, costs or expenses, direct, indirect or incidental,

consequential or special, arising out of, or related to the product.

- Items purchased second hand are not covered by the two (2) year warranty, unless otherwise stipulated by local law.
- During the guarantee period, the product will be either repaired or replaced at any of the authorized Polar Service Centers regardless of the country of purchase.

Guarantee with respect to any product will be limited to countries where the product has been initially marketed.

CE 0537

This product is compliant with Directives 93/42/EEC and 1999/5/EC. The relevant Declaration of Conformity is available at www.support.polar.fi/declaration_of_conformity.html.



This crossed out wheeled bin marking shows that Polar products are electronic devices and are in the scope of Directive 2002/96/EC of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) and batteries and accumulators used in products are in the scope of Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and

accumulators. These products and batteries/accumulators inside Polar products should thus be disposed of separately in EU countries.

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This marking shows that the product is protected against electric shocks.

Polar Disclaimer

- The material in this manual is for informational purposes only. The products it describes are subject to change without prior notice, due to the manufacturer's continuous development program.
- Polar Electro Inc./Polar Electro Oy makes no representations or warranties with respect to this manual or with respect to the products described herein.
- Polar Electro Inc./Polar Electro Oy shall not be liable for any damages, losses, costs or expenses, direct, indirect or incidental, consequential or special, arising out of, or related to the use of this material or the products described herein.

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FR2793672, ES1047774, FI112844, EP 724859 B1, US 5628324, DE 69600098T2, FI110915. Other patents pending.

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