

## CyMotion Master Solar

M86-21950



### 1 Information available as hardcopy, direct help and on CD

Information on setup, operation and configuration can be obtained in these quick-start instructions, as direct help and as additional information for the **KeyM@n** software. Please observe the general user information and the license agreements.

The information is split up based on the following criteria:

- The quick-start instructions essentially describe connection of the device and software installation.
- The direct help is a component of the software included on the CD. It provides you with information on operation where you need it. It is called up via F1.
- Additional information on operation and configuration of the **KeyM@n** software is available on the included CD (**CD-ROM/Manuals**). You can read the desired content on the screen or print it out here.

By supplying only the most essential information as a printout, we are reducing the unnecessary use of paper and thus making our contribution towards environmental protection.

### 2 Features of the CyMotion Master Solar

The **CyMotion Master Solar** consists of the keyboard, the mouse and the wireless receiver for both devices. There are no annoying cables in the way. Depending on your workplace conditions, you can operate your PC up to approx. 2 m away from the receiver.

#### 2.1 The keyboard

In addition to the functions of a standard keyboard, this keyboard offers the following additional functions:

- integrated solar cell for charging the batteries in the keyboard
- encryption of the wireless transmission
- 5 additional keys for the operation of the Internet browser
- 5 additional keys for the operation of multimedia programs
- 4 additional keys for calling up the Windows Calculator, E-mail program, web browser and Standby key
- 4 central additional keys for volume control and multimedia program selection
- 10 unique XPress keys, positioned at the sides
- @ key
- KeyM@n key
- all mouse functions can be executed via the keyboard
- num key can be set as currency key
- period key of the keypad can be set as a comma key



#### Standby key

Older PCs do not support Standby Mode. Pressing the Standby key may cause the PC to crash.

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### Additional functions

The full range of functions is not available until the Cherry **KeyM@n** software is installed.

Using the Cherry **KeyM@n** software, you can assign other functions to the additional keys.

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## 2.2 The mouse

The following features and functions make working with the mouse efficient and comfortable:

- power-save function for long battery life
  - charge cable for charging the mouse batteries while in operation
  - resolution of 800 dpi allows precise movement
  - optical sensor which replaces the ball and eliminates the need to clean the mouse
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### Prerequisite for optimal use

Using the mouse on a bright, textured surface increases its effectiveness:

- optimum movement detection
- longer battery life

Reflective surfaces are not suitable for use with the mouse.

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## 2.3 The receiver



### Prerequisite for optimal use

Place the receiver on a non-metallic surface.

Placing the receiver on a metal surface can limit its functionality.

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## 3 Installation of the Cherry **KeyM@n** software

Install the software first and then connect the device.

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### Connection via monitor/keyboard/mouse switch box

If you connect the device via an electronic monitor/keyboard/mouse switch box, the **KeyM@n** software may not function properly.

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### 3.1 Is software for a keyboard/mouse already installed on the PC?

If software for a keyboard/mouse from Cherry or another manufacturer is already installed on the PC, it should first be uninstalled for safety purposes.

- Uninstall the software. (Usually via **Windows Start menu/Settings/Control Panel/Software.**)

### 3.2 Installing **KeyM@n** software under Windows 98/ME/2000/XP/NT 4.0 SP6

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### Current Cherry **KeyM@n** software on the Internet

The Cherry **KeyM@n** software is constantly being developed and updated. The current version can be downloaded from CHERRY via the Internet: <http://support.cherry.de>

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- 1 Place the Cherry CD in your CD-ROM drive. The CD-ROM starts automatically. The page **Installation** is opened.

- 2 If the CD-ROM does not start automatically, double-click the CD-ROM drive in Windows Explorer and then the **Start.exe** start file.

The page **Installation** is opened.

- 3 Click on the Cherry product for which you would like to install the software.

The installation begins.

- 4 Follow the installation instructions on the screen.

The Cherry **KeyM@n** software is installed.

## 4 Connecting the devices

### 4.1 Connecting the receiver to the PC via the USB connection



#### Windows NT?

**Windows NT** does not support USB. If the PC has a USB port, USB Keyboard Support or USB Legacy Mode must be set to **enabled** in the BIOS of the PC. The standard keys will now function, but the additional keys are not supported.

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- Insert the USB plug of the receiver into any USB port on your PC. You can also use the USB port of a device which is connected to the PC.

### 4.2 Connecting the receiver to the PC via the PS/2 port


- 1 Switch off the PC.
- 2 Insert the USB receiver plug into the accompanying USB-PS/2 adapter.
- 3 Insert the purple plug of the receiver at the PC into the 6-pin PS/2 socket for the keyboard, which may be purple.
- 4 Insert the USB-PS/2 adapter of the receiver at the PC into the 6-pin PS/2 socket for the mouse, which may be green.
- 5 Switch on the PC.

### 4.3 Inserting batteries into the keyboard and mouse

- 1 Open the battery compartment on the underside of the wireless keyboard/mouse.
- 2 Insert both accompanying rechargeable alkaline AA (LR6) batteries.



#### Charge level of alkaline batteries

The alkaline batteries are ready for operation right away and do not need to be charged before the initial use. When the  LED on the receiver flashes slowly, the batteries must be charged. LED green = keyboard batteries, LED red = mouse batteries.

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- 3 Close the battery compartment.

## 5 Recharging the batteries



#### Usable battery type

The charging electronics only function with rechargeable alkaline batteries (example: AccuCell AC 1800, see technical data). No other batteries can be charged in the keyboard and mouse. The batteries of the keyboard are constantly charged by the solar cells.

Rechargeable alkaline batteries have the following advantages:

- high capacity (1800 mAh)
  - minimal self-discharge
  - can be recharged at any time without the memory effect
  - rechargeable several hundred times
  - high output voltage (1.5 V)
  - environmentally friendly due to less waste
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## 5.1 Connecting the charging cable to the PC



### Charging cable

Use only the accompanying charging cable.


- 1 Switch off the PC.  
If the PS/2 port of the PC is occupied by the receiver: Insert the PS/2 plug of the receiver into the PS/2 port of the charging cable. The data is then transferred via the charging cable.
- 2 Insert the charging cable PS/2 plug into a PS/2 port on the PC.
- 3 Switch on the PC.

## 5.2 Charging the mouse batteries

- ▶ Insert the hollow connector of the charging cable into the socket on the front of the mouse. It does not matter whether the PC is switched on or off.  
The mouse is charged as long as the PC is switched on. You can continue working while charging is taking place.



### Tips for charging the alkaline batteries

- Charge the alkaline batteries in the mouse as soon as the  LED on the receiver flashes red. A total discharge can damage the inner structure and chemical components of the alkaline batteries.
- A complete charge of the alkaline batteries lasts 12 to 18 hours. The charging circuit prevents overcharging. As the rechargeable alkaline batteries do not exhibit the so-called memory effect, the charging procedure can be interrupted several times.
- The PC must be switched on to charge the alkaline batteries.
- The charging cable can remain connected to the PC even if the mouse is not being charged.

## 6 Using the power-save function of the mouse

The power-save function switches the mouse to power-save mode after 15 minutes of non-use.

- In sleep mode, the surface on which the mouse is used is scanned only once per second. Moving the mouse or pressing a button exits sleep mode. Sleep mode is preset.
- The mouse switches off in deep-sleep mode. The battery life is notably lengthened by this. Pressing a mouse button switches it back on. Deep-sleep mode must be activated manually.

### 6.1 Activating deep-sleep mode

- 1 Remove the batteries from the mouse.
- 2 Keep the left and right mouse buttons pressed simultaneously and reinsert the batteries.

The setting is confirmed by 10 flashes of the optical sensor of the mouse.



### Automatic deactivation of deep-sleep mode




When you remove the batteries from the mouse, deep-sleep mode is deactivated and the mouse returns to sleep mode. For this reason, the deep-sleep mode must be reactivated each time after the batteries are removed.

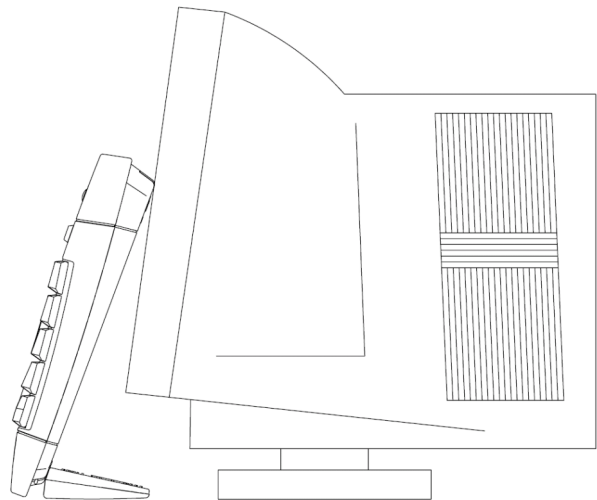
## 7 Setting channels

The channels of the keyboard and the mouse are selected at random from 4,095 channels. The channels of the keyboard and mouse must be selected together.

Channel setting is necessary in the following cases:

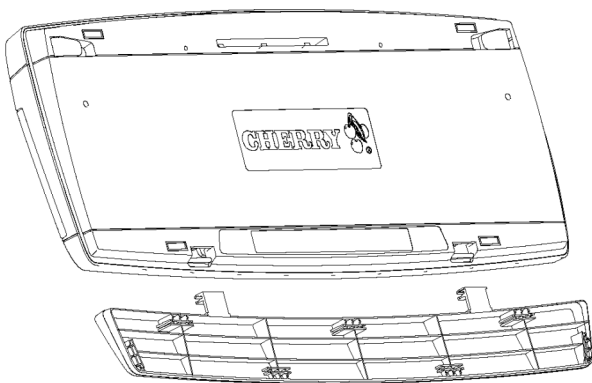
- battery change
- malfunctions during operation of several devices in the 27 MHz frequency range

- 1 Bring the keyboard and mouse into range of the receiver, max. 2 m.
- 2 Press the **CONNECT** button on the top of the receiver until the  LED quickly flashes green and red.
- 3 Press the **CONNECT** button on the bottom of the keyboard on the cover of the battery compartment until the  LED quickly flashes red.  
A new channel is saved in the keyboard and receiver.
- 4 Press the **CONNECT** button on the bottom of the mouse until the  LED goes out.  
A new channel is saved in the mouse and receiver.

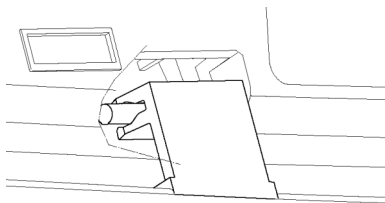


The palm rest can be folded back like a hinge. You can lean the keyboard in this storage position.

## 8 Installing the palm rest



- 1 Turn the keyboard and the palm rest so that the bottoms point upward.



- 2 Press both clips of the palm rest onto the round receivers in the cutouts of the keyboard.



### Damage to the palm rest and keyboard

Do not let the keyboard stand freely, but rather lean it up against something else. Example: a monitor.

Do not use or press the keyboard while it is in the storage position.

## 9 Mounting mouse design covers

- Press the cover into the cut-outs with the pins straight.

## 10 Wireless keyboard (G86-21950)

Designation	Value
Keyboard type	104/105 key keyboard with 29 additional keys
Battery type (power supply)	2 rechargeable alkaline batteries, type AA (LR6)
Supply voltage	2.0 to 3.3 V SELV

Designation	Value
Transmit frequency	27.145 MHz
Channels	4095
Transmission output	-4 dBm
Storage temperature range	-20 °C to +60 °C
Operating temperature range	0 °C to +50 °C
Weight	approx. 1,190 g (with palm rest: approx. 1,280 g)
Dimensions (L x W x H)	495 x 195 x 37 mm (with palm rest: 495 x 245 x 37 mm)

## 11 Wireless mouse (F-8900)

Designation	Value
Mouse type	optical 2-button wheel mouse, charging cable
Resolution	800 dpi
Battery type (power supply)	2 rechargeable alkaline batteries, type AA (LR6)
Supply voltage	2.2 to 3.3 V SELV
Operating duration with charged batteries	approx. 3 months of normal use in an office setting
Transmit frequency	27.045 MHz
Channels	255
Transmission output	-6 dBm
Storage temperature range	-20 °C to +60 °C
Operating temperature range	0 °C to +50 °C
Dimensions (L x W x H)	127 x 72 x 36 mm

## 12 Wireless receiver (R-8900)

Designation	Value
Interfaces	USB port for simultaneous operation of keyboard and mouse. For PCs with no USB port: PS/2 port for operation of the keyboard and USB-PS/2 adapter for operation of the mouse
Receive frequency	Keyboard: 27.145 MHz, Mouse: 27.045 MHz
Channels	Keyboard: 4,095, Mouse: 255
Sensitivity	-70 dBm
Storage temperature range	-20 °C to +60 °C
Operating temperature range	0 °C to +50 °C
Dimensions (L x W x H)	130 x 48 x 31 mm

## 13 Support

To help you with any problems you may encounter in the installation of the keyboard or the software, we provide you with a free support service.

Cherry Support can be contacted at <http://support.cherry.de>. There you can submit your questions to us directly around the clock and seven days a week.

If you do not have an Internet connection, please contact us at the following address:

Cherry GmbH  
Cherrystraße  
D-91275 Auerbach  
Germany  
Hotline:  
Tel.: +49(0)9643-18-206  
Fax: +49(0)9643-18-1545

We are available to help you Monday to Thursday from 7:15 a.m. to 4:00 p.m. and Friday from 7:15 p.m. to 1:30 p.m. (GMT + 1 h).

## 14 General advice

Cherry continuously optimizes products as new technologies are developed. For this reason we reserve the right to make technical alterations. The evaluation of product reliability and the definition of the product's technical performance are carried out according to Cherry's own requirements in order to meet internationally recognized regulations and standards. Requirements in addition to these can be met through mutual cooperation. Improper usage, handling, storage and external influences could lead to faults and defects during use.

We do not accept warranty for defects caused by alterations to our product by the user and shall not be held liable for unauthorized modifications. All repairs must be made by Cherry or an officially appointed organization or persons. There is a danger of explosion if the optional lithium battery is not exchanged in the correct manner! Possible compensation claims against Cherry or its nominated officers – whatever the legal justification including physical or stress related injuries – are excluded. Exceptions to this exist in the case of intent or gross negligence on the part of Cherry, infringements of Product Liability Law or in cases of injury, bodily harm or risk to health. These operating instructions only apply to the accompanying product.

Full details can be obtained from your local Cherry dealer or direct from Cherry GmbH.

## 15 Certification

### 15.1 Federal Communications Commission (FCC) Radio Frequency Interface Statement

Information to the user: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency

energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorientate or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Unauthorized changes or modifications could void the authority to operate the equipment.

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.
- This device must accept any interference received, including interference that may cause undesired operation.

### 15.2 Canadian Radio Interference Regulations

Notice of CSA C 108.8 (DOC Jan. 1989)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.



**CE - Declaration of Conformity  
to the Essential Requirements of the R&TTE- Directive 1999/5/EEC**

**CE - Konformitätserklärung  
über die grundlegenden Anforderungen der R&TTE- Richtlinie 1999/5/EWG**

We, Cherry GmbH, declare under our sole response that the products  
*Wir, Cherry GmbH, erklären eigenverantwortlich, daß die Produkte*

Brand Name	Product Name	Model Name Keyboard	Model Name Mouse	Model Name Receiver
Cherry	CyMotion Master Solar	219XX	F-89XX	R-87XX
Cherry	CyMotion Master Plus9 wireless	217XX	F-87XX	R-87XX

are in conformity with the R&TTE Directive 99/5/ EEC.

This declaration is based on the full compliance of the products with the following European Standards:

*mit den Anforderungen der R&TTE- Richtlinie 99/5/ EWG übereinstimmen.*

*Diese Erklärung basiert auf der Übereinstimmung der Produkte mit folgenden Europäischen Normen:*

RF: EN 300 220 - 3 V 1.1.1 (2000-09)  
EMC: EN 301 489 - 1 V 1.4.1 (2002-08)  
EN 301 489 - 3 V 1.4.1 (2002-08)  
EN 55022 (1998)  
EN 55024 (1998)  
Safty : EN 60950 -1 (2001)

Approved for the use in the following countries of EU and EFTA:

EU: Belgium, Denmark, Germany, Finland, France, Greece, Great Britain, Ireland, Italy, Luxemburg, Netherlands, Austria, Portugal, Spain, Sweden

EFTA: Iceland, Lichtenstein, Norway, Switzerland

*Für den Betrieb in folgenden EU- und EFTA- Ländern zugelassen:*

*EU: Belgien, Dänemark, Deutschland, Finnland, Frankreich, Griechenland, Großbritannien, Irland, Italien, Luxemburg, Niederlande, Österreich, Portugal, Spanien, Schweden*

*EFTA: Island, Lichtenstein, Norwegen, Schweiz*

28-08-2003

Date / Datum

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