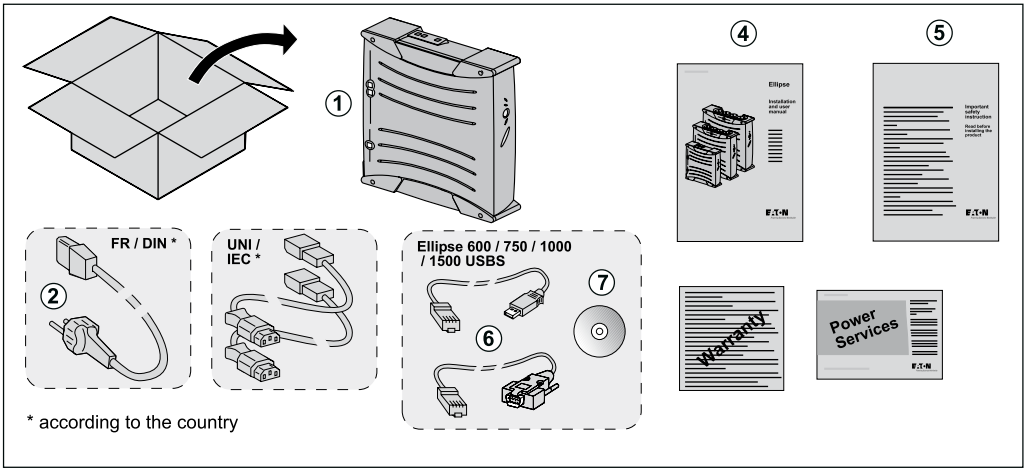
# Ellipse
375/600/750/
1000/1500/XL

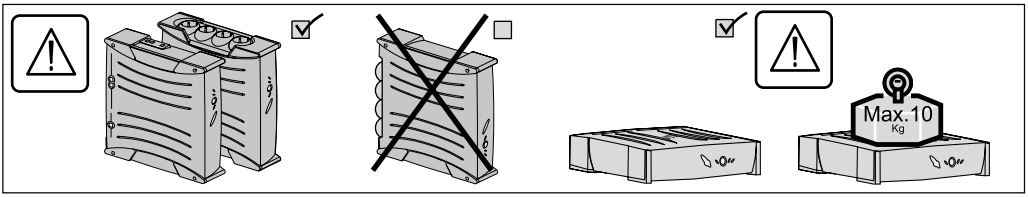
## Installation and user manual

English

## Pulsar Series

Powering Business Worldwide




Caution!

◗ Before installing the **Ellipse**, read the booklet (4) containing the safety instructions to be respected. Then follow the instructions given in this manual (5).

◗ Avant l'installation de **Ellipse**, lire le livret (4) qui présente les consignes de sécurité à respecter. Suivre ensuite les instructions du présent manuel (5).

◗ Vor Installation des **Ellipse** die im Heft (4) genannten Sicherheitsvorschriften lesen. Anschließend die Anweisungen im vorliegenden Handbuch (5) befolgen.

◗ Prima dell'installazione del **Ellipse**, leggere attentamente le istruzioni di sicurezza riportate sul libretto (4). In seguito, attenersi alle istruzioni riportate sul presente manuale (5).

◗ Antes de la instalación del **Ellipse**, lea el manual (4) que presenta las instrucciones de seguridad a cumplir. A continuación, siga las instrucciones del este manual (5).

◗ Lees voordat u het **Ellipse** gaat installeren eerst de veiligheidsinstructies in boekje (4). Volg daarna de instructies van deze handleiding (5).

◗ Antes da instalação do **Ellipse**, ler o caderno (4) onde constam as instruções de segurança a respeitar. Depois, seguir as instruções do presente manual (5).

◗ Πριν την εγκατάσταση του Ellipse, διαβάστε το φυλλάδιο (4) με τις συβουλές ασφαλείας που πρέπει να τηρείτε.
Στη συνέχεια, ακολουθήστε τις οδηγίες χρήσης αυτού του φυλλαδίου(5).

◗ Przed zainstalowaniem **Ellipse**, należy przeczytać instrukcję (4), która zawiera niezbędne zalecenia bezpieczeństwa.
Następnie należy zapoznać się z zaleceniami zawartymi w niniejszej instrukcji (5).

◗ Před instalací zdroje Ellipse si prostudujte příručku (4), kde najdete bezpečnostní předpisy, které je třeba dodržovat. Dále postupujte podle pokynů uvedených v příručce (5).

◗ Pred inštaláciou výpustky si prečítajte knižku (4), v ktorej sú uvedené bezpečnostné príkazy, ktoré je potrebné dodržať. Potom postupujte podľa pokynov tejto príručky (5).

◗ Preden instalirate Ellipse, preberite knjižico (4), v kateri so varnostna navodila, ki jih je treba upoštevati. Nato sledite navodilom tega priročnika (5).

◗ Az Ellipse telepítése előtt olvassa el a (4)-es könyvet, mely a betartandó biztonsági előírásokat tartalmazza. Ezután kövesse a jelen,(5)-ös kézikönyv utasításait.

Ellipse'in tesisatını yapmadan önce, uyulacak güvenlik talimatlarını gösteren (4) sayılı kitapçığı okuyunuz. Daha sonra işbu (5) sayılı el kitabındaki talimatlara uyunuz.

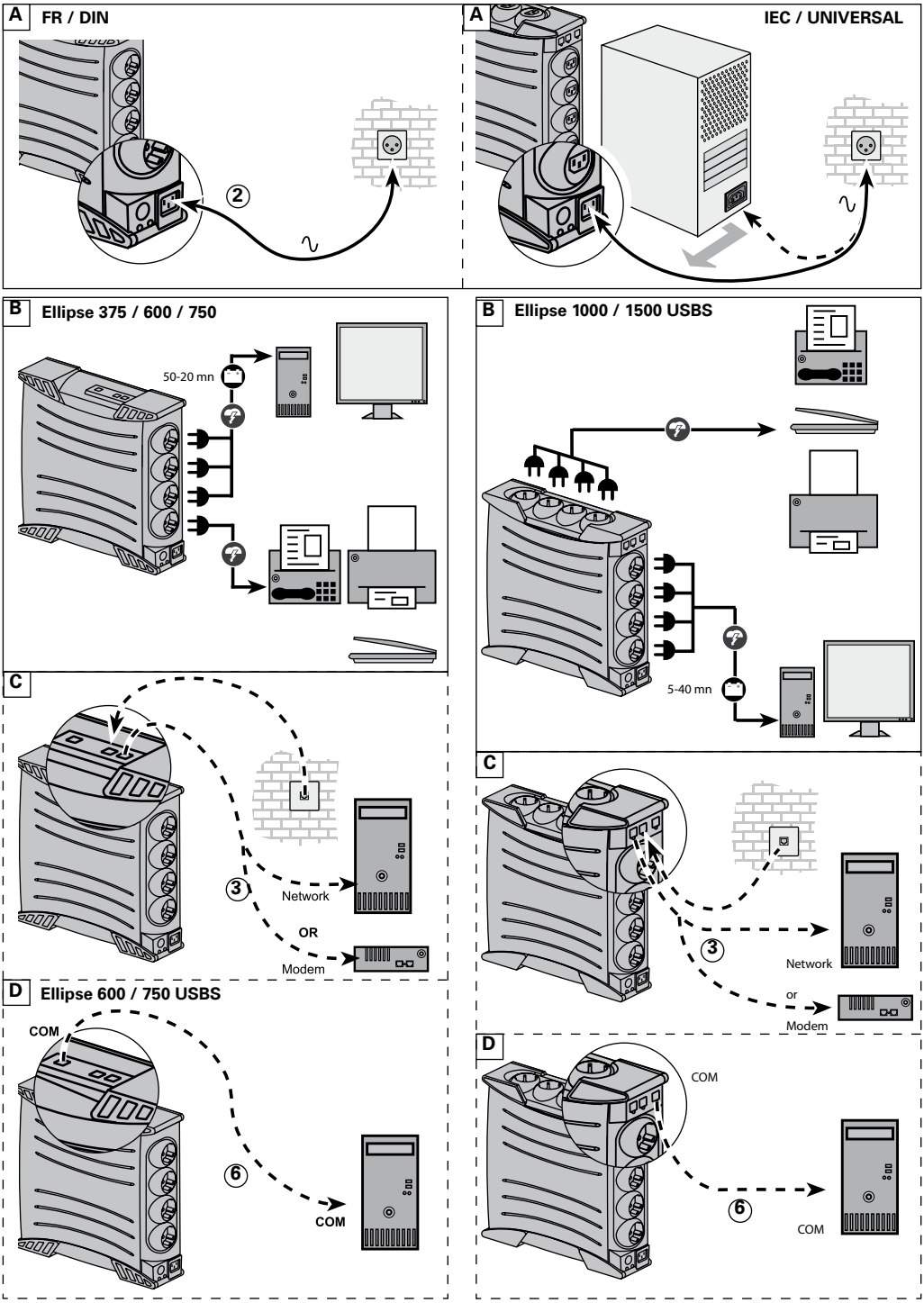
◗ Перед установкой **Источника Бесперебойного Питания (ASI)** прочитайте инструкцию (4) с правилами по технике безопасности, которые необходимо соблюдать. Затем следуйте указаниям настоящего руководства (5).

安装Ellipse之前，请阅读手册④，该手册介绍须遵守的安全指令。然后按照本手册⑤的指示操作。

**تحذير!**

قبل تركيب جهاز Ellipse يجب الرجوع للكتيب (4) الذي يشتمل على إرشادات الأمان التي يجب التقيد بها، ثم اتبع التعليمات الموجودة في هذا الدليل (5) .

## Quick start


A
FR / DIN
2
A
IEC / UNIVERSAL
B
Ellipse 375 / 600 / 750
50-20 mn
B
Ellipse 1000 / 1500 USBS
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C
3
Network
OR
Modem
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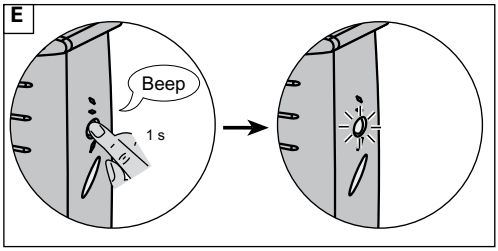
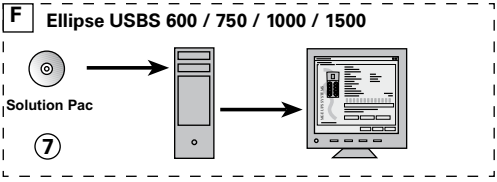
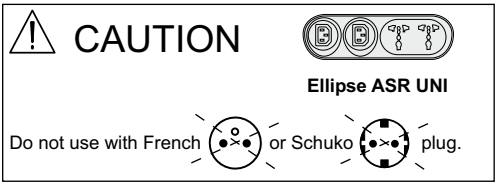
## Quick start





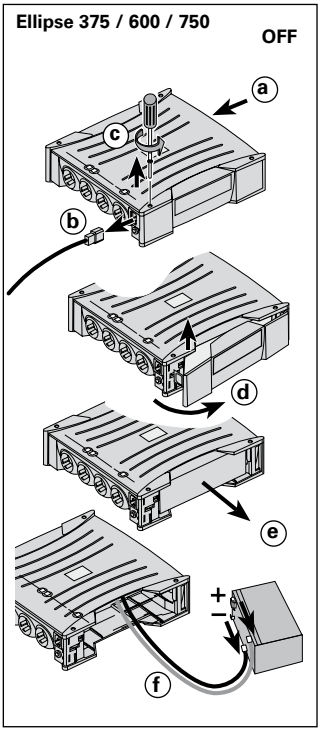
Product representations not legally binding.

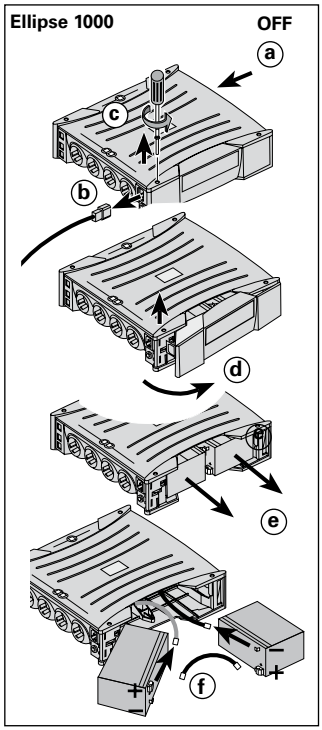


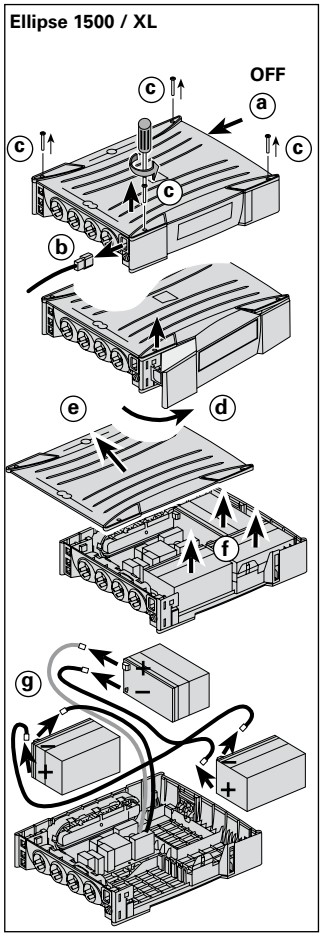




(FR) Ne pas utiliser avec les prises Françaises ou Schuko.
(DE) Nicht mit Französishem oder Schuko Stecker betreiben.
(IT) Non usare con prese Francesi o Schuko.
(ES) No usar con tomas Francesas ó Shucko.
(PT) Não utilizar com tomadas do tipo Francês ou Schuko.

## Battery change




**◗ Warning: take care not to inverse the polarity + (red) and - (black) when connecting the batteries as this will destroy the device.**

**◗ Attention : lors du raccordement des batteries, une inversion des polarités + (rouge) et - (noir) provoque la destruction de l'appareil.**

## Technical characteristics

| Ellipse: | 375 | 600 | 750 | 1000 | 1500 | XL |
|---|---|---|---|---|---|---|
| ◗ **UPS** power | 375 VA / 225 W | 600 VA / 360 W | 750 VA / 450 W | 1000 VA / 600 W | 1500 VA / 900 W | 420 VA / 250 W |
| ◗ Nominal input voltage | 184 V - 264 V, adjustable to 161 V - 284 V | | | | | |
| ◗ Input frequency | 50/60 Hz (46 - 70 Hz working range) | | | | | |
| ◗ Voltage/frequency of battery backup outlets (9) in battery mode | 220 V / 230 V / 240 V ± 7% (50/60 Hz ± 1 Hz) with pseudosinusoidal wave | | | | | |
| ◗ Total output current for all outlets | 10 A max | | | | | |
| ◗ Output current of battery backup outlets (9) | 1.6 A max | 2.6 A max | 3.5 A max | 4.4 A max | 6.5 A max | 1.8 A max |
| ◗ Leakage current | 0.06 mA | | | | | |
| ◗ Input protection | 10 A resettable circuit breaker | | | | | |
| ◗ Transfer time | 5 ms typical | | | | | |
| ◗ Telephone surge protection | Tel, ISDN, ADSL, Ethernet | | | | | N/A |
| ◗ Sealed lead-acid battery | 12 V, 7 Ah | | 12 V, 9 Ah | 2x12V, 7Ah | 3x12V, 7Ah | |
| ◗ Automatic battery test | Once a week | | | | | |
| ◗ Average battery life | 4 years typical, depending on number of discharge cycles and temperature | | | | | |
| ◗ Operating temperature | 0 to 35°C | | | | | |
| ◗ Storage temperature | -25°C to +55°C | | | | | |
| ◗ Operating relative humidity | 0 to 85% | | | | | |
| ◗ Operating elevation | 0 to 3000 m | | | | | |
| ◗ Safety standards | IEC 60950-1, IEC 62040-1-1, CE certified | | | | | |
| ◗ Electromagnetic compatibility standards | IEC 62040-2, C1* | | | | | |
| ◗ Warranty | 2 years | | | | | |
| ◗ Dimensions (mm) | 264 x 81 x 268 | | | 305x81x313 | 316x81x388 | |
| ◗ Weigth (Kg) | 4.2 | | | 8 | 12 | |

**(*) Warning:** Ellipse 1500 FR/DIN/UNI and Ellipse XL are class C2-UPS product. In a domestic environment, these products may cause radio interference, in which case, the user may be required to take additional measures.

## Performances tested according to IEC 61643-1 (class 3) standard for 8/20 µs surge wave

| AC input source protection, Ellipse: | 375 | 600 | 750 | 1000 | 1500 | XL |
|---|---|---|---|---|---|---|
| ◗ Uoc (common mode / differential mode) | 6kV/2kV | 6kV/2kV | 6kV/2kV | 6kV/1.8kV | 6kV/2.6kV | 6kV/2.6kV |
| ◗ Up (common mode / differential mode) | 2kV/1.2kV | 2kV/1.2kV | 2kV/1.2kV | 1.6kV/1.2kV | 1.7kV/1.1kV | 1.7kV/1.1kV |
| ◗ In | 2.5 kA | | | | | |
| ◗ Imax | 8 kA | | | | | |
| **Dielectric isolation** | | | | | | |
| ◗ AC Ground | 2500 Vac, 50 Hz | | | | | |
| ◗ AC /TEL | 3000 Vac, 50 Hz | | | | | |
| ◗ AC + Ground / Screw | 4000 Vac, 50 Hz | | | | | |
| ◗ Tel / Ground | 1000 Vac, 50 Hz | | | | | |
| **Temporary overvoltage (TOV)** | | | | | | |
| ◗ Uc | 250 Vac | | | | | |
| ◗ Ut | 400 Vac | | | | | |
| ◗ TOV | 1450 Vac | | | | | |
| **Load-side surge withstand capability** | | | | | | |
| ◗ Uoc | 6.6 kV | | | | | |
| ◗ Up | 1.5 kV | | | | | |
| ◗ In | 2.5 kA | | | | | |
| **Energy dissipation** | 525 Joules | | | | | |

## Operating conditions

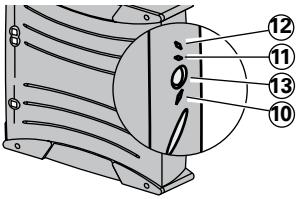
◗This product is an **U**ninterruptible **P**ower **S**upply (**UPS**) for computers and their peripherals, television sets, stereo systems and video recorders... It must not be used to supply other electrical equipment (lighting, heating, household appliances, etc.).
◗ **UPS** can be installed in horizontal, vertical position, or placed in Rack 2U (optional kit).

## UPS connections

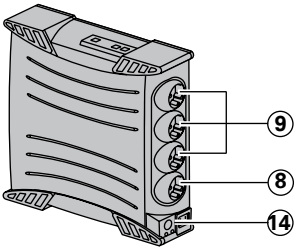
◗ Connect the **UPS** ① to the AC-power system via a wall outlet with an earth connector, using the supplied cord ② for a UPS with FR/DIN sockets or with the supply cord of your computer for a UPS with IEC/UNIVERSAL sockets (see figure A).
◗ Plug critical equipment (computer, monitor, modem, etc.) into the outlets ⑨ providing battery backup power and surge protection (see figure B), taking care not to exceed the rated current indicated in amperes.
◗ Other devices (printer, scanner, fax, etc.) can be connect to the filtered outlets ⑧ that provide surge protection (see figure B). The filtered outlets are not backed up by battery power in the event of a power outage.
◗ **Optional Internet modem / Network connection**:
A modem or Ethernet data line can be protected against surges by connecting it via the **UPS**. Connect the existing device cable between the wall outlet and the **UPS**, and use a similar cable between the **UPS** and the device, as indicated in figure C (cable ③ not supplied).
◗ **Optional COM connection**:
The **UPS** devices with communication (COM) sockets can be connected to the computer using the special USB or serial cable ⑥ supplied.
The software available on the CD-ROM ⑦ (or downloadable from the www.eaton.com site) can be configured to monitor the UPS and the supply of power to the computer (see figures D and F).
◗ Follow the indicated procedure.
◗ At the same time, register for the warranty on the www.eaton.com site (see figure G).

## Operation

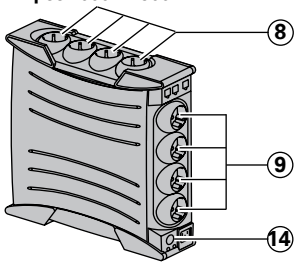
⑧: Filtered outlets.
⑨: Battery backup outlets.
⑩: LED ON indicate that surge protection is active on all outlets.
⑪: LED ON indicate a **UPS** fault.
⑫: LED ON indicate an overload on the battery backup outlets.
⑬: ON/OFF button for the battery backup outlets.
⑭: Protection circuit breaker.




**Ellipse 375 / 600 / 750**




**Ellipse 1000 / 1500 / XL**




◗ **Battery charge:** The **UPS** charges the battery as soon as it is connected to the AC outlet, whether button ⑬ is pressed or not. When used for the first time, the battery will only provide its maximum autonomy after it has been charged for 8 hours. It is recommended that the **UPS** be permanently connected to the AC power supply to ensure the best possible autonomy.
◗ **Switching-on the UPS**: press button ⑬ for about 1 second.
◗ **Filtered outlets ⑧ without battery backup:** Equipment connected to these outlets is supplied as soon as the AC cord ② is plugged in. They are not affected by button ⑬.
◗ **Battery backup outlets ⑨**: Equipment connected to these outlets is supplied as soon as button ⑬ turns green (see figure E). These outlets can be turned on even if the **UPS** is not connected to AC power (button ⑬ flashes).
◗ **AC-power disturbance:** If AC power is disturbed or fails, the **UPS** continues to operate on battery power. Button ⑬ flashes green. In normal mode, the audio alarm beeps every ten seconds, then every three seconds when the end of battery backup time is near. In silent mode (see the section on settings), the audio alarm simply beeps once when the **UPS** transfers to battery power.
◗ If the power outage lasts longer than the battery backup time, the **UPS** shuts down and automatically restarts when power is restored. Following a complete discharge, a few hours are required to recharge the battery back to full backup time.
◗To save battery power, it is possible to press button ⑬ to cut the supply of power to the devices connected to the battery backup outlets.
◗ **Lightning protection:** All outlets, whether backed up or simply filtered, include surge protection, whatever the position of button ⑬.
◗ **Shutdown of the battery backup outlets ⑨**: Press button ⑬ for more than two seconds.

## Battery disposal and safety

◗ **Caution**. Battery service life is reduced by 50% for every ten degrees above 25°C.
◗ **The battery elements must be replaced exclusively by qualified personnel (risk of electrocution)**, with new elements approved by EATON to ensure correct operation of the **UPS**.
◗The battery must be disposed of in accordance with applicable regulations. To remove the battery elements, shut down the **UPS** (button ⑬ OFF), remove the power cord and proceed as indicated in page 4 "Battery change".
◗ **Warning: take care not to inverse the polarity + (red) and - (black) when connecting the batteries as this will destroy the device.**

## Troubleshooting (For further information, visit the www.eaton.com site or contact after-sales support.)

| | Problem | Diagnostic | Solution |
|---|---|---|---|
| 1 | ◗The battery backup outlets (9) are not supplied with power. | ◗ Button (13) is not lighted on. | ◗ Press button (13) and check that it turns green. |
| 2 | ◗The connected devices are not supplied when AC power fails. | ◗The devices are not connected to the battery backup outlets (9). | ◗ Connect the devices to the battery backup outlets (9). |
| 3 | ◗ AC power is available, but the **UPS** operates on battery power. | ◗ Circuit breaker (14), located under the **UPS**, has been tripped by an overload on the **UPS** output. | ◗ Disconnect excess equipment and reset the circuit breaker (14) by pressing the corresponding button. |
| 4 | ◗The filtered outlets (8) are not supplied. | ◗The wall outlet is not supplied.<br>◗ Circuit breaker (14), located under the **UPS**, has been tripped by an overload on the **UPS** output. | ◗ Supply power to the wall outlet.<br>◗ Disconnect excess equipment and reset the circuit breaker (14) by pressing the corresponding button. |
| 5 | ◗ Green button (13) flashes frequently and audio alarm beeps. | ◗The **UPS** frequently operates on battery power because the AC power source is of poor quality. | ◗ Have the electrical installation checked by a professional or use another wall outlet. |
| 6 | ◗ Red LED (12) is on and the audio alarm beeps every 30 seconds. | ◗The **UPS** battery backup outlets (9) are overloaded. | ◗ Disconnect excess equipment connected to the battery backup outlets (9). |
| 7 | ◗ Red LED (11) is on and the audio alarm beeps every 30 seconds. | ◗ A fault has occurred on the **UPS**. The battery backup outlets (9) are no longer supplied. | ◗ Call after-sales support. |
| 8 | ◗ Green LED (10) is off and the filtered outlets (8) are supplied. | ◗ Surge protection is no longer provided. | ◗ Call after-sales support. |
| 9 | ◗The telephone line is disturbed or modem access is not possible. | ◗ Surge protection on the telephone line is no longer provided. | ◗ Disconnect the telephone line from the wall outlet.<br>◗ Call after-sales support. |
| 10 | ◗ Red LED (11) flashes. | ◗The battery has reached the end of its service life. | ◗ Have the battery replaced. |

## Advanced customizing of your UPS:

### Sensitivity to variations of the AC power supply

◗ **Only to be used** if frequent switching to the **UPS** battery due to large variations in the AC supply voltage.

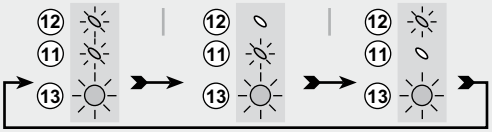
◗ Accessing the programming mode: with the device switched off, press button (13) for 6 s and release it once LEDs (11) (12) (13) have come on.

◗ Display of the 3 possible voltage ranges according to the status of LEDs (11) and (12):

**Normal mode (factory configuration):** AC supply between 184V and 264V

**Low range mode:** AC supply between **161V** and 264V

**Low and high range mode:** AC supply between **161V** and **284V**




Change from one mode to another by successively pressing button (13) while the sound is audible.

◗ Memorizing the mode: 10 s after the last press of the button.

### Audio alarm

◗ Possibility of deactivating the audio alarm when the **UPS** is operating on the battery.

◗ Accessing the programming mode: with the device switched off, press button (13) for 11 s and release it when the audio alarm sounds.

◗ Display of the 2 possible audio alarm modes:

**Normal mode (factory configuration):** the **UPS** emits a beep every 10 s when operating on its battery.

**Silent mode:** the **UPS** emits a single beep when switching to battery operation and then remains silent.

**Normal mode activated:** programming by continuous beep.

**Silent mode activated:** programming by a beep every second.

Change from one mode to another by successively pressing button (13) while the sound is audible.

◗ Memorizing the mode: 5 s after the last press of the button.

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