

# PORTY Power Pack

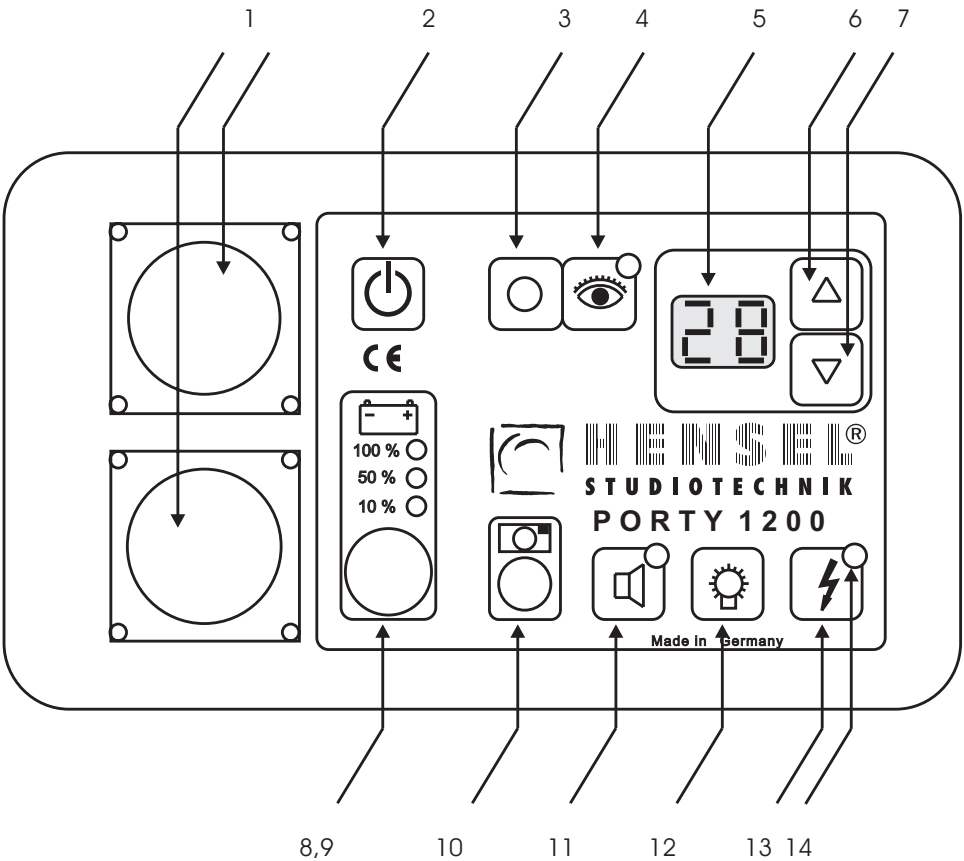
## 1200 B

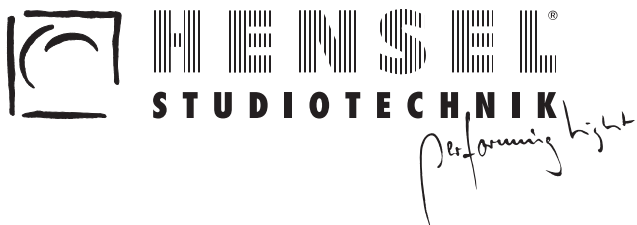


### user manual

PORTY 1200 B Power Pack

Code No. 495  
Front Panel





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# 1 Introduction

Dear Photographer,

in buying a HENSEL flash system, you have purchased powerful equipment of high quality.

So that you are able to successfully and productively work with this system for many years, we are giving you some advice on the use of this high tech product. Only by observance of the information given you secure your warranty, prevent damage and prolong the life of the equipment.

HENSEL Studiotechnik has taken great care to manufacture a secure and high quality flash system under inclusion and observance of all current regulations. Strict quality controls secure our quality requirements even in mass production. Please take your part in this and treat the equipment with due care - your reward will consist of excellent pictures.

If you should have any questions on the use, then feel free to ask us at any time.

We wish you success and „good light“.  
HENSEL Studiotechnik

User Manual –Date of Revision: 2003-11

Technical data are subject to change. No guarantee for misprints. The listed values are guide values and should not be understood as binding in a legal sense. The values can differ due to tolerances in used components.

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### 3 General safety regulations

Power packs store electrical energy in capacitors by applying high voltages. These form a source of danger, which must be carefully excluded.

Besides general rules on handling electrical appliances, the following safety measures must be observed. Therefore read and comply the safety hints (also see the paragraph *Starting up*) within the user manual before turning the appliance on.

#### Proper use

The present power pack is meant for studio use of professional photographers. Its task is to provide electrical energy for certain fixed types of HENSEL flash lamps.

#### Improper use

The appliance may not be used for any other purpose than that described above, especially not for other electrical appliances.

**Contact with the capacitor voltage is perilous, and therefore opening of the case of PORTY power pack and repairs may only be made by authorized customer service.**

- Flashtubes must only be exchanged by authorized trained personal. Exchange of flashtube and modeling lamp must only be performed with the appliance turned off, unplugged from the mains and discharged.
- Only lamp connectors with immaculate contacts must be used, burned or corroded contacts may cause explosions in the area of connectors and lamp sockets.
- Do not route cables across the studio floor if possible, so that damage is excluded. If routing across the studio floor cannot be omitted, then it must be ensured that vehicles, ladders, etc do not damage cables. Damaged cables and cases must be immediately replaced by customer service.
- Ventilation slots of power packs must be kept free during operation and sufficient air supply must be ensured. Do not stick any objects into ventilation slots, lamp sockets or synchronization sockets.  
Do not deposit any objects (tools, coffee cups, etc.) on the power pack.
- Flash systems must not be used in environments with explosion hazard. Flammable materials, like furnishing fabrics, paper, etc. must not be stored in the immediate vicinity of generators and flash lamps to prevent fire hazards.



- PORTY power pack, charging units and connected lamp heads must be protected against humidity and spray water.
- Do not connect accessories from other manufacturers, even if they use the same or similar connectors.
- Power packs - hanging from pantographs or ceiling - must be doubly secured against falling down.
- Do not flash into eyes at short distances (smaller than 5 m), because this can lead to eye damage. Do not look directly into the flash reflector; the flash lamp could be triggered inadvertently.
- Regularly air closed rooms to prevent build-up of inadmissible ozone concentrations, which can occur due to the use of high-powered flash systems.
- During work in the studio generating much dust, the appliance must be covered with suitable dust protection (not during operation).

## 4 Description

PORTY power pack has 1200 J stored energy digitally adjustable in 1/10 steps over a range of 6 f-stops. Power distribution is symmetrical over the two flash sockets.

Especially for PORTY are available: PORTY EHT 1200 and PORTY EHT 1200 TWIN flash heads (Code No. 4991 and 4995, respectively) and PORTY Ringflash RF 120P (Code No. 341) for connection to the flash sockets. It is also possible to connect additional flash heads from the HENSEL product range (*but note: no ability of modeling lamp*) using a special adapter cable (Code No. 578).

About 100 flashes (100% power) and 3400 flashes (1/32 power), respectively, are provided by the supplied battery pack (modeling lamp turned OFF).

The battery pack can be charged using the charging unit „Quick“ (Code No. 5670, 4 different mains adapter included). Charging time is about 2-3 hours. PORTY battery pack can be charged both, inside the power pack unit and outside the PORTY housing.

For mains operation a Power Supply Unit (Code No. 3496) is available.

Flashes can be triggered by a special synchronization cable (Code No. 498) or by the built-in slave.



## 5 Standard delivery

PORTY power pack supplied with:

- 1 PORTY 1200 B power pack, Code No. 495
- 1 Battery pack drawer
  - Battery pack 12V/7Ah included, Code No. 1496
- 1 PORTY special synchronization cable, Code No. 498

## 6 Technical Data\*

Model series / Model type		PORTY Power Pack 1200 B	
Stored energy:		1200 J	
Aperture 100 ASA, t 1/60, 2 m distance, MaxiSoftRef.	100% power:	f 64,2	
	1/32 power:	f 11,2	
Flash duration in sec. t 0.1 (0.5), 100 % output adjustment, 1 (2*) PORTY 1200B	1 PORTY EHT 1200:	1/250	(1/850)
	2 PORTY EHT 1200:	1/560	(1/1500)
	1 PORTY EHT TWIN:	1/600	(1/1900)
	1 PORTY EHT TWIN*:	1/400	(1/1200)
No. of flashes per battery pack charge **	100% power:	100	
	1/32 power:	3400	
Charging time in sec.	to 100% power:	5,8	
	to 1/32 power:	0,8	
Power	Adjustment:	in 1/10 f steps 6 f adjustable symmetrical	
	Distribution:		
	No. of flash sockets:	2	
Modeling lamp max:		50W / 12V Halogen	
Specification of battery pack:		12V/7Ah, rechargeable, no Memory effect	
Charging unit / time (h)	Quick:	2 - 3	
Fuses	Battery pack:	30 AM	
	Modeling lamp:	10 AM	
	Charge:	6,3 AM	
Weight (kg):		7	
Measurements of the housing in cm (LxWxH):		21 x 12,4 x 27	
Code No.:		495	

\*: Technical changes reserved.

\*\*: Modeling light OFF.

## 7 Overview of controls

- 1 Flash sockets 1 and 2
- 2 Main switch ON / OFF
- 3 Slave
- 4 Slave ON / OFF  
*Flash power / automatic shut-off*
- 5 Digital display
- 6 Increase button
- 7 Decrease button
- 8 Charging socket
- 9 Charging LED indicator  
100% (green), 50% (yellow), 10% (red)
- 10 Synchronization socket
- 11 AUDIO ON / OFF  
Acoustical signal for flash readiness  
and automatic shut-off
- 12 Modeling lamp
- 13 Manual flash release
- 14 Display for flash readiness (Ready Indicator)

### Fuses

#### Bottom of the housing:

Fuse *modeling lamp* ..... 10 AM

Fuse *internal charging* ..... 6,3 AM

#### Battery Pack Drawer:

Main Fuse ..... 30 AM

Fuse *external charging* ..... 6,3 AM

## 8 Starting up

### ***Safety hints for operation with connected flash heads***

To avoid damage to the flashtube mount reflectors and lightformers (softboxes etc.) before use and turning on the unit. Do not move power packs and lamp heads around, while they are operating. Turn off the appliance for each change of reflectors or to move the unit to another location.

Caution:

Reflectors, speedrings and other accessories heat up during longer operation. To avoid injuries, handle with isolating cloth or wait, till parts cooled down.

**A damaged flashtube is extremely dangerous because the electrically charged electrodes are exposed and could be touched.**

**In case of a damaged flashtube, the flash head has to be unplugged from the generator immediately and sent to an authorized HENSEL service department. Do not only turn off the flash head, because the capacitors inside the generator may be still charged and dangerous high voltage can be still present at the damaged flashtube electrodes.**

**For replacement of flashtubes please consult your local HENSEL agency.**



Assembly

When mounting to a ceiling system or a pantograph, suspended flash heads have to be doubly secured from falling down or dropping. This is done by tightening the safety screw at the HENSEL tilting head or U-bracket. Due to the existing safety regulations, it is, however, necessary to use a safety rope (Code No. 769) for further security.

The safety rope has to be led through the handle or the U-bracket of the flash head and then secured by looping through the bracket of the pantograph or the eyelet of the carriage.

Heating

Due to the modeling and flash light, each generator and flash head emits heat. This can heat up the parts of the unit to a dangerous level. Therefore make sure, that generators and lamp heads are located far enough from inflammable props to avoid inflaming them. Take care for sufficient air supply and make sure that ventilation slots of generators and flash heads are kept free.

Do not operate power packs and flash heads unattended.

### **Acclimatizing**

When moving generator from one climatic zone to the next, the appliance should stand in the room, in which it will be operated, for some time before starting it up. This prevents internal shortcuts caused by eventually condensing water.

### **Positioning**

PORTY power packs can be operated standing up or lying down.

### **Automatic overload circuit**

Large series of subsequent flashes may trigger the automatic overload circuit indicated by flashing of the digital display **5**. After a break of cooling down, the power pack is ready again for operation. The Ready Indicator **14** flashes up.

### **Lamp connections**

#### PORTY EHT 1200 / 1200 TWIN Head (Code No. 4991 / 4995)

The flash heads are specially designed for operation with **one** PORTY power pack (PORTY EHT 1200) and **two** PORTY power packs (PORTY EHT 1200 TWIN), respectively. The flash head cable is to be connected to the flash socket **1** of the PORTY power pack. For connection of only one PORTY power pack to the PORTY EHT 1200 TWIN head, the MASTER flash head cable is to be used. Flash head extension cables, length 3 m, with round sockets can be ordered (Code No. 579). The flash head is fitted with a modeling lamp 50W/12V Halogen.

#### Ring flash RF 120P (Code No. 341)

Special version only for operation with PORTY power pack. For connection to the power pack the flash head cable has to be plugged in one of the both flash sockets **1**. For synchronization the ring flash can be connected via its 3,5 mm socket directly to the camera. The ring flash hasn't any modeling lamp.

#### Additional HENSEL flash heads

HENSEL flash heads fitted with a 20-way-plug do also work with PORTY power pack. For connection to the power pack a special adapter cable (Code No. 578) can be ordered. In this case the modeling light is not available.

#### Accessories

For the connected flash heads the wide HENSEL accessory range of series EHT/CONTRA (adapter diameter 10 cm) is available.

5

14

Third party manufacturers

Even though similar lamp sockets and plugs are used by other manufactures as well, lamps and flash heads from these manufactures may **not** be connected to the PORTY power pack. This requires in every case an adapter cord. Ask your HENSEL agent about suitable adapter cords for your brand.

**Number of flash heads connected**

The maximum load capacity of the generator may not be exceeded. Only 2 flash heads may be simultaneously connected.

2:**Mechanical connection of lamp plugs**

- Before connecting lamp plugs, turn off the power pack using main switch **2**.
  - Only use flawless plugs and sockets.
  - Plugging or unplugging of flash plugs must only be done with power pack switched off.
  - Unused sockets must be covered with locking caps
- Insert lamp plugs into the flash sockets **1** and then safely lock them using the cap screw. To remove the plug, complete unscrew the cap screw and pull the plug upwards.

**Replacement of the battery pack drawer**Hints to PORTY battery pack

- There are, of course, also available battery packs of the same construction on the market –but these, however, do not necessarily show the same technical data like the original version of the HENSEL battery pack! Therefore, our HENSEL PORTY item should only be operated with the original HENSEL battery packs.
- Battery packs contain substances that are corrosive and injurious to health, therefore the safety hints printed on the battery pack must be observed.
- To prevent any damage to the battery pack avoid over-discharging. Therefore the battery pack must be recharged, when the charging indicator **9** signals only a charge of 10% or the battery pack was not in operation for over 6 month.
- When working with the PORTY at low temperatures the battery pack should be stored in a warm room before to achieve a higher power output.
- The battery pack should no longer be connected to the charging unit than 24 hours.

**9:  
Charging Indicator**

Removing the battery pack drawer

1. Switch off the unit using the main switch 2.
2. Press down the push-button (PUSH) of the battery pack drawer and remove the drawer by means of the swivelling handle.

Inserting the battery pack drawer

Insert the battery pack drawer into the unit until it completely clicked into place.

**Charging of the battery pack**

The battery pack can be charged inside the PORTY housing or outside (e.g. spare battery packs) using the HENSEL charging unit Quick.

*Please note the separate operating instructions enclosed to the charging unit. Please take from this detailed information concerning mains and charging indication.*



**Quick Charger**

Code No.:	5670
Charging time:	2-3 h
Input voltage:	90V...245V≈; automatic switch over

**Quick Charger**

*The charging unit may only be connected to mains outlets with ground connection.*

Internal charging

Plug the charging plug of the Quick Charger into the charging socket 8 of the PORTY power pack. Then connect the mains plug of the Quick Charger to the mains.

**8:  
Charging socket**

External charging of the battery pack (within the drawer)

Insert the charging plug of the Quick Charger into the charging socket on the back of the battery pack drawer (see above: *Removing the battery pack drawer*). Then connect the mains plug of the Quick Charger to the mains.

## 9 Operation

**2:**



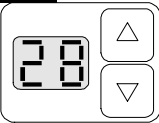
### Turning ON and OFF

By pressing button **2** PORTY power pack is switched on and off. After turning on the unit and first charging of the capacitors the charging indicator **9** flashes. When the green ready indicator **14** lights up, the PORTY power pack is ready to flash.

### Automatic shut-off time

To protect the battery pack the PORTY unit turns off automatically after a predefined period of time.

**5,6,7:**



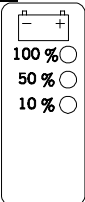
### Setting the automatic shut-off time

Press the two direction buttons **6** and **7** simultaneously. Then the automatic shut-off time can be set. A range of 0 - 60 min. is adjustable shown on the digital display **5** (disregard the decimal point, e.g. 0.2 means 2 min. shut-off time). Switching off automatically is signalled by a tone (3x) when AUDIO is switched on.

To disable the automatic shut-off, set the display **5** to „-.-“.

After about 2 sec. the display switches to the display of f-stop values automatically.

**9:**



### Charging LED indicator

Due to the system, the charging LED indicator **9** of the battery pack can only be an approximate indication.

The capacity, that means the number of flashes, which can be taken, depends upon numerous factors, e.g. status of charging, temperature, age of the battery pack, etc. Completely new battery packs only achieve full capacity after approx. 3 to 5 charges.

**14:**

### READY Indicator

The remaining capacity (remaining number of flashes) can only be charged with loaded battery packs, that means, as long as the PORTY is charging. During the charging time (Ready indication lamp **14** OFF) the battery pack indication display is not meaningful. As soon as the Ready indication lamp **14** lights up, measurement has been finished and the battery pack indication shows the present status of charging of the battery pack.

## Synchronization (flash triggering)

### 10: **SYNC Socket**

#### Synchronization by cable

For operation of **one** PORTY power pack per PORTY Head the synchronization socket **10** is connected to the camera using the provided PORTY special synchronization cable.

Operation of **two** PORTY power packs with one PORTY TWIN head requires the PORTY Synchron Adapterbox TWIN with two outlets (Code No. 6201, see user manual PORTY EHT Heads).

The synchronization circuit is made up of state-of-the-art semiconductor technology and enables secure triggering of the flash even with older cameras with mechanical contacts.

Due to the many different electronic circuits in cameras for controlling synchronization, we cannot take any liability for possible damage to cameras triggering flashes. Please contact the camera manufacturer before using an unusual camera.

### 3: **SLAVE**



#### Synchronization by slave

The built-in slave **3** can trigger the power pack. Triggering is then effected by an „incoming“ flash, which was emitted by another flashlight. This mode of operation is switched on using switch **4** and indicated by the green lamp of the control-LED.

The slave is an impulse photocell. It can only operate, when the triggering flash has a higher f-stop than the ambient light. Please be aware that the ambient light that strikes the slave may never be too strong. If this cannot be avoided, please switch off the slave by pressing switch **4** and release the flash by cable or IR.



#### Manual flash triggering

By pressing button **13** test flashes can be released.

#### Synchronization by connected flash heads

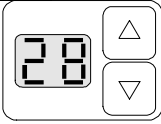
The **EHT PORTY Heads** offer additional flash release options, e.g. remote-controlled triggering using the IR triggering system „SPEED“ (Code No. 392 or 393, 394).

### **Speed**



The **Ring Flash RF 120P** is equipped with a built-in 3,5 mm socket. By means of the provided synchronization cable the ring flash can be directly connected to the camera.



**5,6,7:****Flash power control**

Pressing the both direction buttons **6** and **7** the flash power can be adjusted in 1/10 steps over a range of 6 f-stops. The f-stops are shown on the digital display **5**:

1.0 means	38 J	4.0 means	300 J
2.0 means	75 J	5.0 means	600 J
3.0 means	150 J	6.0 means	1200 J

**Readiness to flash**

Readiness to flash is signalled by

- green light of the Ready control lamp **14**
- acoustical signal when AUDIO is switched ON (green light of the control lamp of switch **11**)

**14****12:****Modeling lamp**

The modeling lamp of the connected EH 1200C PORTY flash head (main switch of the head to „HEAD ON“) is switched on by pressing button **12**. After about 15s the modeling lamp turned automatically off to prevent the battery pack.

**11:****Audio**

An acoustical signal that can be turned on or off by pressing switch **11** indicates:

- Readiness to flash after charging (1x)
- Automatic shut-off (3x)

**13:****Test flash**

By pressing button **13** test flashes can be released.

The green light of the LED control lamp **14** on button **13** signals readiness to flash.

## 10 Maintenance

PORTY power pack is in need of little maintenance by the user. The unit should be dry cleaned from dust from time to time. Before cleaning switch the unit off and separate the unit from the charging unit or the CAR-Adapter.

**Caution:**

*Under no circumstances is any part of the equipment to be opened. The equipment is not user serviceable and there is dangerous high voltage. In the event of difficulty notify your dealer.*





**Replacement of fuses**

PORTY power pack is secured by the main fuse, fuse for modeling lamp and two fuses for charge (internal and external charging).

In case of a broken fuse replace fuses only, when the unit is switched off and separated from lamp heads and charging units.

Attention:

*Never repair or bridge fuses.*

*Only use the following types of fuses:*

Bottom of the housing:

Fuse *modeling lamp* ..... 10 AM

Fuse *internal charging* ..... 6,3 AM

Battery Pack Drawer:

Main Fuse (lateral) ..... 30 AM

Fuse *external charging* (bottom side)..... 6,3 AM

**Exchange of the battery pack**

In case of a damaged battery pack, it can be put out of the drawer and replaced by a new one. The exchange of the battery pack is user serviceable. Please read and comply carefully the following instructions:

1. Remove 4 screws on the upper side
2. Take away the cover (please note the location of the cables)
3. Remove the battery pack from the drawer and loosen the connector from the drawer
4. Insert the new battery pack and plug in the connector into the drawer.
5. Please arrange for the cables so that they won't crossover
6. Put on the cover (don't forget the handle) and fix the screws.

**Regular check**

National safety regulations require regular inspection and maintenance of electrical systems and appliances. Power packs and accessories must be regularly checked for safe operation. Yearly inspection of the appliances serves the safety of the user and protects your investment in the system.

**Return to customer service**

To achieve a maximum protection of the unit sending it in for service, the original packaging should be kept.

**11 Disposal**

Packaging of the power pack has to be separately disposed of and recycled.

Worn out and broken appliances has to be disposed off by electronics recycling.

**12 Accessories**

Accessory available for PORTY power pack:

- |   |               |
|---|---------------|
| ▪ Battery Pack 12V/7 Ah, only   | Code No. 496  |
| ▪ Drawer with Battery Pack 12V/7 Ah                                       | Code No. 1496 |
| ▪ Drawer, only  | Code No. 2496 |
| ▪ Power Supply for mains operation  | Code No. 3496 |
| ▪ Battery Charging Unit QUICK,  | Code No. 5670 |
| ▪ PORTY EHT 1200 Flash Head   | Code No. 4991 |
| ▪ PORTY EHT 1200 TWIN Flash Head  | Code No. 4995 |
| ▪ Ring Flash RF 120 P   | Code No. 341  |
| ▪ Flash Head Extension Cable  | Code No. 579  |
| ▪ PORTY Special Sync Cord   | Code No. 498  |
| ▪ PORTY Synchron Adapterbox TWIN  | Code No. 6201 |
| ▪ Adapter Cable<br>(required for use of flash heads,<br>except EHT PORTY) | Code No. 578  |
| ▪ Reflectors and Softboxes<br>(Adapter Ø for accessories 10 cm)           |               |
| ▪ Umbrellas   |               |
| ▪ IR flash triggering system „Speed“,<br>Transmitter and receiver:        | Code No. 392  |
| Transmitter, only:  | Code No. 393  |
| Receiver, only:   | Code No. 394  |

Additionally there is a **TRAVEL Kit** (Code No. 970) available.

Content:

1 x PORTY1200 B power pack,  
1 x EHT 1200 PORTY Head (flashtube included),  
1 x Modeling lamp 50W/12V Halogen,  
1 x Battery charging unit QUICK,  
1 Alu stand III black, 69 – 240 cm, max. load 4 kg,  
1 Master umbrella Ø 105 cm,  
1 Umbrella flood reflector,  
1 x 7" Reflector with honeycomb 40°,  
All together in backpack.

## 13 Customer Service

### Works customer service

*with 24 hours express service:*

HENSEL Studioteknik GmbH & Co. KG  
GERMANY  
- service department -  
Robert-Bunsen-Str. 3  
D-97076 Würzburg

Phone: +49(0)931/27881-0  
Fax: +49(0)931/27881-50

## 14                      **Certificate of Conformity** **for Electromagnetic Compatibility and Safety**

Manufacturer and Owner of Certification:	HENSEL Studioteknik GmbH & Co.KG Robert-Bunsen-Str. 3 97076 Würzburg Germany
Test Report:	of October 4, 2000
Products:	<b>PORTY 1200 B Power Pack</b>
Description:	Emission and Interference Resistance
Directives:	EN 50 081-1 / EN 55 014 / EN 60 555 / EN 50 082-2 / EN 61 000-4-2/3/4/5 EN 60491:95 / EN 60598-1:93+A1:96 / EN 60598-2-9:89

This certificate of conformity is made by the above mentioned manufacturer according to article 10, paragraph 1, of the Councils Directive of March 3<sup>rd</sup> 1989 referring to electromagnetic compatibility and safety for bringing the statutory instruments of the Member States into lines with each other. This certificate does not make any statement according to requirements of other provisions concerning the electromagnetic compatibility and safety.

Description:	Low Voltage Directive
Directives:	EN 60491:95 / EN 60598-1:93+A1:96 / EN 60598-2-9:89

This certificate of conformity is made by the above mentioned manufacturer according to article 10, paragraph 1, of the Councils Directive of February 19<sup>th</sup> 1973 referring to electrical items for usage within specified voltage limits (72/23/EWG).

This certificate of conformity is the result of testing samples of the above listed products submitted, in accordance with the provisions of the relevant specific standards.

Date:	October 4, 2000
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Manufacturer



J. Renschke  
- Managing Director -  
HENSEL Studioteknik GmbH & Co.KG





Weitere Produkte von HENSEL Studiotechnik  
Other products of HENSEL Studiotechnik

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Reflexschirme  
Umbrellas



Lichtwannen, Softboxen  
Autolights, Soft Boxes



PORTY  
akkubetriebener Generator  
Battery powered generator



Frontprojektion  
Frontprojection