

## 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 Studiotchnik 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 Studiotchnik

User Manual – Date of Revision: 2006-01

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

Compact flash systems 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 measurements 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 compact flash unit is meant for studio use of professional photographers. Its task is to provide electrical energy for HENSEL flash lighting.

#### Improper use

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



**Halogen lamps and flashtubes generate high pressure during operation and can therefore explode. For this reason it is a must to protect pilot and flashlight with the supplied correctly installed HENSEL protection glass dome. The glass dome is available in different versions. The use of the glass dome changes the colour temperature.**

- Contact with the capacitor voltage is perilous, and therefore opening of the case of EXPERT / INTEGRA PRO compact flash units and repairs must only be made by authorized customer service.
- EXPERT / INTEGRA PRO compact flash units are equipped with a user replaceable flashtube. Exchange of flashtube and modeling lamp must only be performed with the appliance turned off, unplugged from the mains and discharged.
- Compact flashes must only used on supply lines (mains) with working protective conductor (earth line).
- 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 compact flashes must be kept free during operation and sufficient air supply must be ensured. Do not stick any objects into ventilation slots or synchronization sockets. Do not deposit any objects (tools, coffee cups, etc.) on the flash unit.
- 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 compact flash units to prevent fire hazards.
- Compact flash units must be protected against humidity and spray water.
- Do not connect accessories from other manufacturers, even if they use the same or similar connectors.
- Flash units - 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 Scope of delivery**

All units of the EXPERT / INTEGRA PRO series come with:

- Flashtube, single coated, user replaceable
- Protection glass dome, clear, uncoated
- Tilting Head with integrated umbrella holder
- Cable set: Power and Sync. Cord
- Transportation Protection Cap

INTEGRA PRO series is identical to EXPERT PRO series, but with Multivoltage technology. EXPERT PRO series is only for 230V operation.

PLUS Versions of EXPERT / INTEGRA PRO series offer additional features like a built-in 4-channel Radio Control Receiver, an illuminated front panel and a shiftable Tilting Head. In this manual, these additional features are indicated by \*.

## 5 Technical Data\*\*

Series	EXPERT / INTEGRA PRO		
Model type	250	500	1000
Values attained at:	230V/50 Hz	230V/50 Hz	230V/50 Hz
Rated energy:	250 J	500 J	1000 J
Aperture at 100 ASA, t 1/60, 1 m distance, 12" Reflector: r:	f 45 7/10	f 64 7/10	f 90 7/10
Flash duration t 0,1: in sec t 0,5:	1/600 1/1800	1/500 1/1600	1/600 1/2000
Recycling time 100% power: in sec 1/32 power:	1,2 0,3	2,2 0,5	2,1 0,45
Flash tube:	U-Flashtube, for plug-in, single coated		
Power adjustment::	In 1/10 f over 6 f adjustable (1/1 ... 1/32)		
Modeling lamp max.:	300W / G6,35 Halogen		
Modeling light adjustment:	FULL, OFF and PROP mode over 6 f		
Features:	Glass Dome (clear, uncoated), plug-in coated Flashtube, Fan, Tilt Head (fix and adjustable*, resp.), Umbrella Holder, Transportation Protection Cap, built-in Receiver*, illuminated Front Panel**		
Fuse EXPERT PRO: INTEGRA PRO:	2 AF 4 AF	2 AF 4 AF	2 AF 4 AF
Mains connection EXPERT PRO: INTEGRA PRO:	230 V~ Multivoltage	230 V~ Multivoltage	230 V~ Multivoltage
Weight (kg):	2,75	2,87	3,90
Measurements in cm without handle (LxWxH):	33 x 15 x 23	33 x 15 x 23	39,5 x 15 x 23
Code No.: EXPERT PRO: INTEGRA PRO:	8310 8814	8330 8815	8340 8816

\*\*: Technical changes reserved.

## 6 Overview of Controls

### Compact Flash Unit - Controls Front Panel -

- 1 ON: Main Switch ON / OFF
- 2 RC\*: Remote Control Switch and ON Indicator
- 3 AUDIO: Acoustical Ready signal and ON Indicator
- 4 FC: Flash Check Switch and ON Indicator
- 5 SLAVE: Slave Switch and ON Indicator
- 6 TEST: Manual flash release with Ready Indicator
- 7 Sync socket
- 8 Slave
- 9 Fuse 2A (EXPERT) and 4A (INTEGRA), resp.
- 10 230V~/50-60 Hz and 115V~/60 Hz:  
Mains connector
- 11 FULL : Modeling lamp operation mode and ON Indicator
- 12 PROP: Modeling lamp operation mode and ON Indicator
- 13 Flash Power control switch
- 14 LED Display

### Tilting Head - Components -

- 15 Cable fixation
- 16 Pre-friction\*
- 17 Shifting of the Tilting Head to balance heavy loads\*
- 18 Clamping screw to hold umbrellas
- 19 Locking screw for attaching the unit to a stand
- 20 Wing nut for adjusting the angle of inclination

### Radio Transmitter - Controls -

- 21a Flash Power Down and Modeling light options\*
- 21b Flash Power Up button\*
- 22 Channel selector for 4 channels (DIP switch)
- 23 Test button for flash triggering
- 24 Socket for Sync Cable,  $\varnothing$  2.5 mm
- 25 Locking Screw for mounting to the Hot Shoe of the camera
- 26 Gap for opening the battery compartment

### Radio Receiver - Controls -

- 27 Channel selector for 4 channels (DIP switch)
- 28 LED green (sync voltage applied)
- 29 LED red (low battery)
- 30 Interface socket
- 31 Gap for opening the battery compartment

\* Additional features only available for the respective PLUS version.

## 7 Starting Up

### **Safety hints for operation with compact flash units**

To avoid damage to the flashtube mount reflectors and light-formers (softboxes etc.) before use and turning on the unit. Do not move compact flashes 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 touching must be avoided; the unit must be switched off and disconnected from the mains outlet immediately. The capacitors inside may still be charged and dangerous high voltage can still be present at the damaged flashtube electrodes (Replacement see page 39, Maintenance).**

### Assembly

When mounting to a ceiling system or a pantograph, suspended compact flash has to be double secured from falling down or dropping. This is done by tightening the safety screw (not included in the standard delivery) into the thread of the HENSEL Tilting Head.

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 of the compact flash and then secured by looping through the bracket on the pantograph or the eyelet on the carriage.

### Heating

Due to the modeling lamp and flashlight, each compact flash unit emits heat. This can heat up the parts of the unit to a dangerous level.

Therefore make sure, that the flash unit is located far enough from inflammable props to avoid inflaming them.

Take care for sufficient air supply and make sure that ventilation slots of compact flash units are kept free. Do not operate flash units unattended. The modeling light should never be used for lighting up the studio but only as an assistance when focusing or determining the light guiding and shadow details of the flash.

#### **Acclimatizing**

When moving the flash unit 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 possible surface leakage currents due to condensing water.

#### **Positioning**

EXPERT / INTEGRA PRO compact flash units come with a Tilting Head. The unit can be attached to a stand or pantographs using one of the two holes and safely secured by fastening the locking screw **19**. The angle of inclination can be adjusted using the wing nut **20**. In the hole above the wing nut an umbrella can be inserted and fastened using the clamping screw **18**. To hold even heavy loads it is advisable to find a new optimal position for the Tilting Head within the gliding rail. For doing this unscrew the Phillips screw **17** and slide the Tilting Head within the rail until the weight is balanced and finally tighten the screw. An additional valuable feature for handling heavy weights is the pre-friction that ensures a decelerated and smooth movement of the Tilting Head. If required the friction can be varied by turning the hexagon nut **16** to the left or to the right. The features **16** and **17** are only available for the respective PLUS versions.

#### **Fixing of the glass dome**

##### Attention:

*The glass dome should only be fixed or removed after having switched off the unit and unplugged from the mains outlet. Please take care not to damage either the flashtube or the modeling lamp (danger!).*

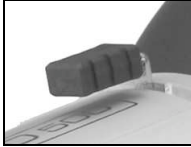
The glass dome is fixed by means of the three pre-mounted springs. For doing this, please slightly tilt the glass dome and insert it into one of the three springs. Then press the glass dome gently into the other two springs until it has completely clicked in.

For removing the glass dome, please slightly tilt it again so that it will easily slip out of the two fixing springs. Then gently loose the glass dome from the remaining third spring and remove it from the fixing device.

### Accessories

All HENSEL reflectors and HENSEL softboxes of series EHT (adapter Ø: 10 cm), accessories included, may be attached to the EXPERT / INTEGRA PRO compact flash; also umbrellas and Softstar.

**Reflector lever**



### Assembly of reflectors and softboxes

For fixing reflectors or softboxes to the compact flash unit, please first of all open the holding clamps. For doing this, please tension the reflector lever laterally as far as it will go against the spring tension. While doing this, the holding clamps will open. Now even and precisely attach the accessory part to the unit. Please do not tilt. By releasing the lever, the holding clamps will completely enclose the accessory part.

For loosening the accessory, please hold tight the accessory part (Attention - it could be hot!) and tension the lever again as described above.

In any case please make sure not to damage either the flashtube or the modeling lamp (danger!).

### Assembly of umbrellas and Softstar

An umbrella holder is integrated in the tilting head that allows for the connection of various umbrellas by using a strong gripping spring mechanism. The umbrella is inserted into the hole above the wing nut **20** and fastened by tightening the clamping screw **18**.

**18:**  
Clamping screw  
for umbrellas

### Mains connection

#### Attention:

*Before connecting the compact flash unit to the mains outlet, make sure, the mains voltage matches the information given on the type label of the compact flash. The type label can be found on the bottom of the appliance.*

*All EXPERT PRO compac flash units are only for 230V/ 50-60 Hz operation.*

*The INTEGRA PRO series comes with multivoltage technology, i.e. the compact flash adjusts itself for different main voltages.*

- 10:**  
Mains socket
- 15:**  
Cable fixation



**10 A**

- 9:**  
2 AF
- 4 AF

**14:**  
<E1>

The provided power cable has to be led through the handle, then attached to the mains socket **10** and connected to the mains outlets. Use the cable fixation **15** for allowing unhindered tilting of the unit.

**Compact flashes must only be connected to mains outlets with ground connection.**

#### Fuses

##### Outlets, in the building

Minimum requirement 10 A fuse outlets

##### Fuses of the compact flash unit

The fuse **9** is a general fuse for the compact flash unit and the modeling lamp. All units of the EXPERT PRO series (only for 230V operation) come with a fuse 2 A fast (2 AF). All units of the INTEGRA PRO series (multivoltage technology) come with a fuse 4 A fast (4 AF).

The specification of the fuses mentioned above is valid for operation with modeling light 300 W Halogen.

More information, please refer to *page 38, Replacement of fuses*.

#### Overheating

All EXPERT / INTEGRA PRO units are equipped with a fan to avoid overheating with fast flash sequences, which could cause damage to the flashtube and the compact flash unit. Nevertheless, if overheating occurs, the error <E1> is displayed on the LED **14**. After a break for cooling down, the appliance is ready again for operation.

## 8 Operation

### Synchronization (Flash triggering)

#### Synchronization by cable

The compact flash unit is connected to synchronization socket **7** to the camera using a synchronization cable with 6,3 mm phone jack.

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.

**7:**  
SYNC

**5:  
SLAVE**Synchronization by slave

The built-in slave **8** can trigger the compact flash unit. Triggering is then effected by an „incoming“ flash, which was emitted by another flashlight. This mode of operation is switched on using switch **5** and displayed by the yellow light of the SLAVE ON Indicator.

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 **5** and release the flash by cable or by radio signal.

Synchronization by Radio Control System

For all units of the EXPERT / INTEGRA PRO series the HENSEL Radio Flash Trigger System RC/RF is available as accessory (set, transmitter and receiver). The remote control allows for flash triggering via radio signal. The respective PLUS versions are equipped with a built-in receiver. With the transmitter available as accessory flashes can be triggered and in addition features for flash power and modeling light adjustment are offered. In the EXPERT / INTEGRA PRO PLUS Kits the transmitter is included.

Radio Flash Trigger and Power Control System RC/RF,  
Set, transmitter and receiver, Code: 387  
Transmitter, only, Code: 390

For operation with EXPERT / INTEGRA PRO units the radio receiver is attached to the sync socket **7** of the compact flash. The respective PLUS versions have a built-in receiver that needs to be activated by pressing the RC switch **2**.

The radio transmitter is attached to the camera using the synchronization cable or by mounting it onto the Hot Shoe of the camera. Four channels can be selected. The selected channel of the transmitter and receiver must correspond to each other. Flashes can be triggered by pressing the TEST button or by releasing the camera shutter.

For a detailed description of the Radio Control System, please refer to chapter 9.

**6:  
TEST**Test Flash

By pressing the button **6** test flashes can be released.

<p><b>13:</b> <b>Power Control</b></p> <p><b>14:</b> <b>LED Display</b></p>	<p><b>Flash power control</b> The desired flash power can be set in 1/10 f-stops over a range of 6 f using power control switch <b>13</b>. The setting is shown on the LED display <b>14</b> presenting values ranging from 5.0 (minimal flash power) to 10.0 (maximum flash power).</p>
<p><b>READY</b></p> <p><b>FC</b></p> <p><b>AUDIO</b></p>	<p><b>Flash readiness</b> Flash readiness of the compact flash unit is shown by</p> <ul style="list-style-type: none"> <li>• Green light of the READY lamp above TEST button <b>6</b></li> <li>• Modeling lamp turned on when Flash Check mode is activated (switch <b>4</b>)</li> <li>• Acoustical signal, when AUDIO <b>3</b> is switched on.</li> </ul>
<p><b>6:</b> <b>TEST</b></p>	<p><b>APD system</b> In case of reducing the flash power, the stored energy will be discharged by APD-system (Automatic Power Drop). No flash will be triggered. After switching off the compact flash units will be automatically discharged. It is also possible, to reduce the stored energy by simply triggering a TEST flash by pressing button <b>6</b>.</p>
<p><b>11, 12:</b></p> <p><b>FULL</b></p> <p><b>PROP</b></p>	<p><b>Modeling lamp</b> The operation mode for the modeling light can be selected by pressing the buttons <b>11</b> or <b>12</b>. Pressing the FULL button <b>11</b> the maximum modeling light output is set. By pressing the PROP button <b>12</b>, the modeling light output is proportional to the selected flash power. When the flash power is reduced the modeling light output will be reduced by the same increments. The selected operation mode for the modeling lamp is indicated by the respective ON indicator. The modeling lamp is switched OFF when no ON indicator lights up. The modeling lamp can be switched at full power for a 35-minute period. Thereafter the output is automatically reduced by approximately 1 f-stop. Pressing any button you like switches the modeling light to full power again. If required, this default value can be changed by entering a value from 5 minutes up to 95 minutes. For doing this, press button <b>13</b> twice and enter the new value shown on display <b>14</b>. Wait for 3 seconds and the display changes to the flash power setting.</p>
<p><b>4:</b> <b>FC</b></p>	<p><b>Flash Check</b> If this mode is switched on by pressing the FC button <b>4</b>, then the modeling lamp is turned off after a flash and will turn on after recharging to the adjusted power level. This shows correct charge as well as readiness to flash. The flash check mode guarantees that the flash heads have triggered when more than one flash unit is used.</p>

## 9 Radio Control System

### Proper use – improper use

The Transmitter of the HENSEL Radio Flash Trigger and Power Control System RC/RF is used for triggering flashes, adjusting the flash power and switching the modeling lamp between FULL/OFF/PROP in HENSEL flash units with built-in receiver (PLUS versions of the EXPERT / INTEGRA PRO series) via radio signal.

For all other units of the EXPERT / INTEGRA PRO series not equipped with a built-in receiver HENSEL Studiotchnik offers the usage of an external receiver as accessory. In connection with the Radio Transmitter flashes can be triggered, but additional features like flash power adjustment and changing modeling light options are not available.

Every use of the equipment that differs from its prescribed use is prohibited. In particular, controlling of electrical items or machines other than described above is prohibited.



**Set (Code 387)**

### Scope of delivery

The Radio Transmitter (Code No. 390) as well as the Set of Radio Transmitter and Receiver (Code No. 387) come with a synchronization cable with 2.5 mm synchronization plug.

### Safety instructions

Changing this unit is strictly prohibited. The housing is splash-proof but not watertight. Therefore protect the equipment from humidity. The operation during rain is not recommended because over the years moisture might ingress into the housing causing damage to the electronics.

### Start-up and channel selection – Receiver -

For operation with compact flash units of the EXPERT / INTEGRA PRO series without built-in receiver the external receiver is to be attached to the synchronization socket **7** of the compact flash unit. After switching the unit ON using the main switch **1** the green LED **28** of the receiver is flashing. For channel selection the DIP switch of the receiver is used. Combining both setting positions for the DIP switches four different options are available. For channel setting, please refer to the figure on page 1 of this manual.

By pressing the RC button **2** the built-in receiver of the PLUS versions of the EXPERT / INTEGRA PRO series is switched on.

**Default  
factory setting:  
Channel 1**



The channel can be selected by pressing the Flash Control Switch **13** once. By turning the knob channels from 1 to 4 can be selected as shown on the LED display **14**. After 3 seconds delay the channel is set and the display changes to the flash power setting.

**Default  
factory setting:  
Channel 1**



Start-up and channel selection - Transmitter -

The Radio Transmitter has no built-in main switch for switching the unit ON. The transmitter is to be connected to the camera either by attaching it to the Hot Shoe of the camera or by connecting the camera to the synchronization socket **24** using the provided synchronization cable. If the transmitter is connected to the Hot Shoe the unit must be carefully tightened using the locking screw **25**. Using the DIP switch **6** at the bottom side of the unit the working channel can be set. Combining both setting positions for the DIP switches four different options are available. The same channel must be set at the corresponding receiver. For channel setting, please refer to the figure on page 1 of this manual.

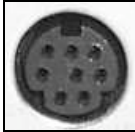
Flash triggering

With correctly installed receiver and transmitter and proper channel selection flashes can be released by pressing the TEST button **23** or by releasing the camera shutter.

Additional features for PLUS versions:

Flash power adjustment and changing modeling light options

The buttons **21a** and **21b** allow further options for HENSEL flash units with a built-in receiver. A single click on the respective button reduces and increases the flash power by 1/10 f-stop. Pressing button **21a** for longer than 3 seconds the modeling light switches from FULL to OFF and PROP, respectively.



The Receiver is equipped with an interface socket **30** for HENSEL power packs.

Maintenance

The HENSEL Remote Control System RC/RF is almost maintenance-free. Because of the low energy consumption of the transmitter a battery lifetime of 1 to 2 years can be assumed depending on the degree of utilization.

The battery of the Radio Transmitter can be exchanged by unscrewing screw **26** at the bottom of the unit. This provides access to the electronics and the battery can be removed from the clips and exchanged. Before reinstallation of the new battery the polarity must be observed. The positive pole should be pointed at that side of the unit where the Power Down **21a** button is located.

When an exchange of the battery of the external Radio Receiver is required, the red LED **29** turns on. Opening of the battery compartment is done by means of a coin, inserted into the lateral slot. The batteries can be removed from the clips and exchanged by three new AA batteries under observation of the polarity.

Technical Data	Transmitter	Receiver
Type / Code No.	RC/RF-TS / 390	RC/RF-R / 388
Sync socket:	2,5 mm jack plug, Mono	-----
Sync. voltage / Sync. current	3 V / < 1mA for 5 $\mu$ s	< 60 V / -----
Switching ON/OFF	-----	By applying Sync voltage
Channels:	4, selected by DIP- Switch	
Sync plug	-----	6,3 mm jack plug, plus pole front
Serial port:	-----	Mini DIN socket 8 pol.
Shutter time for Synchronization:	1/250 s	
Dimensions in cm [inch] (width x length x height)	5,5 x 6,3 x 4,8 [2.2 x 2.5 x 1.9]	6,5 x 3,7 x 14,1 [2.6 x 1.5 x 5.6]
Weight (no battery):		84 g
Weight (with battery):	53 g	157 g
Type of battery:	CR2, 3 V, 1pc.	AA, 3 pcs.
Battery life:	1 - 2 years	approx. 6 months
Range:	> 40 m (131 feet) free visibility	
Frequency:	433,92 MHz	

This product conforms to the radio standards ETSI EN300220 and FCC15.231.

## 10 Maintenance

The EXPERT / INTEGRA PRO compact flash series is in need of little maintenance by the user. The unit should be dry cleaned from dust from time to time. Before cleaning separate the unit from the mains outlet.



*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**

In case of a broken fuse **9** replace fuse only, when the unit is switched off and separated from the mains outlet.



#### Attention:

*Never repair or bridge fuses.*

*Only use "fast" fuses with the required value:*

#### Fuse for operation with modeling light 300W/G6.35 Halogen

EXPERT PRO series: 2 AF

INTEGRA PRO series: 4 AF

Only use fuses in accordance with EN 60127-2/1 or respectively IEC 127-2/1. A wrong fuse may cause an explosion of the halogen modeling lamp.

### **Replacement of modeling lamp**

Replace modeling lamp only, when unit is switched off and unplugged from the mains outlet.

Make sure that the modeling lamp is protected by the specified fuse (*see paragraph replacement of fuses above*).

Use only halogen lamps as modeling light with the maximal light output specified as follows:

EXPERT PRO series: 300W/G6.35/230V (Code 128)

INTEGRA PRO series: 300W/G6.35/115V (Code 1280)

and 300W/G6.35/230V (Code 128), resp.

Make sure that the modeling lamp for units of the INTEGRA PRO series corresponds to the mains voltage.

Wait till modeling lamp has cooled down, and then carefully remove the glass dome from the unit by pulling it out of the spring mechanism (see page 30) and moving it straight away without touching modeling lamp or flashtube (danger!).

Handle halogen lamp with care because of the high pressure inside. Pull out halogen lamp and replace the modeling lamp with a new one.



*Avoid touching the halogen lamp with your fingers; this causes a higher risk of explosion of the halogen lamp.*

#### **Replacement of flashtube**

All unit types of EXPERT / INTEGRA PRO are fitted with a user replaceable flashtube.



**For replacement of flashtube switch off the unit, separate it from the mains outlet and wait for at least 15 minutes.**

Then carefully remove glass dome from head by pulling it out of the spring mechanism (see page 30) and moving it straight away from the head without touching modeling lamp or flashtube (danger!).

Handle flashtube with care because of the high pressure inside.



*Caution: In case of a damaged flashtube glass the electrodes of the tube must not be touched in any case! In this case it is a must to use isolated pliers for pulling out the flashtube!*

First unwind the ignition cable from the connection pin of the ignition. Then pull out flashtube and replace it with a new one. Finally connect the ignition cable.



*You must make sure that the appropriate flashtube is used. Please order from HENSEL:  
Flashtube for EXPERT / INTEGRA PRO series,  
user replaceable single coated, Code No. 9450401.*

### **Regular inspection**

National safety regulations require regular inspection and maintenance of electrical systems and appliances. Compact flash units 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 compact flash unit must be separately disposed of and recycled. Worn out and broken appliances must be disposed of by electronics recycling.

## **12 Accessories**

### Glass Domes

Code No. 9454638: clear, uncoated

Code No. 9454637: clear, single coated

Code No. 9454639: frosted, uncoated

### Flashtube, user replaceable

Code No. 9450401: U-Tube, single coated

### Reflectors and Softboxes

with small accessory adapter diameter (10 cm)

for series EHT/EXPERT/CONTRA

### Umbrellas

## **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

e-mail: info@hensel.de

## 14 Certificate of Conformity for Electromagnetic Compatibility and Safety

Manufacturer and  
Owner of Certification: HENSEL Studiotechnik GmbH & Co.KG  
Robert-Bunsen-Str. 3  
97076 Würzburg  
Germany

Test Report: of January 12, 2006

Product: **Compact Flash Units**  
**EXPERT PRO (PLUS) 250, 500 and 1000**  
**INTEGRA PRO (PLUS) 250, 500 and 1000**

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

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

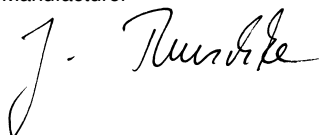
Directives: EN 60491:95 / EN 60598-1:93+A1:96 /  
EN 60598-2-9:89

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: January 12, 2006

Manufacturer



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