

# **User Manual**

03/2010

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# DESCRIPTION OF THE MOVIL BACKPLATE



upper Picture shows first edition Version until 2008 (long version). lower Picture shows second edition Version since 2008 (short version).

## Power supply / rechargeable battery



#### Lithium-manganese batteries in the flash arm

The lithium-manganese batteries housed in the flash arm are extremely robust and reliable. Unlike lithium-polymer or lithium-ion rechargeable batteries, there is no risk of a lithium-cobalt reaction (explosion-like metallic fire) In the event of a malfunction such as a battery failure or overloading, or due to old age. They do not suffer from memory effect, nor do they need to be fully discharged before charging.

Always transport the battery separately from the flash gun when traveling by air. Screw the battery connector (S4 socket) shut when transporting the

flash gun to prevent other metallic objects from causing a short circuit at the contacts.

## Charging external rechargeable batteries

To charge the battery, you attach the S4 connector of the battery charger at its counterpart at the battery. Connect the battery charger now with the mains power supply. The loading procedure starts, if the orange LED at the battery charger light up.



## Charging internal rechargeable batteries

The flash gun is powered by fitted LiMg accumulators. The electronic high-speed charger automatically takes into account the mains power supply voltage (100-240V).

To charge the accumulator, set the switch on the flash gun to Off and insert the charger plug connector into the left flash socket.

## Please note the following when charging the battery:

- Charge the battery at room temperature whenever possible.
- Do not expose the rechargeable battery and charger to direct sunlight before and during the charging process. Temperatures above 40°C and below 0°C will impair the battery performance.
- You can disconnect the charger from the battery as soon as the indicator changes to green.
- Important: Using a different charger may damage the rechargeable battery.
- You should therefore only use the charger supplied with the battery.
- Do not attempt to plug the charger into the flash gun!

Charge indicator	Function	Duration
orange	High-speed charging	approx. 2 hours
green	Compensation	
	charging	

The **internal Li Mg accumulator** will discharge even when you are not using the flash gun. The accumulator discharges fully after approx. 4-6 weeks (dependent upon the outdoor temperature). It then switches to exhaustive discharge mode, which will damage the accumulator.

It is therefore imperative to recharge the accumulator **after 4-6 weeks at the latest**.

#### ● Never store the flash gun with a discharged accumulator!

To storage the System with **external Li Mg accumulator** disconnect the accumulator from the flash. The self discharging time of the **external Li Mg accumulator system** is approx. 7 Month.

#### If you store the flash gun with a connected external-accumulator you have to handle it like an internal accusystem !

## **OPERATION**

When using appliances with rechargeable batteries, plug the **S4 plug into the left S4** socket on the flash gun. The charge connector on the left is a 4-pole connection. The synchronized connection on the right is for either a 6-pole (S6 model) or 5-pole connector (N5 model), and is connected to the camera body.

The synchronized connection in the center is a 5-pin N5 socket and is required when operating the flash gun with an analog TTL camera. It can also be used to connect an auxiliary flash gun.

#### Important:

- Do not use any force. The contacts can be connected without any effort at all.
- Always switch the flash gun off before unscrewing or mounting the rechargeable battery. Uncontrolled switch states may cause damage to the appliance.

Turning the rotary switch to TTL switches your flash gun on and charges the capacitor. The white LED with the flash symbol lights up after 5-6 seconds. Your flash gun is now ready for use. If the LED does not light up after approx. 10 seconds, switch the flash gun off and charge it from the mains power supply.

#### ANTI-EXHAUSTIVE DISCHARGING SYSTEM

The electronic system switches off the pilot lamp or the flash gun if the voltage level of the accumulator falls below a minimum level. This prevents the accumulators from being exhaustively discharged, which lengthens their service life. Now switch the flash gun off and recharge it (see 2.0 or 3.0).

Activation of the anti-exhaustive discharging system is indicated by the relays switching themselves on and off.

## PILOT LAMP

The pilot lamp facilitates orientation at night and enables you to see objects on the display of a digital camera. The pilot lamp is switched on by turning the rotary switch to "PILOT1" or "PILOT2".

Switch Position	Power
Dimmer function	
L1	50%
L2	100%

## SOS FUNCTION

In emergency situations, e.g. on a drifting boat, or when you lose contact with a companion under water, in twilight conditions or at night, it is practical if you can attract the attention of people trying to help you. If you turn the switch to **SOS**, the flash gun flashes approx. 12 times per minute at ¼ of its normal performance. Depending upon the residual capacity of the accumulator, this means that the flash gun will continue to operate at its lowest power output level for up to 8 hours.

Fully automatic TTL flash operation (analog)

#### TTL FLASH OPERATION with analog cameras (center socket)

In TTL mode, the flash gun recognizes the connected camera **automatically**. You just need to set the selector switch to "TTL".

The meter cell, which is located inside the camera, measures the light reflected from the film plane. The camera electronics evaluate this reading and send a cut-off signal to the flash gun.

• The camera is therefore responsible for the correct exposure as it controls the emitted luminous intensity. This means that the exposure can only be manipulated in this mode by adjusting the camera.

#### ERROR indicator:

➔ If the emitted luminous intensity is insufficient, i.e. if the flash gun is operating at full power in TTL mode, the ERROR LED lights up for approx. 3 seconds and the "flash ready" LED blinks simultaneously. If this happens, increase the aperture by one or two settings.

As soon as the flash gun has been attached to a camera and it is ready for use, the flash symbol in the viewfinder lights up when you gently press the shutter button. If this does not happen, please verify whether the ready lamp on the flash gun is functioning correctly. If it is, check whether the plug connectors are clean and connected properly.

Extremely reflective objects and taking photographs against the light invariably result in underexposure when using the flash gun in TTL mode. In such situations, you should preferably use the flash gun in manual mode or change the film speed setting on the camera to a positive setting (+). Do not forget to reset the film speed afterwards.

The TTL automatic mode is also not able to cope with extremely wide-angle lenses when taking photographs of relatively small objects against a dark background. The meter cell mainly takes a reading from the dark background and switches the flash gun off too late. This results in overexposure.

# **AREAS OF APPLICATION FOR TTL**

The flash gun is suitable for the corresponding areas of application according to the working aperture selected on the flash gun (underwater, the murkiness of the water is also a deciding factor).

The most effective working aperture for different shooting situations varies according to the necessary range and the desirable depth-of-field zone. The shallower the f-number, the depth-of-field zone is reduced. A wide (open) aperture is therefore used when the background is to remain out of focus. In contrast, a high f-number is used for macro photographs. A mid-range automatic position is practical for standard shots, e.g. an exposure from 5.6 to 8. The working range here is approx. 2 meters, which should be adequate for most underwater shots.

#### EXPOSURE COMPENSATION WITH THE TTL AUTOMATIC FLASH

To render more saturated colors, it is advisable to **underexpose by approx.** 1/3 - 2/3 **aperture settings**, which can be achieved using the + / - correction setting on the camera. Modern cameras with multiple automatic exposure mechanisms frequently only use the flash gun as a fill flash in the program setting (**P**). Under water, this produces weaker colors due to the decreased light output from the flash gun.

• You should therefore use the **A** setting depending upon the type of camera you are using. Here, the camera adjusts the synchronization speed to a setting between 1/60 and 1/250 according to the ambient brightness. The aperture can be varied as required.

# **COMPOSITE LIGHT SITUATIONS**

In shallow depths, the available daylight is sufficient to expose the film correctly. However, the primary colors, beginning with red, yellow etc., disappear at increasing depth. The flash is therefore only necessary at these depths to retain the colors. The most important factor in composite light situations is a slight underexposure in relation to the ambient brightness.

#### Example:

Exposure indicator on the camera, measured horizontally in the water: aperture 8. Aperture setting on the camera in position A or M: 11 or 11/16 Here, the flash gun must illuminate a flashed object by around 1 to 2 aperture settings, whereas the water in the photograph takes on a deep, saturated blue color. Composite light photographs can naturally also be taken with the sub-power settings. Fully automatic TTL flash operation (digital) In contrast to analog cameras, digital cameras are not recognized automatically as each device has a special control mechanism. Connect the camera to the right flash socket (where there are two sockets) and set the selector switch to "TTL" or "PILOT".

The flash gun is fully controlled by the camera, and data is continually transferred between the two devices.

To take exposure readings, the digital camera triggers one or more preflashes.

• The camera calculates the main flash from these readings. The camera is therefore responsible for the correct exposure as it controls the emitted luminous intensity. This means that the exposure can only be manipulated in this mode by adjusting the camera, as is the case with CANON and NIKON models for example. The values set on the back of the flash gun are transferred to the camera.

This configuration method is faster and safer than having to press several buttons on the underwater body or in the menu.

#### ➔ If the emitted luminous intensity is insufficient, i.e. if the flash gun is operating at full power in TTL mode, the ERROR LED lights up for approx. 3 seconds and the "flash ready" LED blinks simultaneously. If this happens, increase the aperture by one or two settings.

As soon as the flash gun has been attached to a camera and it is ready for use, the flash symbol in the viewfinder lights up when you gently press the shutter button. If this does not happen, please verify whether the ready lamp on the flash gun is functioning correctly. If it is, check whether the plug connectors are clean and connected properly.

Otherwise, follow the camera manufacturer's instructions for using the flash function.

## **EXPOSURE COMPENSATION DIGITAL CAMERA TTL**

To render more saturated colors, it is advisable to underexpose by approx. 1/3 - 2/3 aperture settings, which can be achieved using the + / - correction setting on the camera. Modern cameras with multiple automatic exposure mechanisms frequently only use the flash gun as a fill flash in the program setting (P). Under water, this produces weaker colors due to the decreased light output from the flash gun.

- You should therefore use the A setting depending upon the type of camera you are using. Here, the camera adjusts the synchronization speed to a setting between 1/60 and 1/250 according to the ambient brightness. The aperture can be varied as required.
- Position M is even better, as here you retain full control over the aperture and the speed. The flash control mechanism still operates in TTL mode, however.

# MANUAL FLASH GUN OPERATION

☞ If you operate your flash gun in manual mode, the configured power rating is already used for the preflash. This means that the main flash cannot usually be ignited. Camera models on which the preflash cannot be disabled are not suitable for manual operation (Olympus models).

Please consult your camera's user guide to see whether it is capable of controlling a flash gun in manual mode. This is not a problem with CANON and NIKON models equipped with a *nora* featuring a +/- switch with the M setting. The flash gun emits a constant light source according to the selector switch setting (1/1 to 1/32). These sub-functions are electronically governed and are therefore always identical. The preflash is suppressed.

A suitable aperture setting for your camera can be calculated using this formula:



This formula only applies to distances greater than 1 meter under water.

The flash gun performs at full power with the manual setting "1/1". The performance switch can be adjusted by one aperture setting respectively. The power output of the flash gun can therefore be reduced by a maximum of 4 aperture settings. This allows you to find the appropriate apertures for composite light and close-up shots.

By turning the rotary switch to 1/1 the flash's power output is at its maximum. The output of the flash can be reduced up to 4 aperture steps to a maximum. Here you can find the aperture value for close-ups and mixed-light-shots.

**Example:** Distance 1 m (with reference to 21 DIN/100 ASA, clear water)

Right selector switch	Camera aperture
1/1	16
1/2	11
1/4	8
1/8	5.6
1/16	4
1/32	2.8

Note: Due to the greater angle of illumination above water, readings taken on land using a flash meter are around one aperture setting higher than the values given above for under water. The optical slave triggering works only correct with analogical cameras or with digital cameras in manual-mode.

the short Version of Nova has no slave-function included, because modern digital cameras do not support this function. This depends on the pre-flash.to use the slave-Mode via sensor you need a slave-flash-trigger-module to control theslave flash. In this case switch off the TTL on the Master.

#### Nova in Slave Mode digital cameras

Use both flashes in manual mode only. In all other cases you get a wrong exposure.

# masterflash in all cases digital TTL



example for Master-Slave on digitalcameras

Turn the main-function-switch on **elder models** in "**SLAVE** "-Position.

Select the output level 1/2, 1/4, 1/8, 1/16, 1/32 on the powerstep-selection-switch. The flash gun then restricts the output performance to this value.

The flash gun is triggered when the light from another flash gun hits the meter cell in the reflector.

In order to check that flash ignited correctly, the ERROR indicator start to blink fast.

- The flash may not be triggered in shallow water with strong direct sunlight.
- A slave flash requires light to be received from his meter cell to be triggered. The flash will probably not be triggered if the flash gun is flashed from behind and there is only blue water in front of it.
- The range will vary according to the water conditions, the flash output and the angle at which the flash hits the meter cell. A range of up to 15 m is possible in clear water.

## FLASH GUN CARE AND MAINTAINANCE

All parts of the flash gun are made of anodized, salt water-resistant aluminum or synthetic materials. Nevertheless, it is advisable to rinse the appliance in fresh water after using it in salt water. This applies in particular to the control panel. Do not remove the synchronous cable until after you have cleaned your camera with fresh water.

#### • NEVER IMMERSE THE FLASH GUN INTO WATER WITHOUT THE CAP ON THE SYNCHRONOUS PLUG

#### **REPLACING THE O-RINGS AND ACCUMULATOR**

We recommend that you return the flash gun to subtronic for replacement of all the O-rings and the accumulator after four to five years of use. You can check and replace the O-rings on the NIKONOS plug connector yourself. **The connector thread and O-ring should be kept lightly lubricated.** 

#### CHECKING THE CABLES

All the spiral cables are resistant to salt water and do not need any special care. However, you should check all the cables for cuts or cracks, especially after traveling by air. This is necessary to prevent water from seeping into the cables, and possibly into the camera and the flash gun.

#### ● Always pack the flash gun together with all the detached cables.

Water may contaminate the contacts if you do not insert the plug connectors into the body of the camera or flash gun properly. The sockets are sealed facing inwards, so that water is not able to infiltrate into the flash gun even if the cable is not attached correctly.

Make sure that you always loosen the plug connector lock nut when inserting the connector. Do not tighten it again until you have securely screwed in the plug connector with the lock nut lying flat on the bottom of the camera. Ensure that the camera rail does not prevent it from sitting securely. Not only could this damage the camera, but water could also seep into cables when diving in deep water. The plug connectors will corrode over time, preventing the flash gun from operating or being charged.

Traces of salt water on the contacts may also cause the flash gun to be triggered incorrectly. If the flash gun fires when switching it on, the plug connection is almost always the cause of the problem.

- You should therefore always check to make sure that the plug connector with the Oring is connected securely every time before you go diving.
- Make sure that the housing and flash guns do not exert pressure on the cable connectors when you put them down!
- Cable breakages are usually caused by excessive tension. Make sure that the cables do not get tangled while diving.
- When unscrewing or screwing the caps, make sure that you hold the synchronized cable by the plug connector and not by the cable itself. Otherwise, the cable could become twisted at the plug connection and cause a cable breakage.

#### **CABLE CONNECTORS**

The socket has to be sealed with a dummy plug when the cable is not connected. The Orings on the plug connector and the thread should always be kept lightly lubricated. Make sure that the grooves are aligned correctly when inserting the plug connector.

The contacts must be cleaned immediately after coming into contact with salt water. This is particularly important to ensure trouble-free TTL operation.

• Water may seep into the flash socket if the cable or plug connector are damaged. The left flash socket (charge socket) is fitted with a small vent and safety hole. Water will infiltrate into the flash gun when diving without the dummy plug in this hole!

● NEVER IMMERSE THE FLASH GUN INTO WATER WITHOUT THE CAP ON THE SYNCHRONOUS PLUG

## CONNECTION BAR

The bar for connecting the flash gun arm to the camera has two different threads: M8 and Tripod.

If you are using another method of attachment instead of the original parts, the length of the thread must not exceed 8 mm to avoid levering the bar out of position (max. length of the thread in the bar: 8 mm).

Our ball-joint flash arms are attached directly to the flash bar with an M8 bolt. Please note that the bolt may **only be screwed 8 mm** into the bar, as otherwise **it could be levered out of position**.



subtronic ball-joint arm system, coupling

## FLASH GUN CAPACITOR REFORMATION

The integral flash capacitor deforms for physical reasons when stored for long periods of time. It should therefore be reshaped after 6-8 weeks. This is done by switching the flash gun on for 15 minutes and then operating it two or three times at full power.

#### CHECKING THE TTL

We recommend that you perform the following test every time you install the camera, or change the cable or flash unit:

With the switch set to *TTL* or **PILOT** mode, point the flash directly into the camera lens. The power output of the flash gun must be kept to a minimum. Point the flash gun and camera at a wall around 2 meters away, and then either set the aperture to 16 or 22 or replace the lens cover and trigger the flash. The flash gun should now operate at full power.

Please note that the TTL automatic system will only supply correct exposure data when the camera has been loaded with a film as the light is measured on the surface of the film.

A memory card may be required when using a digital camera depending upon the type of camera.

#### NON-INTEGRITY OF THE FLASH BODY

Please follow the instructions below if water penetrates into the flash gun body:

- Switch the device off.
- Remove the rear cap ring (this ring does not have a sealing function, but is only used to secure the rear plate), extract the lid out by pulling the plug connector or the scale head and remove the water.
- Under no circumstances should you pull the electronic system out of the body as the voltage level on the electronic board is extremely dangerous (up to 400 V).
- Replace the lid and return the device to subtronic as quickly as possible.
- All warranty claims will become void if the lid is opened without due cause unless the case described above occurs during the warranty period and was caused by a factory fault.
- Please note that warranty claims will become void if water penetration is caused by damage to the cables or attaching the plug connector incorrectly. All devices and cables are subjected to an 8-hour pressure test prior to delivery.

## **Reset internal digitalconverter**

In rare cases the integrated digitalconverter can stop working.

To reset the converter, switch the flash to SOS-Mode for approx. 3 flashes.

After adjusting the desired mode of operation the converter works again error free.

# SAFETY INSTRUCTIONS

- The flash gun is designed, and only approved, for photographic use.
- The device may under no circumstances be used in the vicinity of inflammable gases or liquids. RISK OF EXPLOSION!
- Never trigger a flash in the immediate vicinity of the eyes! Triggering the flash directly in front of the eyes of people or animals may cause damage to the retina and serious sight impairment or blindness.
- Only use the supplied charger, which is specially designed for compatibility with the accumulators used in the flash gun.
- Do not expose the accumulators to excessive heat such as sunlight, fire or similar heat sources.
- No opaque material may be positioned immediately before, or directly on, the dome port when triggering the flash. The high energy level of the flash could cause the material to burn or deformation of the dome port.
- Do not dismantle the flash gun. HIGH VOLTAGE! HAZARDOUS TO LIFE! The body does not contain any parts that can be repaired by untrained technicians.
- Do not open the flash gun. There is a risk of leakage if the device is reassembled incorrectly. The electronics will be destroyed immediately if salt water penetrates into the housing.
- There is a risk of overloading the electronics and the accumulator when taking consequential pictures with the flash. Take a break after using the flash approx. 20 times.
- As a consumer, you are legally obliged to return used accumulators. We will dispose of your flash gun free of charge.

## **IMPORTANT NOTES FOR**

ENJOYING UNIMPAIRED USE OF YOUR FLASH GUN ON YOUR UNDERWATER HOLIDAYS

- Test the device in good time (6 weeks) before going on holiday.
- Check the cable.
- A spare cable has saved many a photography holiday.
- Pack the device in your hand luggage.
- Wrap the cable in a towel.
- Check the flash arm. Lightly lubricate the grip levers.
- Regularly rinse the device in fresh water.
- When you return from holiday, take the device into an indoor pool to dissolve any residual salt crystals under pressure.
- When you have been using the device for a few years, treat it to a check-up at subtronic as the O-rings will not live forever, and at some point the accumulator will give up the ghost, as well.
- Inspection and repair charges can be found in our price list.

- Pack the device in a robust cardboard box with plenty of room on all sides for padding material. Do not use a shoe box.
- Detach the flash gun arm, covers and other removable parts from your device.
- Please include the battery charger if you are having problems charging the accumulator.
- Spiral cables with broken wiring or loose contacts can usually be repaired without changing the connector parts by replacing the cable.
- Wiring in cables that have been penetrated by salt water corrodes and snaps. Repairs are not practical in such cases.
- In addition to your **name** and **telephone number**, please state also which repairs or inspections are to be performed, or what faults have occurred with which camera model. If you are about to go on holiday, please tell us when we can return your device. Remember that testing a device takes longer than just one day (pressure test, discharging the accumulator, charging the device, packaging and dispatch).
- The charges for standard repairs such as replacing the accumulator can be found on our Web site. A quotation is not required in such cases. We dispose of defective accumulators in a proper manner. Please inform us if you want us to return the accumulators to you.
- We usually dispatch packages by UPS. Please inform us if you want us to use a different carrier.
- Send the device to us as an insured parcel.

# orderly disposal

do not dispose of defecte devices over the domestic refuse. use for disposal local collecting points or send the equipment back to us.

# Data sheets

ASA/ISO	KAMERA CAMERA	APERTUR	E E E		DISTANCE		
100	0.4	m 0.6	3 m 1.0	m 1.{	5m 2.(	)m 2.5	5 m
1/1	45	32	22	16	~	$\infty$	5,6
1/2	32	22	16	~	$\infty$	5,6	4
1/4	22	16	<b>,</b>	8	5,6	4	2,8
1/8	16	~	$\infty$	5,6	4	2,8	2
1/16	-	ω	5,6	4	2,8	2	1,4
200	0.	6 m 1	m 1.	5 m 2	2 m 2,	5 m 3 I	n
, s	nterwasser Lichttechn <b>u b t r o</b>	nik GmbH		6M	ש		LZ20

. Technical Data <i>nova</i>	
<b>U/W guide number</b> , light path 2 m, empirical value	20 / 250Ws
Illumination underwater (circular beam) DIN 19011	116°
Dome port	
Flash frequency time: (minimum/full output)	0.1 / 2.5 seconds
Number of flashes / at full power	120
<b>Color temperature</b> above water; warm light toned tubes	4600K
Body, sealed by O-rings	aluminum, hard-coated,
maximum depth	80m
Illuminated scale	white LED
Dimensions length/diameter	225 mm / 100 mm
Weight / weight under water	1.9 kg / (0 g) with external accu
Flash arm connection:	M8
Manual-Mode, power levels	1/1, 1/ 2, 1/4, 1/8, 1/16, 1/32
TTL flash mode	Decision must be made in favor of analog or digital
analog	automatic camera recognition for CANON, NIKON and PENTAX models
digital	CANON, NIKON or OLYMPUS models must be selected
Preflash, max. frequency	20 kHz
LED ready indicator	
LED error indicator for underexposure	
Slave flash mode depends on the Modell	1/1, 1/2, 1/4, 1/8, 1/16, 1/32
Exposure distance under water	approx. 15 m
SOS flash mode	approx. 12 flash signals per minute
Pilot lamp	
High energy LED 3W chip with lens system in the centre of the reflector, usable with all operating modes, comparable halogen lamp output, illumination duration, illumination angle / Dimmer function	10 W 160 mins. spot with 10° 2 settings
Remote switching of the pilot lamp from the body	upon request
Power source external battery	rechargeable battery system
Power supply connection	1 S4 socket
2 LiMn accumulators, heavy-current capability	1,4 Ah 2,4 Ah optional
Electronic battery charger, very low weight, rapid- charge system, processor-controlled, charging via a S4 socket connector LED charge indicator Charge time with super LiMn charger	100-240 V charge time: approx. 2 hours 2-color LED on the charger 1 hour
Removable synchronized cable with N5 plug	
Synchronized sockets analog	1 N5 socket
Synchronized sockets digital	1 N5 socket or S6 socket (varies according to camera model)
Anti-exhaustive discharging	electronic
12.08	Subject to technical alterations

# Notes

- 1. The warranty conditions apply exclusively to purchases made in the Federal Republic of Germany.
- 2. The warranty stipulations of the respective country or the warranty conditions of the vendor apply to purchases made abroad.
- 3. The warranty period begins with the conclusion of the purchase agreement or on the date of delivery of the device to the purchaser (consumer).
- 4. We grant a function and impermeability warranty for a period of 24 months on devices supplied by subtronic. Excluded Accumulators (Warranty 6 Month)
- 5. The function and impermeability warranty shall become void, however, in the event of damage caused by an accident or by the device being dropped, if the device is opened, in the event of negligence or improper usage, in particular with regard to damage to the cabling and water penetration at improperly fastened screw connections, in the event of non-observance of the operating conditions, or in the event of failure to comply with the operating manual. Improper handling and intervention by the purchaser or a third party shall exempt subtronic from all warranty obligations and all other claims.
- 6. Under the terms of the warranty, devices that become defective as the result of an acknowledged manufacturing or material defect shall either be repaired free of charge or replaced should the repair costs be disproportionately high. A more extensive liability is excluded. **subtronic** shall not be liable for **indirect damages** and reserves the right of decision with regard to repairs or replacement. The provision of warranty services shall not represent a reason for either extending the warranty period or granting a new warranty period for the replaced or repaired parts.
- 7. Furthermore, wear and tear, usage, as well as excessive use, are likewise excluded from this warranty. The following parts are covered by the aforementioned stipulation: Flashtubes, accumulators, socket contacts, connecting cables. The accumulators used by our company are subjected to a multi-stage selection process, and the capacity of the accumulators is verified several times prior to delivery. We shall not provide any services under the terms of this warranty for accumulators that have been improperly used, e.g. storage in a discharged condition, or long storage periods without charging resulting in exhaustive discharging.
- 8. Please return faulty devices either to your specialist retailer or directly to subtronic GmbH together with the proof of purchase, in transport-proof packaging, and accompanied by a full and accurate description of the complaint. Devices are sent by, and returned to, the purchaser at own risk.

## subtronic GmbH Weilheim a. d. Teck

Device number						
Sales date						
Retailer stamp		 	 	 	 	

# **subtronic GmbH** Michael-Becker-Strasse 9A D 73235 Weilheim Deutschland / Germany

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WEEE-Reg.-Nr.: DE50693801

The answering machine is switched on outside of office hours.

Visit us on the Internet: http://www.subtronic.de

your local subtronic Dealer