// NOVA D 1200 / D 2400

Flash generator

USER MANUAL //

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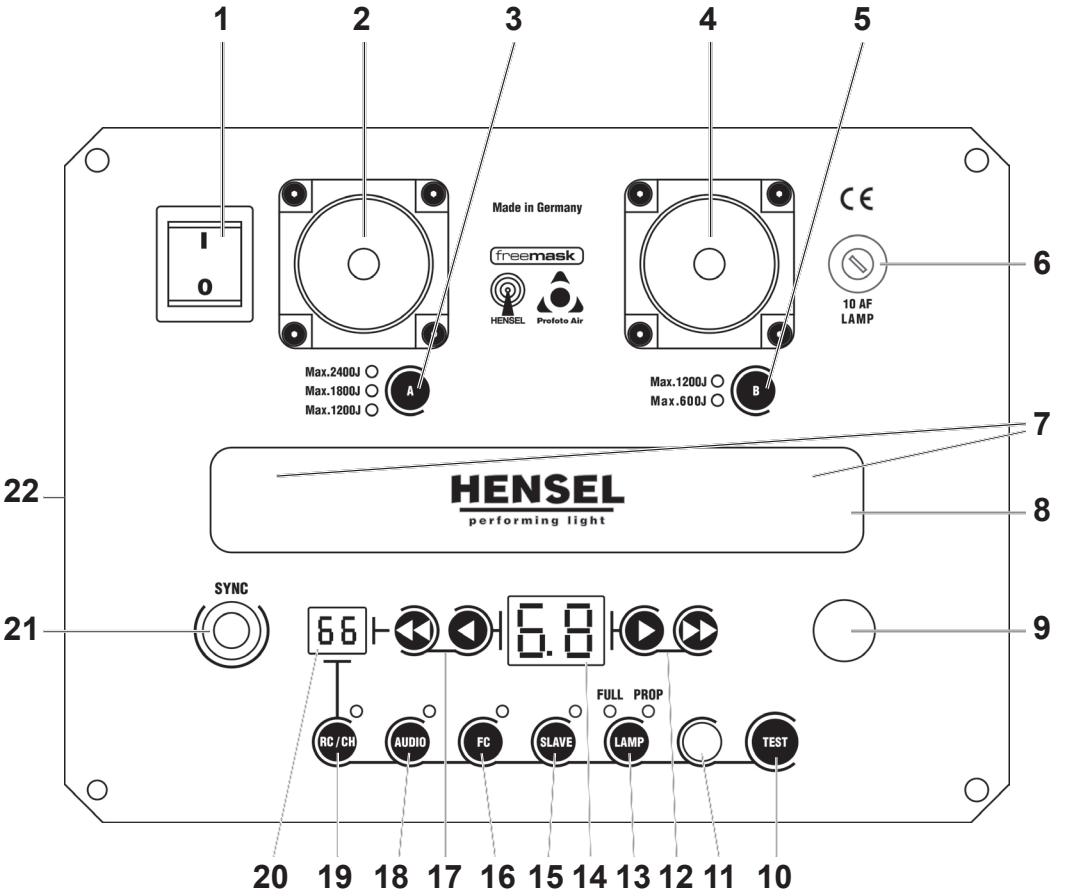
HENSEL
performing light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LAMP
Max.2400J
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performing light
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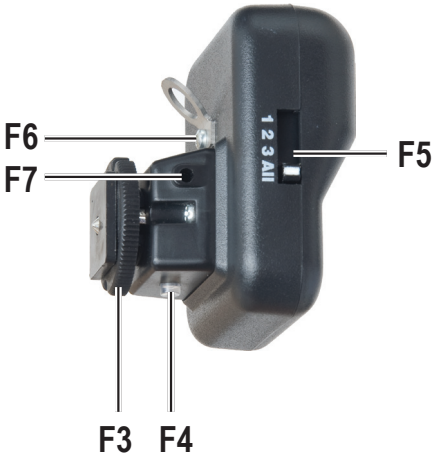
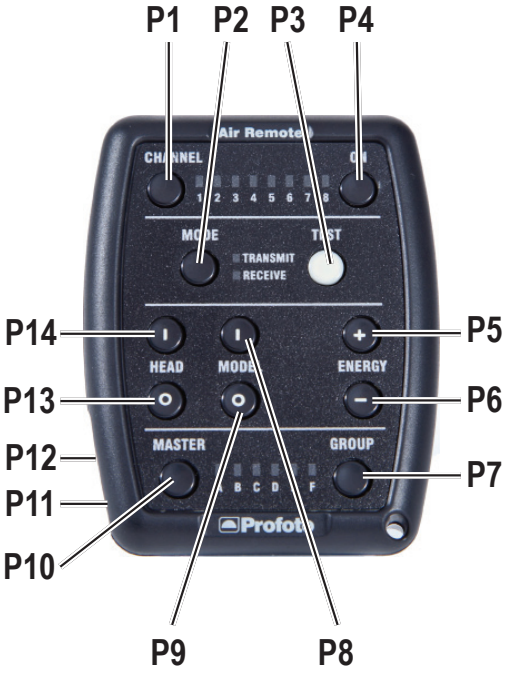


Strobe Wizard Plus / freemask



Profoto Air Remote

Profoto Air Sync

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Subject to technical changes. Errors and omissions excepted. The listed data are standard values and not to be regarded as guaranteed values in a legal sense. Values can deviate depending on component tolerance.

98.0006.00
Effective date: 07/2012

1 Preface

Dear photographer,

By purchasing the flash generator **Nova D**, you have selected a high-quality and high performance product.

Below, we want to give you some details and hints on how to use this unit. These will ensure successful and productive work with it in the coming years.

Observing this necessary information entitles you to warranty adjustments, prevents damages, and extends the operational life of the unit.

Hensel-Visit took great care and observed all pertinent regulations on order to manufacture a safe product of highest quality. Stringent quality checks ensure our high quality standard even in large-scale production.

Please add your part and handle the equipment with the necessary care.

If you have any questions regarding the use of this equipment, feel free to call us any time.

We wish you great success and „good light."

HENSEL-VISIT GmbH & Co. KG

2 Content

3 Safety instructions

In addition to the general rules for handling electrical equipment, the following safety precautions must be observed.

Read and observe the below listed information before initial operation of the equipment.

Supply a copy of the safety precautions when selling, leasing, or otherwise distributing this equipment.

ATTENTION!
Improper handling of the device, non-compliance with the safety hints below, or tampering with the safety features can cause property damage, bodily injury, electric shock, or even death.

Normal use

The main function of the flash generator Nova D is to provide electric power for specific types of flashes. It is mainly designed for use inside a studio. Operating it outside of a studio requires taking certain precautions, see below.
The flash generator is only to be used with the accessories approved by Hensel-Visit which are described in this manual.

Abnormal use

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

Set-up and initial operation

- Do not use flash units in explosive environments.
- Before connecting the **Nova D** to the power supply, make sure that the mains voltage corresponds to the specifications listed on the unit's specification plate.
- The **Nova D** must only be connected to grounded power supply systems.
- Only use plugs/connectors with flawless contacts. Burned and/or corroded plug contacts can be the cause of fires. Defective plugs may lead to damaged plug sockets. The generator's plug sockets also need to be checked for consequential damage.
- Do not connect accessories from other manufacturers, even when these look similar or alike.

- To prevent damages and tripping hazards, avoid laying cables on the floor. If this is not possible, make sure that the cables cannot be damaged by vehicles, ladders, etc.
- Damaged cables and housings need to be replaced immediately by an authorized service department.
- Keep the minimum distance around the equipment unobstructed to ensure proper ventilation.
- Do not place any objects on top of the equipment (coffee cups, vases, containers filled with water, etc.).
- Protect the equipment from moisture, dripping or splashing water.
- Choose safe locations for set-up and make sure that the equipment cannot fall into pools or bodies of water.
- Keep proper distance from flammable materials like decorative fabrics or paper to prevent the risk of fire.
- Secure the equipment with a back-up support when attaching it to ceilings or pantographs. Use the device's safety features and secure the device **additionally** with a safety rope. Suitable safety ropes can be purchased from Hensel-Visit, see „14 Accessories“ on page 39.

Generators and flash heads

ATTENTION!
Defective flash tubes and false handling with defective units can pose a mortal danger.

A damaged flash tube can mean mortal danger because you could come in contact with the electrodes conducting high voltage. Therefore, never touch exposed electrodes inside the flash tube!

First, switch off generators and disconnect them from the power supply. Then disconnect the flash from the generator.

Flash tubes must only be changed by authorized and trained personnel. Changing flash tube and modeling light must only be done after the generator has been switched off and the flash head is disconnected therefrom.

Halogen lamps and flash tubes may burst and must only be operated with properly mounted Hensel safety dome.

ATTENTION!
Risk of death when coming in contact with the condenser voltage.

Opening the housing and repairs of the unit must only be done by an authorized customer service provider.

Working with the equipment

- Do not flash into eyes at short distances since this may lead to eye damage.
- Do not look directly into the flash tube or the reflector. The flash could be triggered accidentally.
- Regularly air closed rooms to prevent build-up of inadmissible ozone concentrations which can occur due to the use of high-powered flash systems.
- Cover the equipment which is not in use with a proper dust guard when working in a dusty environment.

4 General

Description

The **Nova D** is a powerful flash generator. The generator can be triggered and controlled via the built-in radio receivers Strobe Wizard Plus, freemask and Profoto Air. The radio antennas are integrated in the handle of the generator. The stored energy is digitally adjustable in 1/10 steps and can be distributed either symmetrical or asymmetrical via the two flash sockets. Extremely fast flash recycle times, short flash duration times, and a wide output range hallmark this robust unit. The large LED display and the illuminated foil surface with its distinct stamping and the Hensel user logic make the **Nova D** easy to use.

Any Hensel-Visit lamps with 13-pin round plug and a capacity higher than 3000 J can be connected directly. Please note the restrictions concerning the maximum number of flashes in sequence that apply to specially designed models. Hensel Flash heads with long plug can be operated via optionally available adapter cords. These adapt the 13-pin round plug to fit a 20-pin flash socket. Please ask Hensel-Visit for more information.

This user manual describes the generators **Nova D 1200** and **Nova D 2400**. The operation is identical, the only differences are the performance level and the housing dimensions.

Scope of delivery

Please check the scope of delivery before initial use.

Note:
The scope of delivery may vary depending on order configuration and country of delivery. Please see corresponding information on your delivery documents and order forms.

Standard scope of delivery includes:

- 1 Nova D 1200 or Nova D 2400
- 1 Power cord
- 1 Sync cord
- 1 User manual

5 Technical data

Model	Nova D 1200	Nova D 2400
Listed performance output:	1200 J	2400 J
Lead aperture 100 ASA, t 1/60, 12"-Reflector, output 10.0*: **1 m distance:** **2 m distance:**	 128 0/10 64 0/10	 180 0/10 128 0/10
Shortest flash duration time, t 0,5 s **1 EH Mini Speed:** **1 EH Mini:**	 1/4.500 1/2.800	 1/3.160 1/1.450
Shortest flash duration time, t 0,1 s **1 EH Mini Speed:** **1 EH Mini:**	 1/1.800 1/850	 1/920 1/400
Flash duration time, t 0,5 s, 10.0 output* **1 EH Mini Speed:** **1 EH Mini:**	 1/1.500 1/880	 1/750 1/440
Flash duration time, t 0,1 s, 10.0 output* **1 EH Mini Speed:** **1 EH Mini:**	 1/520 1/270	 1/240 1/125
Flash recycle time at max. output:	0,6 s	1,1 s
Flash recycle time at min. output:	0,16 s	0,2 s
Flash performance adjustment: **Output distribution:** **Flash sockets:**	10 - 3 = 8 f-stop symmetric or asymmetric 2 (round sockets)	
Modeling light:	240 V / 650 W , 120 V / 300 W	
Fitting flash heads:	Hensel EH Mini, Ring flash P/PM-XS 3000, F-Spot 3000 (round plug), LightStick 3000 (round plug) and others	
Fuse protection modeling light/charge:	2 x 10 AF, high operating capacity	
Weight including battery:	7,15 kg	8,5 kg
Housing dimensions in cm (LxWxH):	19,8 x 26,0 x 26,8	19,8 x 26,0 x 30,6
Code no.:	3612	3624

** Output 10.0 = 100%.*

Radio remote unit series/unit type	**Strobe Wizard Plus transmitter/T4/6 V freemask transmitter**
Range:	> 40 m (12.2 feet) at clear visibility
Channels:	3 individual channels adjustable + 1 „All“ channel
Frequency:	433,92 MHz
Sync voltage for camera:	< 1 mA for 5 µs / 3 V
Minimal shutter speed for sync:	1/250 s with focal plane shutter 1/500 s with between-the-lens shutter
Weight:	0,053 kg
Housing dimensions (LxWxH):	55 mm x 63 mm x 48 mm
Rating:	IP 32
Suitable flash units:	Nova D, Expert D, Porty L, Speed Max, Integra Plus
Designation of battery:	28L/6 V
Code no. Strobe Wizard Plus transmitter:	3950
Code no. freemask transmitter:	3955
The system meets all requirements according to ETSI EN300220 and FCC15.231	

Radio remote unit series/unit type	**Hensel Profoto Air**
Code no. Air Sync:	3965
Code no. Air Remote:	3966
See the original user manual of the manufacturer Profoto	

Technical modifications excepted.
The listed data are standard values which may deviate depending on component tolerances.

6 Summary of control elements

Nova D 1200/2400

1 .....Power switch ON/OFF

2 .....Flash socket channel A

3 .....Output switch channel A

4 .....Flash socket channel B

5 .....Output switch channel B

6 .....Fuse modeling light/charge
10 AF

7 .....Storage for replacement fuses

8 .....Handle with radio antenna

9 .....Photo cell

10....Test flash **TEST**

11....Indicator flash ready **READY**

12....Output adjustment in 1/10 or
1 f-stop increments

13....Modeling light ON/OFF/PROP **LAMP**

14....Indicator for selected output/
flash count/groups/error codes

15....Photo cell ON/OFF **SLAVE**

16....Flash Check **FC**

17....Output reduction in 1/10 or
1 f-stop increments

18....Audio signal ON/OFF **AUDIO**

19....Radio receiver ON/OFF (Hensel,Profoto)
and channel selection **RC/CH**

20....Indicator channel selection

21....Sync socket **SYNC**

22....USB interface

7 Initial use

ATTENTION!
*Please make sure that the unit is **not** connected to a power supply when preparing for initial use.*

Acclimatization

When relocating the flash generator from and to locations with substantial temperature differences, place the unit in the surroundings where it is to be used and leave it there for some time. This prevents moisture built-up which can result in creeping currents.

Set-up

ATTENTION!
Please regard the general safety instructions pertaining to set-up location and surrounding area in the chapter „Set-up and initial operation" on page 8.

The generator can be operated standing or in horizontal position.

ATTENTION!
Mortal danger! Make sure that units (generators with flash heads connected to them) used outdoors or near bodies of water (ocean, river, pool, etc.) do not come in contact with water or fall into it. Always ensure secure placing of the units. If necessary, secure them against tipping or dropping.

Suspended mounting

Doubly secure the equipment against dropping when mounting it in a suspended fashion. According to the applicable safety regulations, it is necessary to secure the units twice by using a steel rope. This can be ordered from Hensel-Visit, see „14 Accessories" on page 39.

➲ Lead the steel rope through the generator's handle and through a suitable eyelet on the suspension.

Hooked to a stand

The optional generator holder (see „14 Accessories“ on page 39) allows you to hook the generator to the bottom of a lamp stand. Thus the stand has a lower center of gravity and therefore, a more secure stand. This also protects the generator from possible moisture and dirt on the floor.

Mains connection

ATTENTION!
Before connecting the flash generator to the power supply, make sure that the voltage corresponds to the information on the type label or the values listed in the documentation. Flash generators must only be connected to grounded power supplies.

The type label is located at the bottom side of the housing.

The Nova **D 1200 / D 2400** is equipped with multivoltage technology which means the unit automatically adjusts to the applicable voltage.
The modeling lamp must be manually plugged in according to the existing power supply voltage.
The included power cord is connected to the generator's power connector socket and then connected to the power supply.

Fuse protection, building

Ue = 230 V	Ue = 115 V
16 A*	20 A

*: Head curve B

Flash head connection

ATTENTION!
Always switch off the generator before connecting a flash head. Please note the general safety precautions listed in the section„Generators, compact flash units and flash heads" on page 10 when handling flash heads.

Special flash heads are intended for the use with **Nova D**. The flash head cable is connected via a round plug to the flash head and to the generator **2, 4**.

Flash heads with 115 V or 230 V modeling light

- EH Mini
- EH Mini Speed
- EH Pro (long plug, via adapter)

These flash heads are operated with a 115 V or a 230 V modeling light. The modeling light has a maximum of 300 W / 650 W.

Note:
These flash heads must be connected via the flash head cable marked with **yellow/red**.

- The modeling light can be set to continuous mode or to automatic switch off via the generator.
- The modeling light can be set proportionally to the flash output (**LAMP** key **13**).
- The cooling fan is running.

ATTENTION!
The flash generators Nova D 1200 and D 2400 have a substantially higher charge output, e. g. they can flash much faster in sequence. This may cause thermal overload of older flash heads when using existing equipment.
Even though protective measures were included in the generators to prevent thermal overload of the heads, please note also the restrictions of individual flash heads.

Connection of further flash heads

A list of suitable flash heads can be requested at info@hensel.de

Other manufacturers

Though similar lamp sockets and plugs may be used by other manufacturers, their lamps and flash heads must not be connected to the **Nova D**. Please contact the Hensel customer support concerning options for adaption.

8 Operation

ON/OFF switch

The flash generator is switched on by pressing the main switch **1**. When the flash ready light **11** comes on, the unit is ready to flash.

When switched on, it defaults to the settings which were active before the last switching off. This means that the unit stores the settings at the time of switch off.

The main switch **1** switches the generator off.

Synchronization

The synchronization between flash generator and camera is either done via sync cord, the built-in photo cell, or via the radio **Strobe Wizard Plus**, **freemask** or **Profoto Air**.

Synchronization via cable

The battery flash generator is connected to the camera by connecting the synchronization cable with 6.3 mm jack plug to the sync socket **21** on the camera.

The synchronizing process uses the latest semiconductor technology and warrants reliable triggering of the flash unit even when using older camera models with mechanical contacts. The lower voltage of the sync socket makes safe and reliable operation possible, also with the use of modern digital cameras.

Note:
Based on the multitude of possible electronic circuits in different cameras which are used for the synchronization, we are not liable for possible damages to the camera used for flash triggering. Please contact the camera's manufacturer before using a non-standard camera for such purposes.

Synchronization via photo cell

The built-in slave **9** triggers the flash through the incidence of a flash that was emitted by another unit (slave mode).

This mode of operation is activated/deactivated with the **SLAVE** key **15**. The on-state is indicated via the key's LED.

The slave is an impulse photo cell. It only triggers the flash when the incidence of the other flash is stronger than the ambient light.

Note:
Make sure that no other bright, ambient light reaches the slave. If this cannot be avoided, use a cable or radio transmitter for synchronization.
Another interference can be arc discharge lamps, like the ones used in ceiling spots. The impulse-like eradiated light could possibly trigger the slave.

Synchronization via radio transmitter

The remote radio-control systems **Strobe Wizard Plus**, **freemask**, and **Profoto Air** can be used to conveniently synchronize camera and flash unit via radio remote control.

Synchronization is done by selecting from three optional channels.

Activation of the radio channels and channel setting of the **Strobe Wizard Plus**, **freemask**, and **Profoto Air** units is done via the **RC/CH** key **19**.

Switching radio receiver on/off

- ➲ Briefly press the **RC/CH** key **19** to switch on the radio mode. The display **20** reads „Cx" or „Fx" for the channel of Strobe Wizard Plus. The displayed information depends on the setting before switching the unit off last. The LED above the key lights up green.
- ➲ Again press the **RC/CH** key **19** briefly.
  The display **20** reads „Px" for the channel of the Profoto Air receiver. The LED above the key lights up orange.
- ➲ Again press the **RC/CH** key **19** briefly to switch off the radio mode.

Switching radio channels

- ➲ Press the **RC/CH** key **19** for ca. 2 s to switch the channels of the radio receivers.
- ➲ The control keys ◀, ◀◀ **17** and ▶▶, ▶ **12** are for switching channels

For a detailed description of the systems, please see „9 Operation with Strobe Wizard Plus" on page 26.

Note:
Other radio transmitters like radio thermometers or radio remotes that use the same radio frequency may interfere with radio operation or trigger flashes sporadically.

Modeling light

The modeling light is switched on, off and changed via the **LAMP 13** key. The current setting is displayed with LEDs above the key.

- ➲ **Briefly pressing** the **LAMP** key **13** switches the modeling light to **FULL** mode, the LED lights up. In this mode the halogen lamp shines with full brightness, independent from the selected flash output.
- ➲ **Pushing** the **LAMP** key **13 a second time** switches the modeling light to the **PROP** setting. The LED **PROP** lights up. In this mode the brightness of the halogen lamp is proportional to the selected flash output.
- ➲ **Repeatedly pushing** the **LAMP** key **13** switches off the modeling light and the LEDs **FULL** and **PROP** are no longer lit.

The Nova D generator has a stand-by mode called **Auto Dimm** which extends the life of the lamp. In this mode, the lamp output is reduced from settings greater than 9,0 to a setting of 9,0 if no generator keys are pressed during a preselected time.
When pressing the keys ◀ **17** and ▶ **12** simultaneously, the switch time selected last is shown on the display **14** in minutes. The setting is done in minute steps with the ◀ **17** and ▶ **12** keys and done in 5-minute steps with the keys ◀◀ **17** and ▶▶ **12**. When selecting the time „0“, the display shows „--“. In this case, there is no output reduction. The modeling light‘s original brightness is switched on again if any key is used or a flash is triggered.

Note:
Switch off the modeling light during longer breaks to conserve energy and extend the life of your lamp.

Power adjustment

The flash output is adjusted in steps over a range of 8 f-stops with the ◀, ◀◀ **17** and ▶▶, ▶ **12.** ◀ reduces the power, ▶ increases the power of the flash light

- Pressing the keys ◀ and ▶ adjusts the power in steps of 0.1 f-stops.
- Pressing the keys ◀◀ and ▶▶ adjusts the power in full f-stop steps.

The LED display **14** shows the selected output values from 3.0 to 10.

Nova D can be operated in symmetrical or asymmetrical mode via the two flash channels **A 3** and **B 5**.

Setting is done via the **A 3** and **B 5** keys. The LEDs next to the keys indicate the selected maximum power for each channel.

A maximum of 2400 J (Nova D 1200: 1200 J) can be set for channel A and a maximum of 1200 J (Nova D 1200: 600 J) can be set for channel B.

Power adjustment, only channel A is used

➲ Press the **A** key **3** to switch on the flash channel A. The LED at **Max. 2400 J** (Nova D 1200: **Max. 1200 J**) lights up.

➲ Select the desired flash output with the keys ◀, ◀◀ **17** and ▶▶, ▶ **12**.

Listed power output	Energy Nova D 2400	Energy Nova D 1200
10	2400 J	1200 J
9.0	1200 J	600 J
8.0	600 J	300 J
7.0	300 J	150 J
6.0	150 J	75 J
5.0	75 J	37.5 J
4.0	37.5 J	19 J
3.0	19 J	8.5 J

Press the **A** key **3** again to switch off the flash channel A again.

Power adjustment, only channel B is used

The power output is adjusted the same way for channel B - via the **B** key **5.**

Listed power output	Energy Nova D 2400	Energy Nova D 1200
9.0	1200 J	600 J
8.0	600 J	300 J
7.0	300 J	150 J
6.0	150 J	75 J
5.0	75 J	37.5 J
4.0	37.5 J	19 J
3.0	19 J	8.5 J

Press the **B** key **5** again to switch off the flash channel B.

Power adjustment, both channels, symmetric operation

- The channel B is changed to „Max. 1200 J“ by repeatedly pressing the **B 5** key. If this channel was already switched on, it is automatically set to „Max. 1200 J“. If this is not the case, switch on channel A by pressing the **A 3** key.
- Select the desired flash output with the keys ◀, ◀◀ **17** and ▶▶, ▶ **12**, see above.

Power adjustment, both channels, asymmetric operation

- Set an asymmetric maximum power output by repeatedly pressing the **A 3** and **B 5** keys.
- Adjust the desired flash output with the keys ◀, ◀◀ **17** and ▶▶, ▶ **12**.

	Option	Channel A	Channel B	
Nova D 2400	1	2400 J	---	only channel A
	2	1200 J	1200 J	symmetric
	3	1800 J	600 J	asymmetric
	4	1200 J	600 J	asymmetric
	5	---	1200 J	only channel B

	Option	Channel A	Channel B	
Nova D 1200	1	1200 J	---	only channel A
	2	600 J	600 J	symmetric
	3	900 J	300 J	asymmetric
	4	600 J	300 J	asymmetric
	5	---	1200 J	only channel B

Automatic power drop (APD)

When the flash output is reduced, the APD system (Automatic Power Drop) depletes the stored energy internally. No flash is triggered.
Triggering a test flash also drops the stored energy.

Test flash

The test flash is triggered by hand with the **TEST** key **10**. Holding down the key results in the fastest possible sequence of flashes.

Audio

The audio signal signals different modes of operation: flash readiness after flashing or power dumping is indicated by an acoustic signal (1x short). This function can be switched off above the **AUDIO 18** key.

Error messages are indicated acoustically (1x long) and are also shown in the display **20** (display **Er**) and **14** (type of error).

An audible signal (3x short) indicates that the upper or lower end of the performance output range has been reached. The setting limits may vary depending on the output distribution on the flash sockets.
Adjusting settings via the keys ◀, ◀◀ **17** and ▶▶, ▶ **12** results in just one audible signal upon reaching the limit of the setting range. When adjusting settings via a radio control, an audio signal indicates that the output range limit was reached after each try.

Flash readiness

Flash readiness after switching on is indicated by a LED **READY 11**. Flash readiness is also signalled by an audio signal if this function is activated.

Flash Check

The Flash Check mode is activated with the **FC 16** key. In this mode, the modeling light turns off immediately after flashing or reducing the output and lights up again when the selected unit's energy level has been reached again. This shows the correct charge and flash readiness. This flash check signals that all flashes were triggered when several flashes are in use.

Daily flash counter

The number of flashes which were triggered since last resetting the counter is displayed on the two LED displays **20** and **14**.

How to read the daily flash counter:

➲ Press the **AUDIO** key **18** for one second. The LED displays **20** and **14** are blinking and show the number of flashes triggered.

Both displays are read together. The number range of the flash counter goes up to 9999.

Example:

Left display	**right display**	**result**
00	21	21 flashes
01	01	101 flashes

How to reset the daily flash counter:

➲ While in flash count mode, press the **SLAVE** key **15**
The display is reset to 00 00.

USB Interface

The USB interface **22** located on the side of the generator's housing is only used for service purposes.

9 Operation with Strobe Wizard Plus

Radio triggering

The **Nova D** flash generator has a built-in radio receiver that can be used for flash triggering.

Radio remote control

This radio connection also allows you to remotely control the modeling light and remotely adjust the power output.

Summary of control elements

Transmitter

F1 ..... Output reduction in 1/10 f-stops (flash output and modeling light options)

F2 ..... Output increase in 1/10 f-stops (flash output)

F3 ..... Fixing nut for mounting on hot shoe (Hot Shoe)

F4 ..... Test flash trigger

F5 ..... Channel selection switch

F6 ..... Mounting eye/locking screw for battery compartment

F7 ..... Socket for sync cable 2.5mm

Basic transmitter setting

Mounting transmitter

The transmitter does not have an ON switch. It is ready when connected to the camera via the hot shoe or a sync cable.

➲ Attach the transmitter to the hot shoe of the camera and secure it with the fixing nut **F3**.

- or -

➲ Depending on camera type, mount the transmitter to a flash rail and connect the transmitter socket **F7** to the camera via the included sync cable.

Setting channel

Transmitter and receiver can be synchronized via three different channels. Up to three different work stations can be controlled separately. Additionally, the transmitter can also control all receivers together.

The setting is done with the channel selection switch **F5**.

➲ Set the channel selection switch **F5** to channel 1, 2 or 3 for synchronizing individual channels

- or -

➲ Select the switch position **ALL** when all channels are to be controlled.

Setting receiver

See description on pages 20/21

Output adjustment

The flash output is adjusted in steps of 0.1 f-stops with the two control keys ▼ **F1** and ▲ **F2** on the generator

➲ Briefly press ▼ to reduce the output

➲ Briefly press ▲ to increase the output

The generator's LED display shows the selected output values.

Switching the modeling light

Longer pressing of the ▼ **F1** key switches the modeling light of the connected flash heads. The modeling light can be switched between OFF - FULL - PROP - OFF. This function only controls flash heads which are connected to the sockets **2** and/or **4** and which are switched on via the **A 3** key and/or the **B 5** key.

10 Operation with freemask

The transmitter „**freemask**“ has all the functions of the **Strobe Wizard Plus** and is operated the same way.

Additionally, the transmitter is used for the freemask method. „freemask“ is a photographic method to produce digital clipping masks. For this method, the camera takes two exposures in sequence. Exposure values and camera position remain unchanged for both exposures. The **freemask** transmitter controls the two flash groups used for both exposures:

- The flash group for the actual motif to be photographed
- Flash group for the backlighting-like background lighting (mask lighting)

A mask layer is easily created with the help of image editing and thus the motif can be extracted.

The **Nova D** has three other „F“ channels besides the standard „C“ channels for this.

- The flash units for lighting the motif are assigned to the „C“ channels.
- The flash units for the lighting background to be masked are assigned to the „F“ channels.

When selecting channels, (see „Setting receiver“ on page 27), the **freemask** receiver channels „F1“, „F2“ and „F3“ come after the **Strobe Wizard** channels „C1“, „C2“ and „C3“.

Make sure that the channels of the flash units are assigned accordingly, e.g. C1/F1, C2/F2 or C3/F3.

Settings for freemask method

Settings for one work station

freemask transmitter

Set the channel selector switch **F5** on the chosen channel.

Motif lighting

➲ Set all flash units for the motif lighting on „C“ channels (C1, C2, C3).

Mask lighting

➲ Set the **Nova D** for lighting the mask on „F“ channels (F1, F2, F3).

Note:
In this case, the slave of the flash units for mask lighting needs to be switched off with the **SLAVE** *key* **15** *to prevent triggering the first group of flashes. The slaves of the flash units for the motif lighting can be switched on.*

Camera

➲ Set the camera on fastest possible continuous shooting speed.

➲ Set the number of exposures to „2“.

This guarantees the highest exposure frequency setting with two consecutive exposures (depending on camera).

The transmitter will trigger the flash group needed for lighting the motif (C1, C2, and C3) and then trigger the flash group needed for lighting the mask (F1, F2 und F3).

Currently, all cameras support exposure series speeds from 3 pictures per second to (in theory) 500 exposures per second.

Settings for several work stations

If several separate work stations (up to 3) exist within a radio range, each work station must have a channel assigned to it.

➲ Set the channel selection switch **F5** on **1**, **2**, or **3.**

➲ Assign the same channel „C“ to the motif‘s flash units.

➲ Assign the same channel “F” to the flash units‘ mask lighting.

Example:

station 1:	transmitter channel 1	motif C1	mask F1
station 2:	transmitter channel 2	motif C2	mask F2
station 3:	transmitter channel 3	motif C3	mask F3

11 Operation with Profoto Air

The **Nova D** flash generator is equipped with a built-in radio receiver for Profoto Air radio remote controls. The Profoto Air system is available in two versions:

Profoto Air Sync — This unit allows you to trigger individual flash units via 8 channels.

Profoto Air Remote — This unit allows you to synchronize, adjust flash output, and remotely control the modeling light.

Furthermore, the Profoto Air units have additional options which can be used to control flash units and cameras without integrated Profoto Air receiver.

Note:
Inform yourself about the many functions and further operation of the Profoto Air units by reading the respective user manuals.

Basic functions

Channels — Profoto Air Sync/Remote units transmit via 8 different channels. Work at 8 different stations is possible without interfering with each other.

Groups — Additionally, the Profoto Air Remote and the **Nova D** include the option of assigning the units to be triggered to up to 6 groups and then control these jointly.

- All flash units assigned to the same group are controlled together.
- The flash heads of the flash channels A and B of the **Nova D** can be assigned to different groups.
- The flash heads of several generators can be assigned to one group, e.g. all lamps of one light bank.
- In master mode, all flash heads assigned to the same channel can be controlled regardless of their group assignment.

Summary of control elements

P1..... Channel selection key **CHANNEL**

P2..... Mode transmitter/receiver **MODE**

P3..... Test flash flash/camera **TEST**

P4..... ON/OFF key **ON**

P5..... Flash output increase **ENERGY +**

P6..... Flash output reduction **ENERGY -**

P7..... Group selection key **Group**

P8..... Modeling light ON **I**

P9..... Modeling light OFF **O**

P10 ... Select all groups **MASTER**

P11 ... Synchronization socket flash **OUT**

P12 ... Synchronization socket camera **IN**

P13 ... Flash head OFF **O**

P14 ... Flash head ON **I**

Preparing transmitter

Mounting transmitter

The transmitter has a hot shoe adapter. The camera is synchronized via this or a separate cable.

➲ Attach the transmitter to the camera's hot shoe.

- or -

➲ Connect the transmitter's socket **IN P12** to the camera with the included sync cable.

Switching transmitter on/off

➲ Switch the transmitter on by pressing the **ON** key **P4** (at leat 1s)**.** The LEDs are blinking and show the current settings.

➲ Press the **ON** key **P4** again to turn the transmitter off.

The transmitter turns off automatically after 30 minutes of inactivity.

Transmitter/receiver mode

Profoto Air Sync/Remote units can either be used as a transmitter or as a receiver.

➲ Press the **MODE** key **P2** until the LED **TRANSMIT** lights up.
This sets up the unit as a transmitter.

- or -

➲ Press the **MODE** key **P2** until the LED **RECEIVE** lights up.
This sets up the unit as a receiver.

In this mode, flash units can be triggered via built-in radio.

Channel setting

All units that are supposed to work together need to be set on the same channel.

Transmitter The setting is done with the channel selection key **P1**.

➲ Press the channel selection key **P1** until the desired channel 1-8 is indicated on the LED bar.

Nova D The Profoto Air channels of **Nova D** are designated with P1- P8 and are shown on the left display **20**.

➲ Briefly press the **RC/CH** key **19** several times until a „P" channel is shown.
The LED above the key lights up orange.

➲ Press the RC/CH key **19** for ca. 2s to change the channels of the radio receiver.
The display is blinking. Now the channels can be changed with the selection keys ◀◀ **17** and ▶▶ **12.**

Setting group (only Profoto Air Remote)

The group setting lets you combine individual flash units/flash heads. This lets you jointly control the settings of the flash heads contained in this group. Triggering of the flash heads is done via the channel assignment.

Additionally, the transmitter can control all groups together (master mode).

Transmitter The setting is done with the group selection key **P7**.

➲ Press the group selection key **P7** until the desired group is shown in the LED bar.

- or -

➲ Press the **MASTER** key **P10** to select all groups.
The complete LED bar lights up and **all** flash heads with the same channel are controlled regardless of group assignment.

Nova D

The two flash channels A and B of the **Nova D** with their connected flash heads can be individually assigned to a group. The selected group (letter A-F) is shown on the display **14**.

- The first digit of the display **14** shows the group of flash channel A.
- The second digit of the display **14** shows the group of flash channel B.

How to change the flash channel's group assignment:

➲ Press the **RC/CH 19** key for ca. 2s.
The display is blinking.

➲ Switch on the group for the flash channel A with the control key ◀ **17** and the group for the flash channel B with the control key ▶ **12**.

After 5s the display switches back and shows the set output.

Checking channel/group assignment

➲ Press the **RC/CH** key **19** for ca. 2s.
Both displays **14** and **20** are blinking.

The selected channel is displayed in the left display **20**, the selected groups for both flash channels are displayed in the right **14**.

Profoto Air Remote

Settng power output

The keys + **P5** and **– P6** are used for adjusting the flash output **ENERGY** on the generator. Briefly pressing the key adjusts the power in steps of 0.1 f-stops, pressing the key longer (> 2 s) adjusts the power in full f-stop steps.

➲ Press + **P5** to increase the power

➲ Press **- P6** to decrease the power

The generator's LED display shows the set output values.

Flash head on/off

The flash heads **HEAD** of the controlled flash units can be switched on and off on the generator with the two keys **P13** and **P14**.

➲ Press the **P13** key to switch off the flash heads assigned to the group.

➲ Press the **P14** key to switch on the flash heads assigned to the group.

Setting the modeling light

The controlled flash heads' modeling lights **MODEL** can be switched on and off on the generator via the keys **P8** and **P9**.

➲ Press **P8** to switch off the modeling light.

➲ Press **P9** to switch on the modeling light.

12 Maintenance

ATTENTION!
The flash generator must be switched off and disconnected from the power supply before doing any maintenance work to it.

The flash generator **Nova D** requires little maintenance by the operator.

To guarantee the electrical safety, the outside of the unit must be cleaned regularly from dust and dirt.

Note:
Only clean the unit dry!

Regular maintenance

National safety regulations require the maintenance and inspection of any electrical system and equipment in regular intervals. Compact flash units, generators, and accessories must be inspected at regular intervals to ensure operational safety. An annual inspection of such devices ensures the user's safety and retains equipment value.

Replacing fuse

ATTENTION!
Fuses must not be „patched up" or otherwise bypassed. Only use spare fuses that match the below listed value and have the response rating "fast".
The flash generator must be switched off and disconnected from the power supply before replacing the fuse.

The flash lamp connectors of the battery flash generator and the mains drawer are protected against short circuit by a 10 AF safety fuse. Only use fuses with „large switching capacity" according to EN 60127-2/1 or IEC 127-2/1.

How to replace a fuse:

➲ Open the safety mount **6** with a screw driver and pull it out.

➲ Replace the defective fuse with a new one of the type listed on the previous page.

Note:
*The handle **7** of the battery flash generator contains two spare fuses **6**.*
Replace spare fuses immediately after removal.

Error messages

In case of an error, an error code is displayed in display **14**.
The numbers mean the following:

No.	Error	Description
E1	Charging error	Max. charge time exceeded, e.g. afterglow, errors do not reset automatically, unit must be turned off and then on again.
E2	Discharge error	Max. discharge time exceeded, error does not reset automatically, unit must be turned off and then on again.
E3	Overload error	Error does not reset itself, unit must be turned off and then on again.
E4	No flash	Error resets itself after a short time.
E5	Temperature error	Error resets itself as soon as the temperature falls below critical values.

Warranty

The warranty period for battery flash generators depends on the country of delivery.

You can obtain information pertaining to warranty periods on the Internet pages of the distributing companies.

Normal usage, meeting the safety requirements in the instruction manual, and adhering to the information therein are prerequisites for this warranty. Unauthorized manipulation and tampering with the unit void any warranty claim.

Flash tubes, modeling lamps, protective glass covers, and defective cables which are caused by improper handling are excluded from the warranty.

The warranty includes replacement of faulty parts and the time required for installation by a qualified technician.

Note:
You may send the unit free of charge to one of the customer service points, see „13 Customer service points“ on page 38. Please include a short description of the defect.

Disposal

The packing material of the generator needs to be sorted and recycled as necessary. Retired and defective electronic equipment must be recycled in accordance with regulation.

13 Customer service points

Manufacturer's service

HENSEL-VISIT GmbH & Co. KG
Robert-Bunsen-Str. 3
97076 Würzburg
Tel. +49 931 27881-0
Fax: +49 931 27881-50
E-Mail: info@hensel.de

Service points listed in the Internet

Additional national and international service and distribution addresses can be found on the web page of Hensel-Visit GmbH & Co. KG: **www.hensel.de**

14 Accessories

Flash heads

EH Pro Mini	code no.: 3605
EH Pro Mini Speed	code no.: 3606
Ring flash RF 3000P/PM-XS	code no.: 3410
F-Spot 3000 round plug	code no.: 3391
LightStick 3000 Ws Rundstecker	code no.: 379

A comprehensive list of suitable flash heads can be requested at info@hensel.de

Radio transmitter/receiver

Strobe Wizard Plus transmitter	code no.: 3950
freemask transmitter	code no.: 3955
Profoto / Hensel Air Sync	code no.: 3965
Profoto / Hensel Air Remote	code no.: 3966
Profoto / Hensel Air USB	code no.: 3967

Additional accessories

Safety rope	code no.: 769
Generator support	code no.: 227

Sync cable, different lengths

15 Subject index

16 Declaration of Confirmity

for Radio and Telecommunication Terminal Equipment, Electromagnetic Compatibility and Safety

Manufacturer:	HENSEL- Visit GmbH & Co.KG Robert-Bunsen-Str. 3 97076 Würzburg Germany
Owner of Certification:	HENSEL- Visit GmbH & Co.KG Robert-Bunsen-Str. 3 97076 Würzburg Germany
Test Report:	of July 20, 2012
Product:	**Nova D 1200, Nova D 2400**
Description:	**Radio and Telecommunication Terminal Equipment**
Standards:	EN 300220-2 V 2.1.2

This declaration of conformity is made by the above mentioned manufacturer according to article 3, of the governing EU- directives R&TTE1999/5/EC referring to Radio and Telecommunication Terminal Equipment for bringing the statutory instruments of the Member States into lines with each other. This declaration does not make any statement according to requirements of other provisions concerning the electromagnetic compatibility and safety.

Description:	**Emission and Interference Resistance**
Standards:	EN 301489-1 V 1.8.1 EN 301489-3 V 1.4.1

This declaration of conformity is made by the above mentioned manufacturer according to article 10, paragraph 1, of the governing EU- directives 2004/108/EC referring to electromagnetic compatibility and safety for bringing the statutory instruments of the Member States into lines with each other. This declaration does not make any statement according to requirements of other provisions concerning the electromagnetic compatibility and safety.

Description:	**Low Voltage Directive**
Standards:	EN 60065:2002+A1:2006+Cor.:2007+A11:2008 EN 60598-1:2008+A11:2009 EN 60598-2-9:1989+A1:1994 EN 50371:2002

This declaration of conformity is made by the above mentioned manufacturer according to article 10, paragraph 1, of the Governing EU- directives 2006/95/EC referring to electrical items for usage within specified voltage limits.

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

Date: July 20, 2012

Manufacturer

Guido Puttkammer
- Managing Director -
HENSEL- Visit GmbH & Co.KG

HENSEL

performing light

WWW.HENSEL.DE