

**O**peration manual **GB** 

Nr. 31884

# Made in Switzerland









# TABLE OF CONTENTS

1 Product description	2	
<ul> <li>1.1 Use and operation</li> <li>1.2 Technical data</li> <li>1.3 Ambient conditions for operation</li> <li>1.4 Ambient conditions for transport and storage</li> <li>1.5 Device labels</li> </ul>	2 2 2 2 2 2	
2 Safety instructions	2	
3 Supplied equipment	3	
4 Commissioning	3	
5 Operation	4	
<ul> <li>5.1 Operator's controls</li> <li>5.2 Switch on device</li> <li>5.3 Operation</li> <li>5.3.1 Operation without a foot pedal:</li> <li>5.3.2 Operation with on/off foot pedal:</li> <li>5.3.3 Operation with Vario foot pedal:</li> <li>5.4 "Overheat" overload protection</li> </ul>	4 5 5 5 5 5 5	
6 Cleaning	6	
6.1 Motor or handpiece	6	
7 Faults and fault detection	6	
8 Discarding instructions		



# **1** Product description

#### 1.1 Use and operation

The NM3000 has a broad field of application. It can be used for grinding, polishing, milling, drilling, etc. It can control motors or handpieces, and guarantees a uniform tractive power throughout the rotational speed range.

Fields of application :	Tool manufacturing	Chiropody
	Mechanics	Nail studio
	Dental technology	Jeweller's shop

The NM 3000 table model can be operated without a foot pedal, with an ON/OFF foot pedal or with a VARIO foot pedal.

## 1.2 Technical data

Operating voltage:	115 V~ / 60 Hz or 230 V~ / 50 Hz (see device label!)
Power:	130 VA
Dimensions (W x H x D):	170 x 100 x 95 mm
Net weight:	2.5 kg

#### **1.3** Ambient conditions for operation

Rel. air humidity:	max. 80%
Temperature:	10 to 40℃
Air pressure:	800 to 1060hPa

# 1.5 Device labels



:Caution: Refer to enclosed documentation!

IP22

: Drip-proof foot pedal

# 1.4 Ambient conditions for transport and storage

Rel. air humidity:	max. 90%
Temperature:	0 to 60℃
Air pressure:	700 to 1060hPa



: EC conformity symbol

: Old electrical and electronic equipment must be disposed separately and may not be included in regular domestic waste.

# 2 Safety instructions

We are very much concerned with your safety, your team's safety and of course your patient's safety. Therefore, it is imperative for you to comply with the following instructions:

The NM 3000 may only be operated by experienced trained personnel!



The use of third-party products is the responsibility of the operator!

Please ensure that operating voltage and mains voltage agree!

- Repairs may only be carried out by authorised NOUVAG service engineers!
- Improper use and repair of the device as well as not complying with the instructions relieve us from any obligations regarding guarantee or other claims!

# **3** Supplied equipment

		Product no. →	01	04	06	07	10
Article no.	Article designation	Quantity	10	10	10	10	10
1037	Control device NM 3000	1 unit	•	•	•	•	•
1050	Micromotor 31	1 unit	٠	1	٠	•	
1055	Handpiece 34	1 unit		1	•		
1119	Motor handpiece 38	1 unit		•			•
1488	On/off foot pedal	1 unit	•	•			
1487	Vario foot pedal	1 unit		]	•	•	•
1066	Hand piece surface	1 unit	٠	•	•	•	•

The device is available with CH, D, GB and USA plug.



# 4 Commissioning

- 1) Optional: Connect foot pedal to "FOOT" control device socket (at back!).
- 2) Connect motor to "MOTOR" control device socket (at back!).
- 3) Set "FORWARD / REVERSE" switch to middle position.
- 4) Make mains connection.

#### The device can now be operated!



# **5** Operation

# 5.1 Operator's controls



#### Front

Back

#### Front side:

#### A) **"Overheat"LED:**

Illuminates in the case of motor overload.



If the "Overheat" LED illuminates, the device must be switched off for at least 10min.

- B) **"Power" LED:** Illuminates when the device is switched on
- C) "FORWARD / REVERSE" switch: Adjustment of the direction of rotation: Forwards / Neutral / Backwards
- D) **"0 ... 35,000 RPM" control knob:** Adjustment of the rotational speed
- E) "MOTOR" socket:

Connection of micromotor or motor handpiece

#### Back:

- F) **"FOOT" connector**: Connection of foot pedal (optional!)
- G) "ON /OFF" switch: Switching on/off of control device → illuminates when control device is switched on
- H) "LINE" cable: Mains supply 115 V~ / 60 Hz or 230 V~ / 50 Hz (see device label!)

# 5.2 Switch on device

The control device is switched on and off with the "**ON /OFF**" switch (at the back!)  $\rightarrow$  When the device is switched on, the "**ON /OFF**" switch and the "**Power**" LED illuminate.



## 5.3 Operation

The NM 3000 can be operated without a foot pedal, with the on/off foot pedal or with the Vario foot pedal:

#### 5.3.1 Operation without a foot pedal



If the "FORWARD / REVERSE" switch is not located in the middle position when the device is switched on, the connected motor starts running automatically  $\rightarrow$  Risk of injury!

Rotational speed:The "0 ... 35,000 RPM" control knob steplessly regulates the desired rotational<br/>speed from 0 to 35,000 rpm.Direction of rotation:The "FORWARD / REVERSE" switch is used to start the motor and to change<br/>the direction of rotation of the motor:

"FORWARD": Motor rotates forwards

Middle position: Motor stationary

"REVERSE": Motor rotates backwards

#### 5.3.2 Operation with on/off foot pedal

Foot pedal:	The motor is switched on and off with the on/off foot switch: Pedal not pressed: Motor off Pedal pressed: Motor		
Rotational speed:	The <b>"0 35,000 RPM"</b> control knob steplessly regulates the desired rotational speed from 0 to 35,000 rpm.		
Direction of rotation:	The rotational direction of the motor can be changed with the "FORWARD / REVERSE" switch:		
	"FORWARD": Motor rotates forwards		
	Middle position: Motor stationary		
	"REVERSE". Motor rotates backwards		

#### 5.3.3 Operation with Vario foot pedal

Vario foot pedal:	The rotational speed of the motor can be steplessly controlled with the Vario foot pedal.			
	Pedal not presse	ed:	Motor off	
	Pedal pressed:		Variable rotational speed	
	Pedal completely pressed:		Speed as set on "0 35,000 RPM" control knob	
Direction of rotation:	<ul> <li>tion: The direction of rotation of the motor can be changed with the "FORWARD / REVERSE" switch:</li> <li>"FORWARD": Motor rotates forwards</li> </ul>			
Middle position: Motor stationary				
"REVERSE": Motor rotates backwards		s backwards		

#### 5.4 "Overheat" overload protection

If the motor is overloaded, the "Overheat" LED illuminates.



If the "Overheat" LED illuminates, the device must be switched off for at least 10min.

English



# 6 Cleaning

For care of the material, please do not fail to comply with the following important points:

Do not use any solvent-containing, caustic cleaning agents!



Only wipe control unit with cloth. Do not use spray cleaning, as device is not sealed!

#### 6.1 Motor or handpiece

→See separate instructions for motor or handpiece!

# 7 Faults and fault detection

Fault:	Cause:	Elimination:		
	Mains connector not plugged	Plug in mains plug		
Device does not run:	Wrong operating voltage	Check mains voltage →See marking on device label		
Footpedal does not	Foot pedal not connected	Connect foot pedal cable to back of control unit		
function:	Control unit not switched on	Switch "ON/OFF" main switch to "ON" position		
Micromotor 31 problems:	See separate operating instructions for micromotor 31			
Handpiece 34 problems:	See separate operating instructions for handpiece 34			
Handpiece 38 problems:	See separate operating instructions for handpiece 38			

If a fault cannot be eliminated, please contact the supplier or the authorised service centre. Relevant addresses can be found on the last page of the operating instructions.

# 8 Discarding instructions

When discarding the device, device components and accessories, please comply with the issued statutory regulations.

With regard to the preservation of the environment old equipment may be returned to the distributor or manufacturer.