Busy lab days, but you're equipped for success. You are passionate for science.

### **LABORATORY EQUIPMENT**

Equip yourself for success.





# Equip yourself for success in the lab.

#### STARLAB: MORE THAN JUST TIPS

Starlab are liquid handling experts. We have become a recognised name as a manufacturer and supplier of high quality plastic consumables for a wide range of applications in liquid handling, such as the TipOne® pipette tip system and ErgoOne® pipettes.

Our laboratory equipment carries on the tradition of quality, with a range of products designed to help you with a variety of laboratory applications. Our equipment is designed to be

- Robust
- Reliable
- Easy to use
- Easy to maintain

Starlab laboratory equipment is designed for repeated daily use for a range of laboratory applications. User convenience, great features and a small footprint is at the heart of our design process.

Discover our range, and equip yourself for success in the lab.



**VORTEX MIXER** 

S8010-0000



# **Contents**

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### **GuardOne® Workstations.**

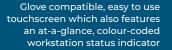


#### ALL IN FOR YOUR APPLICATIONS

Starlab's GuardOne® Workstation provides the ideal workspace for sensitive and critical applications requiring a clean environment or protection from potential contamination by bacteria, DNA or RNA. The GuardOne® Workstation minimizes crosscontamination risk to protect your valuable samples and reagents\*, thus helping to prevent both the time and cost involved by having to duplicate contaminated work.

Every aspect of GuardOne® has been designed with convenience in mind. All functions are controlled via the glove compatable, easy to use touchscreen.

Smart design! Minimal volume packaging with easy assembly in just 15 minutes. HEPA filter exchange and UV lamp exchange in just 2 minutes.





Easy open lid with hydraulic struts for effortless HEPA filter exchange



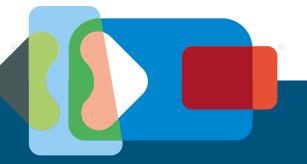
High-preformance energy-saving LED lights (white and red)



Optically clear, UV-impermeable polycarbonate for maximum visibility



Convenient cable access for your electrical devices





**WATCH VIDEO** 



<sup>\*</sup>GuardOne\* is not designed to protect the operator.



- One-touch QuickStart / QuickStop settings
- Efficient UV<sub>245 nm</sub> decontamination with timer function
- Efficient, class H14 HEPA filter with pre-filter provides ISO class 5 working environment\*
- Real-time airflow measurement\*
- Life-span monitoring of consumables
- Virtually maintenance-free
- Easy to clean
- Easy, tool-free assembly in just 15 minutes









	Dead Air Workstation 32"	Dead Air Workstation 48"	Laminar Flow Workstation 32"	Laminar Flow Workstation 48"
		Ordering Information		
Article No.	S8040-1000	S8040-1001	S8040-0000	S8040-0001
		Technical Specifications		
		BASIC SPECIFICATIONS		
External dimensions (W x D x H)	813 x 610 x 877 mm	1220 x 610 x 877 mm	813 x 610 x 877 mm	1220 x 610 x 877 mm
Internal dimensions (W × D × H)	800 x 600 x 600 mm	1200 x 600 x 600 mm	800 x 600 x 600 mm	1200 x 600 x 600 mm
Weight	32 kg	35 kg	36 kg	42 kg
Power consumption	38 W	38 W	90 W	160 W
Lab timer	Yes	Yes	Yes	Yes
AIR FLOW				
Air velocity	-	-	0.2 – 0.4 m/s	0.2 – 0.4 m/s
Realtime airflow measuring	-		Yes	Yes
Pre-filter	-		1x	2x
HEPA filter			1x H14	2x H14
HEPA filter lifespan monitor		-	yes	yes
		LIGHT		
LED light intensity	1400 lux	1400 lux	1400 lux	1400 lux
UV lamp	1x 15 W	2x 15 W	1x 15 W	2x 15 W
UV lamp lifespan monitor	Yes	Yes	Yes	Yes
UV timer	Yes	Yes	Yes	Yes
UV safety switch	Yes	Yes	Yes	Yes

Go online for more information, videos and ordering details on replacement lamps, filters & accessories







<sup>\*</sup>Laminar flow models only.

### Vortex Mixer.

### **Great features. Good vibrations.**

# (0)

**SPEED RANGE** 

#### THE STARLAB VORTEX MIXER

With its compact and stylish design, the Starlab Vortex Mixer is the perfect bench partner for your lab. The unique touchscreen provides precise speed settings for the gentle mixing of samples right up to vigorous vortex mixing and the resuspending of cells or chemical pellets.

- Glove compatible touch screen
- Precise vortexing speeds, from 300 to 3,500 rpm
- One-touch pre-set options for speed / time
- Touch or continuous operation
- End of run audible alarm
- Power-saving sleep mode
- Optional accessories



WATCH VIDEO



TOUCH MODE

Minimal pressure required

to maintain vibration.

#### **ANTI-SLIP FEET**

provide stability on the bench during mixing SMOOTH, QUIET OPERATION

POWER-SAVING SLEEP MODE



#### **OPTIONAL ACCESSORIES**



Adapter for microplates
Mix one plate with a SBS/SLAS
footprint with speeds up to
1,500 rpm



Adapter for 1.5/2.0 ml tubes Mix up to 15 tubes at the same time with speeds up to 1,500 rpm

# Subscribe to the vibe.

#### **ORDER INFO & TECHNICAL SPECIFICATIONS**

	Description	Article No.
	Vortex Mixer <sup>1)</sup>	\$8010-0000
	Accessories	
4	Replacement Standard Attachment	\$8010-0010
	Adapter for 1.5 / 2.0 ml tubes	\$8010-0011
-	Adapter for microplates	\$8010-0012
454	Replacement power adapter with four exchangeable plugs, 24 V, 1 A for EU, UK, US & AUS	\$8010-5012
<sup>1)</sup> Vortex Mixer is s four exchangeabl 2-year warranty.	supplied with one standard attachment and a e plugs.	power adapter with

	Technical specifications
Speed range	Standard attachment: 300 to 3,500 rpm Adapter for 1.5/2.0 ml tubes: 300 to 1,500 rpm Adapter for microplates: 300 to 1,500 rpm
Speed increments	50 rpm
Timing capacity	1 second to 99:59 minutes
Type of movement	Orbital
Operation modes	Two: touch and continuous
Noise level	≤ 55 dBA
USB output	5 VDC 1 A
Permissable ambient temperature	2 °C – 40 °C
Permissable relative humidity	≤80%
Power supply	100 – 240 V, 50 Hz – 60 Hz
Unit input	24 V DC 12 W
Weight	≤ 2.8 kg
Dimensions (WxDxH)	200 x 130 x 103 mm



starlab.click/shop-vortex



# The Minicentrifuge

#### **SMOOTH OPERATOR**

This is a compact and solid unit that delivers a guiet, smooth operation and unique features. It's so easy to use.

Just load your samples, close the lid and you're spinning. The one-touch STOP provides fast braking and opens the lid at the same time for a seamless, one-handed operation.

	Description	Article No.
	Minicentrifuge <sup>1)</sup>	S8030-5000
	Accessories	
•	Tube rotor for 8 x 1.5/2.0 ml tubes	S8030-5010
	PCR strip rotor for 32 x 0.2 ml PCR tubes or 4 x 8 PCR tube strips	\$8030-5011
954	Power adapter with four exchangeable plugs, 24 V, 1 A for EU, UK, US & AUS	\$8030-5012
Thirt	Tube rotor adapters for 0.5 ml tubes, pack of 8	S8030-5013
Hall	Tube rotor adapters for 0.2 ml tubes, pack of 8	S8030-5014
<sup>1)</sup> Supplied with power adapter and four exchangeable plugs, 1 x tube rotor, 1 x PCR strip rotor and one pack of 0.5 ml adapters and one pack of 0.2 ml adapters.		

**MAGNETIC** LID LOCK aids easy, one-handed operation

Technical specifications		
Maximum speed	6,500 rpm ± 1 %	
Maximum g-force	2,500 × g	
Noise level	55 dBA	
Permissable ambient temperature	2 °C – 40 °C	
Perrmissable relative humidity	≤ 80 %	
Power supply	100 – 240 V, 50 Hz – 60 Hz	
Unit input	24 V DC 12 W	
Weight	< 1.2 kg	
Dimensions (WxDxH)	160 x 130 x 112 mm	

) starlab

OH SO QUIET noise level 55 dBA

**TOOL FREE** quick and easy rotor exchange

> **ONE-TOUCH STOP** for fast braking and lid release

QUICK START just close the lid to start spinning!



**WATCH VIDEO** 



starlab.click/minicentrifuge



# A perfect fit for your daily use.

#### TURN UP, SPIN DOWN

The Starlab Minicentrifuge is your ideal personal partner for the quick spin down of condensate, vortexed or thawed samples. It is intended for applications requiring relatively low centrifugal forces, such as microfiltration, cell separation and quick spin downs from microcentrifuge tube walls and caps.



#### **TUBE ROTOR**

- Max. speed: 2,500 × g (6,500 rpm)
- Max. capacity: 8 × 1.5/2.0 ml tubes
- Adapters for 0.2 ml and 0.5 ml tubes



#### **PCR STRIP ROTOR**

- Max. speed: 2,500 × g (6,500 rpm)
- Max. capacity: 4 × PCR strips or 32 × 0.2 ml PCR tubes



The Tube Rotor holds up to eight microcentrifuge tubes ...



... or up to eight conical or skirted screw cap micro-



The PCR Strip Rotor holds up to four 0.2 ml 8-tube PCR strips ...



... or up to 32 single 0.2 ml PCR tubes.

Rotor specifications				
Rotor type	Max. capacity	Max. tube length	Max. tube diameter	Example tube type
Tube Rotor	8 tubes	45 mm	11 mm	1.5/2.0 ml microcentrifuge tubes. 0.5 ml Skirted Screw Cap Microtubes. 1.5/2.0 ml Skirted/Non-Skirted Screw Cap Microtubes
Tube Rotor, with 0.2 ml adapters	8 tubes	19 mm	6.0 mm	0.2 ml PCR tubes
Tube Rotor, with 0.5 ml adapters	8 tubes	45 mm	8.0 mm	0.5 ml PCR or microcentrifuge tubes
PCR Rotor	4 x 8-strips or 32 x singles	35 mm	6.0 mm	0.2 ml PCR strips or single tubes



## Mixer HC.

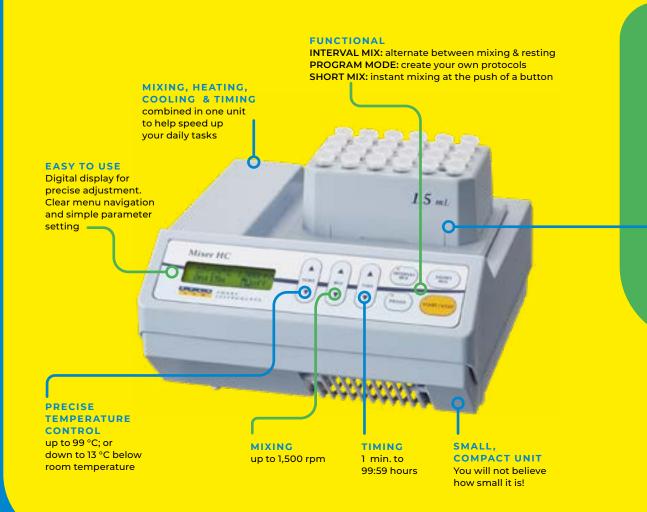
#### ONE SMALL DEVICE, SO MANY USES.

The Mixer HC is an essential bit of kit for any lab. Nine different thermoblocks for use with all common vials and plates means the Mixer HC will become your "go to" piece of equipment for a wide range of applications.

It's so convenient! You can mix, you can heat, and you can mix and heat at the same time! It will also cool your sample down and, you can time each step along the way. Easy to use and to program, the Mixer HC will prove to be an invaluable benchtop companion to help speed up your daily laboratory tasks.

- Mixing up to 1500 rpm
- Heating up to 99° C
- Cooling down to 13° below ambient
- Auto thermoblock recognition
   for quick and easy exchange between protocols
- Small, compact unit

Mixer HC¹)	S8012-0000
<sup>1)</sup> Thermoblock is not included and must be purchased separate	ly. 2-year warranty.





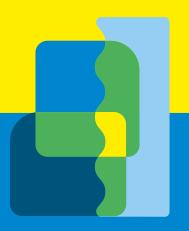
**WATCH VIDEO** 





#### AUTOMATIC THERMOBLOCK RECOGNITION

provides quick and easy changing of thermoblocks between protocols. No programming required!



### NINE THERMOBLOCKS PROVIDE MAXIMUM FLEXIBILITY AT THE BENCH

	Accessories	
==	Thermoblock for 24 x 0.5 ml Microcentrifuge Tubes <sup>2)</sup>	S8012-0010
	Thermoblock for 24 x 1.5 ml Microcentrifuge Tubes <sup>3)</sup>	S8012-0011
	Thermoblock for 24 x 2.0 ml Microcentrifuge Tubes, Round Bottoms <sup>3)</sup>	S8012-0012
	Thermoblock for 24 x 2.0 ml Microcentrifuge Tubes Ø 12 mm, V-Bottoms	S8012-0013
	Thermoblock for 8 x 5.0 ml Preparation Tubes	S8012-0014
	Thermoblock for 8 x 15 ml Conical Centrifuge Tubes	S8012-0015
	Thermoblock for 4 x 50 ml Conical Centrifuge Tubes	S8012-0016
,mm	Thermoblock for 24 x 1.5/2.0 ml Cryo Tubes	S8012-0017
	Thermoblock for Micro / Deepwell Plate, with Lid	S8012-0018
	Adapter Plate 96 x 0.2 ml Tubes or a PCR plate (For use with S8012-0018)	S8012-0019
8	ISO-Rack with Lid: 24 x 0.5 ml Microcentrifuge Tubes	S8012-0020
	ISO-Rack with Lid: 24 x 1.5/2.0 ml Microcentrifuge Tubes	S8012-0021

Tubes shown with Iso-Rack are not included.

Technical specifications			
Temperature control range			
Thermoblocks for microcentrifuge tubes	13 °C below room temperature, to 99 °C		
Thermoblocks for microplates / deepwell plates	10 °C below room temperature, to 99 °C		
Mixing frequencie	s for thermoblocks		
1.5 / 2.0 ml microcentrifuges tubes	300 to 1400 1/min <sup>4)</sup>		
Speed Range	300 rpm to 1500 rpm – depends on the thermoblock used		
General unit specicifation			
Type of movement	Orbital		
Mixing orbit	3 mm		
Operation	Mixing, temperature control, simultaneous mixing and temperature control		
Heating rate	5 °C/min		
Cooling rate	2 to 3 °C/min		
Timing capacity	1 min to 99:59 hours, infinitely adjustable		
Power supply	100 – 240 V, 50/60 Hz		
Max. power consumption	90 W		
Permissible ambient temperature	4 °C – 35 °C		
Permissible Relative Humidity	70 % max.		
Weight	3.2 kg		
Dimensions (W × D × H)	220 × 250 × 125 mm		
<sup>4)</sup> Find more information at www.starlab.click/mixerhc			





# Aspirator.



#### **USE TWO HAND CONTROLLERS** WITHOUT ANY LOSS OF PERFORMANCE

The Starlab Aspirator is designed for the safe and efficient aspiration of fluids. The vacuum level and suction power is adjustable in eight steps (150 to 850 mbar) for safe and reproducible working.

The chemically-resistant pump automatically switches on/off to reduce noise level in the workplace. The ergonomically-designed hand controller is fully autoclavable. Collection containers are available in two options; 4 L polypropylene and 2 L glass bottles. You can also use the Aspirator as a mobile vacuum source for sterile filtration and solid phase extraction.

Easy to handle Pressing the lever allows fine adjustment of the suction power. Permanent suction can also be enabled.



8-channel tip adapter The 8-channel adapter for 200 µl and 300 µl pipette tips is the perfect choice for working with cell culture plates.



**Hydrophobic filter** Hydrophobic filter prevents contamination of environment and provides overfill protection.



**Quick coupling** Autoclavable, self-sealing quick coupling allows safe decontamination of biological risks.

- The powerful pump can operate two hand controllers without any loss of performance
- Chemically-resistant, high performance pump with long service life
- Auto ON-OFF pump switch with low noise emission for a quieter working environment
- Ergonomic, fully autoclavable hand controller
- Intuitive, reproducible adjustment of suction power via touch panel

Technical specifications		
Maximum pumping speed	16.7 l/min	
Adjustable range of vacuum	150 – 850 mbar	
Maximum permissible inlet/outlet pressure	1.1 bar	
Noise level	45 dB(A)	
Permissible ambient temperature	10 – 40 °C	
Permissible relative humidity	38 – 85 %	
Maximum power consumption	40 W	
Power supply	230 V + 10 %, 50/60 Hz	
Weight	7.3 kg	
Dimensions (W × D × H)	408 x 194 x 500 mm	



### THE IMPORTANCE OF ACCESSORIES! HERE'S A GUIDE OF WHAT TO BUY.

To have a fast coupling system: N2400-9008 plus N2400-9009.

To add an exchange bottle:

N2400-9010 (fast coupling N2400-9008 also recommended)

To have a self-sealing system applicable for biological risks:

N2400-9008 plus N2400-9009

N2400-9000 <sup>1)</sup> includes everything you need to get started: Aspirator. 4 Litre Polypropylene Bottle with Protection Filter and Inlet Pipe. Hand Controller, including 2.5 m Tubing, a Wall Mount, an Adapter for Pipettes, and an Adapter for Pipette Tips.

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To have a benchtop stand for your Hand Controller: N2400-9004

To use stronger chemicals (eg. sodium hypochlorite) or staining solutions: N2400-9012 plus

To work with cell culture plates: N2400-9003

N2400-9013

To add a second Hand Controller: N2400-9001 plus N2400-9006 or N2400-9008

WATCH VIDEO

To have easy access to your under bench Aspirator N2400-9014

Aspirator N2400-9000

<sup>1)</sup> Aspirator is supplied with everything you need to get started. 1-year warranty.

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🖵 starlab.click/aspirator

	Accessories	
700	Hand Controller for Aspirator. Includes one Adapter for Pipettes, one Adapter for Pipette Tips, a Wall Mount, and 2.5 m Tubing.	N2400-9001
OF THE REAL PROPERTY.	8-Channel Tip Adapter for Hand Controller	N2400-9003
4	Stand for Hand Controller	N2400-9004
0	Tubing for Hand Controller (2.5 m)	N2400-9005
	Connection Kit for Second Hand Controller	N2400-9006
9	Protection Filter with Connective Tubing	N2400-9007
199	Quick Coupling: Hand Controller to Bottle	N2400-9008
N SEE	Quick Coupling: Bottle to Pump	N2400-9009
Î	4 Litre Polypropylene Bottle with Filter and Inlet Pipe	N2400-9010
ĺ	4 Litre Polypropylene Bottle with Screw Cap	N2400-9011
	2 Litre Glass Bottle with Filter and Inlet Pipe	N2400-9012
	Adaper for 2 Litre Glass Bottle	N2400-9013
-Call Co.	Mobile Underframe	N2400-9014
#Q <sup>ab</sup>	Tool for Diaphragm Change	N2400-9015
1	Adapter for Pipettes	N2400-9016



# Plate Centrifuge.



- Holds two plates
- Use with non-skirted, semi-skirted and skirted 96- and 384-well plates
- **2,500 rpm**
- Two operating modes
- End of timed run audible alarm
- Starts / stops in seconds
- Convenient small footprint
- Optional adapter available for half plates or tubes

#### GET SPINNING, IMPROVE PCR YIELDS.

Starlab's innovative Plate Centrifuge is tailored for the rapid and effortless centrifugation of samples in PCR plates. Use before and after thermal cycling to enhance your yield.

#### **CONVENIENT, TIME SAVING**

Now you can stop taking plates to the big centrifuge at the other end of the lab, and having to wait for it to unlock. This plate centrifuge can sit on your bench and will spin your plates in seconds.

#### **FAST LOADING**

Holds two PCR plates. Load the sealed plates vertically into the top slots.

#### TWO OPERATING MODES

**SHORT:** Use for short spins. Press and hold to run at maximum speed. The timer will count up. Release the button to stop centrifuging

TIMER: For longer centrifugation or hands-free operation, set a duration. Centrifuging will stop when the set time has elapsed.

TECHNICAL SPECIFICATIONS		
Capacity	2 x 96-/384-well PCR plates. Maximum plate height: 25 mm	
Maximum speed	2,500 rpm ±10%	
Maximum RCF	500 x g	
Temperature range	5°C to 40°C (up to 80% RH at 31°C, decreasing linearly to 50% RH at 40°C)	
Timer capacity	0-99 seconds / 0-99 minutes	
Noise level	51 dB <sup>1)</sup>	
Power adapter operating voltage	100 to 240 V~, 50 to 60 Hz, 1.5A	
Unit input	24 VDC 45 W	
Protection class	IP21	
Weight	2.6 kg	
Dimensions	190 x 220 x 186 mm	
<sup>1)</sup> Operation noise level, excluding timer alarm		

#### **ORDERING INFORMATION**



Plate Centrifuge1)

N2631-0100



Plate Centrifuge Adapter for use with 0.2 ml PCR tubes & PCR strips, and 48-well PCR Plates

N2631-0018

1) 2-year warranty.



starlab.click/platecentrifuge



### Rotator Mixer Multi 1.



- Controlled sample inverting
- Programmable
- Three different motions
- Variable speed and timer
- Low profile and small footprint

#### IT'S GIVING OUT GOOD VIBRATIONS

Compact and multifunctional, the programmable Rotator Mixer provides the thorough mixing of microtubes with consistent results. The three different motions – vertical rotation, reciprocal motion and vibration – can be used separately or combined, as well as variable speed and timer functions. Supplied with a platform for 26 tubes up to 15 mm diameter (eg. 1.5/2.0 ml and 15 ml tubes), Starlab's Rotator Mixer will aid your daily mixing tasks. An optional platform is available separately. The Rotator Mixer is designed for mixing applications including cell suspensions, incubations, extraction procedures, gel washing and precipitations.



Vertical Rotation 360° vertical motion for time period of 0–250 seconds, or non-stop.



Reciprocal Motion
Platform direction changes
in turns (turning angle 1 –
90°) for 0 – 250 seconds, or
non-stop.



Vibration
Platform direction changes in turns (see reciprocal motion) plus additional vibration (turning angle 1–5° for 1–5 seconds.



Pause
Platform direction changes in turns, incl. a temporary motion stop of 1 – 5 seconds (in conjuntion with reciprocal motion only).

	Description	Art. No.
- Sii	Rotator Mixer Multi 1	N2400-5000
	Accessories	
-	Platform for 5 x 50 ml & 12 x 5.0 to 15 ml Tubes	N2400-5103
omo	Platform for 26 Tubes up to 15 mm diameter	N2400-5104
N2400-5000 is supplied	d with platfrom N2400-5104, 2-year warranty.	

Technical specifications		
Speed range	1 – 100 rpm	
Speed increments	1 rpm	
Timing capacity	Auto switch-off: 1 min. – 24 hrs. Vertical or Reciprocal Mode: 0 – 250 seconds, or non-stop. Vibration mode: 0 – 5 secs	
Maximum load	0.5 kg	
Permissable ambient temperature	4 – 40 °C	
Output	1.25 A	
Weight	1.8 kg	
Dimensions (W × D × H)	365 x 195 x 155 mm	

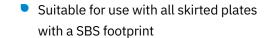




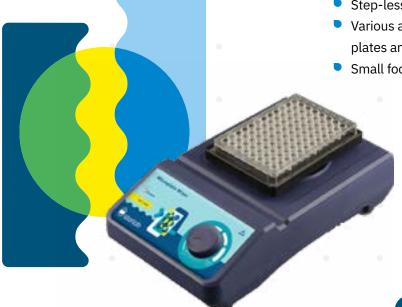
## Microplate Mixer.

#### MIX IT. SHAKE IT.

Ideal for the mixing and shaking of any skirted plate (PCR, Cell Culture, Deepwell, Microtiter and Microplates), the Starlab microplate mixer can hold either one or two plates, depending on the attachment being used. Versatile too! You can also mix tubes with the special tube adapter accessories. The step-less, variable vibration speed is excellent for applications such as the resuspending pellets.



- Wide speed range: 0 to 1500 rpm
- Step-less speed control
- Various accessories for microtitre plates and tubes
- Small footprint



🔀 starlab.click/**microplate-mixer** 

	Description	Art. No.
*	Microplate Mixer <sup>1)</sup>	N2400-8040
	Accessories	
	Attachment for One Microtiter Plate <sup>2)</sup>	N2400-8041
	Attachment for Two Microtiter Plates <sup>2)</sup>	N2400-8042
	Tube Adapter for 15 x 1.5 / 2.0 ml Tubes <sup>3)</sup>	N2400-6012
	Tube Adapter for 8 x 15 ml Centrifuge Tubes <sup>3)</sup>	N2400-6013
	Microplate Mixer Adapter Plate	N2400-8043

<sup>1)</sup> N2400-8040 is supplied with attachment N2400-8041. <sup>2)</sup> N2400-8041 and N2400-8042 are suitable for use with all skirted plates with a SBS footprint (127.8 x 85.5 mm). 3) N2400-6012 and N2400-6013 can only be used on this mixer in conjunction with the 2-vear warranty.

Technical specifications		
Speed range	0 – 1500 rpm <sup>1</sup>	
Type of movement	Orbital	
Orbital diameter	4.5 mm	
Maximum load	0.5 kg	
Permissable ambient temperature	4 – 40 °C	
Permissable relative humidity	< 80 %	
Maximum power consumption	20 W	
Power supply	100 – 240 V, 50/60 Hz	
Weight	3.0 kg	
Dimensions (W × D × H)	150 x 260 x 80 mm	

<sup>&</sup>lt;sup>1</sup> 1500 rpm is maximum speed with all attachments, except N2400-8042 which has a maximum speed of 1000 rpm.

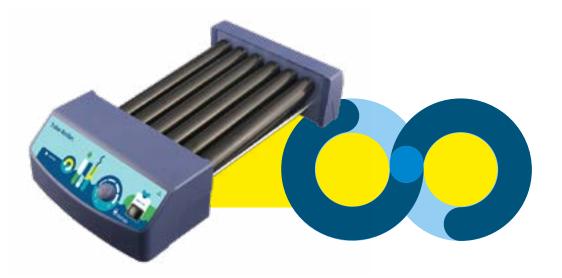


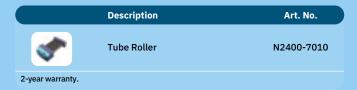
### **Tube Roller.**

#### IT'S A ROCK AND ROLL STAR

Simultaneous rolling and tilting movements ensures thorough mixing of your samples. The unit features variable speed control and a sturdy and robust construction. The tube roller is built for continuous operation and is suitable for applications such as hybridisation.

- Simultaneous rolling and tilting motion
- Continuous operation
- Speed control up to 70 rpm
- Six rollers holds load up to 4 kg
- Easy to use





Technical specifications		
Speed range	0 – 70 rpm	
Type of movement	Orbital	
Number of rollers	6	
Size of rollers	280 x 30 mm	
Maximum load	4.0 kg	
Permissable ambient temperature	4 – 40 °C	
Permissable relative humidity	< 80 %	
Maximum power consumption	25 W	
Power supply	100 – 240 V, 50/60 Hz	
Weight	4.5 kg	
Dimensions (W × D × H)	260 x 460 x 120 mm	





### **Orbital Shaker.**



- Provides gentle agitation up to vigorous orbital motion
- Two operating modes: continuous and timer
- LCD displays for speed and time
- Holds load up to 7.5 kg
- Choice of two platforms

#### **SHAKE IT ALL ABOUT**

With two operating modes – continuous and timer – orbital shaking of your samples is possible from a gentle agitation up to a vigorous orbital motion. The easy to read, digital speed and timer displays ensures ease of use in the busy lab environment. The orbital shaker is suitable for a wide range of molecular biology or immunology applications.

The Orbital Shaker is NOT supplied with a platform. Two platforms are available and sold separately so you can order your shaker to suit your requirements.



Orbital Shaker. Image shows N2400-8030 with platform N2400-8011 (sold separately).

	Description	Art. No.
	Orbital Shaker (without platform)	N2400-8030
	Accessories	
-	Universal Platform with Clamping Rolls	N2400-8011
4	Universal Platfrom with Rubber Mat and Bungee Cords	N2400-8021

N2400-8030 is not supplied with platfrom. A platform must be purchased separately. Platforms N2400-8011 and N2400-8021 can also be used on the Starlab Rocking Shaker (N2400-8010) and Stalab 3D Rocker Shaker (N2400-8020). 2-year warranty.

Technical specifications		
Speed range	100 – 500 rpm	
Type of movement	Orbital	
Orbital diameter	10 mm	
Maximum load	7.5 kg	
Platform dimensions	300 x 300 mm	
Operation	Two: continuous or timer	
Timing capacity	1 – 1199 mins (19 hrs 59 secs)	
Display	LCD	
RS232 interface	Yes	
Permissable ambient temperature	4 – 40 °C	
Permissable relative humidity	< 80 %	
Maximum power consumption	30 W	
Power supply	100 – 240 V, 50/60 Hz	
Weight	13.5 kg	
Dimensions (W × D × H)	420 x 370 x 100 mm	



starlab.click/orbitalshaker



# 3D Rocking & Rocking Shakers.







#### SHAKEN, NOT STIRRED

Two similar shakers but with different movements: 3D or see-saw rocking. Both shakers have a fixed tilt angle and provide two shaking modes: continuous and timer. The digital speed and timer displays ensure ease of use. Both shakers are supplied with a platform with a rubber mat and bungee cords. An alternative platform with clamping rolls is available separately, making these shakers suitable for a wide range of applications including blotting, cultivation and incubation techniques.

- See-saw rocking or 3D mixing
- Two operating modes: continuous and timer
- LCD displays for speed and time
- Easy to use

(N2400-8030). 2-year warranty.

Alternative platform available

	Description	Art. No.	
	3D Rocking Shaker	N2400-8020	
-	Rocking Shaker	N2400-8010	
Accessories			
*	Universal Platform with Clamping Rolls	N2400-8011	
Universal Platfrom with Rubber Mat and N2400-8021 Bungee Cords			
N2400-8020 and N2400-8010 are both supplied with platfrom N2400-8021. Platforms N2400-8011 and N2400-8021 can also be used on the Starlab Orbital Shaker			

	Technical specifications	
	3D ROCKING SHAKER	ROCKING SHAKER
Speed range	10 – 70 rpm	10 – 70 rpm
Type of movement	3D mixing	See-saw rocking
Tilt angle	9°	9°
Maximum load	5.0 kg	10 kg
Platform dimensions	300 x 300 mm	300 x 300 mm
Operation	Two: continuous or timer	Two: continuous or timer
Timing capacity	1 – 1199 mins (19 hrs 59 secs)	1 – 1199 mins (19 hrs 59 secs)
Display	LCD	LCD
Permissable ambient temperature	4 – 40 °C	4 – 40 °C
Permissable relative humidity	< 80 %	< 80 %
Maximum power consumption	50 W	40W
Power supply	100 – 240 V, 50/60 Hz	100 – 240 V, 50/60 Hz
Weight	9.0 kg	9.0 kg
Dimensions (W × D × H)	370 x 420 x 200 mm	370 x 420 x 106 mm



# Magnetic Stirrers.

#### starlab.click/stirrers

#### MAGNETIC STIRRER



Economical magnetic stirrer that is easy to use and built to last. Provides reliable stirring with the adjustable stirring speed. This compact stirrer can hold up to 3 litres and is ideal for applications such as buffer preparation.

- Variable speed range up to 1500 rpm
- Stirring volume up to 3 litres
- Compact design
- Easy to clean
- Supplied with a 40 mm stir bar

### MAGNETIC STIRRER WITH HEATING



A magnetic stirrer with very fast temperature ramping and a ceramic-coated plate to ensure an even temperature. Easy to use, the LED display shows temperature and speed. Ideal for many applications such as preparation of solvents at high temperatures.

- Fast temperature ramping saves time
- Speed and temperature LED display
- Hotplate safety warning light
- Chemically-resistant ceramic-coated plate
- Supplied with a 40 mm stir bar

	Description	Art. No.
-	Magnetic Stirrer	N2400-2010
	Magnetic Stirrer with heating	N2400-3010
	Accessories	
1	Temperature Sensor PT1000 (For use with N2400-3010)	N2400-3011
2-year warranty.		

Technical specifications		
	STIRRER	STIRRER W HEATING
Speed range	100 – 1500 rpm	200 – 1500 rpm
Speed increments	10 rpm	10 rpm
Maximum stirring volume	3 litres	3 litres
Plate diameter	135 mm	135 mm
Temperature range	-	Ambient to 280 °C (1 °C increments)
Permissable ambient temperature	4 – 40 °C	4 – 40 °C
Permissable relative humidity	< 80 %	< 80 %
Maximum power consumption	10 W	515 W
Power supply	100 – 240 V, 50/60 Hz	200 – 240 V, 50/60 Hz
Weight	0.9 kg	1.4 kg
Dimensions (W × D × H)	155 x 215 x 75 mm	155 x 215 x 75 mm



### -86° C Underbench Freezer.



#### AND CHILL! AT LAST, A SMALL LAB FREEZER THAT'S AFFORDABLE

Store your samples in this space saving, eco-friendly unit directly under your lab bench. This freezer is a great choice if you are looking for a small, energy efficient freezer with a great storage capacity. The freezer is compatible with a range of storage boxes and racks. To utilise storage capacity to the full, use one of the specially made stainless steel racks. The racks (available separately) fit perfectly inside the freezer and are available to hold 50 mm, 75 mm or 100 mm high storage boxes with a standard 133 x 133 mm footprint.

	Description	Art. No.
	Underbench Freezer	N2700-1000
Accessories		
	U100 Rack for 50 mm High Boxes, 74 places	N2700-1001
-	U100 Rack for 75 mm High Boxes, 45 places	N2700-1002
	U100 Rack for 100 mm High Boxes, 33 places	N2700-1003
2-year warranty.		



Technical specifications		
Temperature range	-60 °C to -86 °C	
Power supply	220-240 V, 50/60 Hz	
Weight	60 kg	
Ext. dimensions (W × D × H)	595 × 690 × 825 mm (incl. condensor & handle) 595 × 630 × 825 mm (incl. condensor)	
Net volume	91 litres	
Power consumption	2,445 kWh / year 6.7 kWh / 24h	
Noise level	57 dB	
Temperature probe	1/PT 1000	
Referant type	HCFC-free, Nature R	
USB	Yes	
Data connection	MODBUS	
Digital controller	XW737K	
Data logging	35,500 entries	
High/low temperature alarm	Yes	
Defrost	Manual	
Battery back-up	48 hour	
Adjustable shelves	Yes (2)	
Handle lock	Yes	



- Use as your personal -80 °C storage place
- Reduces heat and noise in your laboratory
- Ergonomic handle
- USB port for temperature logger
- No filter maintenance free!
- 48-hour battery backup



**Shelving.**U100 Freezer is supplied with two shelves.



Stainless Steel Racking. U100 Freezer shown with racking and storage boxes (sold separately) to utilise storage capacity perfectly!



# Four-Channel Timer / Clock.



#### TIMING IS EVERYTHING!

Timer/Clock with a large easy to read LED display. There are four channels on which cycles can be independently or simultaneously set. You can easily toggle between your pre-set channels and the clock, so you can keep on top of your experiments, or know when it's time for lunch!

- Allows four different timings simultaneously
- Alarm auto switch-off saves battery life
- Convenient bench stand and magnetic strip
- Large, easy to read display

	Description	Art. No.
INSTR	Four Channel Timer / Clock	N9900-0001
Calibration	Calibration of Four Channel Timer / Clock	C0003-0000
To receive the Timer pre-calibrated, you must order the Calibration (C0003-0000) on the same Purchase Order as your new Timer. 1-year warranty.		

#### **NEED A CALIBRATED TIMER?**

Simply order the pre-calibration of the Timer (C0003-0000) on the same Purchase Order as your new Timer (N9900-0001).

We will then know to calibrate the Timer prior to shipping, and will send the Timer to you with its Certificate of Calibration.

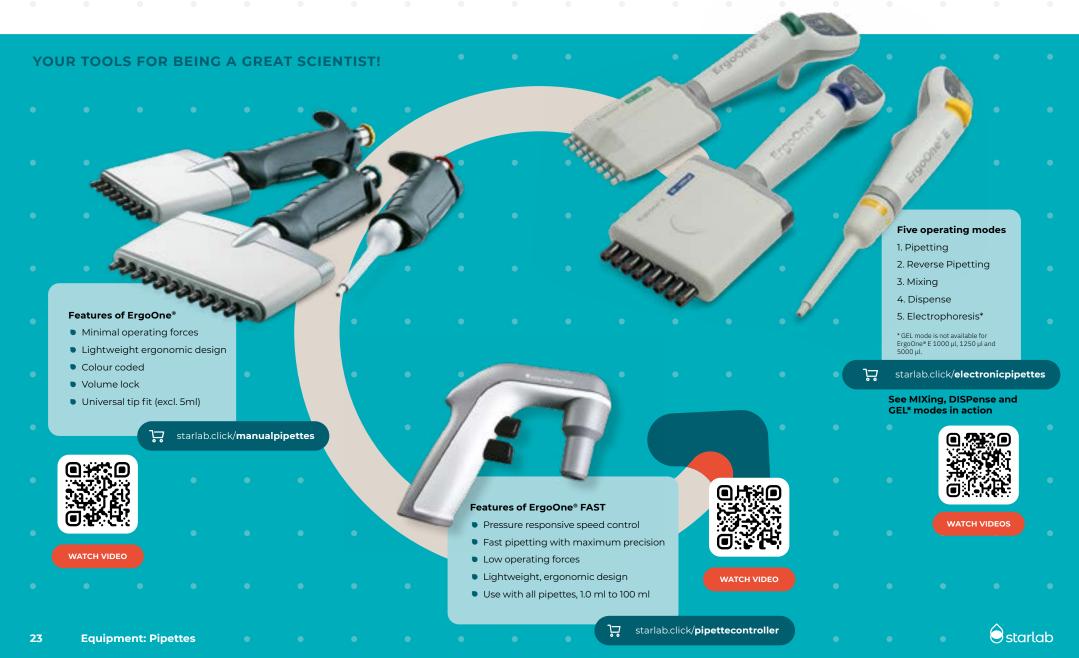


starlab.click/timer

Technical specifications		
Timing capacity	99 hours, 59 mins, 59 seconds	
Timer	Count down / count up	
Alarm	Audible (for 1 minute at end of cycle)	
Clock	12 hour / 24 hour	
Operating modes	4	
Power	2 x LR44 batteries (included)	
Dimensions (W x D x H)	73 x 13 x 59 mm	



# The ErgoOne® pipette family.



# Starlab



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### BUSY LAB DAYS, BUT YOU'RE EQUIPPED FOR SUCCESS.

Starlab laboratory equipment is designed for repeated daily use across a range of laboratory applications. Our equipment is designed to be robust, reliable, easy to use and easy to maintain. User convenience, great features and a small footprint is at the heart of our design process. Discover our range of benchtop equipment for the lab, and equip yourself for success.



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