



Laboratory instruments

Electronic controls for brushless motors

Prolab & Prolab Basic

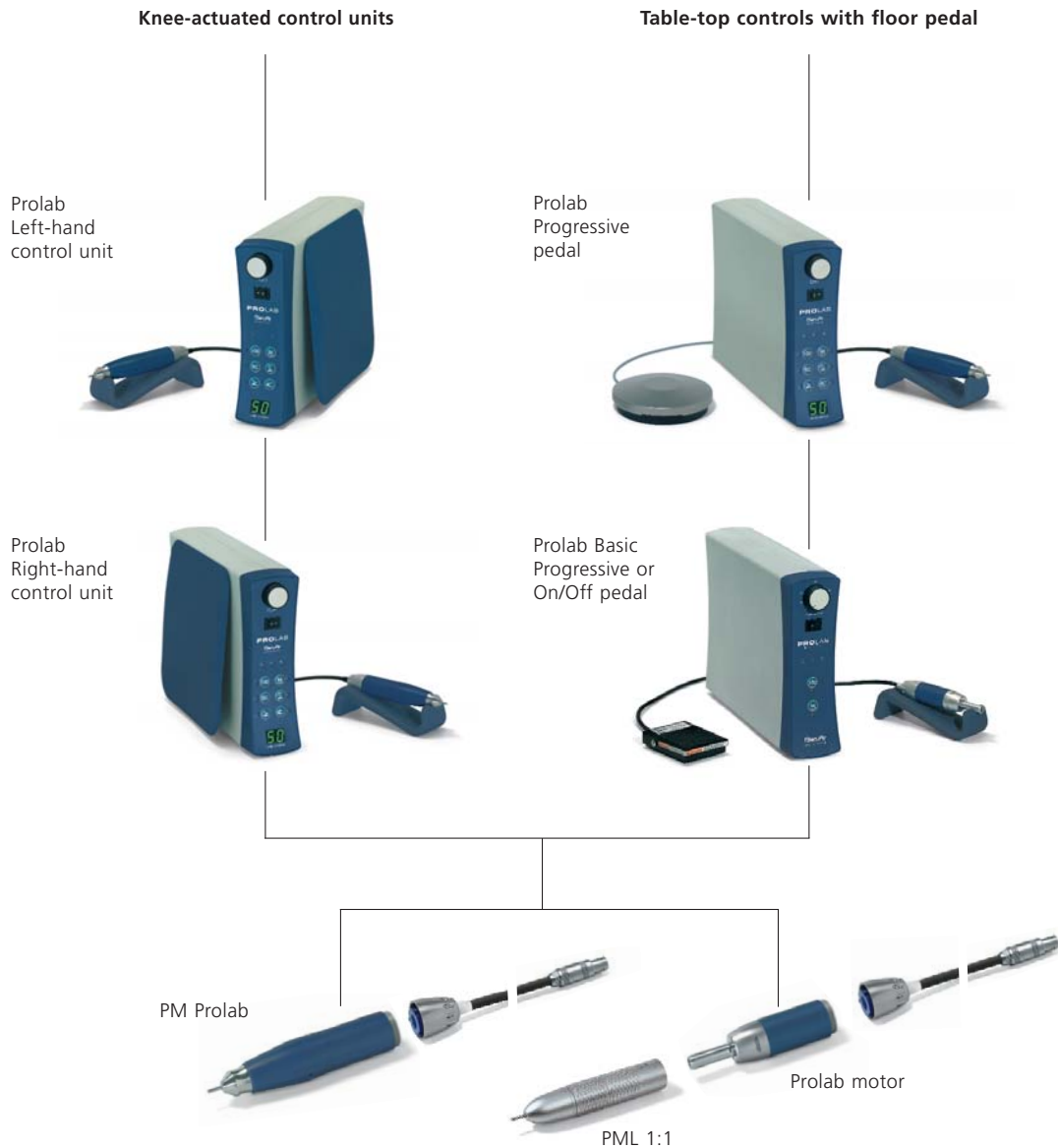
Developed to meet the requirements of the dental technician, Bien-Air has created the new Prolab and Prolab Basic laboratory control units, on the cutting edge of modern technology and ergonomics. These control units have simple, highly practical functions which provide greater operating safety and comfort. The "control & motor" unit strategy provides greater safety and comfort. The handpiece and motor, inspired by the new generation of MX® series brushless motors designed for the dental sector, enables professional work to be performed with complete confidence.

Prolab handpiece

The new handpiece, with integral brushless motor assembly, is very powerful and has an extremely effective chuck mechanism. This handpiece, very rugged and easy to handle, enables professional work to be performed with complete confidence.

Prolab Motor and PLM 1:1

The new Prolab Basic brushless motor, with E Standard coupling in accordance with ISO 3964, is self-ventilated and provided with internal thermal protection. Combined with the PML 1:1 handpiece, it offers an efficient unit for the practitioner.



Air-driven control units

Control units

The table-top air-driven control unit S001 and its wall-mounted version SF 811 for straight turbine TD 783 are especially effective for delicate, precise ceramic and prosthetic work. They monitor and adjust the turbine pressure precisely and are pedal-controlled. The STS 890 version comes with internal spray. Its pedal controls the ON/OFF function and triggering of the TDS 890 turbine spray.

Straight turbines

These high-speed turbines are designed for the most delicate operations, such as finishing or repair on metal, resin or ceramic. Simple connection, a rotation speed of 300,000 rpm and the Friction Grip (FG) chuck mechanism protected by a special dust protection shield ensure precise work with great comfort. The TDS turbine is equipped with an efficient internal spray.

Table-top air-driven unit



S001

Wall-mounted air-driven unit



SF 811

Table-top air-driven unit with spray



STS 890



TD 783

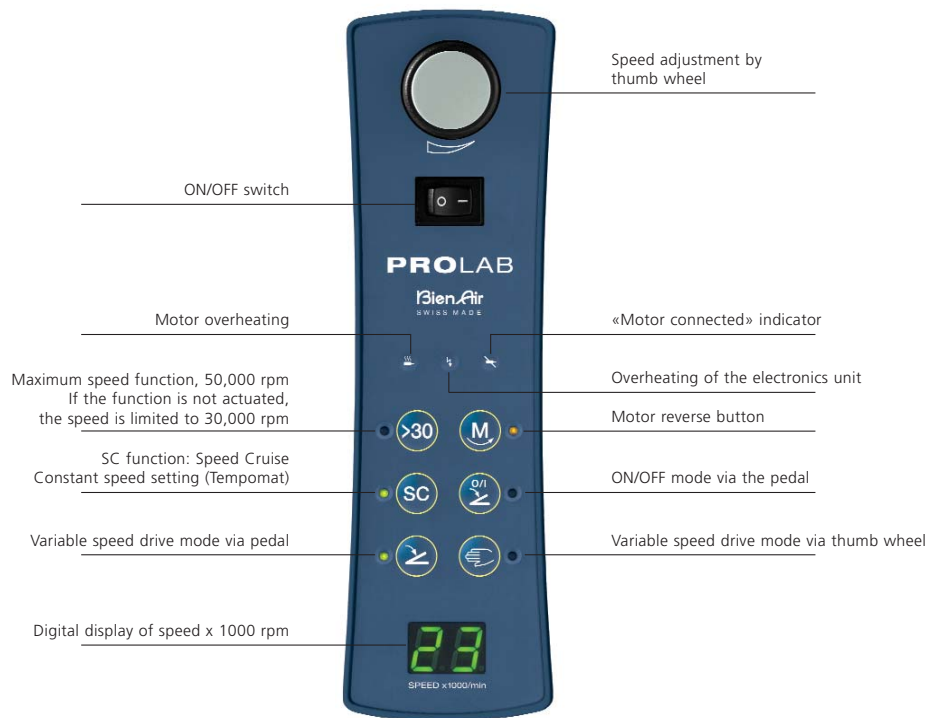


TDS 890
with internal spray



PROLAB

Electronic laboratory control unit



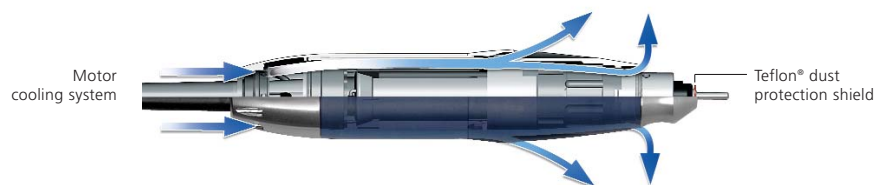
Operating safety and comfort

Prolab has simple, highly practical functions which provide greater operating safety and comfort. A unique construction technique results in optimum efficiency for the handpiece with integral motor and the control unit, ensuring high performance and long life.

The high, thin shape of the box facilitates its integration under a table or on a table top, thus clearing the work area. All the control functions are grouped together on the front face.

The face is curved forward in its lower part, facilitating data reading.

Prolab is available in three versions, a tabletop model with floor pedal and two models with knee control unit, to be attached on the left or right side.



The exclusive PM Prolab

This new handpiece unit, with integral brushless motor assembly, is very powerful at all speeds. A new, original Bien-Air construction technique, protected by several patents, gives longer life and increased motor efficiency. This major technological step forward also permits a reduction in overall motor length, vibration and noise. Bur gripping is performed by a new, highly effective system. A Teflon® dust protection shield, easily interchangeable, leaving no gap between the bur locking clamp and the nose of the handpiece, offers optimum protection. The clamp can be removed very quickly. The integral handpiece, exceptionally rugged and easy to handle, enables professional work to be performed with complete confidence. With PM Prolab, a large part of the work required in laboratory can be performed, from rough forming to finishing work.



Product Improvements

For left knee



For right knee



With progressive pedala



The Prolab set comprises:

- 1 Prolab unit with choice of right or left knee control, or control by progressive floor pedal
- 1 motor cable
- 1 unit mounting
- 1 support for instrument

Optional supplements:

Self-ventilated Prolab motor,
E Standard coupling as per
ISO 3964, speed from 1,000 to
40,000 rpm maximum, in both
directions of rotation



or

PM Prolab handpiece
with integral motor, speed from
1,000 to 50,000 rpm, in both
directions of rotation

REF set

1700223-001	Prolab, for left knee, PM with built-in motor
1700222-001	Prolab, for right knee, PM with built-in motor
1700224-001	Prolab, progressive pedal, PM with built-in motor
1700237-001	Prolab, progressive pedal, E standard motor
1700256-001	Prolab, for left knee, E standard motor
1700257-001	Prolab, for right knee, E standard motor

General data - Prolab unit

Type	Laboratory control unit
Classification	In conformity with machinery directive 98/37/EC
Supply voltage	100 - 240 Vac
Frequency	50 - 60 Hz
Unit dimensions (L x H x D)	92 x 306 x 232 mm
Unit weight	2,500 g
Cable weight	150 g
Control unit+motor temperature	Electronically controlled
Electromagnetic compatibility	EN 61000-6-1, EN 61000-6-3
Safety	EN 60335-1
Max. speed with PM Prolab	50,000 rpm
Max. speed of Prolab motor	40,000 rpm

PROLAB

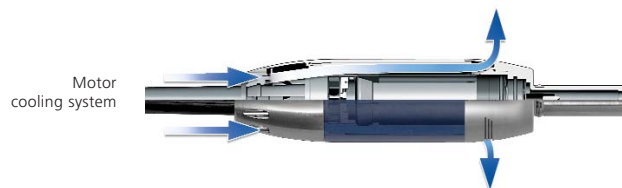
Electronic laboratory control unit

Basic



Simple and efficient

Simplified version. Speed adjustable by thumb wheel from 1,000 rpm to 40,000 rpm. Buttons for selection of Forward/Reverse and for speed limiting to a maximum of 30,000 rpm. Indicator lamps warning of overheating of the motor and control unit, and of motor connection. The motor is self-ventilated, easy to handle and rugged, especially suitable for laboratory requirements, and provided with an E Standard coupling as per ISO 3964, matching most handpieces.



Motor and PML 1:1

The efficient, rugged Prolab motor, self-ventilated and without brushes or sensors, is fitted with the E Standard coupling as per ISO 3964, the commonest coupling in the world. Specially designed for Prolab laboratory control units, it operates smoothly at all speeds. An ideal extension, the direct-ratio straight handpiece PML 1:1 is provided with a very efficient enhanced bur locking system and motor antirotation system. Rotational speeds up to 40,000 rpm. Maximal speed of rotation 40,000 rpm.

* The PML 1:1 handpiece is not included in the PROLAB sets



Product Improvements

With On/Off pedal

With progressive pedal



The Prolab Basic set comprises:

- 1 Prolab Basic unit with choice of floor pedals, On/Off or progressive
- 1 motor cable
- 1 unit mounting
- 1 support for instrument

Optional Accessories:

Self-ventilated Prolab motor,
E Standard coupling as per
ISO 3964, speed from 1,000 to
40,000 rpm maximum, in both
directions of rotation



PM Prolab handpiece

with integral motor, speed from
1,000 to 50,000 rpm, in both
directions of rotation. Speed limited
to 40,000 rpm with Prolab Basic

REF set

1700041-001	Prolab Basic, On/Off pedal, E standard motor
1700252-001	Prolab Basic, progressive pedal, E standard motor
1700253-001	Prolab Basic, On/Off pedal, PM with built-in motor
1700254-001	Prolab Basic, progressive pedal, PM with built-in motor

General data - Prolab Basic unit

Type	Laboratory control unit
Classification	In conformity with machinery directive 98/37/EC
Supply voltage	100 - 240 Vac
Frequency	50 - 60 Hz
Unit dimensions (L x H x D)	92 x 306 x 232 mm
Unit weight	2,500 g
Cable weight	150 g
Control unit + motor temperature	Electronically controlled
Electromagnetic compatibility	EN 61000-6-1, EN 61000-6-3
Safety	EN 60335-1
Speed	1,000 to 40,000 rpm max.



An ideal extension of the Prolab
motor, the direct-ratio PML 1:1
straight handpiece

S001 / SF 811

Air-driven laboratory units

STS 890



Precision and refinement

The table-top air-driven control unit S001 and its wall-mounted version SF 811 for straight turbine TD 783 are recommended for delicate ceramic and prosthetic work. They monitor and adjust the turbine pressure precisely and are provided with a pedal-actuated ON/OFF function. The STS 890 version is equipped with an efficient spray. Its pedal controls the ON/OFF function and triggering of the TDS 890 turbine spray.



Straight turbines TD 783 and TDS 890

Designed for meticulous finishing and repair work, they allow high-precision work for the dental technician. They fit perfectly in the hand, providing greater freedom of movement. The straight ball-bearing turbines are protected by a special dust protection shield which reduces wear and ensures longer life. Rotational speed up to 300,000 rpm. Recommended air pressure 2.5 bar. Effective Friction Grip chuck (FG). Lubrication with Lubrimed® medical grease. For rotary instruments, bur dia. 1.60 mm. TDS 890 comes with internal spray.

Product Improvements



S001 - Table-top control module REF 1700126-001

Set comprises:

- 1 unit S001 REF 1600318-001
- 1 turbine TD 783 REF 1600161-001
- 1 foot pedal REF 1600312-001
- 1 grey coiled hose REF 1200022-001

SF 811 - Wall-mounted control unit REF 1700083-001

Set comprises:

- 1 unit SF 811 REF 1600167-001
- 1 turbine TD 783 REF 1600161-001
- 1 foot pedal REF 1600312-001
- 1 grey coiled hose REF 1200022-001

STS 890 - Table-top control module with spray REF 1700092-001

Set comprises:

- 1 unit STS 890 REF 1600388-001
- 1 turbine TDS 890 REF 1600163-001
- 1 foot pedal REF 1600389-001
- 1 straight hose, 4-hole REF 1600390-001

General data - Air-driven control units

Type	Laboratory control unit
Air pressure	2.5 bar
Pedal	Allows turbine speed to be varied
Dimensions S001	(L x H x D) 110 x 135 x 162 mm
Dimensions SF 811	(L x H x D) 86 x 75 x 165 mm
Dimensions STS 890	(L x H x D) 200 x 190 x 100 mm
Weight S001	1,250 g
Weight SF 811	300 g
Weight STS 890	4,400 g
Safety	In conformity with IEC Standard 601-1

Information - Straight turbines

Type	Ball-bearing turbine protected by a special dustproof shield
Speed of rotation	300,000 rpm
Air flow	35 litres/min. on average
Bur changing mechanism	Friction Grip (FG)
Burs	Bur \varnothing 1.60 mm as per ISO 1797 - type 3
Hose TD 783	Grey coiled silicone, \varnothing 1/8"
Hose TDS 890	Grey straight silicone, with 4-hole coupling
Weight	60 g
Cleaning	With Bien-Air Spraynet®
Lubrication	With Bien-Air Lubrimed® grease

Prolab & Prolab Basic Accessories



Unit mounting
REF 1301220-001



Floor pedal, progressive, for
Prolab and Prolab Basic
REF 1600440-001



Floor pedal, On/Off,
for Prolab Basic
REF 1600447-001



Motor holder, sterilisable
REF 1301575-001



PM Prolab handpiece with
built-in motor, speed from
1,000 to 50,000 rpm
REF 1600430-001



Prolab micromotor, speed
from 1,000 to 40,000 rpm
maximum
REF 1600443-001



Straight handpiece PML 1:1
Direct ratio, with retractable
anti-rotation catch
REF 1600156-001



Black cable
for Prolab and Prolab Basic for
micromotor and for handpiece
with integral micromotor,
length 3 m
REF 1600431-001

Bien-Air maintenance products

You will extend the life of your instruments if you provide them with appropriate maintenance. For this purpose, Bien-Air has developed a range of high-performance products, such as Spraynet® sprays for external cleaning, Lubrifluid® for lubrication, and Lubrimed® medical grease, for ideal ball-bearing lubrication.



Maintenance products

Spraynet®, box of 6 cans	REF 1600036-006
Lubrifluid®, box of 6 cans	REF 1600064-006
Lubrimed® grease, box of 6 refill cartridges	REF 1600037-006
Lubrimed® greaser	REF 1000003-001

For further information, see the animations at www.bienair.com

Lubrifluid® spray for handpiece PML 1:1 and Lubrimed® grease for air turbines TD 783 and TDS 890 only.



Bien-Air - An impressive family history

David Mosimann, an inventive and entrepreneurial precision mechanic with a passionate dedication to his trade and meticulous workmanship, decided to set up his own business in 1948. He started a wonderful adventure by founding Bien-Air SA in 1959, and since then the firm has constantly expanded. David Mosimann's enthusiasm was inherited by his son Vincent, who took up the banner with as much energy as his father. Bien-Air, established in Biel, now has more than 400 employees, in Switzerland and throughout the world.



Over four decades of prosperity

To meet ever-growing demand, Bien-Air has constantly enlarged its product range. After dental instruments and laboratory equipment, Bien-Air moved into ENT surgery and, more recently, implantology and microsurgery with various technologies. These new businesses are likewise areas in which reliability and safety are dominant features. To implement this corporate policy, Bien-Air in 1974 opened a production branch in Saignelégier (Jura region of Switzerland). In 1998 the Biel and Saignelégier buildings were enlarged. These changes enabled internal flows to be optimised. The new premises increased staff comfort and efficiency at Bien-Air, which has now celebrated its 40th anniversary.



Quality first

Determined to meet its customers' needs, the company has always invested heavily to enhance reliability. Modern machining techniques and stringent controls at each stage of manufacturing and assembly are the key to impeccable product quality, and products are marketed by a global distribution network. Management, supported by highly qualified personnel, has applied this strict policy in every department. The results were soon apparent: Bien-Air Dental SA is now certified compliant with ISO 9001/EN 46001 standards and EEC directive 93/42.



Global Service

Bien-Air Group's eight subsidiaries in Europe, Asia and the United States are the backbone of a well-oiled distribution network. Local inventory ensures very short delivery times. Constantly attentive to the market and its representatives, the company is able to design and supply instruments and equipment meeting the specific requirements of each customer. More than 130 technicians provide rapid, efficient, on-the-spot customer service worldwide. Personalised advice and support, training and telediagnosics are already helping our customers achieve greater efficiency.

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