

## CHIROPRO – perfect instrument control



2-button multi-function pedal



4-button multi-function pedal



Integral peristaltic pump

Chiropro is a table-top system for use with 1 or 2 BASCH brushless micromotors which are sterilisable with cables. Chiropro permits perfect control of real bur speed and torque. Superbly backlit display with a choice of 7 languages to show the dental surgeon the information needed for each task. Manual adjustment of all 8 programs is possible at any time, even for the program currently in use. Handpiece gear ratios can be selected from 31 speed reducing and increasing ratios across a range from 1,000:1 to 1:6. The delivery of the integral peristaltic pump is adjustable electronically from 15 to 130 ml/min. Chiropro and the micromotors and cables meet the safety requirements of medical standards 93/42/EEC and also comply with electromagnetic compatibility standard IEC 601-1-2. Control unit with insulation class I type B and protection level IP40. Pedal protection level IPx8, water-resistant to a depth of 1 metre.

The Chiropro set comprises:

1 electronic tabletop control with integral peristaltic pump, 1 bracket and 10 irrigation lines with two flow rate ranges and 10 clips, and 1 BASCH motor with its cable. Depending on the model, supplied with a 2- or 4-button pedal.

Two-button pedal functions:

control of the motor's speed, its direction of rotation, and pump-motor synchronisation.

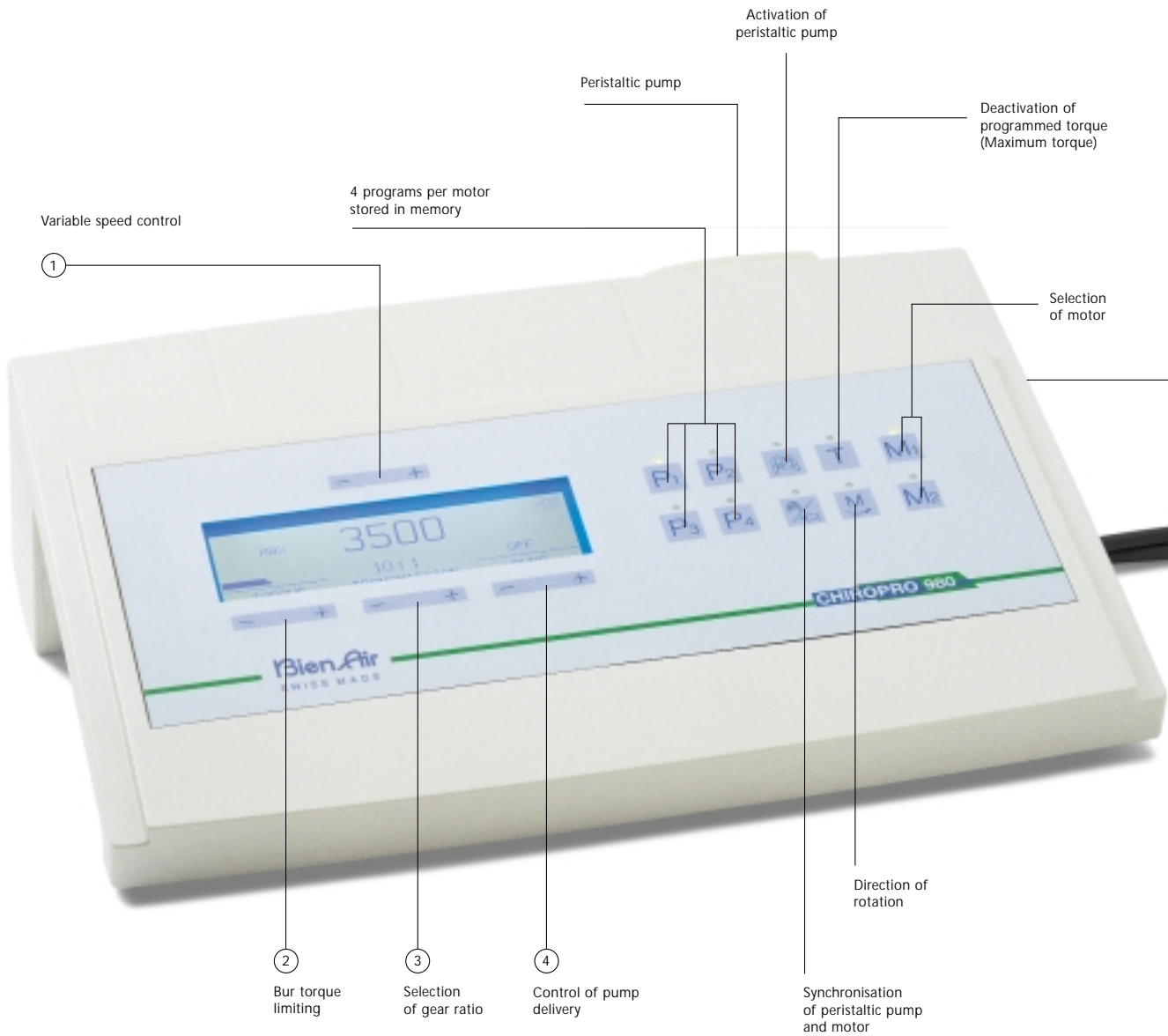
Additional functions on the four-button pedal:

selection of one of the 2 motors and one of the 4 programs available per motor.

Available gear ratios

1,000 : 1	40 : 1	7 : 1
512 : 1	33 : 1	6 : 1
256 : 1	30 : 1	4 : 1
128 : 1	28 : 1	2 : 1
120 : 1	27 : 1	1 : 1
100 : 1	24 : 1	1 : 2
74 : 1	20 : 1	1 : 3
64 : 1	16 : 1	1 : 4
60 : 1	14 : 1	1 : 5
50 : 1	10 : 1	1 : 6
	8 : 1	

# All settings visible at a glance



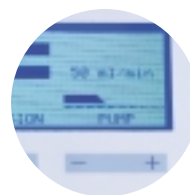
①



②



③



④

## Simple programming for maximum efficiency



2 push-pull type outputs  
on control side



BASCH motor and cable are  
sterilisable

**P<sub>1</sub>** **P<sub>2</sub>** **P<sub>3</sub>** **P<sub>4</sub>**

Programs per motor: P1, P2, P3 and P4  
Selection keys for recorded programs.  
Each parameter can be modified and saved  
at any time.

**T**

Deactivation of programmed torque  
By activating this key (green light lit), the programmed  
torque control is replaced by maximum motor torque  
control.



Control of the peristaltic pump  
Option of activation by button on the foot control or  
activation synchronised with motor operation.

**M**

Reversing Mode  
A function identical to that of the foot control which  
reverses the direction of motor rotation. Reversing  
mode is confirmed by an audible signal.

**M<sub>1</sub>** **M<sub>2</sub>**

Selection of Motor 1 or Motor 2  
Each motor has 4 programs selectable independently.

## CHIROPRO - Technical data



### CHIROPRO

Voltage	230, 115 or 100 VAC
Electrical power to motors	2 quick-release push-pull connections / 24 VDC for BASCH motors
Insulation class	I, type B
Protection level	IP 40
Dim. (LxDxH) / weight	370 x 288 x 115 mm (total height with power unit 485 mm) / 5.8 kg
Peristaltic pump	Delivery 30 to 130 ml/min, with silicon pipe, internal diameter 2.4 mm / external diameter 5.6 mm.
Bracket - Irrigation (H)	Made of stainless steel, height 450 mm
Irrigation lines	Two flow rates: 100% = 30 to 130 ml/min. and 50% = 15 to 65 ml/min. Silicone hose, ID 2.4 mm / OD 5.6 mm
Irrigation clips	Sterilisable for securing irrigation lines down the length of the motor cable
Holder	Sterilisable



### BASCH micromotor

Motor reference	1600076-001 Motor / 1600342-001 Cable
Input power rating	0 to 24 Vdc 5 A max.
Mechanical power	62 W at 20,000 rpm with Chiropro
Rotational speed	500 to 40,000 rpm with Chiropro, self-cooling
Coupling	E standard ISO attachment lug
Dimensions / Weight	ø 21 mm, length 100 mm, ISO lug included / 110 g without cable
Micromotor cable	Push-pull type on Chiropro side, stainless steel nut on BASCH motor side / Length 3 m
Sterilisation	Motor and cable sterilisable in autoclave



### 2-button multi-function pedal

Functions:	ON/OFF, reversal of the direction of motor rotation and triggering of the peristaltic pump.
Dimensions (LxDxH)	160 x 170 x 55 mm / Weight 0.830 kg
Watertightness:	IPx8 as per IEC 529.



### 4-button multi-function pedal

Additional functions of the 4-button pedal:	selection of one of the 2 motors and one of the 4 programs available per motor.
Dimensions (LxDxH)	249 x 193 x 59 mm / Weight 1.775 kg

### Complete sets with 1 BASCH motor

Version with 2-button pedal		Version with 4-button pedal	
For 230 Vac	REF 1700113-001	For 230 Vac	REF 1700206-001
For 115 Vac	REF 1700114-001	For 115 Vac	REF 1700207-001
For 100 Vac	REF 1700115-001	For 100 Vac	REF 1700208-001

## Implantology instruments



### CA 1:1 ext spray

REF	1600200-001
Type	Contra-angle with external spray
Direct ratio	1:1
Speed	500 to 40,000 rpm with Chiropro
Locking system	Push button grip
Weight	100 g
Burs	In accordance with ISO 1797 / $\varnothing$ 2.35 mm type 1, length 22 or 26 mm
Detachable irrigation set	Comprising 10 side tubes + 10 clamping rings for external spray REF. 1500431-010



### CA 30:1 ext spray

REF	1600284-001
Type	Contra-angle with external spray and detachable Kirschner/Meyer type irrigation system
Ratio	Speed reducing factor of 30
Speed	15 to 1,300 rpm with Chiropro
Locking system	Push button grip
Weight	100 g
Burs	In accordance with ISO 1797 / $\varnothing$ 2.35 mm type 1, length 22 or 26 mm / or Kirschner/Meyer type
Detachable irrigation set	Comprising 10 side tubes + 10 clamping rings for external spray + 10 irrigation systems of Kirschner/Meyer type REF. 1500467-010



### PM 1:2

REF	1600436-001
Type	Straight handpiece with external spray
Ratio	Speed increasing factor of 2
Speed	1,000 to 80,000 rpm with Chiropro
Bur changing mechanism	By ring
Weight	86 g
Burs	As per ISO 1797 / dia. 2.35 mm type 2, max. length 44.5 mm

This technical data may be changed by Bien-Air Dental SA at any time, without entailing its liability

Bien-Air Dental SA  
Länggasse 60  
Case postale 6008  
2500 Bienne 6, Switzerland  
Tel. +41 (0)32 344 64 64  
Fax +41 (0)32 344 64 91  
dental@bienair.com

Bien-Air  
Deutschland GmbH  
Jechtinger Straße 11  
79111 Freiburg, Deutschland  
Tel. +49 (0)761 45 57 40  
Fax +49 (0)761 47 47 28  
ba-d@bienair.com

Bien-Air España, SA  
Villarroel, 7 pral. 2a  
08011 Barcelona, España  
Tel. (+34) 934 25 30 40  
Fax (+34) 934 23 98 60  
ba-e@bienair.com

Bien-Air USA, Inc.  
17880 Skypark Circle  
Suite 140  
Irvine, CA 92614 USA  
Phone 1-800-433-BIEN  
Phone 949-477-6050  
Fax 949-477-6051  
ba-usa@bienair.com

Bien-Air France Sarl  
131, Boulevard Péreire  
75017 Paris, France  
Tel. +33 (0)1 47 64 13 49  
Fax +33 (0)1 40 54 91 43  
ba-f@bienair.com

Internet:  
www.bienair.com

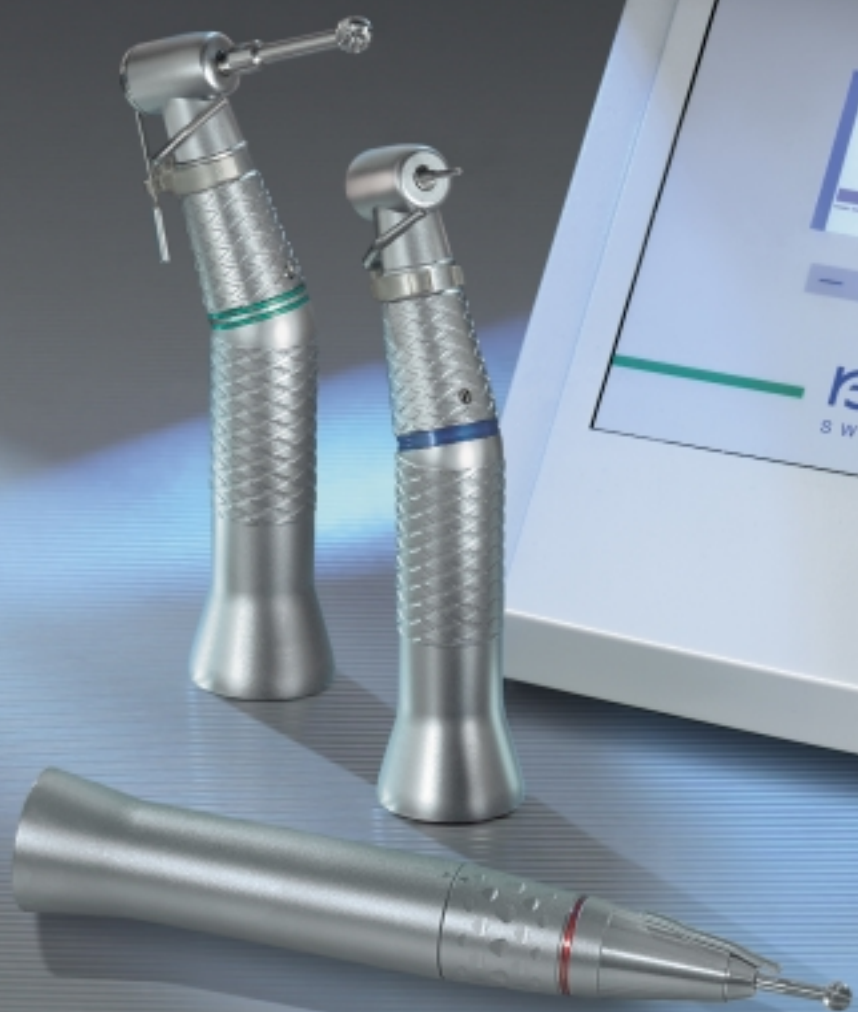
Bien-Air Italia s.r.l.  
Via Vaina 3  
20122 Milano, Italia  
Tel. +39 (02) 58 32 12 51/52/54  
Fax +39 (02) 58 32 12 53  
ba-i@bienair.com

Bien-Air UK Limited  
63, The Street  
Capel, Surrey RH5 5JZ, England  
Tel. +44 (0)1306 711 303  
+44 (0)1306 712 505  
Fax +44 (0)1306 711 444  
ba-uk@bienair.com

Bien-Air Asia Ltd.  
Nishi-Ikebukuro  
Daiichi-Seimei Bldg. 10F  
2-40-12 Ikebukuro, Toshimaku  
Tokyo, 171-0014, Japan  
ピエン・エア・アジア株式会社  
〒171-0014  
東京都豊島区池袋2-40-12  
西池袋第一生命ビルディング10F  
Tel. +81 (3) 5954-7661  
Fax +81 (3) 5954-7660  
ba-asia@bienair.com

Beijing Bien-Air  
Medical Instrument  
Technology Service Co. Ltd.  
Room 2106, The Exchange Beijing,  
No 118 Jian Guo Lu Yi,  
Chao Yang District,  
Beijing 100022, China  
北京彼岸医疗器械  
技术服务有限公司  
北京市朝阳区建国路  
乙118号招商局中心  
京汇大厦2106室  
Tel. +86 10 6567 0651  
Fax +86 10 6567 8047  
ba-beijing@bienair.com

Bien Air<sup>+</sup>  
Dental



CHIROPRO implantology unit



## Implantology instruments

A trio of robust and reliable instruments for precision work. These instruments can be autoclaved. They have an external spray and feature gear ratios of 1:1 for the CA 1:1 ext spray, a speed reducing factor of 30 for the CA 30:1 ext spray and a speed increasing factor of 2 for the PM 1:2.

The CA 30:1 ext spray contra-angle is fitted with a detachable Kirschner/Meyer system providing better irrigation through the bur.

These three instruments are machined from high-quality materials and are capable of easily withstanding frequent sterilisation operations.

All Bien-Air handpieces are equipped with the standardised coupling most widely used in the world:

E Standard, as per ISO 3964.