PROIMPLANT

ENG Instructions for use

CE
0123

Rx Only

REF 2100227-0003/2024.04

Set REF 1700389-001

1 x REF 1600730-001

1 x REF 1303393-001

1 x REF 1600752-001

CA 20:1

1 x REF 1600632-001

1 x REF 1600606-001

1 x REF 1600631-001

10 x

1 x REF 1500984-010

10 x

1 x REF 1303711-010

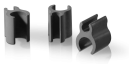
Set REF 1700395-001

1 x REF 1600730-001

1 x REF 1303393-001

1 x REF 1600752-001

1 x REF 1600606-001



10 x

1 x REF 1303711-010

1 x REF 1600631-001

10 x

1 x REF 1500984-010

Options

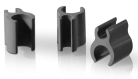
CA 20:1

REF 1600632-001

REF 1600752-001

REF 1600606-001

REF 1600631-001



10 x

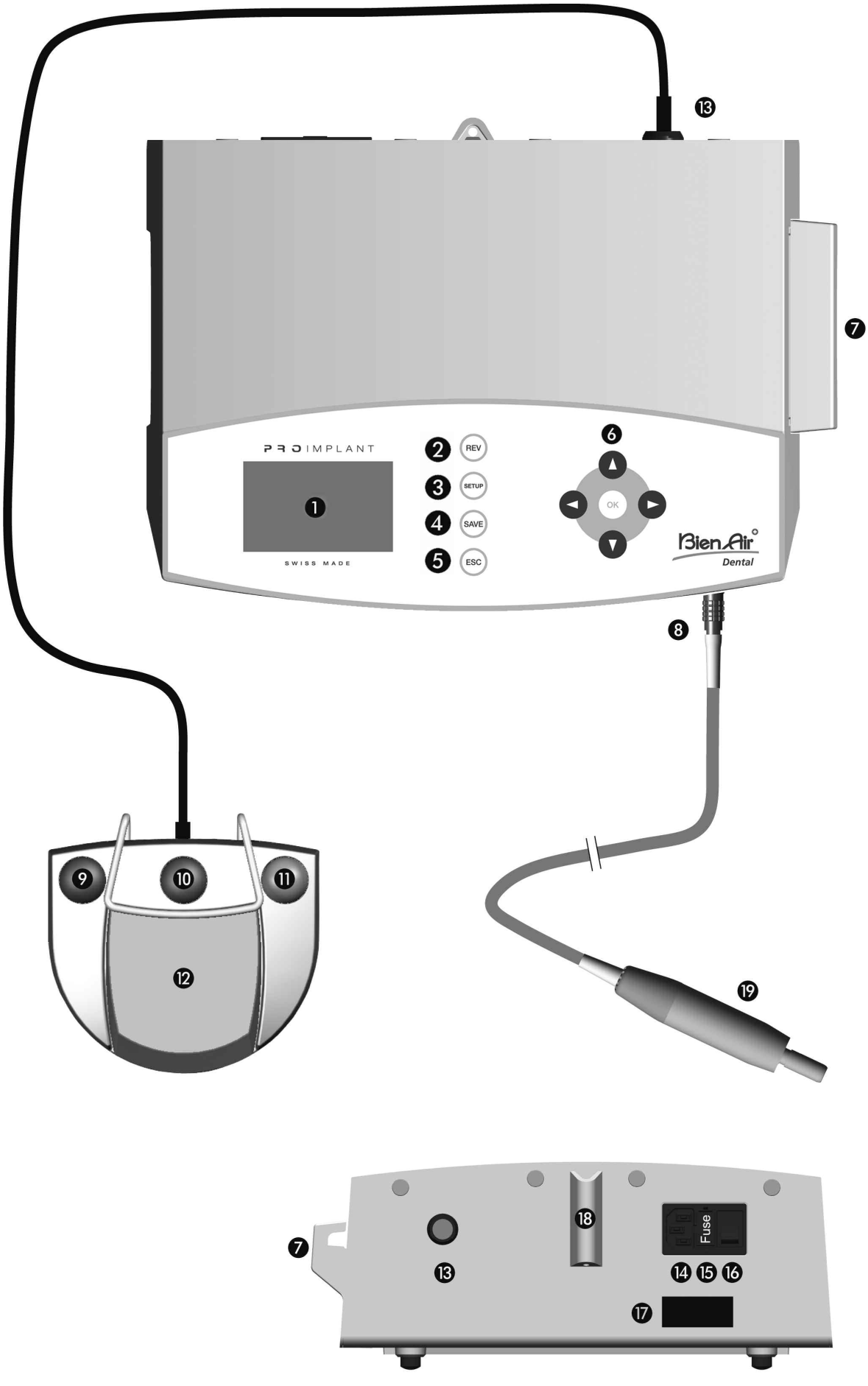
REF 1303711-010

10 x

REF 1301560-010

10 x

REF 1500984-010


PROIMPLANT
SWISS MADE
REV
SETUP
SAVE
ESC
OK
BienAir
Dental
Fuse

Summary

Starting display

Available values

IMPLANT PRG	Steps	Ratio	Speed in rpm	Torque in Ncm	Irrigation in ml/min
Implantology					
Implant PRG1	Round bur 1	128:1	100 - 40'000 rpm	0.48 - 4.8 Ncm	30 ml/min 20%
Implant PRG2	Round bur 2	64:1	with a CA 1 : 1	with a CA 1 : 1	60 ml/min 40%
Implant PRG3	Drill 1	30:1			90 ml/min 60%
Implant PRG4	Drill 2	27:1	Depends on the CA	Depends on the CA	120 ml/min 80%
Implant PRG5	Drill 3	20:1			150 ml/min 100%
Implant PRG6	Drill 4	16:1			
Implant PRG7	Tapping	10:1			
Implant PRG8	Tap unscrewing	1:1			
	Implant screwing	1:2			
	Unscrewing	1:5			

Table of contents

1 Meaning of symbols

CE Marking with number of the notified body.

Rx Only

Caution: Federal law (USA) restricts this device to sale by or on the order of a licensed healthcare practitioner.

Protective earth (ground).

Main switch
ON - The instrument is energized.
OFF - The instrument is de-energized.

Fuse Ø 5 x 20 mm.

Alternating current.

Device of type B.

CAUTION ! Dangerous voltage.

Element sensitive to electrostatic discharges.

CAUTION! Refer to the accompanying documents.

Danger of pinching. Do not put your fingers in rotating parts.

Variability in steps.

Symbol for «Water-cooling».

Symbol for «peristaltic pump».

Recyclable materials.

Recyclable electrical and electronic material.

Sterilisable up to the specified temperature.

Operating mode intermittent.

Manufacturer.

Sterilise with Ethylene Oxyde

2 Description

Identification

Electronically controlled tabletop device for dentistry allowing operation of an MX CHIROPRO micromotor with variable speed control by a pedal.
A peristaltic pump conveys the physiological liquid via a disposable irrigation line without being contaminated.
The device's LCD display indicates the stage of implant fitting, the instrument's ratio, the bur speed, torque value and irrigation flow setting.

Intended use

The system is to be used by dentists and surgeons in dental offices and hospitals. The system is designed to control a dental micromotor which can drive a dental hand-piece fitted with appropriate tools to cut hard and soft tissues in the mouth and to screw dental implants.
The system is intended for use in dentistry for implantology work.
Any use other than that for which this product is intended is unauthorised and may be dangerous.
The medical device meets all the current legal requirements.

Environment

The device is not designed for use in an explosive atmosphere (anaesthetic gas).

Working	Temperature:	+10°C (50°F) to +25°C (77°F)
	Relative humidity:	30% to 80%, including condensation
	Atmospheric pressure:	700 hPa to 1060 hPa
Transport and storage	Environmental conditions	
	Temperature:	-25°C (-13°F) to +70°C (158°F)
	Relative humidity:	10% to 100%, including condensation
	Atmospheric pressure:	500 hPa to 1060 hPa

Environmental protection and information for disposal of the instrument

The disposal and/or recycling of materials must be performed in accordance with the legislation in force.

This device and its accessories must be recycled.
Electrical and electronic equipment may contain dangerous substances which constitute health and environmental hazards. The user must return the device to its dealer or establish direct contact with an approved body for treatment and recovery of this type of equipment (European Directive 2002/96/EC).

3 Set supplied

Set REF 1700389-001	1x	PROIMPLANT control	REF 1600730-001
	1x	Micromotor MX CHIROPRO	REF 1600752-001
	1x	Cable for MX CHIROPRO micromotor	REF 1600606-001
	1x	Contra-angle handpiece CA 20:1 (without light)	REF 1600632-001
	1x	Pack of 10 disposable sterile lines	REF 1500984-010
	1x	10 attachments collars for fastening the sterile irrigation line to a cable	REF 1303711-010
	1x	Bracket for fluid bottle	REF 1303393-001
	1x	Pedal 3 buttons	REF 1600631-001
	1x	Cable system 3P, US / Asia, length 2,00 m	REF 1300067-001
	1x	Instruction	REF 2100227

Set REF 1700395-001	1x	PROIMPLANT control	REF 1600730-001
	1x	Micromotor MX CHIROPRO	REF 1600752-001
	1x	Cable for MX CHIROPRO micromotor	REF 1600606-001
	1x	Pack of 10 disposable sterile lines	REF 1500984-010
	1x	10 attachments collars for fastening the sterile irrigation line to a cable	REF 1303711-010
	1x	Bracket for fluid bottle	REF 1303393-001
	1x	Pedal 3 buttons	REF 1600631-001
	1x	Cable system 3P, US / Asia, length 2,00 m	REF 1300067-001
	1x	Instruction	REF 2100227

4 Options

Contra-angle handpiece CA 20:1 (without light)	REF 1600632-001
Micromotor MX CHIROPRO	REF 1600752-001
Cable for MX CHIROPRO micromotor	REF 1600606-001
Pack of 10 disposable sterile lines	REF 1500984-010
10 attachments collars for fastening the sterile irrigation line to a cable	REF 1303711-010
Pedal 3 buttons	REF 1600631-001
Cable system 3P, Switzerland, length 2,00 m	REF 1300065-001
Cable system 3P, Europe, length 2,50 m	REF 1300066-001
Cable system 3P, US / Asia, length 2,00 m	REF 1300067-001
10 fuse T4.0A L 250 VAC	REF 1301560-010

5 Technical Description: Technical data

Voltage
100 – 240 VAC
50 – 60 Hz

Fuses
2 fuses T4.0A L 250 VAC, breaking capacity 40A

Power demand
300 VA

Classification
Class IIa in accordance with European Directive 93/42/EEC concerning medical devices.

Electric insulation class
Class I, per IEC 60601-1
(apparatus protected against electric shocks).

Degree of protection
IP 40 (protection against insertion of objects larger than 1 mm).

Dimensions L x W x H
309 x 220 x 123 mm. Height with bracket 506 mm

Weight

Housing	2.7 kg	Pedal	830 g
Cable	105 g	Bracket	115 g

Memory
Implantology mode: Storage in memory of 8 implant fitting sequences of 10 steps each.

Interface Languages
French, German, English, Italian, Spanish, Portuguese, Japanese and Russian.

List of errors & Toubleshooting
Page 15

Bracket
Stainless steel

Intended for use with:	see instruction
Micromotor MX CHIROPRO	REF 2100161
Cable for MX CHIROPRO micromotor	REF 2100163
Contra-angle CA 20:1, without light	REF 2100209

⚠ The use of the system with other handpieces, motors or cables has not been validated/certified

Peristaltic pump

Pump delivery:	From 30 to 150 ml/min. (5 levels).
Hose for pump:	External Ø 5.60 mm, internal Ø 2.40 mm Wall thickness 1.60 mm.

Pedal
REF 1600631-001
Dimensions (LxWxH) 250 x 205 x 54 mm
with handle: 250 x 205 x 144 mm
The pedal is waterproof (IP X8 in accordance with CEI 529).

Cables
Length of cables:
Pedal cable 2,90 m
Motor cable 2,00 m

WARNING
To prevent any risk of electric shock, this device must be connected only to a power supply network provided with protective earth.
The system is not adapted to be used in the presence of inflammable gases (e.g. anaesthetic gas).
Do not attempt to open the apparatus when it's connected to the electric mains. Beware of electrical shocks.

Applied parts (per IEC 60601-1)

Micromotor MX CHIROPRO	REF 1600752-001
CA 20:1	REF 1600632-001
Irrigation lines	REF 1500984-010

Operating mode:
Intermittent
ON: 5 min.
OFF: 40 min.

5 Technical Description: Electromagnetic compatibility

Precautions regarding Electromagnetic Compatibility (EMC)

Electro-medical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the present document.
PROIMPLANT complies with the EMC requirements according to IEC 60601-1-2. Radio transmitting equipment, cellular phones, etc. shall not be used in the close proximity of the device since they could influence the performance of the device. Particular precaution is required when using strong emission sources such as High Frequency surgical and similar equipment so that the HF cables are not routed on or near the device. If in doubt, please contact a qualified technician or Bien-Air Dental.
PROIMPLANT should not be used adjacent or stacked with other equipment. If adjacent or stacked use is necessary, PROIMPLANT should be monitored to verify normal operation in the configuration in which it will be used.

WARNING!

The use of accessories, transducers and ca-bles other than those specified, with the exception of transducers and cables sold by Bien-Air Dental as replacements parts for internal components, may result in increased emissions or decreased immunity of PROIMPLANT. Dental professionals need to be aware of potential electromagnetic interference between electronic dental devices and active implantable medical devices, and should always inquire about any devices implanted in the patient.

Guidance and manufacturer's declaration - electromagnetic emissions

PROIMPLANT is intended for use in the electromagnetic environment specified below.
The customer or the user of PROIMPLANT should ensure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	PROIMPLANT uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	PROIMPLANT is suitable for use in all Establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Not applicable	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Conform	

Guidance and manufacturer's declaration - electromagnetic immunity

PROIMPLANT is intended for use in the electromagnetic environment specified below.
The customer or the user of PROIMPLANT should ensure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines No input/output lines	±2 kV for power supply lines No input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±0.5 kV line to line ±1 kV line to line ±0.5 kV line to earth ±1 kV line to earth ±2 kV line to earth	±0.5 kV line to line ±1 kV line to line ±0.5 kV line to earth ±1 kV line to earth ±2 kV line to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and variations de tension voltage variations on power supply input lines 1 IEC 61000-4-11	<5% U_T (>95% dip in U_T) for 0,5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	<5% U_T (>95% dip in U_T) for 0,5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of PROIMPLANT requires continued operation during power mains interruptions, it is recommended that PROIMPLANT be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercialor hospital environment.

NOTE U_T is the a.c. mains voltage prior to application of the test level.

5 Technical Description: Electromagnetic compatibility

Guidance and manufacturer's declaration - electromagnetic immunity
PROIMPLANT is intended for use in the electromagnetic environment specified below.
The customer or the user of PROIMPLANT should ensure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 V	Portable and mobile RF communications equipment should be used no closer to any part of PROIMPLANT, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance** $d = 1.2\sqrt{P}$ $d = 1.2\sqrt{P}$ 80 MHz to 800 MHz $d = 2.3\sqrt{P}$ 800 MHz to 2,5 GHz
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5 GHz	3 V/m	where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

[a] Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the PROIMPLANT is used exceeds the applicable RF compliance level above, the PROIMPLANT should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the PROIMPLANT.
[b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the PROIMPLANT
The PROIMPLANT is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the PROIMPLANT can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the PROIMPLANT as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = 1.2\sqrt{P}$	80 MHz to 800 MHz $d = 1.2\sqrt{P}$	800 MHz to 2,5 GHz $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

6 Installation

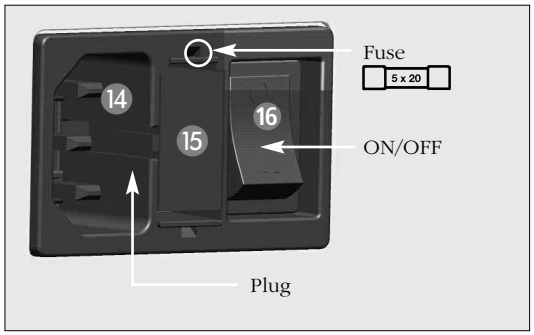


fig. 1

Installation

A. PROIMPLANT may be positioned on a table, on a trolley or another surface, but in no case on the floor.
Power plug 14 is the device for disconnection in case of problems, and it must be easily accessible at all times.

B. The fuse box may be opened with a screwdriver .
100 - 240 Vac = fuse T-4.0 A L 250 VAC REF 1301560-010

C. The apparatus is powered by your line voltage (100/115/230 Vac). Connect the power cable to the plug **fig. 1**.

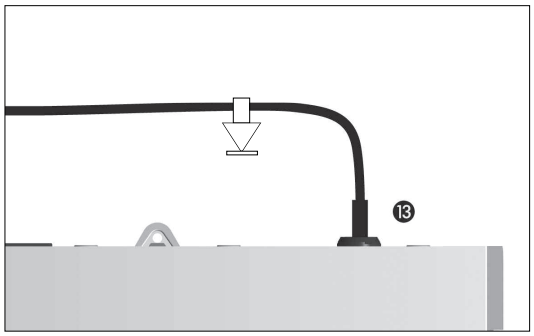


fig. 2

D. Connect the pedal cable to the output provided on the rear panel, guiding the connector and plug by means of the index pin on the connector **fig. 2**.

⚠ Do not raise the pedal using the connection cable.

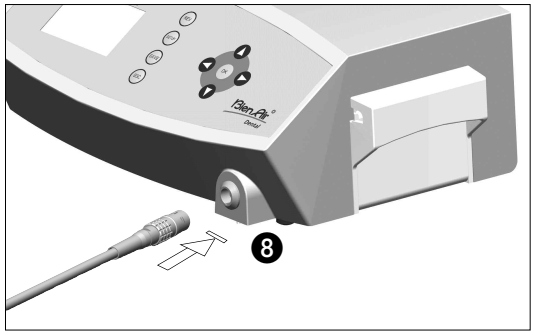


fig. 3

E. Connect the MX CHIROPRO micromotor cable to the motor output, guiding the connector and plug by means of the index pin and red dot on the connector **fig. 3**.

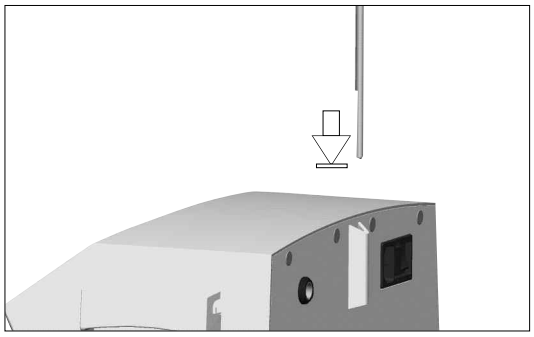


fig. 4

F. Align and attach the bracket to the housing provided on the console's rear and suspend the flask or bottle **fig. 4**.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Bien-Air Dental SA
Länggasse 60
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SWITZERLAND
TUBULURE POUR POMPE PERISTALTIQUE
A usage unique. Stérilisé à l'oxyde d'éthylène.
Vérifier l'intégrité de l'emballage avant usage
REF 1500984-001
TUBING SET FOR PERISTALTIC PUMP
For single use only. Sterilized by ethylene oxyde.
Do not use if packaging is damaged.
SET DI TUBI PER POMPA PERISTALTICA
Da usare una sola volta. Sterilizzato ad ossido di etilene.
Non usare se la confezione non è integra.
SCHLAUCHSET FÜR PERISTALTIKPUMPE
Zur einmaligen Verwendung. Sterilisiert mit Äthlenoxid.
Nicht verwenden, wenn Verpackung beschädigt ist.
TUBO PARA BOMBA PERISTALTICA
Tubo mono uso. Esterilizado por óxido de etileno.
Utilizar sólo si el envase está intacto.
Rx Only
STERILE EO
0459
AAAA/MM
LOT EXXXXXX
EMP - Parc d'activités de Signes - 83870 SIGNES (France)

fig. 5

G. Check the packaging integrity, as well as the expiration date of the irrigation line.
Only lines supplied by Bien-Air Dental ensure trouble-free operation. These lines are sterile and for single use. Re-use may result in microbiological contamination of the patient.

6 Installation

fig. 6

H. Remove the single-use sterile irrigation line from its pouch.

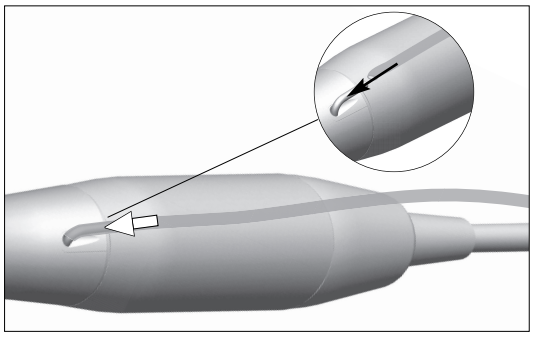


fig. 7

Fitting on the spray tube

I. Connect the flexible hose of the irrigation line to the spray tube of the handpiece or contra-angle **fig. 7**.

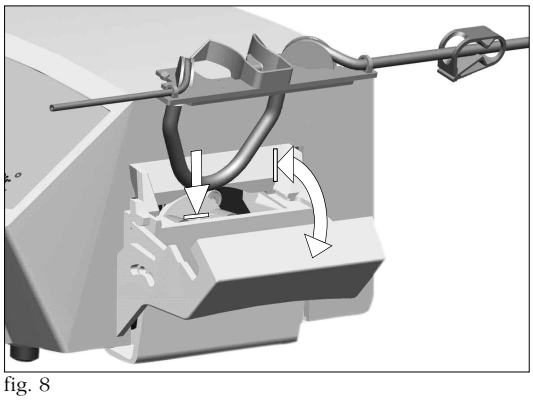


fig. 8

Installation on the peristaltic pump

J. Install the plastic cassette in the peristaltic pump.
Check that the cassette is clipped correctly.
Close the pump lid, **fig. 8**.
If there is resistance to closing, open the lid again and check the correct positioning of the cassette.

⚠ **Warning!**
Do not run the pump while the lid is open.

Danger of pinching!

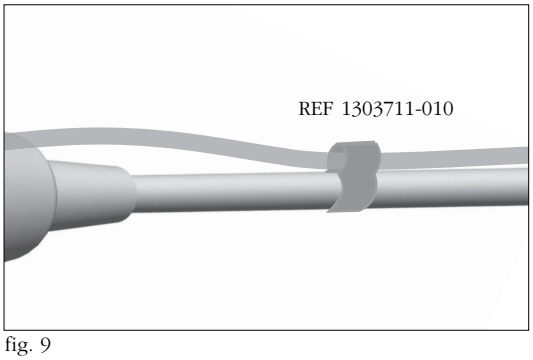


fig. 9

K. Perforate the cap of the physiological liquid flask with the pointed end of the irrigation line after removing the protective cap.

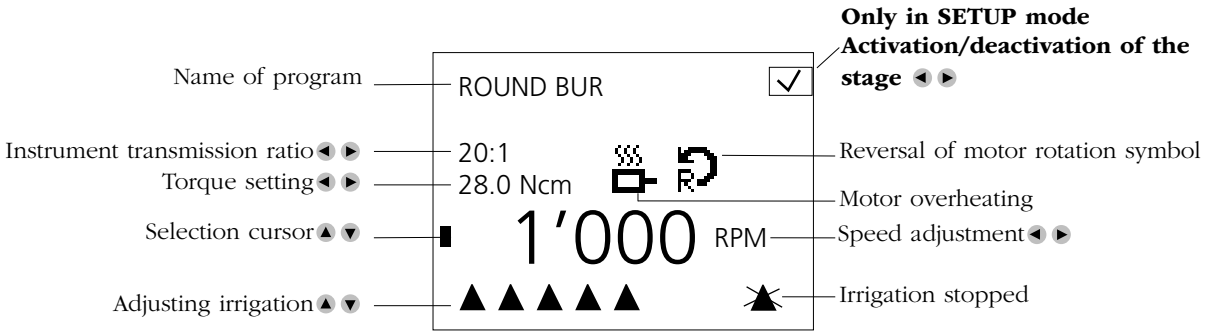
L. Attach the irrigation line on the motor cable using the attachment collars REF 1303711-010 **fig. 9**.

Stopping procedure

The device can be safely stopped using the main switch ⑯.

7 Description of keys and elements

❶ **DEVICE SCREEN**



❷ **COMMAND TO REVERSE THE ROTATION OF THE MX CHIROPRO MICROMOTOR**

❸ **"SETUP" MENU CALL-UP KEY**

❹ **PARAMETERS BACKUP KEY**

❺ **RETURN KEY**

❻ **COMMANDS DEVICE**

- ▼ Down key } cursor
- ▲ Up key
- ◄ Left key (–) } adjusting
- ► Right key (+)
- (OK) Confirmation/selection key
  In implantology mode: next stage

❼ **PERISTALTIC PUMP LID**

❽ **MX CHIROPRO MICROMOTOR CONNECTOR**

❾ **IRRIGATION ON/OFF CONTROL BUTTON ON PEDAL**

❿ **"PROGRAM" BUTTON ON PEDAL**
In implantology mode:
- Short press: next stage
- Long press: previous stage

⓫ **BUTTON TO REVERSE THE ROTATION OF THE MX CHIROPRO MICROMOTOR ON PEDAL**

⓬ **VARIABLE SPEED DRIVE ON PEDAL**

⓭ **PEDAL CONNECTOR**

⓮ **MAINS CONNECTOR (100/115/230 VAC)**

⓯ **FUSE HOLDER**

⓰ **MAIN SWITCH ON THE DEVICE**

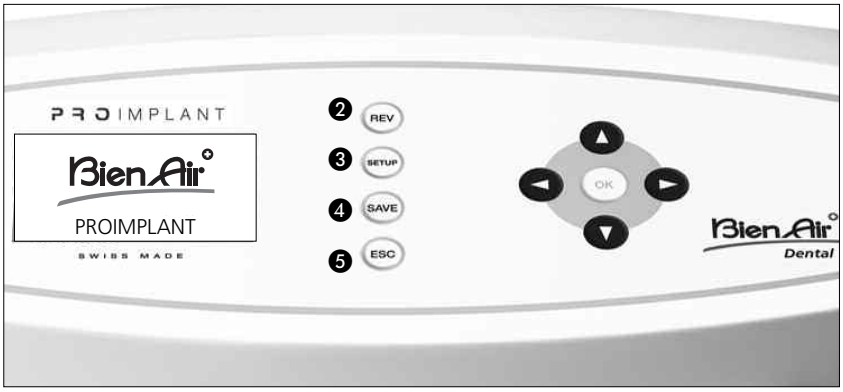
⓱ **LABEL**

⓲ **BRACKET SUPPORT**

⓳ **MX CHIROPRO MICROMOTOR**

8 Operation

Description of functions

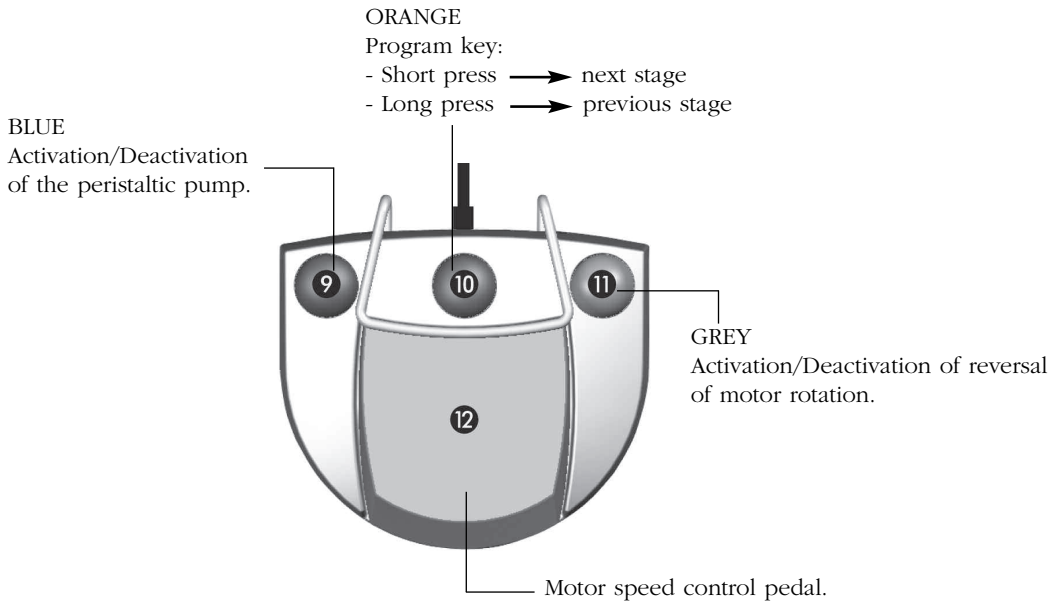


❷ **REV** The "reverse" function can be chosen directly in all the programs.
Upon selection, a beep and the "reversal of motor rotation" icon indicate reverse rotation.

❸ **SETUP** See next page.

❹ **SAVE** Stores the settings of a program: press the key until a beep is emitted, and the values that are flashing will be stored in memory directly.

❺ **ESC** Return function. With "ESC", you can leave the current screen. In “Implantology” mode, can also be used to return to the previous stage.
If the name of the program flashes when exiting, the changes will not be taken into consideration.
The changes must always be confirmed with "SAVE", otherwise they will be lost.



8 Operation

Start-up

1.

System loading.....

2. ▼ ▲ OK

LANGUAGE
English ✓
Français
Deutsch
Italiano
Espanol
Português
Russian
Japanese

Select with ▼ ▲
Confirmation with OK

3. ▼ ▲ OK

IMPLANT. PRG
Implant PRG1
Implant PRG2
Implant PRG3 ✓
Implant PRG4
Implant PRG5
Implant PRG6
Implant PRG7
Implant PRG8

Select with ▼ ▲
Confirmation with OK

4. OK

<Name of selected program>
Please check the pre-programmed values before inserting implant.

OK: continue
ESC: back

5. OK

INFORMATION
Key functions: ▲ move cursor UP ▼ move cursor DOWN ◄ decrem./disable ► increm./enable

OK: continue

6. ▼ ▲ OK

MAIN MENU
Implantology

Select with ▼ ▲
Confirmation with OK

with
OK: go directly to pre-setting with no possibility of deactivating the stages

or
with SETUP, possibility of deactivating the stages with ☑

The 8 implantology programs contain default values that represent common settings used during implant procedures.

This storing in memory takes place only at the first connection of the device and is subsequently maintained.
These parameters can then be modified in SETUP.

Pre-settings

SETUP

Language
Implant. PRG
Ratio
Light
Footpedal
Torque units
Contrast
Editor
System info
Restore defaults

English
Français
Deutsch
Italiano
Español
Português
Russian
Japanese

Select the language wanted ▼ ▲ and confirm with OK.

Language
Implant. PRG
Ratio
Light
Footpedal
Torque units
Contrast
Editor
System info
Restore defaults

128:1
64:1
30:1
27:1
20:1
16:1
10:1
1:1
1:2
1:5

Select the ratio to be changed ▼ ▲ OK, then change of value with ▼ ▲ and with ◄ ► then save with SAVE. Continue with OK. ESC: back

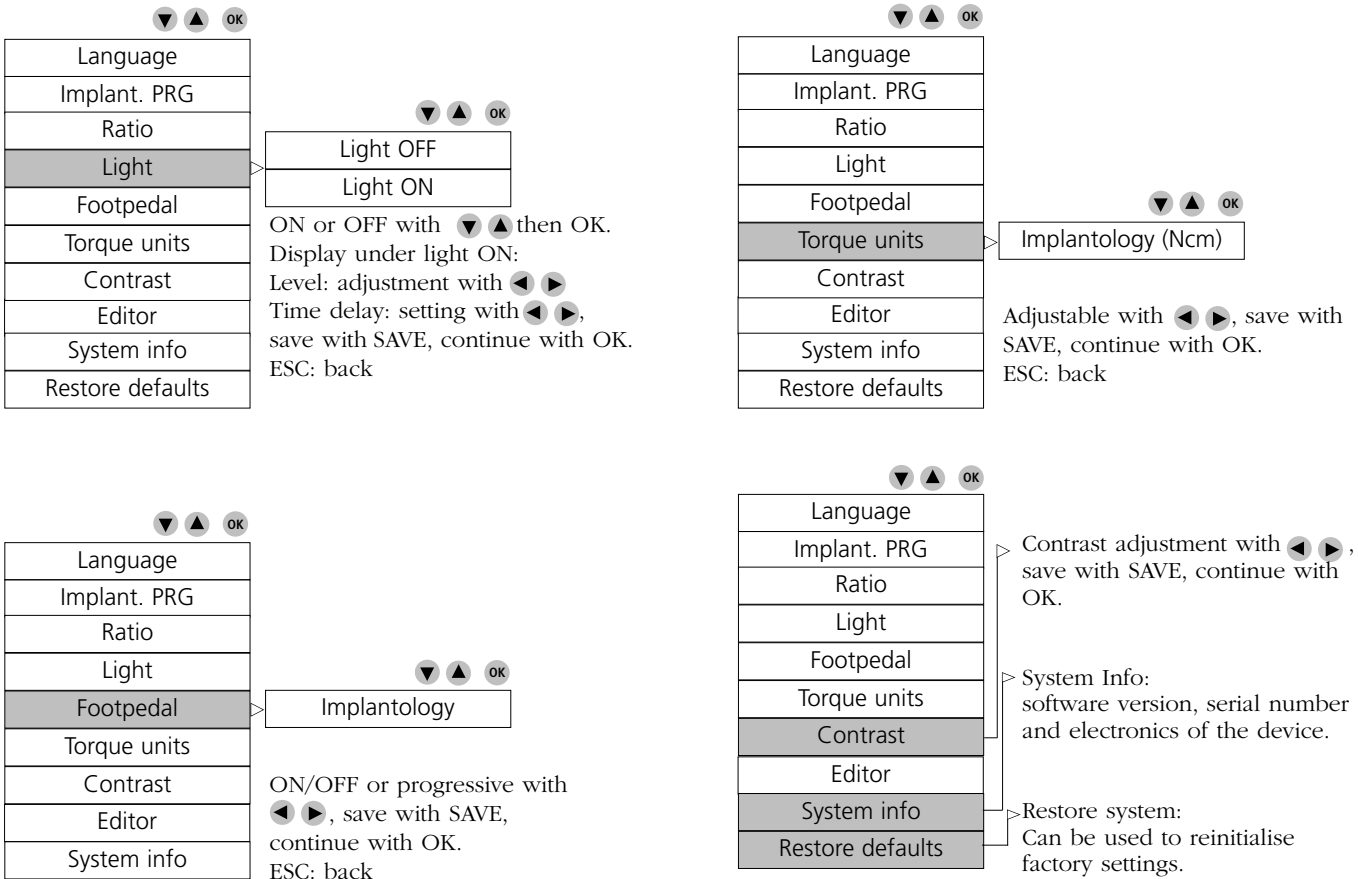
Language
Implant. PRG
Ratio
Light
Footpedal
Torque units
Contrast
Editor
System info
Restore defaults

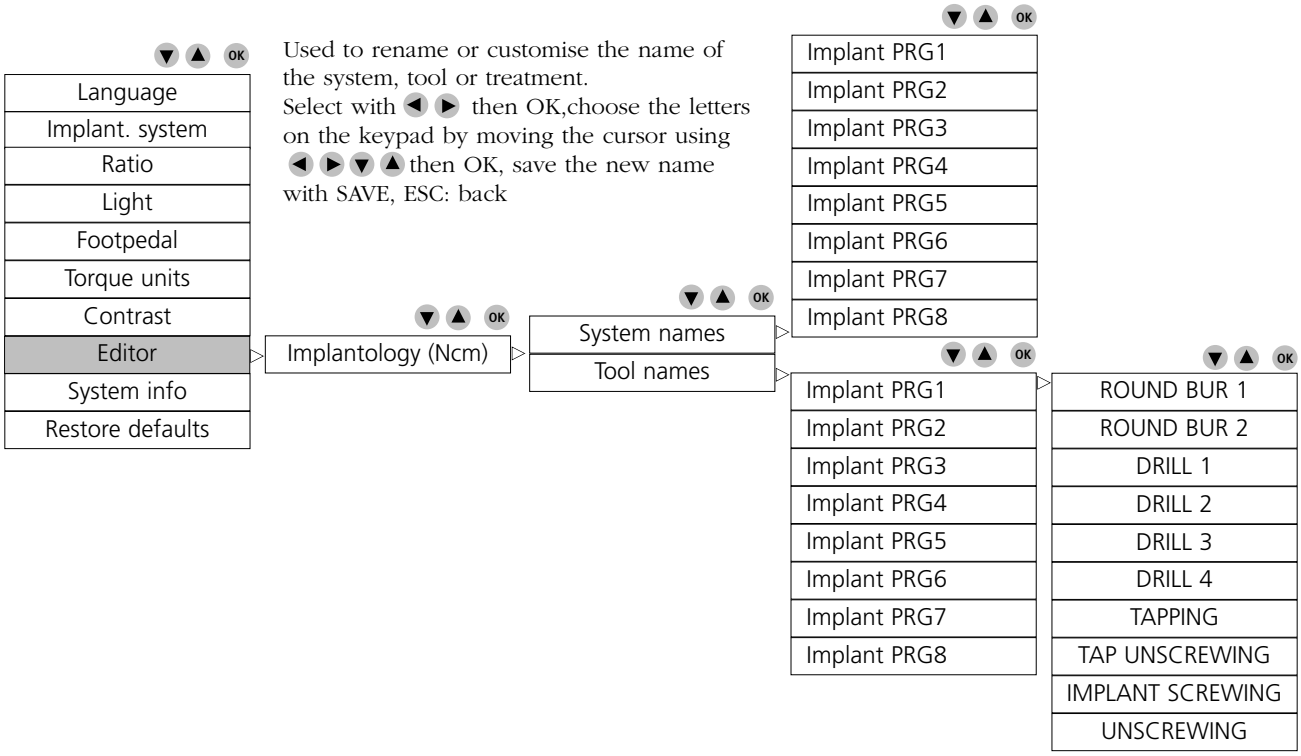
Implant PRG1
Implant PRG2
Implant PRG3
Implant PRG4
Implant PRG5
Implant PRG6
Implant PRG7
Implant PRG8

Select the system wanted ▼ ▲ and confirm with OK.
ESC: change

8 Operation

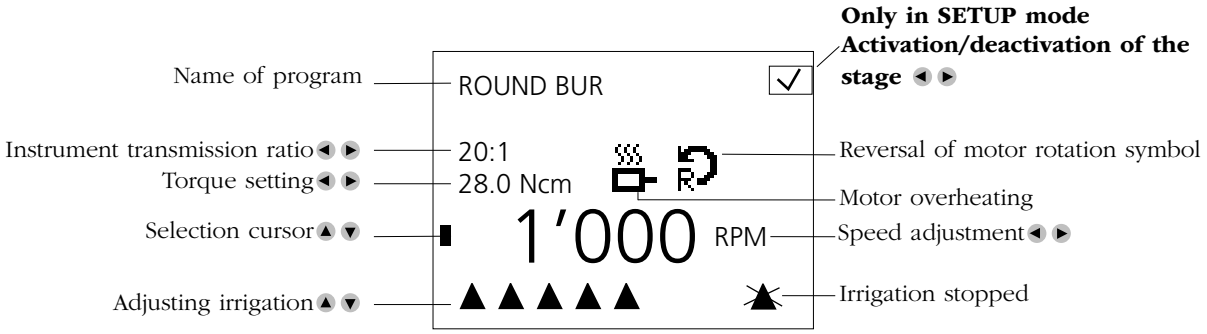
Pre-settings





8 Operation

Description of functions



MAIN MENU	**Steps**	**Trans-mission ratio**	**Speed in rpm**	**Torque in Ncm**	**Irrigation in ml/min**
Selection wanted ▲ ▼ and confirm with OK	Each of these stages can be activated or deactivated from the SETUP menu. See also info on the last page. OK: next step ESC: previous step	Select with the cursor ▮			
		Ajustable: ◄ ► then SAVE	Ajustable: ◄ ► then SAVE	Ajustable: ◄ ► then SAVE	Ajustable: ◄ ► then SAVE

Implantology	ROUND BUR 1	128:1 64:1 30:1 27:1 20:1 16:1 10:1 1:1 1:2 1:5	100 - 40'000 rpm with a CA 1 : 1 Depends on the CA selected	0.48 - 4.8 Ncm with a CA 1 : 1 Depends on the CA selected	30 ml/min 20% 60 ml/min 40% 90 ml/min 60% 120 ml/min 80% 150 ml/min 100%
	ROUND BUR 2				
	DRILL 1				
	DRILL 2				
	DRILL 3				
	DRILL 4				
	TAPPING				
	TAP UNSCREWING				
	IMPLANT SCREWING				
	UNSCREWING				

Pre-programmed values, see pages 33

9 List of errors & Toubleshooting

Message		Cause of error	Action
⚠ Release the pedal	The pedal is pressed when starting the device. ——————— The motor is blocked for more than 2 sec.	Safety	Release the pedal and press again.
⚠ ♨	The motor control card limits the power supplied to the motor to prevent motor overheating.	Safety	Avoid extended use.
Equipment initialisation error The following error may occur at start-up of PROIMPLANT			
1. Check on the integrity of the PROIMPLANT memory			
INIT ERROR 1	The memory is corrupt! Please contact Bien-Air Dental SA. ESC: restore	The memory data check failed.	Press the ESC key to try to restore the memory. Contact Bien-Air Dental SA.
Device operating error The following errors may occur during operation of the device			
1. Loss of pedal connection			
ERROR 1	The pedal is not connected! Please check the connection. ESC: exit	The pedal is not connected correctly.	Check pedal connection. Contact Bien-Air Dental SA.
2. Peristaltic pump overheating			
ERROR 2	Irrigation pump overheating! Please wait for it to cool. ESC: exit	Peristaltic pump motor overheating	Wait until the system cools. Contact Bien-Air Dental SA.
3. Peristaltic pump general error			
ERROR 3	Irrigation pump fault! Please contact Bien-Air Dental SA. ESC: exit	Peristaltic pump electrical fault.	Contact Bien-Air Dental SA.
4. Loss of motor connection			
ERROR 4	The motor is not connected! Please check the connection. ESC: exit	Loss of motor phase fault. The motor is not connected correctly.	Check motor connection. Contact Bien-Air Dental SA.
5. Motor cable fault			
ERROR 5	Motor cable fault! Please change cable. ESC: exit	Motor power fault. The motor cable may be defective.	Check motor cable. Contact Bien-Air Dental SA.
6. Motor control overheating			
ERROR 6	System overheating! Please wait for it to cool. ESC: exit	Overheating of motor control card (electrical control of motor).	Wait until the system cools. Contact Bien-Air Dental SA.
7. System electrical fault			
GEN ERROR [Error code]	System electrical fault! Please contact Bien-Air Dental SA. ESC: exit	Communication fault with motor control card: [EC100] Motor control card power supply undervoltage: [EC101] Motor control card power supply overvoltage: [EC102] Other motor control card faults: [EC120]	Contact Bien-Air Dental SA.

10 Default values

Implantology:
Default values page 33
The table shows the default operating values for 8 different implantology sequences.

11 Maintenance

Only use original Bien-Air Dental maintenance products and parts or those recommended by Bien-Air Dental. Using other products or parts may cause operational failure and/or void the guarantee.

Servicing
Never disassemble the device. For any modification and repair, we recommend that you contact your regular supplier or Bien-Air Dental directly. Bien-Air Dental asks the user to have its dynamic instruments checked or inspected at least once a year.

Information
The technical specifications, illustrations and dimensions contained in these instructions are given only as a guide. They may not be the subject of any claim. The manufacturer reserves the right to make technical improvements to its equipment, without amending these instructions.
For all additional information, please contact Bien-Air Dental SA at the address indicated on the back cover.

Cleaning-disinfection
• Disinfect the surfaces of the console and pedal with a clean cloth soaked in a suitable product. • Do not exert any pressure on the screen. • Do not immerse in disinfectant solution • Not designed for an ultrasonic bath. • Use a new sterile irrigation line for each patient. • AAMI TIR 12:2004 - Disinfection level: intermediate.

Important

For maintenance:	see instruction
- MX CHIROPRO micromotor	REF 2100161
- Cable for micromotor MX CHIROPRO	REF 2100163
- Contra-angle CA 20:1	REF 2100209

12 Generalities and guarantee

General information
The device must be used by a qualified professional in compliance with the current legal provisions concerning workplace safety, health and accident prevention measures, and these working instructions. In accordance with such requirements, the operators:
• must only use devices that are in perfect working order; in the event of irregular functioning, excessive vibration, abnormal heating or other signs that may indicate malfunction of the device, the work must be stopped immediately; in this case, contact a repair centre that is approved by Bien-Air Dental;
• must ensure that the device is used only for the purpose for which it is intended, must protect themselves, their patients and third parties from any danger, and must avoid contamination through the use of the product.

Terms of guarantee
Bien-Air Dental grants the user a guarantee covering all functional defects, material or production faults.

The device is covered by this guarantee for 24 months from the date of invoicing.

In case of justified claim, Bien-Air Dental or its authorised representative will fulfil the company's obligations under this guarantee by repairing or replacing the product free of charge.

Any other claims, of whatever nature, in particular in the form of a claim for damages and interest, are excluded.
Bien-Air Dental shall not be held responsible for damage or injury and the consequences thereof, resulting from:
• excessive wear and tear
• improper use
• non-observance of the instructions for installation, operation and maintenance
• unusual chemical, electrical or electrolytic influences
• poor connections, whether of the air, water or electricity supply.

The guarantee does not cover flexible "fibre optic" type light conductors, or any parts made of synthetic materials.

The guarantee shall become null and void if the damage and its consequences are due to improper manipulation of the product, or modifications to the product carried out by persons not authorised by Bien-Air Dental.Claims under the terms of the guarantee will be considered only on presentation, together with the product, of the invoice or the consignment note, on which the date of purchase, the product reference and the Serial No. should be clearly indicated.

Default values

Implantology: default values

The table shows the default operating values for 8 different implantology sequences.
These default values represent common settings used during implant procedures.

Implant PRG1 / PRG8	Implant PRG2	Implant PRG3	Implant PRG4	Implant PRG5	Implant PRG6	Implant PRG7
ROUND BUR 1	ROUND BUR	ROUND BUR	ROUND BUR	ROUND BUR	ROUND BUR	PILOT DRILL 1
20:1	20:1	20:1	20:1	20:1	20:1	20:1
28.1 Ncm	28.1 Ncm	28.1 Ncm	28.1 Ncm	28.1 Ncm	35.3 Ncm	28.1 Ncm
1'000 RPM	2'000 RPM	1'000 RPM	1'200 RPM	1'500 RPM	1'500 RPM	800 RPM
▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△
ROUND BUR 2	PILOT DRILL	DRILL 1	DRILL 1	DRILL 1	DRILL 1	PILOT DRILL 2
20:1	20:1	20:1	20:1	20:1	20:1	20:1
28.1 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	28.1 Ncm
1'000 RPM	800 RPM	800 RPM	800 RPM	500 RPM	1'500 RPM	800 RPM
▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△
DRILL 1	DRILL 1	DRILL 2	DRILL 2	DRILL 2	DRILL 2	DRILL 1
20:1	20:1	20:1	20:1	20:1	20:1	20:1
35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm
800 RPM	800 RPM	800 RPM	800 RPM	500 RPM	1'500 RPM	600 RPM
▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△
DRILL 2	DRILL 2	DRILL 3	DRILL 3	DRILL 3	DRILL 3	DRILL 2
20:1	20:1	20:1	20:1	20:1	20:1	20:1
35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm
600 RPM	800 RPM	800 RPM	800 RPM	500 RPM	1'500 RPM	500 RPM
▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△
DRILL 3	DRILL 3	DRILL 4	DRILL 4	DRILL 4	DRILL 4	DRILL 3
20:1	20:1	20:1	20:1	20:1	20:1	20:1
35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm
500 RPM	800 RPM	800 RPM	800 RPM	500 RPM	1'500 RPM	400 RPM
▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△
DRILL 4	DRILL 4	DRILL 5	DRILL 5	DRILL 5	DRILL 5	SHAPING DRILL
20:1	20:1	20:1	20:1	20:1	20:1	20:1
35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm
400 RPM	800 RPM	800 RPM	800 RPM	500 RPM	1'500 RPM	250 RPM
▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△	▲▲▲△△
TAPPING	TAPPING	TAPPING	TAPPING	TAPPING	TAPPING	TAPPING
20:1	20:1	20:1	20:1	20:1	20:1	20:1
35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm
15 RPM	15 RPM	15 RPM	15 RPM	15 RPM	20 RPM	20 RPM
△△△△△	△△△△△	△△△△△	△△△△△	△△△△△	△△△△△	△△△△△
TAP UNSCREWING	TAP UNSCREWING	TAP UNSCREWING	TAP UNSCREWING	TAP UNSCREWING	TAP UNSCREWING	TAP UNSCREWING
20:1	20:1	20:1	20:1	20:1	20:1	20:1
42.5 Ncm	42.5 Ncm	42.5 Ncm	42.5 Ncm	42.5 Ncm	42.5 Ncm	42.5 Ncm
15 RPM REV	15 RPM REV	15 RPM REV	15 RPM REV	15 RPM REV	15 RPM REV	20 RPM REV
△△△△△	△△△△△	△△△△△	△△△△△	△△△△△	△△△△△	△△△△△
IMPLANT SCREWING	IMPLANT SCREWING	IMPLANT SCREWING	IMPLANT SCREWING	IMPLANT SCREWING	IMPLANT SCREWING	IMPLANT SCREWING
20:1	20:1	20:1	20:1	20:1	20:1	20:1
35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm	35.3 Ncm
15 RPM	15 RPM	15 RPM	15 RPM	15 RPM	15 RPM	15 RPM
△△△△△	△△△△△	△△△△△	△△△△△	△△△△△	△△△△△	△△△△△
UNSCREWING	UNSCREWING	UNSCREWING	UNSCREWING	UNSCREWING	UNSCREWING	UNSCREWING
20:1	20:1	20:1	20:1	20:1	20:1	20:1
54.7 Ncm	54.7 Ncm	54.7 Ncm	54.7 Ncm	54.7 Ncm	54.7 Ncm	54.7 Ncm
15 RPM REV	15 RPM REV	15 RPM REV	15 RPM REV	15 RPM REV	15 RPM REV	15 RPM REV
△△△△△	△△△△△	△△△△△	△△△△△	△△△△△	△△△△△	△△△△△

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REF 2100227-0003/2024.04