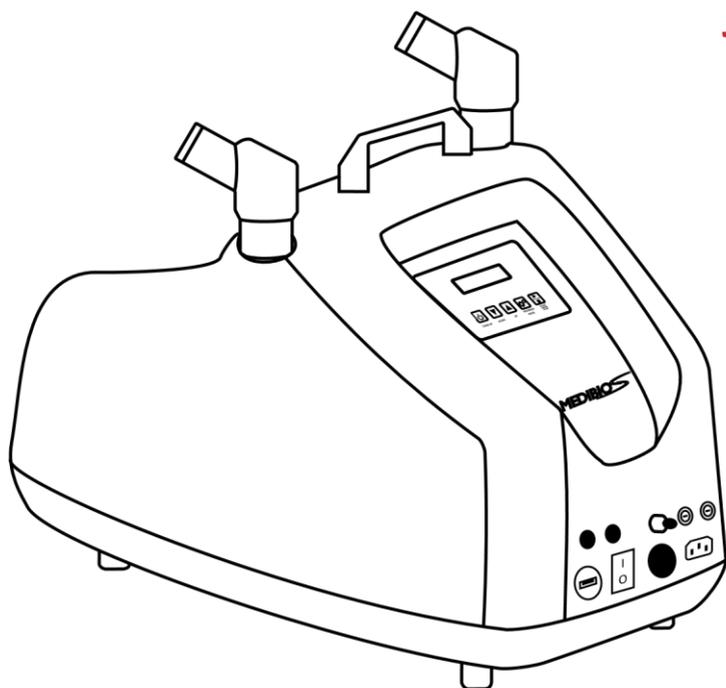


USER MANUAL

MEDIBIOS *basic* Reference *bsc*



bsc

MEDIBIO

Introduction

The present user manual must be considered as an integral part of the machine, as it contains important information on proper utilization of MEDIBIOS basic reference bsc device. Keep in a protected but easily accessible place.

Every operator should carefully comply with warnings and instructions given in this manual. Reproduction or translation of any part of the present manual is forbidden without prior written consent of the Manufacturer Company.

The machine described in the present manual is a diffuser of ready-made liquid solutions such as:

- Medical devices
- Biocides
- Sanitizers

MANUFACTURER:

Amil Care Corp.

Web site: www.amilcarecorp.com

For information about MEDIBIOS: info@amilcarecorp.com

For assistance: assistance@medibios.com



The “mandatory” symbol is used to describe safety instructions and warnings to be complied with.

Disposal: The correct disposal of your old product will help prevent potential negative consequences for our environment and human health. Do not dispose of your old products with your normal household waste. Please act according to your local rules.

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1. Safety instructions and warnings



Here following is a list of warnings to be observed in order to safely operate the device and to avoid risks to people and animals or damage to the instrumentation. Before using this device it is mandatory to observe the safety and usage instructions described in the present manual. This manual can be modified without prior notice.

- This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take appropriate measures
- The device must be used only by trained and authorized personnel, applying exclusively the operative protocols
- The user operates under his/her own responsibility.
- Don't use the device for purposes different from those for which it was designed.
- Only use the device with the products authorized by the producer (the list of the authorized products is available on the website www.amilcarecorp.com or please contact the local authorized distributor).
- Carefully study the material safety data sheet of the product to be utilized before using the device.
- During device operation, the place must be totally devoid of people and animals.
- In case of weekly planning, ensure that all personnel are aware of the days and times of device start and that outside the place to be treated a notice of treatment in progress is exposed.
- Before effecting a disinfection or disinfestation (pest control) or a washing cycle, ensure that the place is suitable (see 7.2).
- Enter the place again only after the value of the used substance correspond to what indicated in the Safety Data Sheet (sect. 8 of the Safety Data Sheet). Measure this value with suitable detector device.
- Utilise the device in a dry and protected place.
- Don't go near the device with inflammable or explosive materials.
- Ensure that the power supply from mains is correct and complying with relevant norms. In order to avoid electrical interference to the device it is important to verify that the value of resistance to earth is efficient and well suited to the protections of your electrical plant.

- Periodically check the state of the power supply cable and never operate the device when the cable shows any anomaly or is in any way damaged in its structure.
- Don't pull the cables to detach them from the device panel, but take them in your fingers to extract them from the sockets.
- Don't leave the instrument connected to mains when not in use: disconnect the plug from mains when the device is not in use (except when a weekly plan has been set).
- Don't introduce any objects or liquids inside the pivoting nozzles of the diffuser and don't cover them either during product emission or when the equipment is off.
- Place outside the room a suitable notice of disinfection or disinfestation (pest control) or washing treatment in progress.
- Keep the device in horizontal position, do not tilt it and turn it upside down.
- Carefully set the device on a perfectly flat surface inside the room to be treated, ensuring a distance of approximately 1 metre is left free of obstacles in the emission direction, in order to ensure proper emission.
- Position the device so that it rests on its damping feet and not on the lower body plate, so as to ensure that ventilation and air aspiration slots are not blocked.
- Never try to set the device on unstable or unsuitably dimensioned surfaces.
- Never tamper with the liquid bottle. The bottle can be removed and inserted again several times.
- Remove the bottle during any device move or transport.
- When transporting, empty the device from any liquid inside through the washing program (see 7.3.8.3).
- The device is equipped with a special protection on the coupling of the bottle, so before placing the bottle make sure to remove the protection. If the device is not used for long periods, lift the bottle (see 7.2 - modality of bottle extraction) and put the protection on the coupling.
- Never use abrasive sponges or substances to clean the device, utilize instead soft cloth moistened with warm water. Carry out all cleaning operations with the machine in the OFF state and with mains cable disconnected.

- When opening the delivery package, verify that the device is intact, paying special attention to any signs of damage. In case of damage, please immediately contact Customer Assistance (see Introduction).
- Take hold of the device exclusively from the specifically provided handle.
- Never immerse the device in water.
- It is recommended that the operator should never attempt improper use or maintenance of the device. Maintenance can be carried out exclusively by authorized personnel.
- Do not tamper with the valve.

The Manufacturer shall not be held responsible for possible damage to people, animals or things in case of improper use.

2. General

Name: MEDIBIOS

Model: basic

Reference: bsc

Purpose: Sanitation - Disinfection – Disinfestation (pest control)

Use: in closed rooms

Medical Device Classification: class I

Appliance class: class I

3. Technical characteristics

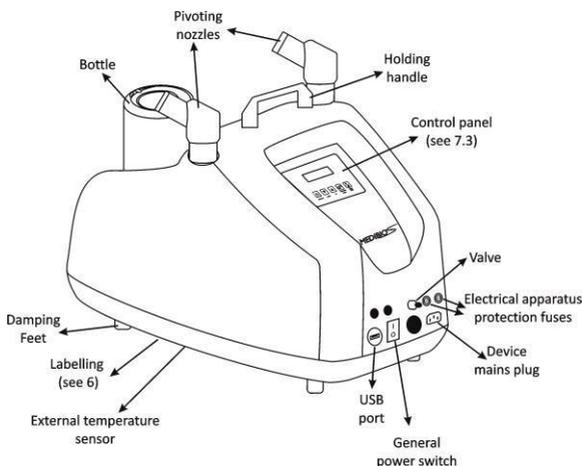
- Power: 1000 WATT
- Supply voltage: 120 Volt \pm 3% or 230 Volt \pm 3%
- Mains frequency: 50 - 60 Hertz
- Fuses: 10 A or 6,3 A
- Turbine rotating speed: 22000 rpm
- Bottles capacity: 1 Lt
- Empty weight: 9,2 Kg
- Service temperature: from 5°C to 40°C
- Motor with thermal safety switch tripping at 80°C
- Dimensions (cm): W 55 x D 35 x H 44
- Body material: Makrolon[®] Polycarbonate
- 2 pivoting emission nozzles
- Particle size: from <1 to 5 μ m
- Hourly consumption: 1.500 ml/h \pm 10%
- Treatable volume: from 10 to 1000 m³

4. Chart of consumption and emission duration (1ml/m³)

For example:

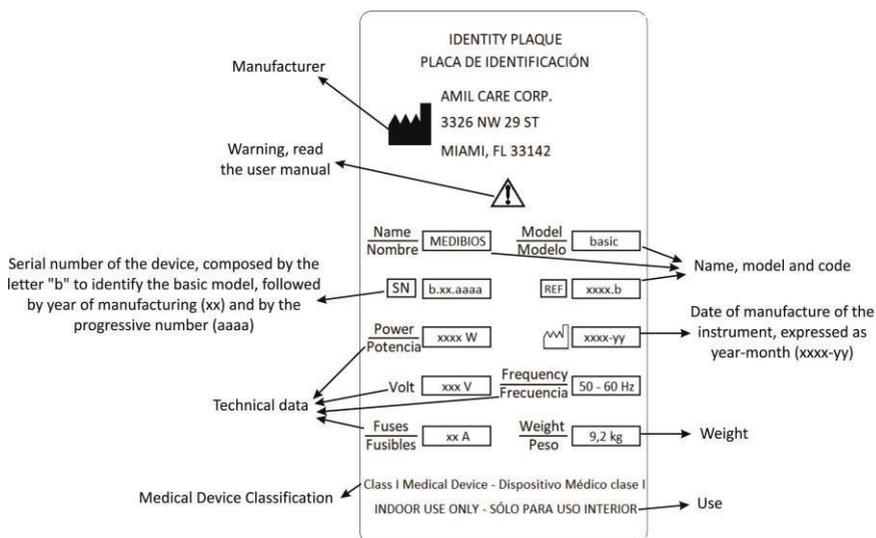
Cubic Meters	Cycle Time in seconds	Consumption in ml
1	2,4	1
10	24	10
100	240	100
1000	2400	1000

5. List of visible external elements



On the device, there are applied warning (the complete list of warnings are described in this manual in section 1) and/or descriptive phrases and images of some components.

6. Labelling



7. General norms of usage

7.1 Unpacking the device

The device is delivered inside a delivery package, check that it is intact and therefore in good conditions.

Open the package without turning it upside-down. Lift the apparatus by its handle to extract it from the cardboard box.

The packaging has to be preserved for the whole time of use of the device and not just for the duration of the guarantee, since the device could need calibration or tuning by the manufacturer or a service centre.

A non-original package doesn't guarantee the necessary correct protection of the machine during transport.

Moving of the apparatus must be effected without shaking and by appropriate means.

The device has to be kept in a dry place protected from outdoors weather.

7.2 Modalities of use

- Before effecting a disinfection or disinfestation (pest control) or a washing cycle, ensure that the place is suitable. Verify that:
 - there are no air extraction plants turned on during the treatment. In case it is not possible to turn off the ventilation plant will be evaluated correction factors on the basis of plant features
 - there is no leakage of product from the room to be treated (where necessary do seal door cracks with adhesive tape)
 - prominently show outside the room a notice/warning of treatment in progress.
- Carefully set the device on a perfectly flat surface inside the room to be treated, ensuring a distance of approximately 1 metre is left free of obstacles in the emission direction, in order to ensure proper emission.

- Turn the bottle upside-down and insert it in the recess provided applying light pressure downwards until it bottoms
- Connect the mains cable to the device and to the electrical wall plug
- Orientate the nozzles of the device according to need, while avoiding directing them in converging directions, so as not to cross its flows and avoiding directing them towards the control panel
- Press the main start switch
- Select the settings on the control panel (see 7.3)
- During the countdown exit the room and make sure that there are no people and/or animals left inside the place to be treated
- The device will automatically load the product in the pre-load tank provided, after which emission will begin
- At the end of the cycle the device automatically stops the program
- Enter the place again only after the value of the used substance correspond to what indicated in the Safety Data Sheet (sect. 8 of the Safety Data Sheet). Measure this value with suitable detector device.

Modality of bottle extraction

The bottle has to be extracted in the following way:



1. Firmly press the release mechanism (indicated by an arrow);
2. While keeping pressed the release mechanism, lift the bottle;
3. Let go of the release mechanism (the valves will automatically close).

7.3 Control panel

7.3.1 General features

The electronic unit can execute the following programs:

- 15 programs pre-set as follows: from program 1 to program 5 the protocol 1ml/m³ is applied, from program 6 to program 10 the protocol 3ml/m³ is applied, from program 11 to program 15 the protocol 5ml/m³ is applied. The user can input the cubic metres to be treated for each program. The input cubic metres are recorded by the electronic unit but they can be modified as necessary
- Program 16 "WASHING CYCLE" allows emptying the pre-load tank and cleaning the pipes inside the device with distilled water. This operation is useful every time a disinfestation (pest control) cycle is followed by one of disinfection or vice-versa. The washing cycle lasts 22 minutes. This cycle cannot be modified.
- For the program 17 "MANUAL" the protocol 1ml/m³ is applied, which allows to effect a cycle at any given moment by only setting the cubic meters to be treated. The input cubic metres are recorded by the electronic unit but they can be modified as necessary
- Program 18 "WEEKLY" allows the user to decide at what time and on which days the desired cycle of disinfection or disinfestation (pest control) should automatically start

7.3.2 Display, keys and LED warning lights

DISPLAY: LCD 16 characters x 2 lines (backlit) STAND-BY:

Key to turn the system on or off

DOWN: Key to select cycle / decrease value

UP: Key to select cycle / increase value

PROGRAM MODE: Key to enter settings menu and data editing

START/STOP: Key to start/stop the cycle



Every key on the keyboard is associated to a backlighting LED. The LEDs associated to the keys STAND-BY, PROGRAM MODE and START/STOP have specific warning functions that will be described in the dedicated paragraphs.

7.3.3 Turning the device ON

During the start up of the electronic unit, effected by external general switch, the display shortly shows the name of the producer and of the instrument and the software version currently installed (x.xx).



MEDIBIOS
Swf .Rev. x .xx

7.3.4 Stand-by state

To switch off the electronic unit it is sufficient to press the key STAND-BY; all LEDs of the keyboard will turn off. When there is a weekly plan set, the LED corresponding to the PROGRAM MODE key remains on (with device in stand-by any possible cycles programmed for automatic start will not take place)

The display shows room temperature, day, hour and minutes, for example:



OFF 24°
WEDNESDAY 11:42

7.3.5 Idle-on state

To turn on the electronic unit it is sufficient to press the STAND-BY key; the LED corresponding to the STAND-BY key will turn on.

Note: when the LED corresponding to the PROGRAM MODE key remains fixedly lit, this means that the timer is active for the automatic start of a cycle (program), but such cycle is not relative to the current day.

In this state the device is ready to perform a cycle (with manual start) rather than a washing cycle.

The display shows the parameters relative to the last cycle effected before disconnection from mains.

```
?? Prog.   hh:mm  
M3      xxxx yml/m3
```

Where: ?? Prog. is the last effected program (?? = 1, 2, 3, 4... 18)
hh:mm is the duration of the cycle (this is automatically calculated on the basis of input volume and selected protocol ml/m³)
xxxx is the volume (cubic meters) of the room to be treated
yml/m³ is the protocol to be used (1ml/m³ for programs 1÷5, 3ml/m³ for programs 6÷10 and 5ml/m³ for programs 11÷15)

7.3.6 Configuring interface language

To configure the electronic unit for the messages to be displayed in **ITALIAN** it is sufficient to act as follows:

- with device unpowered, switch on while maintaining pressed the **STAND-BY** and **DOWN** keys

To configure the electronic unit for the messages to be displayed in **ENGLISH** it is sufficient to act as follows:

- with device unpowered, switch on while maintaining pressed the **STAND-BY** and **UP** keys

To configure the electronic unit for the messages to be displayed in **SPANISH** it is sufficient to act as follows:

- with device unpowered, switch on while maintaining pressed the **DOWN** key

To configure the electronic unit for the messages to be displayed in **PORTUGUESE** it is sufficient to act as follows:

- with device unpowered, switch on while maintaining pressed the **UP** key

7.3.7 Programming

7.3.7.1 Clock setting

It is possible to set / adjust the clock to memorize date, day and current time by following the procedure here below.

With device in stand-by, or with display showing for instance:

OFF 24°
Wednesday 11:42

press and keep pressed the PROGRAM MODE key for 5 seconds. The display will show:

Set Date
gg/mm/aaaa

where gg/mm/aaaa indicate the date

The first parameter to be set is the one related to the day of the month.

To modify the day of the month it is sufficient to push on the DOWN or UP keys (increase / decrease of one unit for each pressing or rapid increase / decrease if the key is kept pressed). Once the day of the month has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the month (**mm** blinking).

Set Date
gg/mm/aaaa

To modify the month it is sufficient to push on the DOWN or UP keys (increase / decrease of one unit for each pressing or rapid increase / decrease if the key is kept pressed). Once the month has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the year (**aaaa** blinking).

Set Date
gg/mm/aaaa

To modify the year it is sufficient to push on the DOWN or UP keys (increase / decrease of one unit for each pressing or rapid increase / decrease if the key is kept pressed). Once the year has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of parameters relative to the clock. The display will show:

Set hour
hh:mm YYYYYY

where hh:mm and YYYYYY are respectively hour:minutes and day currently set.

The first parameter to be set is the one relative to time (**hh** blinking).

To modify the time it is sufficient to press the DOWN or UP keys (increase / decrease of a unit for each pressing or rapid increase / decrease if the key is kept pressed). Once

current time has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the minutes (**mm** blinking).

```
Set hour
hh:mm YYYYYY
```

Press the DOWN or UP keys to modify minutes. Once current minutes have been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the day of the week (**YYYYYY** blinking).

```
Set hour
hh:mm YYYYYY
```

Press the DOWN or UP keys to select the day of the week; pressing the PROGRAM MODE key again will confirm the input and as a consequence conclude the clock setting procedure. The system returns to the OFF state and the display shows day, time and minutes just set, for example:

```
OFF 24°
Thursday 18.15
```

7.3.7.2 Programming weekly automatic start

The cycle of disinfection or disinfestation (pest control) can be started in two ways:

- at any time by the operator/user by pressing the START / STOP key
- automatically without necessity of the operator/user presence. To enable automatic cycle start it is necessary that this has suitably been programmed by means of the weekly programming operations.

Weekly programming allows the user to decide at what time and on which days the desired cycle should automatically start.

To program the weekly automatic switch-on it is sufficient to follow the procedure here below:

With device in idle-on state, or with display showing for example

```
08 Prog. 12:00
M3      100 3ml/mg
```

repeatedly press the DOWN or UP keys to select the menu that allows entering the weekly programming environment. The display has to show:

```
18 Prog.
      WEEKLY
```

Press the PROGRAM MODE key to access the programming environment. The display will show:

```
Monday OFF
Prog. 1
```

At this point the following operations allow to program the possible starts during the course of the week.

For ease of explanation suppose we want to set a weekly plan which includes one day of rest, so structured:

- Monday start cycle 05:30 desired cycle: 2
- Tuesday start cycle 05:30 desired cycle: 2
- Wednesday Rest
- Thursday start cycle 04:30 desired cycle: 2
- Friday start cycle 05:30 desired cycle: 2
- Saturday start cycle 05:30 desired cycle: 2
- Sunday start cycle 05:30 desired cycle: 2

Pressing the PROGRAM MODE key it is possible to enter the planning of Monday automatic start schedule: The display will show:

```
Monday 00.00
Prog. 1
```

The first parameter to be set is the one relative to time (**00**. blinking).

To modify the time it is sufficient to press the DOWN or UP keys. Once current time has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the minutes (**00** blinking).

Monday 05.00
Prog. 1

Press the DOWN or UP keys. Once set the minutes, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the desired cycle (**1** blinking).

Monday 05.30
Prog. 1

Press the DOWN or UP keys to select the desired cycle.

Monday 05.30
Prog. 2

Having set the cycle, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the following day.

Tuesday OFF
Prog. 1

Pressing the PROGRAM MODE key it is possible to enter the planning of Tuesday automatic start schedule: The display will show:

Tuesday 00.00
Prog. 1

The first parameter to be set is the one relative to time (**00**. blinking).

To modify the time it is sufficient to press the DOWN or UP keys. Once current time has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the minutes (**00** blinking).

Tuesday 05.00
Prog. 1

Press the DOWN or UP keys. Once set the minutes, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the desired cycle (**1** blinking).

```
Tuesday    05.30  
Prog. 1
```

Press the DOWN or UP keys to select the desired cycle.

```
Tuesday    05.30  
Prog. 2
```

Having set the cycle, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the following day.

```
Wednesday OFF  
Prog. 1
```

Since in our example on Wednesdays there is a rest and we don't need the automatic cycle start, it is sufficient to press the key UP to directly pass on to Thursday programming, or press the PROGRAM MODE key without programming time or minutes (the system recognizes 00.00 as OFF).

```
Wednesday 00.00  
Prog. 1
```

Press PROGRAM MODE:

```
Wednesday 00.00  
Prog. 1
```

Press PROGRAM MODE:

```
Wednesday OFF  
Prog. 1
```

Having set the cycle, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the following day.

```
Thursday OFF  
Prog. 1
```

Pressing the PROGRAM MODE key it is possible to enter the planning of Thursday automatic start schedule: The display will show:

```
Thursday 00.00  
Prog. 1
```

The first parameter to be set is the one relative to time (**00.** blinking).

To modify the time it is sufficient to press the DOWN or UP keys. Once current time has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the minutes (**00** blinking).

Thursday 04.00
Prog. 1

Press the DOWN or UP keys. Once set the minutes, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the desired cycle (**1** blinking).

Thursday 04.30
Prog. 1

Press the DOWN or UP keys to select the desired cycle.

Thursday 04.30
Prog. 2

Having set the cycle, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the following day.

Friday OFF
Prog. 1

Pressing the PROGRAM MODE key it is possible to enter the planning of Friday automatic start schedule: The display will show:

Friday 00.00
Prog. 1

The first parameter to be set is the one relative to time (**00**. blinking).

To modify the time it is sufficient to press the DOWN or UP keys. Once current time has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the minutes (**00** blinking).

Friday 05.00
Prog. 1

Press the DOWN or UP keys. Once set the minutes, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the desired cycle (**1** blinking).

Friday 05.30
Prog. 1

Press the DOWN or UP keys to select the desired cycle.

Friday 05.30
Prog. 2

Having set the cycle, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the following day.

Saturday OFF
Prog. 1

Pressing the PROGRAM MODE key it is possible to enter the planning of Saturday automatic start schedule: The display will show:

Saturday 00.00
Prog. 1

The first parameter to be set is the one relative to time (**00**. blinking).

To modify the time it is sufficient to press the DOWN or UP keys. Once current time has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the minutes (**00** blinking).

Saturday 05.00
Prog. 1

Press the DOWN or UP keys. Once set the minutes, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the desired cycle (**1** blinking).

Saturday 05.30
Prog. 1

Press the DOWN or UP keys to select the desired cycle.

Saturday 05.30
Prog. 2

Having set the cycle, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the following day.

Sunday OFF
Prog. 1

Pressing the PROGRAM MODE key it is possible to enter the planning of Sunday automatic start schedule: The display will show:

Sunday 00.00
Prog. 1

The first parameter to be set is the one relative to time (00. blinking).

To modify the time it is sufficient to press the DOWN or UP keys. Once current time has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the minutes (00 blinking).

Sunday 05.00
Prog. 1

Press the DOWN or UP keys. Once set the minutes, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the desired cycle (1 blinking).

Sunday 05.30
Prog. 1

Press the DOWN or UP keys to select the desired cycle.

Sunday 05.30
Prog. 2

Having set the cycle, pressing the PROGRAM MODE key will confirm the input and return to the display relative to Monday.

Monday 05.30
Prog. 2

At this point it is possible to exit the programming environment of the weekly timer by pressing the START/STOP key.

The display will show:

18 Prog.
WEEKLY

N.B.:

- in order for the cycle to be performed with automatic start, the device has to be in idle-on condition. With the device in stand-by (OFF) state the automatic cycle, even if programmed, will not be performed.
- in idle-on condition lighting of the PROGRAM MODE LED is to point out that at least one weekly automatic start has been programmed, but it is not in the current day.
- on the day when the programmed cycle must be performed, the PROGRAM MODE LED can be seen blinking to point out that a TIMER is active. Once the cycle has been performed the PROGRAM MODE LED returns to be on (fixed).

For example: if for Monday an automatic start at 05.30 has been programmed, from midnight (24.00) of Sunday (00.00 Monday) the PROGRAM MODE LED begins to blink until 05.29. At 5.30 the cycle is executed (during the cycle the START/STOP LED blinks). At the end of the cycle the PROGRAM MODE LED returns to be lit (fixed).

7.3.7.2.1 Check/reading of the weekly timer

To verify the timers programmed for weekly automatic start it is sufficient, from the state of idle-on, to move to the weekly menu by using the DOWN and UP keys; the display should show:



18 Prog.
WEEKLY

At this point by pressing the PROGRAM MODE key the display will show:



Monday 05.30
Prog. 2

By means of the DOWN and UP keys it is possible to roll through and read off the programs set for each day of the week. Finished the reading, pressing the START/STOP key will allow returning to the main menu; the display will show:



18 Prog.
WEEKLY

7.3.7.2.2 Editing the weekly timer

To verify the timers programmed for weekly automatic start it is sufficient, from the state of idle-on, to move to the weekly menu by using the DOWN and UP keys; the display should show:



18 Prog.
WEEKLY

At this point by pressing the PROGRAM MODE key the display will show:



Monday 05.30
Prog. 2

By means of the DOWN and UP keys select the day for which you intend to modify the automatic start schedule or the type of cycle, for example Sunday. The display will show:



Sunday 05.30
Prog. 2

By pressing the PROGRAM MODE key enter the programming of automatic start schedule; the display will show (**05.** blinking):



Sunday 05.30
Prog. 2

To modify the time it is sufficient to press the DOWN or UP keys. Once current time has been set, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the minutes (**30** blinking).



Sunday 06.30
Prog. 2

Press the DOWN or UP keys. Once set the minutes, pressing the PROGRAM MODE key will confirm the input and allow to continue to the setting of the desired cycle (**2** blinking).

Sunday 06.45
Prog. 2

Press the DOWN or UP keys to select the possible new desired cycle.

Sunday 06.45
Prog. 5

Having set the cycle, pressing the PROGRAM MODE key will confirm the input and return to the display relative to next day, in our case Monday.

Monday 05.30
Prog. 2

At this point it is possible to exit the programming environment by pressing the START/STOP key.

7.3.7.2.3 Disabling weekly automatic start

As previously seen for the timer modification, for its disabling (if it is wanted to disable automatic start for one or more days of the week) it is necessary to enter the weekly programming environment and set start time(s) to 00:00 (OFF) for the desired day(s).

For example:

To disable a timer set for weekly automatic start it is sufficient, from the state of inactivity, to move to the weekly menu by means of the DOWN or UP keys; the display should show:

18 Prog.
WEEKLY

At this point by pressing the PROGRAM MODE key the display will show:

Monday 05.30
Prog. 2

By means of the DOWN or UP keys select the day for which you intend to disable automatic start, for example Sunday. The display will show:

Sunday 06.45
Prog. 5

By pressing the PROGRAM MODE key enter the programming of automatic start schedule; the display will show (06. blinking):

Sunday 06.45
Prog. 5

Press the DOWN or UP keys to bring the hours to 00. Once reset the hour, press the PROGRAM MODE key to confirm input and continue to the change of minutes (45 blinking).

Sunday 00.45
Prog. 5

Press the DOWN or UP keys to take the minutes to 00. Once zeroed the minutes, press the PROGRAM MODE key to confirm and continue to cycle setting (5 blinking). The timer goes from 00.00 to OFF (i.e. disabled).

Sunday OFF
Prog. 5

The cycle is irrelevant to timer-enable status; press therefore the PROGRAM MODE key and continue to the display relative to the following day, in our case Monday.

Monday 05.30
Prog. 2

At this point it is possible to exit the programming environment by pressing the START/STOP key.

7.3.8 Disinfection/disinfestation cycle

7.3.8.1 Manual start

7.3.8.1.1 Program selection

Before starting any cycle it is necessary to select the most suitable program for the volume of the room to be treated.

The electronic unit has 15 pre-set programs, as already mentioned, and for each program the volume subject to treatment can be modified at will by the user (press the PROGRAM MODE key and UP or DOWN keys). On the basis of set volume and of protocol (not modifiable), cycle length will be automatically recalculated taking into consideration that:

- Programs 1÷5 protocol 1ml/m³ emission time 2.4 seconds per m³
- Programs 6÷10 protocol 3ml/m³ emission time 7.2 seconds per m³
- Programs 11÷15 protocol 5ml/m³ emission time 12 seconds per m³

Programmable Range 10 ÷ 1,000 m³ with steps of 10 m³

The manual cycle Program 17 can be set for volumes from 10m³ to 1,000m³ (with steps of 10m³) and the emission times will be calculated using the protocol 1ml/m³ (emission time 2.4 second per cubic metre).

7.3.8.1.2 Program start

Suppose, for example, we want to set program 1. The display will show:



```
01 Prog. 00:10
M3      20 1ml/m3
```

Should it be desired to modify the room volume (pre-set but in any case modifiable) it is sufficient to press the PROGRAM MODE key; the data relative to cubic metres start blinking.

At this point press the UP or DOWN keys to set the desired cubic metres. Next pressure of the PROGRAM MODE key allows to confirm and memorize the modified datum (clearly cycle duration will be recalculated accordingly).

To activate the program it is sufficient to press the START/STOP key. The START/STOP LED begins then to blink until the end of the cycle.

The buzzer mounted on the board will send forth a brief intermittent acoustic signal for 15 seconds (countdown) to point out that a program has been activated.

This countdown allows the user, once pressed the START/STOP key, to leave the room where the device is placed before the actual cycle starts (product emission).

The display will show:

```
01 Prog.    00:48  
WAIT       00:15 R
```

```
01 Prog.    00:48  
WAIT       00:14 R
```

decreasing to 00:00 (mm:ss)

```
01 Prog.    00:48  
WAIT       00:00 R
```

NOTE: the letter R on the side of the countdown serves to point out that filling of the tank is in progress. The cycle remains in stand-by until tank filling is completed. If this filling lasts for longer than 150 seconds (therefore the pump remains active for longer than 150 seconds) it is assumed the bottle is empty (no functional block is provided for). The display will show this condition with the message: **ALM BOTTLE**. To reset the signal it is necessary to replace the bottle and then restart a cycle of disinfection or disinfestation (pest control).

At this point product emission will begin and the display will show:

```
01 Prog.    00:48  
IN PROGRESS
```

```
01 Prog.    00:47  
IN PROGRESS
```

decreasing to 00:00 (mm:ss)

```
01 Prog.    00:00  
IN PROGRESS
```

Once the minutes/seconds of the program have passed, the START/STOP LED extinguishes while the display returns to show:



```
01 Prog. 00:48
M3      20 1ml/m3
```

In this condition the disinfection or disinfestation (pest control) cycle is taken as finished.

7.3.8.2 Automatic cycle start

An automatic start cycle takes place with the same procedure as a manual start cycle (15 seconds countdown, cycle, end cycle).

WARNING:

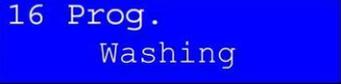
Even when on the display a "page" is shown relative to a different program from the one set for automatic departure, at the time set for its start the correct program will be automatically shown. N.B.:

- **in order for the cycle to be performed with automatic start, the device has to be in idle-on condition. With the device in stand-by (OFF) state the automatic cycle, even if programmed, will not be performed.**
- **on the day when the programmed cycle must be performed, the PROGRAM MODE LED can be seen blinking to point out that a TIMER is active. Once the cycle has been performed the PROGRAM MODE LED returns to be on (fixed).**

7.3.8.3 Washing cycle

To effect the washing cycle it is necessary to insert the bottle containing distilled water.

Start the washing cycle by pressing the START/STOP key when the display shows:



16 Prog.
Washing

The START/STOP LED begins to blink until the end of the cycle.

The buzzer mounted on the board sends forth a brief intermittent acoustic signal for 15 seconds (countdown) to point out that a program has been activated, in this example the washing cycle.

The washing cycle, lasting in total 22 minutes (14 min + 1 min + 7 min).

NOTE: the three phases composing the washing are visualized on the display through special dedicated countdown:

Phase 1: The time decreases: 14:00; 13:59; 13:58 ... 00:00



16 Prog. 14:00
IN PROGRESS

Phase 2: The time decreases: 1:00; 00:59; 00:58 ... 00:00



16 Prog. 01:00
IN PROGRESS

Phase 3: The time decreases: 07:00; 06:59; 06:58 ... 00:00



16 Prog. 07:00
IN PROGRESS

7.3.8.4 Cycles stop

At any moment it is possible to stop any program in execution before its normal finishing time by pressing the START/STOP key.

The device turns into the idle-on state.

Here following the Personal Protective Equipment (mandatory equipment) is described, which the operator has to wear in case of forced entrance into the treated spaces during product emission or before the necessary waiting time.

Before entering the operator has to wear:

- protective glasses Standard EN 166 requisites K/N FOG-BAN, IR
- folding respirator with FFP3 valve Standard EN 149:2001+A1:2009
- protective gloves Standard EN 420 and EN 374:2003

Enter the room, turn off the device, solve the emergency, leave the area and wait for the time of product degradation. Once the operator leaves the room, the door should be carefully closed again in order to avoid leaks.

Enter the place again only after the value of the used substance correspond to what indicated in the Safety Data Sheet (sect. 8 of the Safety Data Sheet). Measure this value with suitable detector device.

7.3.9 Alarms

Alarms are shown on the display in case of:

- Empty or not inserted bottle: if the tank filling operation lasts for longer than 150 seconds (therefore the pump remains active for longer than 150 seconds) it is assumed the bottle is empty (no functional block is provided for). The display will show this condition with the message: **ALM BOTTLE**. To reset the signal it is necessary to replace the bottle and then restart a cycle of disinfection or disinfestation (pest control)
- Maintenance: when the device reaches on the display 300 hours operation time, as soon as a new cycle is activated, the display screen will show for 5 seconds the message "**WARNING! CALL SERVICE CENTER**"; this signal, which however doesn't inhibit correct operation of the device (no functional block is provided for), has

the purpose to point out to the user the necessity to contact technical assistance for a maintenance call.

7.3.10 Procedures in case of mains failure

In case of interruption of mains electrical supply, when power is reinstated the unit goes back to the state (idle-on or stand-by) that it was in at the time of power failure.

If during power outage a program (both with automatic and manual departure) is scheduled to start, this is aborted. All data on the board memory remain however memorized.

7.3.11 Download data

For each cycle the apparatus memorizes the number of used program, its duration, the day in which it has been performed, the ambient temperature, start and end time and a possible alarm that signals the interruption of the said cycle.

To download the stored data it is necessary to use a USB pen drive by following the instructions below:

- turn on the device via the general power switch
- press the STAND-BY key on the keyboard (the device has to be in OFF state)
- Insert the USB pen drive into the appropriate port (ensure first that the USB pen drive does not contain any documents or files)
- Wait for automatic downloading (the display shows "WAIT USB")
- Disconnect the USB pen drive to the procedure completed.

NOTE: The downloaded data will be cancelled from the Medibios device memory

7.3.11.1 Download data to PC

At this point to display the performed cycles and to save them on PC it is necessary to insert the USB pen drive into your computer and open the document that is automatically created by downloading process called "DATALOG.TXT".

The possible presence of the warnings:

“STOP!” indicates that that cycle has been interrupted at the time detailed next to it.

“POWER FAIL!” indicates that there has been an electrical power failure during cycle execution.

Note: If into the USB pen drive is not saved any documents DATALOG.TXT, it is necessary to format the USB pen drive (ensure that there are no other documents or files stored in the USB pen drive) and repeat the download data.

8. Guarantee

Duration of the guarantee:

- a) The device MEDIBIOS basic reference bsc is guaranteed for a 1 year (one year) period, starting from the date of transport document. This document will have to be kept available for any possible claims.

Object of the guarantee:

- a) MEDIBIOS basic reference bsc guarantee covers repairs or parts replacement caused by manufacturing defects, subject to control of the defect by the authorized centre of assistance.
- b) Refunds demanded in consequence of wrong use or negligence, or of equipment overload, as also damages caused by voltage fluctuations from mains supply, of wrong use or extraordinary events, do not fall under the coverage provided by this guarantee.
- c) The guarantee becomes void in case of intervention of personnel not authorized by AMIL CARE CORP. or by the distributor.
- d) The seals provided on the instrument have to remain intact. Furthermore if anomalous corrosion of any parts confirms the use of other liquids not authorized by AMIL CARE CORP., this too would cause voiding and forfeiture of the guarantee.

Improper use:

- a) Proper use of the device MEDIBIOS basic reference bsc is indicated in the present Manual, any other use is forbidden and not recognized for guarantee purposes.

Transport:

- a) The material travels at the client's own risks and perils; in case of deterioration in transit, the recipient has to note on the TD all reserves towards the carrier before taking delivery of the instrument.

Limitations of responsibility:

- a) AMIL CARE CORP. shall not be responsible towards the client, neither directly nor indirectly, for any breach or delay in the application of the guarantee obligations possibly caused by force majeure or from any other unexpected events extraneous to the wish of AMIL CARE CORP.
- b) AMIL CARE CORP. responsibility is limited to the above described obligations and quantitatively to the amount of the invoice settled by the client as title of purchase of the object of the claim, with express exclusion of any responsibilities for indirect damages such as loss of data in computer applications, loss of profit or loss of earnings from production, interruptions of service, etc., where not contrary to applicable legal regulations on product responsibility in each individual country.
- c) Any other guarantee right not explicitly detailed in the present manual is specifically excluded.



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