

primelase HR

EXCELLENCE



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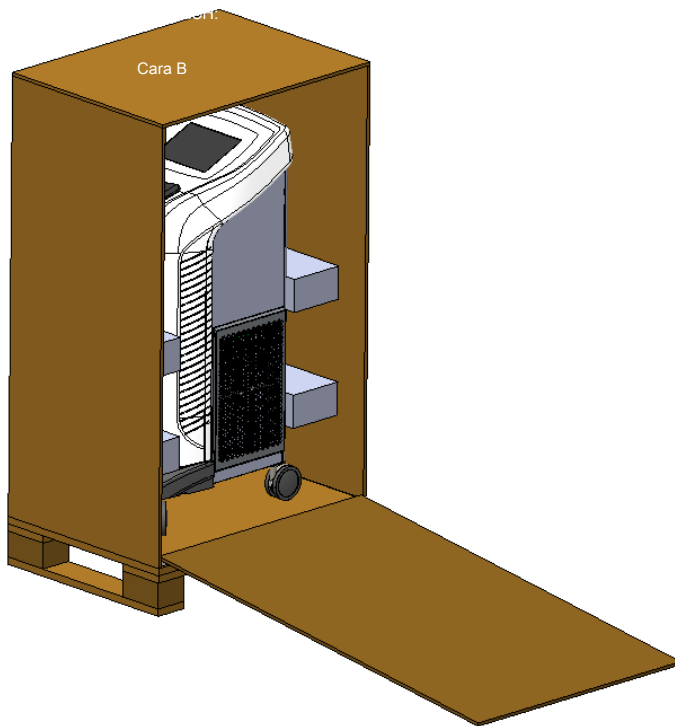
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TECHNICAL SPECIFICATIONS:	¡Error! Marcador no definido.

1. EQUIPMENT DESCRIPTION

1.1. Unpacking

Once opened the wooden box, the side wall can be used as a ramp to take the equipment down easily.



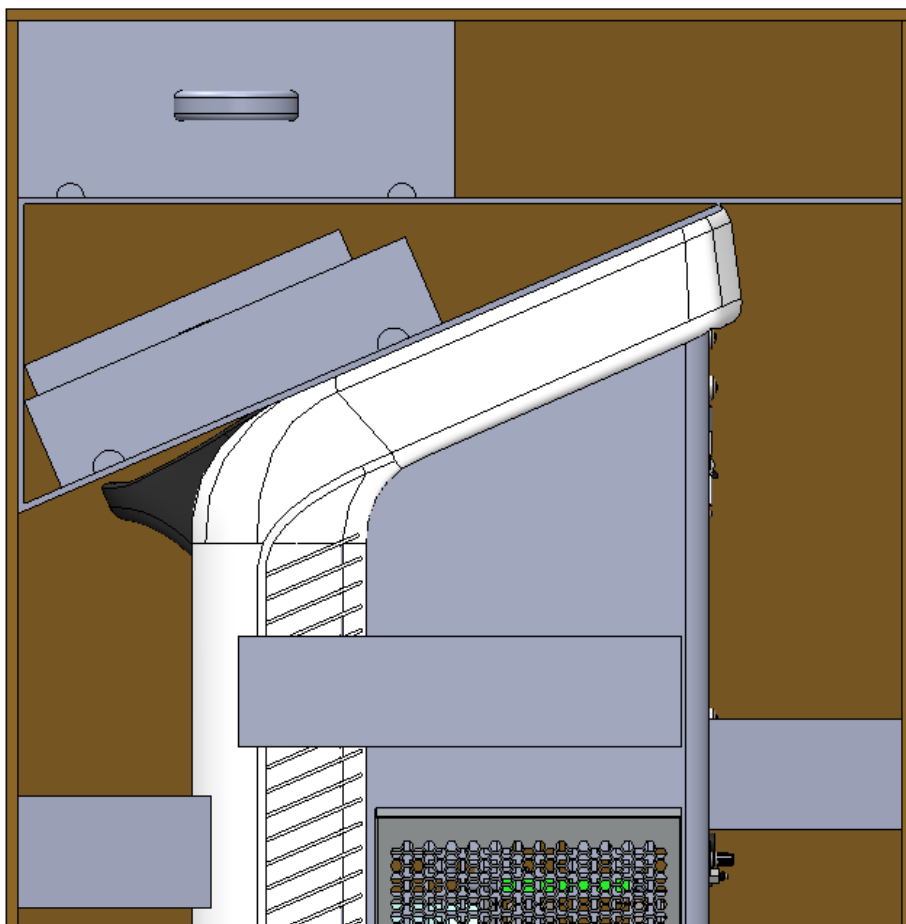
ACCESSORIES:

Accessory:	
 + 	A4.01455
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Manuals packed in a box: 305 x 225 x 26



Inside wooden box layout



1.2 User interface

1.2.1 Help Button

Is used for assistance within the different screens and the software of the equipment. Once pressed **HELP Button**, it is only necessary to press any zone or button on the screen in order to be displayed the associated information. This button is available on all screens.



1.2.2 Home Screen

When device is turned on will be shown by default the **screen home**:



In HOME screen is available an access to the different menus, depending on the selected button. The **PLAY** button is highlighted in grey (disabled), when the **applicator** is not correctly connected.

To enable the **PLAY** button and access the **Treatment screen**:

- ❖ Connect the **applicator**, correctly as described in the section **commissioning / connection of applicators and accessories**.
- ❖ Once connected correctly, the **PLAY** button will be enabled.



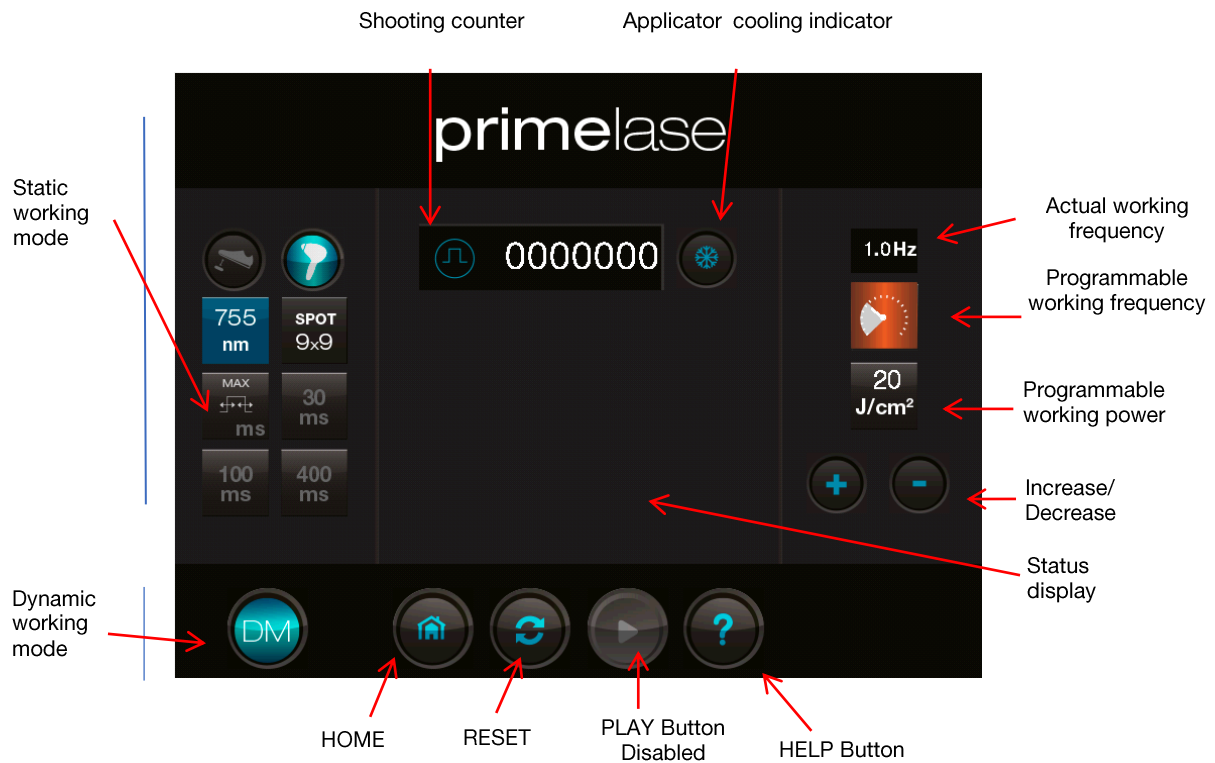
PLAY - Enabled

From the home screen, is also possible to access other screens like settings and configuration that are explained hereafter in this paragraph:

- ❖ To access the introduction of codes and license screen press the button **codes and licensing**.
- ❖ To access the settings screen press the button **configuration**.

1.2.3 Treatment selection Screen

Pressing the **Play** button, appears the user interface for treatments:



Once entered the treatments screen:

- ❖ Use the button **reset** to erase the shooting counter.
- ❖ Use the **help** button to learn the function of each of the buttons of the current user interface.
- ❖ Use the **home** button to return to the home screen.

Static Mode

1. **Pulse duration selection:** use the interface **working mode** to select the pulses duration during treatment. Select between the values: 30 ms , 100 ms, 400 ms and AUTO



In AUTO mode, automatically is set the minimum pulse duration allowed by the device, depending on the programmed operating power. This set time will appear on the screen.



← Pulse duration set in AUTO mode depending on programmed power.

Press the button of the desired pulse duration and will be highlighted in blue (enabled).


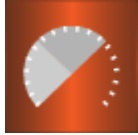

2. Select the **working power:**

- ❖ **For** selecting the power of pulses during the treatment (measured in J/cm²), use **programmable working power** interface. The permissible maximum value varies depending on the selected **working mode** .
- ❖ Once pressed the **programmable working power** button will be highlighted in blue (enabled).
- ❖ Use the keys **increase / decrease** to set the desired power.

3. Select the **programmable working frequency:**

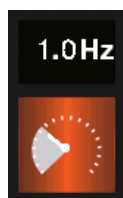
- ❖ **For** selection the frequency during treatment (measured in Hz) is used the interface **programmable working frequency**.
- ❖ The programmed frequency appears in the interface in the following way:

Programmed frequency	Description	Definition
----------------------	-------------	------------

Up to 3 Hz		Indicates that the device has been programmed to a maximum operating frequency of 3 Hz.
Up to 2 Hz		Indicates that the device has been programmed to a maximum operating frequency of 2 Hz.
Up to 1 Hz		Indicates that the device has been programmed to a maximum operating frequency of 1 Hz.

❖ The icon of **actual working frequency** is the info for the maximum rate allowed for the selected treatment, depending on the previously selected parameters:

- 1. selected working mode.
- 2. programmed working power.
- 3. maximum set working frequency.



← **Actual working frequency (maximum allowed)** by the device based on the previously selected working parameters.



Programmed frequency and operating frequency. The equipment allows you to select the **frequency** (see programmable working frequency), however, according to: 1. Working mode and 2. Programmed power. In cases of working parameters at highest power, always the device is automatically correcting them to their **permissible maximum value**. This value appears on screen (see actual working frequency).

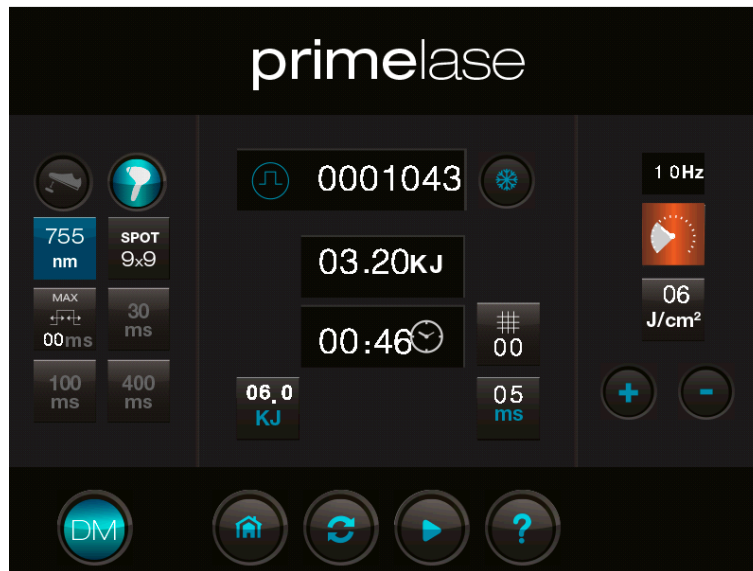


In situations and very special working conditions, when the equipment have to work at temperatures above normal operating conditions, the actual working frequency might be decreased to prevent malfunctions.

- ❖ Select button **programmable frequency** and will be highlighted (in blue).
- ❖ Use the keys **increase / decrease** to select the desired working power.

Dynamic Mode

The interface of dynamic mode looks like the following image:



1. Select **Dynamic** operating mode:

- ❖ Use the **Working Mode** interface to select Dynamic Mode (DM).
- ❖ Click on the Dynamic Mode (DM) button and it will be enabled (in blue)

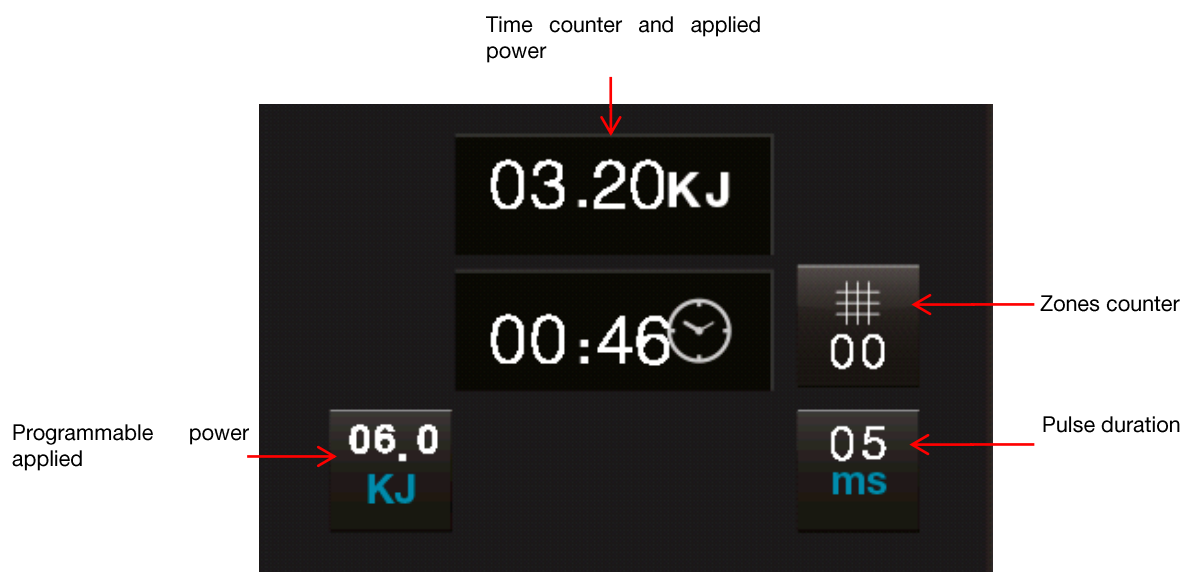
2. Select the **working power**:

- ❖ Use **Programmable working power** interface to select power (measured in J/cm²) of pulses to be used during treatment. The maximum value allowed varies according to selected **working mode**.
 - Programmable power in dynamic mode: **1-10 J/cm²**
- ❖ Press the **programmable working power** and it will be enabled (in blue).
- ❖ Use the keys **increase / decrease** to select the desired working power.

3. Select the **programmable working frequency**:

- ❖ Use the **programmable frequency** interface to select the working frequency (measured in Hz), to be used during treatment.
 - Programmable frequency in dynamic mode: **5-10 Hz**
- ❖ Select the **programmable frequency** button **and** it will be enabled (in blue).
- ❖ Use the keys **increase / decrease** to select the desired working frequency.

Once configured the general parameters (working power and working frequency), select also the specific parameters for operation in dynamic mode:



- ❖ Press the **pulse duration** of the internal dynamic mode (DM) menu and use the keys **increase / decrease** to set the duration of each pulse:
 - Programmable pulse duration: **3 - 15 ms J/cm²**

- ❖ Press the **programmable power applied** of the internal dynamic mode (DM) menu and use the keys **increase / decrease** to set maximum power applied on each zone (grid):
 - Programmable power: **0.5 KJ - 15 KJ**

- ❖ Once selected **pulse duration** and programmable power, the device automatically preset the **timer** and **power applied**.
 - **Time** → Preset duration per zone (grid) depending on the **programmable power applied** and the previously programmed parameters: **working frequency** (Hz) and **pulse power** (J / cm²)
 - **Power applied** → Start a count from zero to the programmed energy value

- ❖ Other working parameters of dynamic mode (DM):
 - **Counter Zones** → Increases one unit every time the **energy applied value** is reached
 - **Use mode – pedal** → The equipment shoots only the pedal connected to the back of the equipment is pressed.
 - **Use mode – button** → The equipment shoots as normal, pressing the applicator trigger.



Whenever the programmed treatment time elapses for a zone, the equipment automatically return to **PAUSE** status. To start the treatment again, access **PLAY** mode.

Other working parameters

Shooting counter : The equipment counts the number of shots made during the day, unless the device is not switched OFF.



Disconnecting or turning off the device, shooting counter resets to zero.

Status display: Indicates the status of the equipment at all times, as well as the actions that the user must perform in order to operate the device correctly.

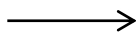
Start a treatment



Authorization code to activate the laser treatment. Primelase® laser system is protected to prevent unauthorized use. According to the safety requirement, Primelase® is protected by an activation code necessary to perform the laser treatment. Only authorized personnel to carry out the laser treatment, using equipment Primelase®, must know the activation code.

The system has a default activation code, which should be modified by authorized personnel before starting the laser treatment. Use the configuration settings screen to modify the code by entering and subsequently accepting a new code. The device is only ready to start the treatment when the **play** button is **enabled**.

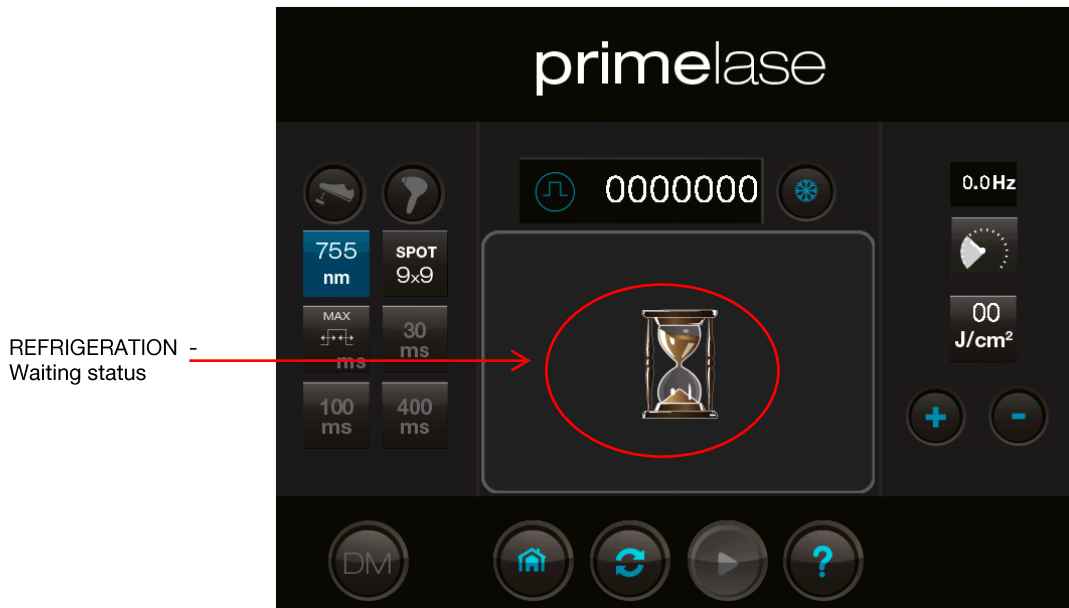
PLAY - Enabled





When the internal coolant has reached its optimum working point, will be carried out automatically the calibration, then the equipment will be ready for use.

1. Refrigeration of the equipment (waiting display status). Every time when the equipment is turned on and is pressed the PLAY button, it will start to cool down to a certain point, preparing for normal operation. The hourglass icon will remain until the device reaches the optimum working temperature.



2. Calibration equipment (display status): The equipment will start the calibration, automatically, when accessing the treatment screen, as long as the applicator is placed in the holster.

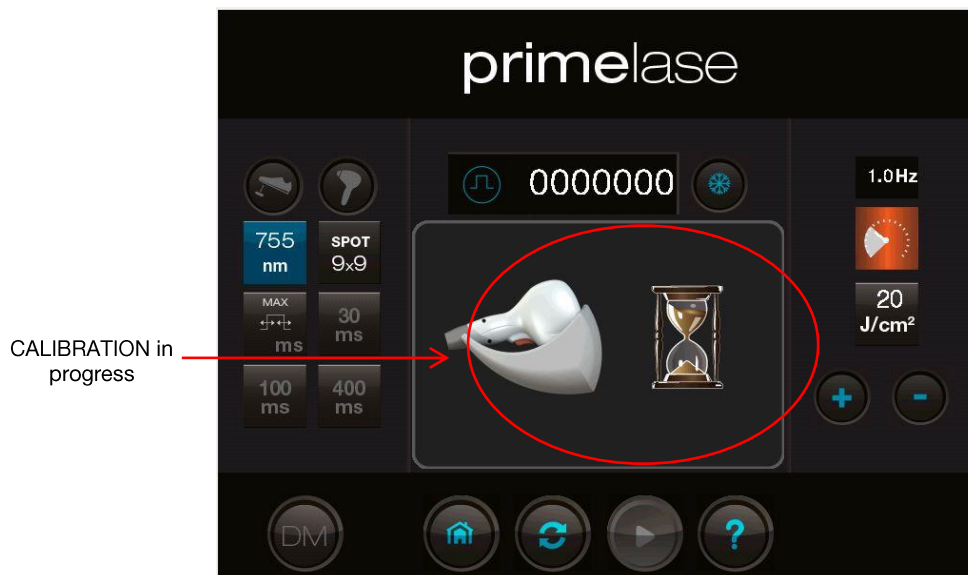


The equipment **requires calibration** when is being switched ON. If during the day, the equipment remains on and various treatments are carried out, the equipment configures the parameters internally without the need of a new calibration process.

If the **applicator** is not correctly placed in the holster at the calibration time, a warning appears on the screen (status display), indicating that the applicator must be placed in the holster in order to start the process.



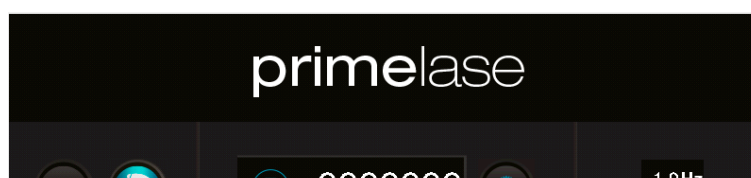
The following animation on Status Display indicates that the calibration is in progress:



During the calibration process the applicator LED flashes continuously in purple color (see **description of applicator**) and the device emits a few short beeps continuously.

Treatment screen

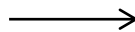
Once all of the previous steps are executed, the equipment is ready to work. And for safety reasons at first it is **Paused**.



↑
Access to PLAY

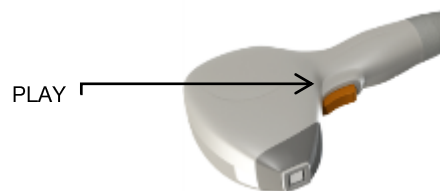
To switch to **play** mode:

- ❖ Press the button **play** on the screen.



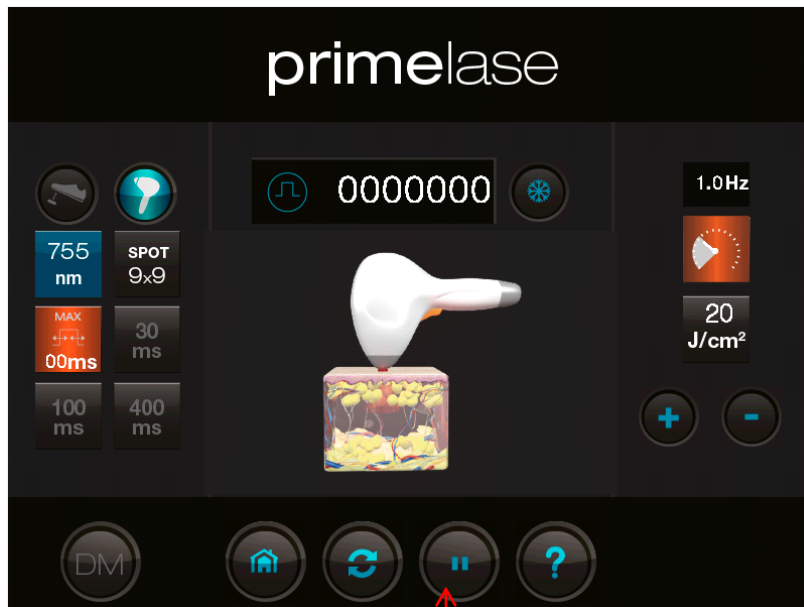
PLAY

- ❖ Keep the applicator's trigger pressed for 1 or 2 seconds.



During this process the applicator LED will flash between the colors green (idle) and blue (active). Once the waiting time has expired, after releasing the trigger, the LED will remain in blue(active).

Once the unit is in **PLAY** mode, will appear the following screen:

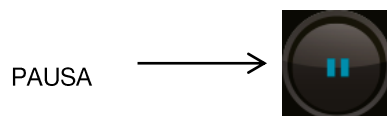


Access PAUSA

In mode **PLAY** can be done normal treatment.

To enter into **Pause** mode:

- ❖ Use the button **pause** that appears on screen.



- ❖ Do not shoot for 10sec during treatment.



For safety reasons, once left for 10 seconds without shooting during the treatment, the equipment returns to stand-by, avoiding potential unwanted shots.

- ❖ Place the applicator in the holster



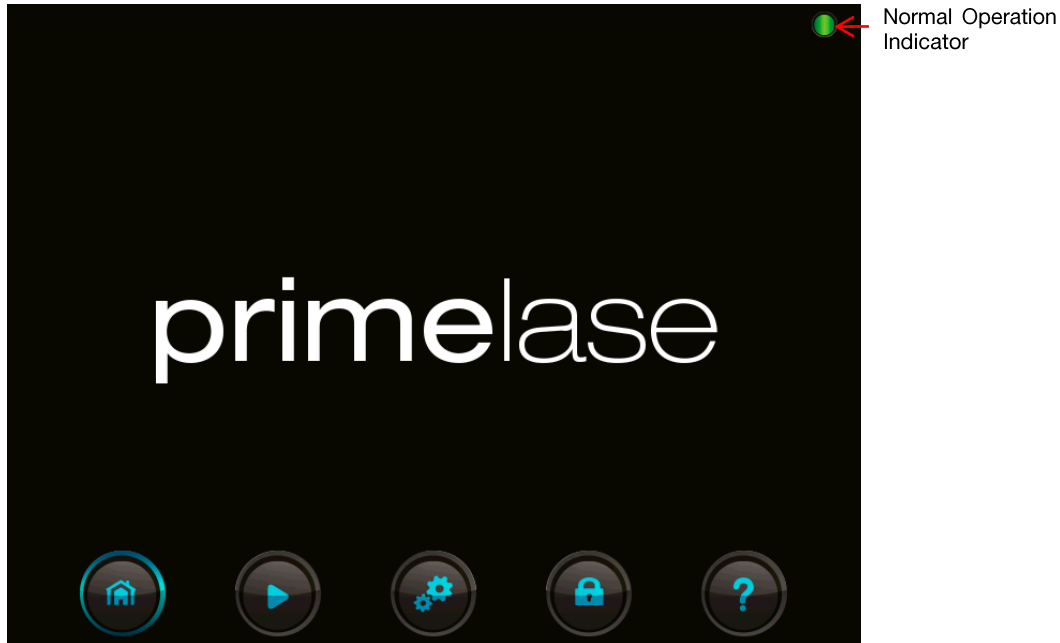
1.2.4 System Alerts

The equipment has an indicator for the operational status, informing the operator that equipment is in normal function or, on the contrary, detect a situation of abnormal operation. The different operating states of the equipment are:

- ❖ Normal operation.
- ❖ Abnormal operation
 - That enables further use of the equipment.
 - That blocks the use of the equipment.

Equipment status indication. Operation normal

If no errors are present during the operation of the system, always appears on the display normal operation indicator:



Equipment status indicator must always appear in green.

Any other than **normal operation indicator** status indicates a situation of abnormal operation, detailed below.

Equipment status indication. Abnormal operation

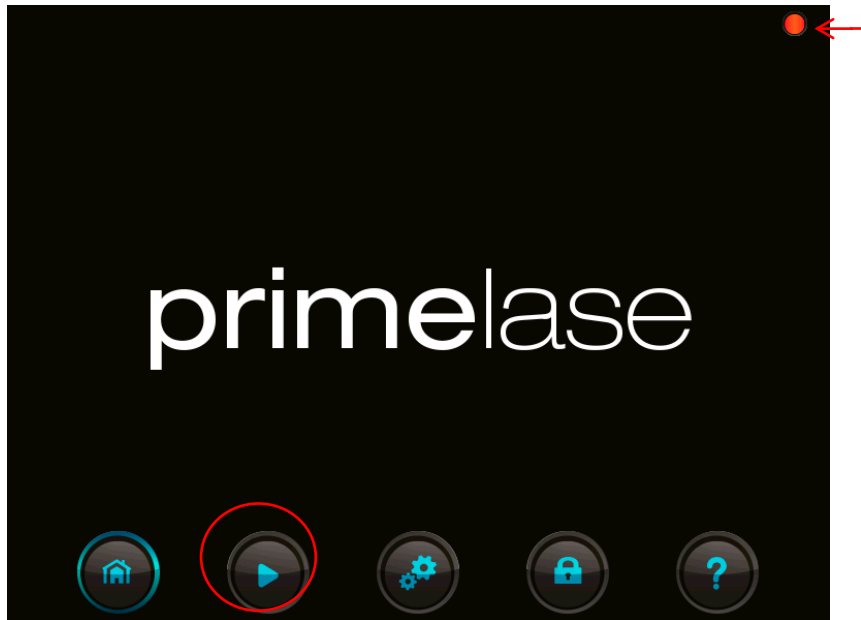
In case of abnormal operation of the equipment, there are two possible system errors:

- ❖ Abnormal operation that allows to retry the system.
- ❖ Abnormal operation that blocks the system.

Abnormal operation that allows the retry of the equipment

In this case the system status indicator appears as shown in screen:

Abnormal
Operation
Indicator



If occurs an error during normal operation, the equipment returns to the home screen, turning the indicator of abnormal function in red.

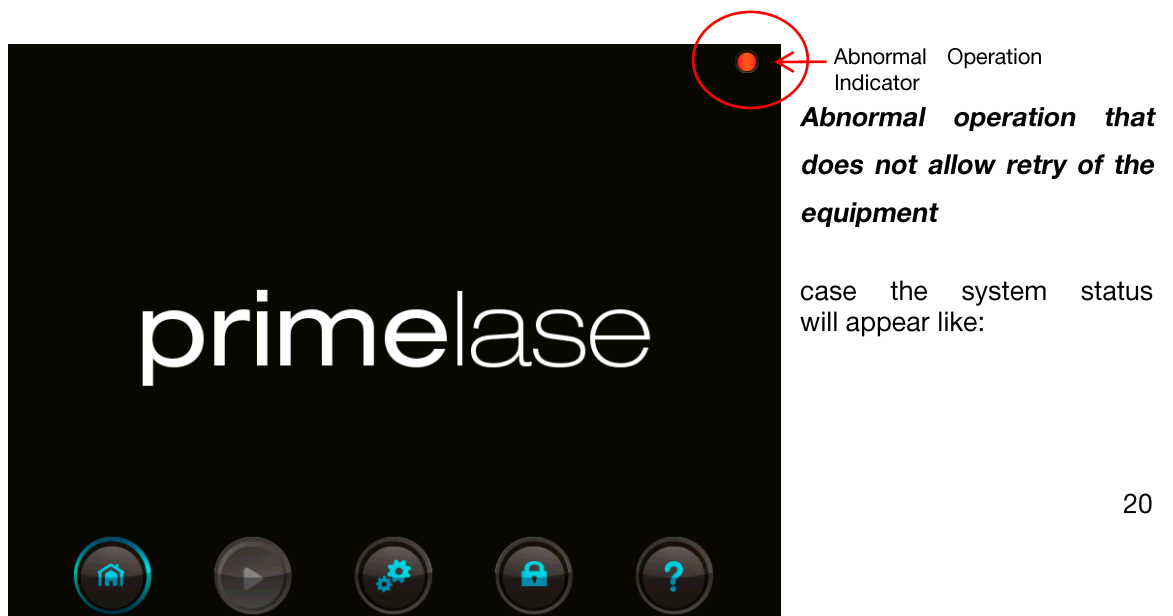
This type of errors allows the user to retry the normal operation of the equipment. In this way, when the indicator shows a state of abnormal operation, returns immediately to the stand-by.

Pressing the **play** button again, allows a new retry of the equipment from sleep mode.



If equipment does not operate properly after several retries; turn it off, wait at least 30 seconds, and start it again. If the problem persists, contact the manufacturer technical assistance.

In this indicator



If such a system error occurs during the normal operation of the equipment, will return immediately to the home screen turning the indicator of abnormal operation in red. These type of errors block the system and do not allow the user to retry the normal operation of the equipment (disabled Play).

When the indicator shows a state of abnormal operation, the device immediately returns to idle state preventing a new retry of the system.



Follow the explanatory instructions and contact the manufacturer technical service before the occurrence of a blocking error.

TECHNICAL SPECIFICATIONS:

BASIC OPERATION:

Equipment type	Diode laser	hair	removal
Emission laser	equipment		
	Direct	by	quartz prism

TECHNICAL CHARACTERISTICS:

Peak maximum power	10.000W
Wavelength	755nm - 1060nm
Maximum energy	300J
Maximum fluency	360J/cm ²
Pulse duration	3ms-400ms

POWER SUPPLY:

Network Power Supply	Single fase, 100-240 V
Frequency	50 -60Hz.
Nominal power	2.800W
Maximum power	3.300W
Current (200-240V)	13A

REGULATION:

DIRECTIVE MDD	Class IIb Class
Class acc IEC 60825-1	IV Láser Class
Class acc IEC 60601-1	I, Tipo B
MARCAJE	CE0120

PHYSICAL FEATURES:

Dimensions, Weight, Display

140 x 480 x 550 mm

75 Kg

Touch screen 10, 4 "

Working conditions, Storage conditions

18 - 30 °C

2-50 °C, <90% humidity (without condensation)