

# iFiRE®

Safe Use Instructions & Maintenance  
Installation Instructions

BIO BURNERS CRM 43 / 58 / 75 / 93 / 113 / 130



**iFiRE<sup>®</sup>**

## **Warranty**

Warranty of the device's good function provided, duration two (2) years from the purchase date, which includes any repair service and spare parts cost for malfunction that will come up because of building mistake or not appropriate material used.

The warranty does 't cover any breakdown that will possibly appear because of wrong use of the device, vandalism, hyper-voltage of the electric power, force majeure (e.g. fire – earthquake etc.), not authorized repair attempt as well as any other beyond structure imperfection or/and not appropriate material used.

Finally, the warranty is limited only to the replacement/repair of the defective element and doesn't cover losses (material or not) caused by this malfunction.

Shipment of the device for repair in warranty, means implicitly acceptance of its terms.

Any shipment/delivery cost of the device for repair in warranty, burden the device's owner.

Any possible shipment for repair in warranty without actually having any malfunction on the device or in case the malfunction is not covered by the provided warranty the diagnosis cost burdens the owner of the device.

## **Packaging- Transport**

The Ethanol Burner is delivered fully packaged and comes with the following:

1. Ethanol Burner
2. Handle (Special Tool) that adjusts the flame
3. Refilling Funnel
4. Special Handle for Burner's Placement
5. Manual of safe Operation, Use & Maintenance
6. Warranty brochure and warranty terms.

The initial packaging is advised to be preserved by the buyer for the whole duration of the burner usage.

Regarding the packaging selection, every possible action has been taken care of, so that the packaging protects the burner from any possible damage through its transportation.

## **Unpacking-Installation**

To unpack the Burner, please follow the steps below:

1. Using a sharp tool (scissors, knife, blade etc.) we remove the packaging.
2. Take out the content of the box and check from the provided list enclosed the packaging, that all the expected material are available.
3. Read carefully the Instructions of Installation, Safety and Functions and keep the provided manual for future use.  
We choose the spot that we are going to place the burner according to the manual's reference .
4. We place the burner and provide fuel according to the manual's reference. (See Pages 9-10)
5. Set the burner in function.

## **Safety Instructions**

### Ethanol

The Ethanol is a colorless, flammable liquid with chemical type  $C_2H_6O$ .

### Burner

The Ethanol Burner is designed and manufactured with standards its function firstly, and its safe function for the man in the environment that will be placed.

It is addressed to the common user and doesn't require special care from him during its operation.

Read and comprehended the safety precautions before operating the burner. Mentioned all you should know about its proper and safe function.

Save this for future reference.

Any omission of the safe usage precautions and operation can lead to an accident or damage.

## **Basic safety usage instructions:**

- Never leave a burner in operation unsupervised.
- Keep children and pets away from the burner whether it is on operation or not
- The burner is not a toy.
- The burner must always be placed on flat incombustible horizontal surface. (NOT straight to plasterboard, wood or similar material surfaces)
- Only adults should use the burner.
- Read and follow the fuel's usage instructions.
- Use only ethanol fuel or bioethanol or ethylene alcohol. Any other fuel is not suitable for this burner. The use of non suitable fuel can lead to uncontrollable flame and it is not advised.
- Keep safe distance 90 cm (to all directions) at least, from flammable material during the burner's function. Do not operate the burner close to curtains, rugs or carpets.
- Do not put objects on the top or inside the burner.
- Do not operate the burner under or close to combustible objects.
- The burner is getting hot during its function. Do not touch the burner barehanded during its operation. Leave safety margin at least 30 minutes after its quenching so that you can touch it barehanded.
- Do not fill the burner with fuel while its function. There is serious danger of accident. Wait 15 minutes at least after the burner's quenching, for refilling. Even if it shows to be off there might be small hearths or lights that could cause general fuel ignition during refilling.
- To light and quench the burner you have to follow the instructions of the present manual.
- Periodically check the burner for external damage or possible fuel leakage. If you discover any damage, turn off the burner and contact with the manufacturer or the supplier for giving assistance.
- Clean the device external surface periodically with fresh (not wet) cloth. Use only water and not harsh cleaning because there is possibility to damage the device.
- Avoid the air flow in the room where the burner operates (air current). The aeration of the room is, nevertheless, necessary.
- Do not use the device in a possible explosive atmosphere.
- Do not use the burner for heating or boiling water or for cooking food.

**ATTENTION!** During the cleaning, the device must be cold. There is serious burn danger.

**ATTENTION!** The children must not play with the device.

**ATTENTION!** While the ethanol is burning, steam and carbon dioxide are produced. The room where the burner functions, must be ventilated sufficiently.

- All those who face health problems should firstly advise their doctor before making use of the burner
- In case of fuel leakage from the burner wipe the left fuel by using an absorbent cloth. Next, wash the cloth with plenty clean water.
- Do not fill with fuel the burner while its operation there is an explosion danger.
- Do not try to turn off the burner by throwing water there is a serious explosion danger.
- Do not use the burner if it has an obvious malfunction. If you realize malfunction contact your supplier.
- Do not repair and modify the burner, the repair must be done only by your supplier.
- Do not move the burner while it's working
- Do not convert and do not try to repair the burner. If a problem is caused or repair is required please attend to the manufacturer or the supplier.
- The simultaneous operation of more than one device ethanol burn (with burners of that type) in a space is allowed **only** when the pace of fuel flow of all does not exceed the price of 0,5 lt/h while it is necessary further ventilation of the function room.
- The ethanol fireplaces are not suitable for continuous operation.
- The use of decorative elements such as wood imitations or pebble are forbidden in the area where the flame can touch them.

## **Minimum Dimensions of operation room**

The ethanol fireplaces consume oxygen quantities during their function (ethanol burn).

It is necessary to replace the oxygen (ventilation of the room).

On table 1 the minimum space dimensions are mentioned (medium height 3 meters). For the calculation of the minimum dimensions were consider as accepted the following:

- The space is a common house with average insulation where air flow is provided through its openings (doors etc).
- As minimum limit the 5,7m<sup>3</sup> of provided air are taken for every 1000 BTU

BIO BURN TYPE	DIMENSIONS (WxLxH) (cm)	FUEL CAPACITY (mL)	NET WEIGHT (Kg)	AUTONOM Y (h)	MINIMUM ROOM DIMEN- SIONS (m <sup>2</sup> )
BIO BURN CRM 43	43 X 19 X 8	1.950	8.0	3.5 – 5.0	12.5
BIO BURN CRM 58	58 X 19 X 8	2.600	11.0	3.5 – 5.0	15
BIO BURN CRM 75	75 X 19 X 8,3	3.400	18.0	3.5 – 5.0	21
BIO BURN CRM 93	93 X 19 X 8,3	4.200	22.5	4.0 – 6.0	35
BIO BURN CRM 113	113 X 22 X 13,0	10.500	40.0	6.0 – 8.0	50
BIO BURN CRM 130	130 X 22 X 13,0	14.000	56.0	6.0 – 8.0	75

## Safe Use Instructions

Before using the ethanol burner for the first time, make sure the following:

- Remove all the packaging material, the stickers and the labels.
- Check the contents of the packaging for any possible damage and make sure that all the parts are enclosed. Do not use the burner if you realize any damage at the given parts.
- Make sure that you keep away all the packaging material from children. There is danger of accident or swallowing parts.

To assemble the burner place the quenching shutter at the connectors of the burner lid. The burner is now ready for use.

## Filling the burner with fuel

- To fill the burner with fuel, firstly you always draw the shutter to its final position and then open the special filling hole.

**ATTENTION:** Never fill the burner from its main opening cause there might be small hearths, non visible.

- Always fill the burner using the special devices to control the flow (e.g. funnel - See the Photo 4&5 - Page 9)
- Do not spill fuel out of the hole of the burner, there is serious danger of combustion. In case that fuel is spoilt, wipe carefully all the surfaces.

**ATTENTION:** The fuel can destroy some surfaces (as wood, paint or skin).

- The burner is completely filled when the level of the fuel, during the filling, has reached the upper surface of the ceramic stone. (The filling is realized in 2 parts. During the first filling, as soon as the fuel has reached the upper surface of the stone, stop for 10-15", letting it absorb a part of the existent fuel. By the passage of the 10-15", when the fuel level has been a little lessened, repeat the same procedure till the fuel level reaches again the upper surface of the stone.

Now the burner is completely filled.

- The burner doesn't require the maximum fill with fuel for the correct function but works better when it is full.
- Especially for the first use the burner must be filled completely and slowly.
- Do not store the fuel close to the burner. Use safety distance, one meter at least.
- Use only fuel with main substance the ethanol. Fuels of different type are forbidden and constitute threat if used with burner of this type.

Photo 1: Signs of Burner Safety

**ATTENTION: Do not smoke during filling the burner with fuel and for as long as you handle the fuel.**

## Ignition

The burner is ready for ignition after having been filled with fuel.

- Draw the shutter to the open position.
- Use a suitable long lighter for the ignition of the burner's surface.
- Do not put your hands on the surface of the fuel and do not stand over the burner while you turn it on. The ignition of the burner must be done from the side and no parts of the body or flammable material should be over it.
- Do not blow towards the burner during the ignition there is danger of burn.
- The burner during the ignition does not produce the highest flame from the beginning. The highest flame result (temperature and flame height) comes after 10-15 minutes of operation.
- Adjust the flame's height, with the provided tool, drawing suitably the shutter from the open position.
- Avoid long periods of non use of the burner while the fuel is volatile and will be vaporized. If you intend not using it for a long period of time, empty the fuel.

**ATTENTION! The burner must get cold in environment's temperature before its reignition.**

**Do not fire and do not fill the burner while being in warm condition.**

**Always check that the burner is completely off.**

## Quenching

- Do not turn off the burner using water, there is danger to explode.
- To turn off the burner use the provided tool (See Photos 5&6 - Pages 9-10) with which you will move the shutter till its closed position. Leave the shutter on this position for at least five (5) minutes of the hour, to make sure that the burner's flame is completely off.

- Use only the provided tool to move the shutter since it is very warm and there is danger of burning in case of barehanded contact.
- If the flame does not turn off completely when having moved the shutter to its closed position, move it back again to its open one and try again to turn it off drawing the shutter with a faster and more abrupt move this time.
- There is the possibility after a long-term use the lid to be dilated as a result the shutter not to move normally. Knock the edge of the burner with a butt and careful bump with the moving tool of the shutter. Be careful not to cause any damage to the burner.
- If after quenching remains any fuel into the burner, keep the lid closed so as to prevent its vaporization. When you want to use it again, fill the burner with fuel till MAX and then turn it on again.

### **Burning Time**

- The burner, depending on the model, has a certain fuel capacity (maximum capacity).
- Among the technical characteristics of each model, there is the maximum burning time that refers to the burning of full burner in a completely open position of the shutter (max. flame).
- To save more fuel and extend burning time you can reduce the burning hole (lower flame) using the special tool.

### **Safety Instructions**

The burner has on the surface of the filling opening a visible and permanent symbol to indicate that the filling is not allowed during the function when the burner is in hot condition.

Photo 1: Signs of Burner Safety



### **Maintenance Instructions**

**ATTENTION!** The burner is getting hot during its function. After the quenching the burner remains warm. Leave it at least 30 minutes for the natural cooling before you touch it barehanded.

Clean the surface of the burner only after the burner has been cold enough.

**ATTENTION!** The cleaning and the maintenance of the device must not be preformed by unsupervised children.

- Do not use harsh cleaning or cleaning in powder because it can cause damage on the surface of the burner.
- To avoid fuel leakage make sure that it is empty of fuel before cleaning.
- For the burner's cleaning use fresh cloth. Use only water and if needed soft cleaning liquid (like for dishes). For tough stains or dull of the surface wipe with spirit.
- Before using the burner again make sure that you have placed again properly all its parts.
- Regular check of all the obvious parts of the burner must be done for damages. In case of damage replace the damaged.
- If any problem happens during its function, contact with the manufacturer or the supplier for assistance.

### **Facing Problems**

Problem	Possible Cause	Action
There is smoke or a strange odor that comes from the burner when being in function	<p>A. There might be other elements that are burning in the burner.</p> <p>B. Use of wrong fuel (it's imperative that you use <b>ONLY</b> fuels with ethanol base).</p> <p>C. Have placed something around or on top of the flame that is not approved or not suggested.</p> <p>D. If the burner is empty (the flame is turning off) or if you have just turned off the flame, this is normal. Exactly as happening when you turn off a candle.</p> <p>E. The ethanol quality you're using is not good enough.</p>	<ul style="list-style-type: none"> <li>▪ Turn off the burner and wait until it gets cold.</li> <li>▪ Clean the burner and remove other elements.</li> <li>▪ Contact with the manufacturer /supplier for proposals of appropriate/suggested fuels.</li> </ul>

Problem	Possible Cause	Action
The burner does not ignite	<p>A. Not enough fuel in the burner.</p> <p>B. You haven't used the proper fuel (it's obligatory to use <b>ONLY</b> fuels with ethanol as main substance).</p> <p>C. The opening of the burner does not have sufficient air for the ignition of the flame.</p> <p>D. The fuel is cold and it takes time to ignite.</p> <p>E. If the burner is used outdoors (not suggested), the fuels could have been mixed with rain water.</p>	<ul style="list-style-type: none"> <li>▪ The level of the fuel, must be high.</li> <li>▪ Check the type of the used fuels.</li> <li>▪ Open the control door of the flame completely and repeat the initial procedure till the burner is getting hot and finally ignites.</li> <li>▪ If the burner is full of water empty the content and refill with pure fuel.</li> </ul>
The flame is not off when closing close the lid	<p>A. Maybe the speed used to close the lid of the burner was very slow.</p> <p>B. There are obstacles in the mechanism.</p>	<ul style="list-style-type: none"> <li>▪ Make sure that no obstacles are in the route of movement of the burner's quenching shutter.</li> <li>▪ Try again to turn off the flame with an abrupt and quick move of the shutter.</li> <li>▪ If you have no results let the fuel be fully consumed and the flame will turn off itself. Contact with the manufacturer/supplier for assistance.</li> <li>▪ Do not use the burner until its maintenance.</li> <li>▪ If the burner is overflowed and the flame is vivid prepare, in any case, the fire-extinguisher and supervise the flame until it returns in normal levels, provided that you are not able to turn it off.</li> <li>▪ Do not blow and do not try to cover the flame with blanket in order to turn it off.</li> <li>▪ Do not throw water to turn it off.</li> </ul>
The shutter quenching can not be moved (is stuck) when the burner is in hot/cold situation	<p>A. The shutter quenching is dirty or contains burn remains.</p> <p>B. There is something that prevents the shutter e.g. something that is thrown on the burner.</p> <p>C. The burner has malfunction (e.g. has suffered fall from height and is crooked).</p> <p>D. The shutter has dilated (temporarily due to heating from extensive function)</p>	<ul style="list-style-type: none"> <li>▪ Clean the burner and check if the movement of the quenching shutter is impeded by obstacles.</li> <li>▪ Let it get cold.</li> <li>▪ If no damage exists done contact with your manufacturer/supplier. Do not use the burner again before it has been maintained.</li> </ul>
Some fuel is spoiled, what should be done so as to fire the burner again?		<ul style="list-style-type: none"> <li>▪ Remove all the flammable sources.</li> <li>▪ Remove people and animals from the area.</li> <li>▪ Wipe the spilled liquid using a dry absorbent cloth, and afterwards, wipe the same surface with a cloth soaked of water.</li> <li>▪ Avoid to inhaling the steam.</li> <li>▪ Refresh the room opening the windows and the doors.</li> <li>▪ Turn on the burner <b>ONLY</b> when the room is refreshed and make sure that all the fuel .</li> </ul> <p><b>Attention:</b> Go to the (MSDS) of the fuel for further information about the safe handling of the fuel.</p>

Problem	Possible Cause	Action
The flame is unusually intense and high	A. It is possible to have been provoked by a strong air current that blows towards the flame.	<ul style="list-style-type: none"> <li>▪ Find and remove the source of the air (probably the window/door is open or the blower in function blows the air to the flame).</li> <li>▪ If you can not remove the source of the air and the flame is too vivid, turn off the burner.</li> <li>▪ Maybe you should redefine the burner's position to minimize the effect from the air current.</li> <li>▪ Contact the manufacturer/supplier for assistance if the problem remains.</li> </ul>
The burner does not function properly		<ul style="list-style-type: none"> <li>▪ Contact the manufacturer/supplier for assistance</li> <li>▪ Do not try to operate the burner with malfunction.</li> </ul>

### **Environmental Management – End of Life circle**

Beyond its life endurance, the device must not be rejected to the common domestic waste bins. It must be recycled according to the Legislation standards for electrical device recycling, which are valid for the current period of time .



*The care of each one of us for the environment guarantees better living conditions for our children*



# INSTALLATION

Photo.1

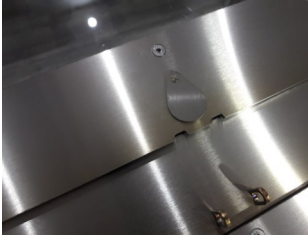


Photo.2



Photo.3



Photo.4



Photo.5



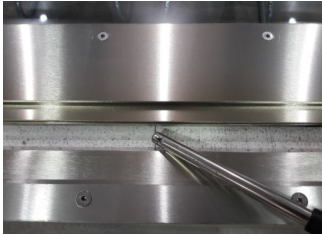
On the surface of the burner there is a special filling (Photo 1). Check that the cover opens and closes properly. **ATTENTION!** At its initial position always close the cover of the burner and open the special filling hole (Photo 2).

To place the Burner in the special hole into the built-in fireplace construction, use the special handle for Burner's placement as presented on the left photo (Photo 3). Use the same special handle also in case you need to move/remove the Burner from this position.

**ATTENTION:** Never fill the burner from its main opening because there might be small hearths, non visible. To fill the burner with Bioethanol, always use the special tools to control the flow of the fuel (Photo 4). Thus, avoid the case of fuel being spilled out and around of the burner's hole, while we make sure that our ignition will be completely safe. Place the filling funnel into the filling hole and fill with attention using a vessel, (Photo 5). The filling is realized in 2 parts. During the first filling, as soon as the fuel has reached the upper surface of the stone, stop for 10-15", letting it absorb a part of the existent fuel. By the passage of the 10-15", when the fuel level has been a little lessened, repeat the same procedure till the fuel level reaches again the upper surface of the stone.

Now the burner is completely filled.

Photo.6



To light up the burner we use a lighter with a long spout. Place the ledge of the lighter in the hole of the burner so as to touch the ceramic stone and then light (Photo 6).

Photo.7



Photo.8



To quench the burner, use the special tool that is provided with the burner.

Place the edge of the tool to the 2 special holes on the top of the burner's lid (Photo 7) and draw it till its completely close position (Photo 8). Let the lid to this position for about 5 minutes so as to make sure that the flame of the burner has been extinguished completely. In case that it has not yet, move again the lid to its initial open position and draw it again, with a more abrupt and quick move, till its close position. Let again the lid to this position for about 5 minutes.

