# 2-Person FAR Infrared Sauna Owner's Manual

# FOR INDOOR USE ONLY 120V / 15 AMP Dedicated Circuit Required



#### CAUTION: EXIT SAUNA IMMEDIATELY IF YOU FEEL DIZZY, SLEEPY, OR ANY DISCOMFORT

The information in this Owner's Manual is intended for informational purposes only and should not be considered medical advice. Please consult your physician before using this product. This product is not endorsed by medical professionals and is not intended to diagnose, treat, cure, or prevent any disease.

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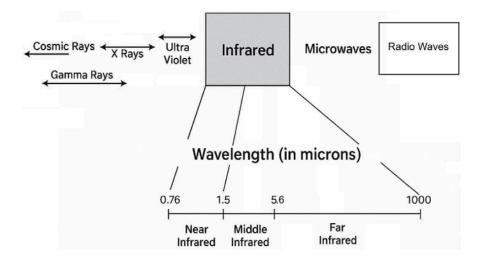
# **What Are Infrared Rays?**

Infrared rays are a type of light that we perceive as heat. Although we cannot see infrared light with the naked eye, we can feel it as warmth. The sun generates most of its energy in the infrared segment of the spectrum. Infrared rays heat your body directly without needing to warm the air in between, a process known as conversion.

Infrared light is divided into three segments based on wavelength, measured in microns:

Near Infrared: 0.76-1.5 microns
 Middle Infrared: 1.5-5.6 microns
 Far Infrared: 5.6-1000 microns

Among these, Far Infrared rays penetrate organic substances, such as the human body, to a depth of two to three inches, providing a uniform warming effect.



#### **Are Infrared Rays Safe?**

Infrared rays, being a component of sunlight, are not only safe but also highly beneficial at a cellular level. Health professionals have utilized infrared heat lamps for decades. Hospitals often use infrared heating systems in incubators to keep newborns warm.

#### What Is an Electromagnetic Field (EMF)?

Electromagnetic fields (EMFs) are invisible areas of energy that are associated with the use of electrical power and various forms of natural and man-made lighting. They are created by electrically charged objects. The strength of the magnetic field is measured in milligauss (mG).

#### **Types of EMFs:**

- **Electric Fields:** Produced by stationary charges (like the electricity in your home wiring).
  - **Example:** The electric field around a plugged-in lamp.
- Magnetic Fields: Created by moving charges (like the current flowing through your appliances).
  - **Example:** The magnetic field around a running refrigerator

#### **Common Sources of EMFs:**

- **Household Appliances:** Microwaves, refrigerators, and Wi-Fi routers.
- **Electronic Devices:** Cell phones, laptops, and tablets.
- **Power Lines:** The wires that bring electricity to your home.

#### **EMF Levels from Common Devices**

#### (Measured in milligauss, mG)

Device	EMF at Close Range (0–1 inch)	EMF at 3 Feet Away (approx. 1 meter)
Blender	50–220 mG	0.3–3 mG
Clothes Washer	8–200 mG	0.1–4 mG
Coffee Maker	6–29 mG	0.1 mG
Computer	4–20 mG	2–5 mG
Hair Dryer	60–20,000 mG	0.1–6 mG
Microwave Oven	100–500 mG	1–25 mG
Television	5–100 mG	0.1–6 mG
Vacuum Cleaner	230–1,300 mG	3–40 mG
Airplane (in flight) ~50 mG		_
Cell Phone (active use) 0.1–20 mG		~0.01–1 mG
Electric Car (driver seat)	30–300 mG	0.5–3 mG (back seat or trunk)

#### Footnotes & References

- U.S. Environmental Protection Agency. (n.d.). Electric and Magnetic Fields (EMF). Retrieved from https://www.epa.gov/radtown/electric-and-magnetic-fields-emf
- 2. National Institute of Environmental Health Sciences. (2002). EMF: Electric and Magnetic Fields Associated with the Use of Electric Power Questions and Answers. Retrieved from https://www.niehs.nih.gov/health/assets/docs\_f\_o/emf.pdf
- 3. Consumer Reports. (2015). EMF Levels in Common Household Appliances. Consumer Reports Magazine.
- 4. Safe Living Technologies Inc. (2021). EMF Exposure from Household Devices and Electric Vehicles. Retrieved from https://slt.co
- IEEE. (2012). Electromagnetic Field Exposure Assessment of Personal Devices. IEEE Transactions on Electromagnetic Compatibility, 54(2), 453–460.
- 6. Baan, R. A., et al. (2011). Carcinogenicity of radiofrequency electromagnetic fields. The Lancet Oncology, 12(7), 624-626.
- 7. EMF Academy. (n.d.). EMF Levels on Airplanes. Retrieved from https://emfacademy.com/emf-airplane

#### Why Are EMFs Important?

EMFs are everywhere in our modern world. While most EMFs are safe, high levels of exposure, especially from certain sources, can potentially affect your health. It's a good idea to be aware of EMFs and take simple steps to reduce exposure, like keeping your phone away from your bed at night or using wired internet instead of Wi-Fi when possible.

#### **EMF** in our Sauna:

Our sauna products are designed to have low EMF emissions:

• Low EMF Carbon Heater Panels: Range between 5mG-10mG at approximately two inches from the heater panel.

Despite extensive research over many years, no government body, including the Occupational Safety and Health Administration (OSHA), has established permissible exposure limits (PEL) for electromagnetic fields (EMFs). Currently, there is no consensus on the potential health hazards from EMF exposure. Mainstream scientific evidence suggests that low-power, low-frequency electromagnetic radiation, such as that associated with household currents and infrared saunas, does not pose a short- or long-term health risk.

#### **How Infrared Saunas Work**

Infrared saunas differ from traditional saunas by using infrared radiant energy to directly penetrate the body's tissues, inducing perspiration. Traditional saunas rely on steam to heat the air inside the sauna, which then heats your body until you begin to sweat. For this to be effective, temperatures need to reach around 190 degrees Fahrenheit. In contrast, infrared saunas only require temperatures up to 120 degrees Fahrenheit to achieve the same effect. This lower temperature makes the environment more comfortable and allows for easier breathing.

Since many materials absorb the infrared rays, minimal clothing is recommended for maximum effect. The infrared sauna emitters are designed to heat you and not necessarily the air inside the sauna. It is not a hot box like a traditional sauna. The temperature gauge is a guide for your safety.

**NOTE:** It is recommended that you drink water before, during, and after sauna use to prevent dehydration since your body fluids will be lost through perspiration. It is not recommended to shower immediately after use since your pores will be open and possibly absorb anything in the water.

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#### **Health Benefits**

Infrared rays penetrate the body through conversion, creating a deep heating effect in muscle tissues and internal organs without placing excessive strain on the heart. Our body responds to this increased heat through the natural cooling process of perspiration. During perspiration, acids and waste residues such as toxins, sodium, alcohol, nicotine, cholesterol, and potentially carcinogenic heavy metals (including zinc, lead, nickel, cadmium, etc.) are expelled from the cells. This process opens the pores of our skin, allowing waste products to be discharged and old skin cells to be shed, leaving the skin glowing and clean with improved tone, elasticity, texture, and color.

#### **Reported Health Benefits Include, But Are Not Limited To:**

- Pain relief from rheumatoid arthritis
- Relaxation of muscle spasms
- Reduction of cellulite
- Increased blood circulation
- Clearing of rashes and acne
- Enhanced skin tone
- Cardiovascular conditioning

**CAUTION:** The infrared rays emitted by your sauna are reported to offer various potential therapeutic benefits based on research conducted over the past 40 years worldwide. These benefits are provided for reference purposes only and do not imply that infrared saunas can cure or treat any disease. If you have a medical condition, are taking prescription drugs, or have acute joint injuries, please consult your physician before using the sauna. Individuals with surgical implants (such as metal pins/rods, artificial joints, silicone, or other types of implants) typically do not experience adverse effects but should also consult their physician or surgeon before using the sauna.

#### Sauna Maintenance

Since infrared saunas do not require hot rocks, water, or steam to operate, they need very little maintenance.

#### CAUTION: Before cleaning, UNPLUG the sauna from the wall outlet.

- Simply wipe down the sauna with a damp, soft, clean cloth. Regularly clean the floor heater with a dry cloth to keep it free of debris.
- Avoid using liquid cleaners or aerosol cleansers inside the sauna. Do not use benzene, alcohol, or strong cleaning chemicals in or on the sauna.

CAUTION: Chemical-based cleaners can damage wood or be absorbed into the wood and be released during use.

#### **Operating the Sauna**

Before your sauna is turned on, remove all plastic coverings from the control panel. Check and confirm the connections to the Power Supply (including power cord), heaters, and temperature sensors are properly connected and connections are snug and tight.

**IMPORTANT**: The power supply voltage and frequency must match the required voltage and frequency (120V, 15AMP **DEDICATED** circuit). Please consult an electrician if you are unsure.

**TROUBLESHOOTING:** If your circuit keeps tripping, it is likely because you are not using a dedicated circuit for your sauna.

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#### **Control Panel Operations:**

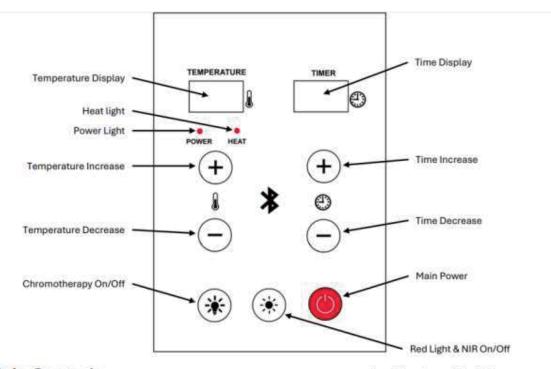
- 1) Plug sauna into dedicated 110v wall outlet
- 2) Use control panel operating sheet for sauna operational instructions
- 3) After 3 hours of continuous use, the sauna needs to be shut down for one hour.

#### NOTE: It is recommended to use multiple towels during your sauna session.

- Fold the first towel several times and place it on the bench. This towel will absorb most of your personal perspiration and add comfort while you sit.
- Use the second towel to frequently wipe perspiration from your body. This helps you perspire faster and prevents excessive perspiration from dripping onto the floor.

# Operation Instruction for Infrared Sauna Controller A4M05359

# **Control panel operating instruction**



#### **Main Controls**



Main Power

Turns sauna system on/off



#### Chromotherapy Press once to turn

ON/OFF ambient lighting.

# **Indicator Lights**



- Power Light On when sauna is plugged in
- Heat Light On when heating is active



#### Time + / -

Sets session duration (max 60 minutes).

- First press: numbers blink (you're setting time)
- Solid numbers: time remaining



#### **Change Light Color**

- Hold Chromotherapy for 1.5 seconds
- 2. Display will Show 2n
- Press repeatedly to cycle colors: White, Pink, Blue, Teal, Green, Yellow, Red

#### **Bluetooth Audio**



- Turns on with Main Power
- On your phone/device:
  - Open Bluetooth Settings
  - Select BYD-Sauna to pair



#### Temperature + / -

Sets sauna temperature (max 150°F)

- First press: numbers blink (you're setting temp)
- Solid numbers: shows current temp



#### **Red Light & NIR**

Turns on Red & Near-Infrared lights. Note: This will turn off

Note: This will turn off chromotherapy lighting.

#### Tips



- Blinking Numbers = you're setting a value
- Solid numbers = current reading
- Max time: 60 minutes
- Max Temp: 150°F

# **Tips for using your Sauna**

- Pre-Sauna Shower: Taking a hot or warm shower or bath before using your sauna can help you
  perspire more and enhance comfort.
- **Hydration:** Drink water before, during, and after your sauna session to replenish body fluids.
- **Temperature Regulation:** To adjust the temperature inside the sauna to your comfort level, use the movable roof vent or leave the door slightly open. The roof vent can be adjusted based on personal preference.

#### • Use of Towels:

- Fold the first towel several times and place it on the bench. This towel will absorb most of your personal perspiration and add comfort while you sit.
- Use the second towel to frequently wipe perspiration from your body. This helps you perspire faster and prevents excessive perspiration from dripping onto the floor.

#### **CAUTION: Never place ANY towels on or over the floor heater**

- **Cooling Down:** For every three hours of use, the sauna must be turned off for one hour to cool down.
- **Boosting Immunity:** At the first sign of a cold or flu, increasing your sauna sessions may help boost your immune system and reduce the reproductive rate of the virus.
- **Muscle Relief:** To help relieve sore and tense muscles, massage the affected areas during your sauna session.
- **Foot and Ankle Treatment:** Elevate your ankles and feet and move them close to one of the heat emitters for a deep heating effect.
- **Hair Treatment:** To utilize the sauna's heat therapy effect, apply oil and treatment to your hair and wrap it with a towel. After your sauna session, rinse your hair thoroughly.
- **Improved Sleep:** The peaceful and relaxed state induced by a sauna session may help you sleep easier and deeper.
- **Energy Conservation:** Unplug your sauna when not in use, especially if you do not plan on using it for an extended period.
- **Post-Sauna Cooling:** After your sauna session, do not jump into the shower or bath immediately. Your body will continue to perspire even after the heat emitters are off. Sit in the sauna with the door slightly open and let your body cool down. Once you feel comfortable, you can exit the sauna. After about fifteen minutes, when your body has completely cooled down, you can take a shower or bath to clean your body.

## **Safety Instructions**

Carefully read and follow all instructions before using the sauna.

Always follow safety precautions when assembling and using electrical equipment.

#### FOR INDOOR USE ONLY 120V AC / 15AMP DEDICATED CIRCUIT REQUIRED

<u>WARNING:</u> Before assembly, visually inspect all heaters for any signs of damage. Excessive vibrations during transport may harm the heating elements. <u>DO NOT START</u> the sauna if any damage is detected. Contact Backyard Discovery for troubleshooting and replacement parts.

**Note:** Your sauna has been completely assembled and tested prior to packaging.

TWO adults are required for assembly.

#### Choose a good indoor location to install the sauna:

- Location should be dry, level, well ventilated, temperature controlled and away from any source of water
- Do not install the sauna near water sources such as bathtubs, showers, wet basements, or swimming pools where water may splash on the sauna.
- Main power cord must be easily accessible.
- Ensure the power supply cord does not create a trip hazard and is not pinched by surrounding objects.
- Do not use wall receptacle adapters, surge protectors, or extension cords between the sauna cord and the wall outlet.

**Replacement Parts:** When replacement parts are needed, ensure they meet the manufacturer's specified requirements. Unauthorized substitutes may result in fire, electrical shock, or other hazards. Please contact Customer Service directly for the repair parts.

#### **GEVERAL SAFETY WARNING:**

- No additional electrical receptacles may be installed inside or outside the sauna structure.
- Do not install any locking or latching mechanisms on the door as this may cause accidental entrapment
- If manually resettable temperature-limiting controls are frequently triggered, contact customer service and a qualified provider.

 Do not tamper with, reposition, or cover any vents or sensors on top of, or behind the sauna

#### **FCC Warning**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- —Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement.

To maintain compliance with FCC's RF exposure guidelines, the distance must be at least 20 cm between the radiator and your body, and fully supported by the operating and installation

#### **IC Warning**

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1)This device may not cause interference.
- (2)This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux normes CNR exemptes de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est assujetti aux deux conditions suivantes :

- (1)Cet appareil ne doit pas causer d'interférences.
- (2)Cet appareil doit accepter toute interférence, y compris celles qui peuvent entraîner un fonctionnement indésirable de l'appareil.

The device has been evaluated to meet general RF exposure requirement. To maintain compliance with RSS-102 — Radio Frequency (RF) Exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

le dispositif de a été évalué à répondre général rf exposition exigence.pour maintenir la conformité avec les directives d'exposition du RSS-102-Radio Fréquence (RF). ce matériel doit être installé et exploité à une distance minimale de 20 cm entre le radiateur et votre corps.

- Adult Supervision REQUIRED: Sauna use is not recommended for children. DO not leave children unattended around the sauna.
- **STAY ALERT:** Never sleep inside the sauna.
- **Medical Conditions:** Individuals with obesity, heart disease, blood pressure issues, circulatory problems, diabetes, or other medical conditions should consult a physician before using the sauna.
  - **Pregnancy:** Pregnant or possibly pregnant women should consult their physician before using the sauna, as excessive temperatures can harm the fetus.
  - Medications: Consult a physician before using the sauna if you are taking medications, as some may induce drowsiness or affect heart rate, blood pressure, and circulation.

- **Substance Use:** The use of alcohol, drugs, or medications (prescribed or non-prescribed) before or during the sauna session may lead to unconsciousness and other harmful physical injuries such as fatal hyperthermia.
- **Hyperthermia Danger:** Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal temperaturs of 98.6°F. The normal body temperature should not exceed 103°F (39°C). Symptoms of hyperthermia include dizziness, lethargy, drowsiness, and fainting. Excessive hyperthermia can lead to failure to perceive heat, physical inability to exit the sauna, unawareness of hazards, unconsciousness, and fetal harm in pregnant women. Avoid setting the sauna to excessively high temperatures.
- **Pre/Post-Exercise Use:** Use care when exercising before and after sauna use. Do not use the sauna immediately after strenuous exercise. Wait at least 30 minutes for your body to cool down completely.
- AVOID ELECTRIC SHOCK: Ensure your hands are dry before plugging and unplugging cords and wiring harnesses from the power supply and circuit boards. Never operate the sauna with wet hands or feet to avoid electrical shock or injury. Do not touch the metal prongs of the plug. Do not use the sauna during an electrical storm to avoid the risk of shock or injury.
  - **Power Cord:** If the power supply cord becomes damaged, replace it immediately through the manufacturer or its agent. If the power cord becomes too hot or the electrical equipment experiences technical problems, contact the manufacturer or its agent immediately.
  - **Electrical Outlet:** Ensure the electrical outlet is in good working order. Loose wiring can cause heat buildup and sparking. If burn marks appear around the terminals, do not use the sauna and have the outlet replaced by a certified electrician. Contact Customer Support if the power cord is damaged.
  - **Power Cycling:** Avoid continuously switching the power on and off excessively, as it will compromise the life of the electrical components.
- Power Supply: Ensure the outlet power supply meets the required specifications to avoid safety
  risks.
- **Lamps:** Some sauna models have reading or roof lamps that become very hot when powered on. Do not touch the lamp until it has cooled down completely to avoid burns.
- Heating Elements: Do not pour water or other liquids onto the infrared heat emitters. Avoid bumping, hitting, or breaking the heating elements to prevent electrical shorts and safety risks.
- **Cleaning:** Do not use chemical-based cleaning agents inside the sauna. Only wipe down the sauna with water and a damp cloth.
- **Storage:** Do not stack or store objects on top of or inside the sauna.
- **Repairs:** Do not attempt to repair yourself unless authorized by the manufacturer or its agent.

  Unauthorized repair attempts will VOID the warranty. Contact the manufacturer immediately if a problem occurs.
- Modifications: Do not make modifications to the sauna, its structure, or components.
   Modifications will VOID the warranty.
- **Inspection:** Inspect the sauna room for correct operation before each session. If the sauna does not operate properly, discontinue use and contact Customer Service.

# **Troubleshooting:**

Before performing any troubleshooting on the sauna, ensure you unplug the power cord from the wall outlet. If the sauna is hardwired directly to the breaker in the electric panel, turn the breaker to the "OFF" position.

### **CAUTION:** Never place ANY towels on or over the floor heater

If you encounter any of the following issues, you can try the solutions yourself:

#	Fault Phenomenon	Fault Cause	Solution
1	Temperature display shows "HH" error code & alarm	Temperature too high (>150°F / 65°C)	Power off the unit and restart after it cools down.
2	Bluetooth fails to pair normally	Another device is already paired	Disconnect the previously paired device.
3	Unit loses Power	Breaker flipped or poor connection	Very the designated breaker is on, and wall plug is properly seated into outlet. You may not have a dedicated circuit.
4	Lighting Malfunctions	Loose wire connection	Verify the wire connection on the roof and verify it is plugged in.
5	Heater Malfunctions	Loose wire connection	Verify the wire connection on the roof is properly connected
6	Interior Moisture	Perspiration or exterior causes	Use towels on bench to absorb personal perspiration and wipe floor immediately. Check to be sure there are no leaks or moisture in the exterior environment.

Professional Service Required
If you encounter any of the following issues, please contact a qualified technician:

#	Fault Phenomenon	Fault Cause	
1		Mainboard IC burned	
2	Controller fails to power on	No power input	
3		Loose power cable connection	
4	Unit stops heating prematurely	System overload (Over-current protector triggered)	
4	(Before reaching set temp/time)	Temperature sensor localized overheating	
5	Temperature display shows "EP"	Temperature sensor open circuit	
6	No power	Abnormal switching power supply, the indicator light inside the control box is flashing and the buzzer is making a hoarse sound.	
7	Abnormal temperature display	Temperature probe damaged	
8	Bluetooth fails to pair normally	Bluetooth module failure, or another device is already connected.	
9	Malfunctioning control panel display	Digital tube driver IC damaged	
10	Wall outlet overheating	Often loose wiring in terminal of the wall outlet	