



ASTE
FINLAND

USER MANUAL

LUMIO[®]

series



IMPULSE FREEZER

LUMIO[®] 90 F, LUMIO[®] 145 F

LUMIO[®] 185 F

Congratulations on the purchase of your new Aste premium product!

At Aste we develop products with complete devotion to quality and ease of use. That's our passion. To obtain the best results, we advise you to read this user manual* carefully.

Even though this product has been designed according to the highest standards, it is important to use and maintain your appliance correctly.

On behalf of the Aste-team



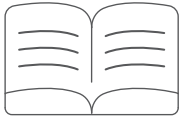
Jussi Salonen
CEO and Founder, Aste Finland Oy

*Aste constantly works on the further development of all models. Therefore please understand that we have to reserve the right to make design, equipment and technical modifications.

TABLE OF CONTENTS

1. SAFETY INSTRUCTIONS.....	4
2. PUTTING INTO OPERATION	7
3. USE OF THE APPLIANCE	8
4. CLEANING AND MAINTENANCE	12
5. TROUBLESHOOTING.....	14
6. TECHNICAL SPECIFICATIONS.....	17
7. ENVIRONMENTAL POLICY & RECYCLING.....	18
8. DISPOSING OF THE APPLIANCE	18
9. DETAILED PRODUCT INFORMATION	19

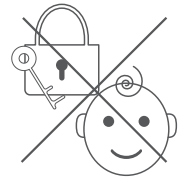
1. SAFETY INSTRUCTIONS



Please **read** this operating and maintenance **manual carefully**. We suggest to **keep the guide** into your possession **during the entire life cycle** of the product.

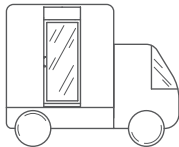


After delivery, immediately check the appliance for possible **transport damage** and make sure it **works properly**. All **safety devices must be present and functional** before operating the appliance.

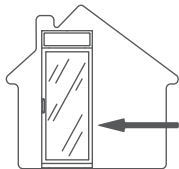


Do not leave children without supervision. Ensure that they do not play with the appliance. In the case of appliances provided with locks, the key must be kept at a site where children cannot have access to it to **avoid unintentional locking**.

1.1. INSTALLATION AND USE



The appliance always has to be **transported and displayed vertically**.

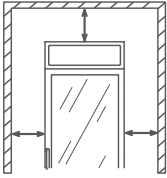


The appliance is designed for **inside use only**.



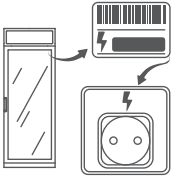
The surroundings should not transcend the following conditions (based on a standard environment):

- **25°C temperature**
- **60% humidity**
- **0,2 m/s air speed**



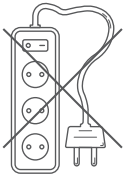
Keep a **minimum distance of 10 cm between the appliance and neighbouring surfaces** (walls, roof, furniture etc.).

Keep clear of obstructions all ventilation openings in the appliance enclosure or for built-in structure.

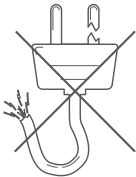


Before connecting the device, **check:**

- **The power rating** (on the type plate)
- The relevant local **electrical safety regulations**



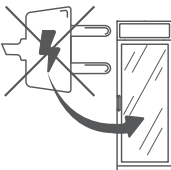
Do not use an extension cord to connect the appliance to the **electrical circuit**.



Make sure that **power cable and plug are undamaged** before connecting the appliance. The **damaged cable can only be replaced** with a cable identical to the original part.



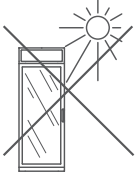
After delivery, **keep the appliance in a warm ambient temperature for 2 hours** before starting it.



Do not use electrical appliances inside the storage compartments of the appliance, unless they are of the type recommended by the manufacturer.



Do not store explosive substances such as aerosol cans with a **flammable** propellant in the appliance. The user is **solely responsible** for damages to properties or products, or injuries to persons resulting from **careless** and **improper** use of the appliance.



Do not expose the appliance into **direct sunlight**. **Do not heat** the appliance to **more than 70°C**.

1.2. DEFECTS



Only authorised service specialists may perform work on the electrical and refrigeration systems.

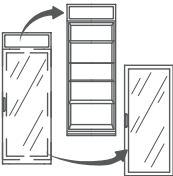
If this is not observed, all warranty and liability claims become invalid.

Damaging the refrigerant circuit can lead to severe injuries. **Do not damage the refrigerant circuit!**

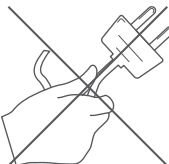
1.3. WHEN OUT OF USE



Make sure that the appliance is **thoroughly cleaned and dried**. Proper cleaning prevents corrosion and mould formation.



Appliances out of use may be **dangerous for children**, therefore position the appliance in such manner that **no person can get locked up**.



When disconnecting the appliance from the power supply, always **take hold** of the plug. **Do not pull** the cable.

2. PUTTING INTO OPERATION

2.1. INSTALLATION

IMPORTANT!

Never move the appliance by grasping the handle of the lid.

Position the device where it is protected from **sunlight** and other **heat sources**, since operation may be disturbed if the ambient temperature **exceeds +25°C**.

- The appliance **should not be operated** in rooms where the temperature **drops below +10°C** since this disrupts the lubrication of the compressor.

Leave at least **10 cm space between the appliance's side walls/roof/back** and neighbouring surfaces such as other devices, walls, furniture and ceiling to provide free air flow behind the device to enable proper operation.

If the furnishing of the room allows positioning only close to the heat source the following minimum clearances must be kept:

- Put a **0.5-1 cm** thick insulation board between two devices if they are **3 cm or less** apart.
- **Min. 30 cm from oil or coal-fired ovens.**

IMPORTANT!

If the humidity is **above 60%**, condensation may occur on the glass.

2.2. ELECTRICAL CONNECTION

The appliance may be connected to **220-240 V, 50 Hz mains** via properly mounted grounded socket. Check if the voltage meets the local voltage and make sure that the connecting cable isn't stuck anywhere.

A fuse/circuit breaker of **10 A** is required for the operation of the appliance.

- If the connection cable is damaged or it has to be extended, the job must be done by a qualified electrician to avoid the dangerous situations.

Do not use an extension cord! The appliance must be positioned in a way that the **main plug is easily accessible**.

3. USE OF THE APPLIANCE

3.1. STARTING UP

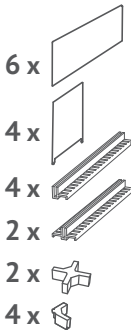
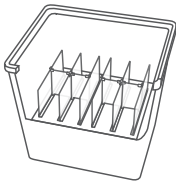
IMPORTANT!

All packaging materials are recyclable/energy waste.

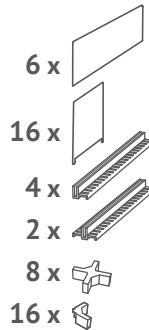
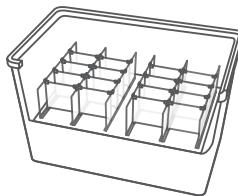
1. **Make sure** that all packaging material and foreign objects are removed from the appliance.
2. **Clean** the appliance with detergent before switching it on, **dry** it with a soft, clean cloth and let it **ventilate** for a while.
3. It is advised to keep the appliance in an **upright** position for at least **2 hours after** transport before using it.
4. It is advised to **switch on** the appliance and **check its operation before positioning** it at the final place.
5. **Leave** the appliance **connected** in an empty state for **2 hours** to check the functioning before adding goods for the first time. **Do not load** food to be frozen **before** the temperature display reads **-18°C**.

3.2. SET OF DIVIDERS

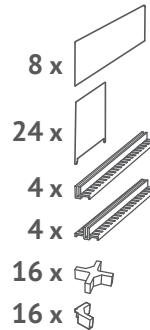
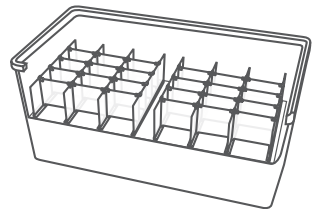
LUMIO® 90



LUMIO® 145



LUMIO® 185

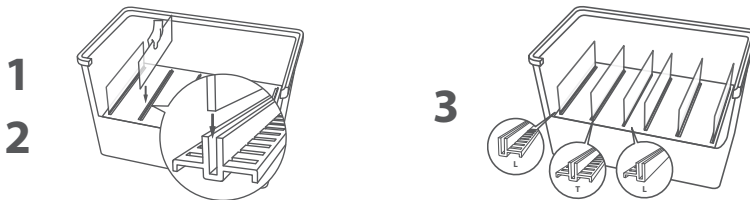


3.3. DIVIDERS INSTALLATION (DEFAULT SETUP)

IMPORTANT!

Wear safety gloves during the installation.

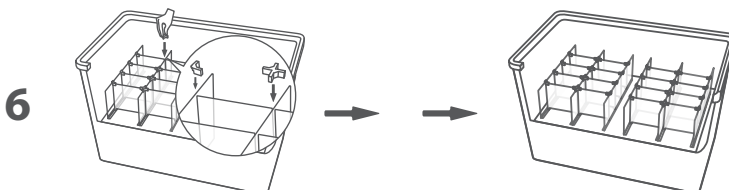
1. **Make sure** there are no foreign objects present in the food storage of the appliance.
2. **Position** the slotted basement profiles inside the appliance. Insert transversal dividers into the profiles.
3. **Make sure T-shaped** profiles are placed **in the middle**. Please **note the orientation** of **L-shaped** profiles. Insert lateral dividers into slots in the basement profile.



4. **Insert lateral dividers into slots in the basement profile.**
5. **Make sure** the dividers have prescribed distance between each other. Distances are indicated by the number of empty slots of the basement profile and can be **customised if needed**.



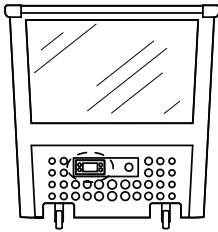
6. **Secure** the dividers using **clips**. Apply them all the way down at the point of the intersection of lateral and transversal dividers. Check that clips are **securely positioned**.



3.4. DIGITAL CONTROLLER

HINT!

The **digital temperature controller** is located in the lower part of the appliance, close to the power cable.





Select the desired target temperature by pressing



Turn lights ON/OFF by pressing



Press and hold  for **3 seconds** to switch ON or turn OFF the appliance.

Start defrosting by pressing and holding  for **3 seconds**.

Thawing is fully automatic. It is recommended to **defrost and clean** the appliance **every 3 months** (see chapter 4. Cleaning and Maintenance).

3.5. FILLING

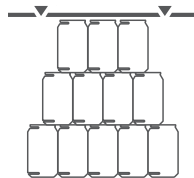
To achieve **optimal cooling**, it is advised to **fill up the appliance when it is less frequently used**, since the frequent opening of the appliance hinders cooling of its contents.

1. Check the **maximum load**.
2. **Do not overload** the device with products. Inside you will see line indicators that show the maximum level.
3. **Be careful not to block air circulation.**

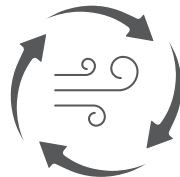
1



2



3



IMPORTANT!

Always **mind** the **maximum load** (see chapter 6. Technical Specifications).

3.6. ENERGY SAVING TIPS

HINT!

Do not place the appliance in direct sunlight, HVAC outlets or near heat-producing appliances (like ovens, boilers and heaters).

The appliance reaches its **top efficiency** when it works **24/7**, do not switch it off during the night.

Always close the lid.

Level the appliance, so the **lid closes tightly**. The appliance will run with higher energy efficiency.

Keep your appliance **clean and well maintained**: dust on the condenser or any unsolved problem can cause increased energy consumption.

Fill the appliance **according to the prescribed instructions** to allow energy-efficient operation.

Wipe goods dry before placing them in the appliance. This cuts down on moisture build-up inside the appliance.

Turn off the interior lighting of the appliance for the night.

Maintain and clean the appliance in a proper way. If the condenser coil is not cleaned **at least 4 times per year**, the efficiency of the appliance will **decrease significantly**.

IMPORTANT!

Once the appliance is switched off, or in case the power is cut off, **wait for at least 5 minutes before plugging in again** to avoid damaging the compressor or cooling system of the appliance.

WARNING!

Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the current user manual.

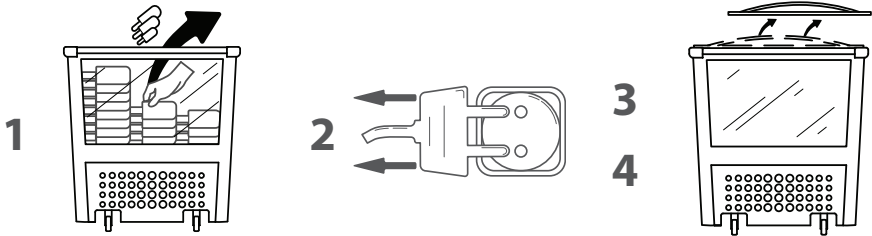
4. CLEANING AND MAINTENANCE

IMPORTANT!

Lack of maintenance will cause the appliance to break down.

4.1. PREPARATION

1. **Remove** or **relocate** appliance's contents.
2. Disconnect the appliance **from the mains**.
3. **Remove lids to allow** free air circulation.
4. **Let** the appliance **defrost for 12 hours**.

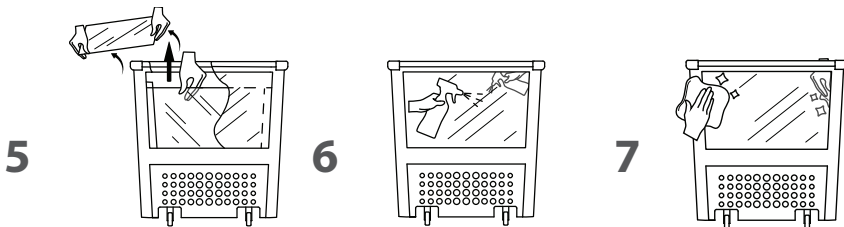


4.2. CLEAN INSIDE/OUTSIDE

IMPORTANT!

Do not clean the appliance with high-pressure or steam cleaners.

5. **Remove** inner glass to reach all surfaces.
6. **Clean** the inside and outside of the appliance with water and **non-aggressive** detergent.
7. **Dry** previously cleaned surfaces with a soft, clean and dry cloth.



IMPORTANT!

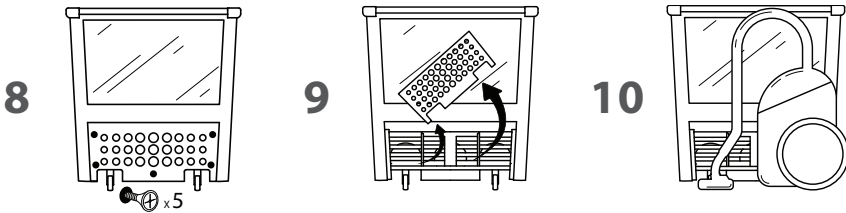
Wear safety gloves to avoid the danger of injury during cleaning.

4.3. CLEAN CONDENSER

IMPORTANT!

Only the ventilation grating to the condenser may be opened.
Only a trained specialist may open other covers of the appliance.

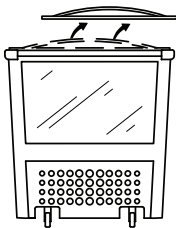
8. The front grill is mounted to the frame with **five screws located close to its edges**.
9. **Remove the ventilation grating** by pulling it out to reach the condenser.
10. **The condenser must be cleaned at least 4 times a year** with a brush or vacuum cleaner. Make sure that fins are not damaged or bent.



4.4. RE-INSTALL

1. Install **ventilation grating, inner glass and lids** back.
2. **Connect the appliance to the main circuit**.
3. **Switch on** the appliance.
4. Put **contents back in** after 1 hour.

4.5. TAKING THE APPLIANCE OUT OF SERVICE



Empty the appliance's **contents** and **pull out the power plug**.

Make sure that the appliance is **thoroughly cleaned and dried**. Thus mould formation and corrosion are prevented.

The appliance out of use may be **dangerous for children**, therefore remove its lid or position the appliance in such manner that **no person can get locked up**.

IMPORTANT!

Secure loose parts of the appliance before moving it to the storage.

5. TROUBLESHOOTING

Problem	Possible causes	Remedy
The appliance does not operate	The appliance is not switched ON.	Switch ON the appliance
	The power plug is not plugged in correctly	Reconnect the appliance to the power supply in a correct way
	Power relay tripped	Wait for at least 5 minutes then restart the appliance
	The power cable/plug is damaged	Contact the seller or your local service provider
	The airflow is restricted	Check the distance between the appliance and its surroundings / Nothing blocks the airflow inlets/outlets / Condenser is not dirty
	The fuse is blown/the circuit breaker tripped	Replace the fuse/reset the circuit breaker
Water condensation on surfaces	The electronic board may be defective	Contact the seller or your local service provider
	Too high ambient temperature and/or relative humidity %	Install the appliance in an adapted environment
Appliance gets too cold / Ice formation on inner surfaces	Too low ambient temperature	Install the appliance in an adapted environment
	The temperature regulation may be incorrect	Contact the seller or your local service provider
LED lights do not operate	The appliance is not switched ON	Switch ON the appliance
	Lights are turned OFF	Switch ON lights using the digital controller
	LED lights are burned out	Contact the seller or your local service provider

Problem	Possible causes	Remedy
Unpleasant smell	Re-evaporation tray is dirty	Contact the seller or your local service provider
Appliance's performance level of cooling is not enough	Too high ambient temperature and/or relative humidity %	Install the appliance in an adapted environment
	The airflow is restricted	Check the distance between the appliance and its surroundings / Nothing blocks the airflow inlets/outlets / Condenser is not dirty
	The lid is not closed correctly	Close the lid correctly
	The lid gasket does not seal properly	Clean the gasket from dirt
	Wrong temperature setting	Check temperature settings using electronic display
Disturbing noise / Disturbing vibration	The gurgling sound is produced by the flow of refrigerant	Such sound is normal
	Popping and cracking sounds are produced by the contraction and expansion of refrigerant	Such sounds are normal
	The surface under the appliance is not flat enough	Position the appliance steadily on a flat surface
	The appliance is not levelled correctly	Level the appliance to ensure that its position is steady

Problem	Possible causes	Remedy
The digital controller does not operate	The appliance is turned OFF	Switch ON the appliance
	The electronic board may be defective	Contact the seller or your local service provider
The lid does not close properly	The lid gasket does not seal properly	Clean the gasket from dirt.
	The lid gasket is flattened since it was squeezed between the appliance body and the lid	Unflatten the gasket by gently pulling it off
	The dividers are not properly positioned	Make sure dividers are positioned in a proper way
	The appliance is not levelled correctly	Level the appliance to ensure that it stands upright
Excessive ice formation in the evaporator area	Too high ambient temperature and/or relative humidity %	Install the appliance in an adapted environment
	The lid is not closed correctly	Close the lid correctly
	The lid gasket does not seal properly	Clean the gasket from dirt
	The heating element may be defective	Contact the seller or your local service provider

In case the malfunction is not caused by any of the above-mentioned factors or persists over a long period of time or in order to order spare parts*, please contact the seller, your local service partner or get in touch with our after-sales service:

+358 (0)29 7020 0150 or via e-mail: **service@sisucoolers.com**

*The minimum period during which spare parts, necessary for the repair of the appliance is 8 years after placing the last unit of the model on the market

6. TECHNICAL SPECIFICATIONS

Type	LUMIO® 90 F	LUMIO® 145 F	LUMIO® 185 F
Net Weight	89 kg	170 kg	250 kg
Gross Volume	200 l	470 l	620 l
Net Volume	87 l	195 l	270 l
Max Load per Side	24 kg	70 kg	70 kg
Width (external)	625 mm	1456 mm	1873 mm
Depth (external)	900 mm	895 mm	895 mm
Height (external)	930 mm	927 mm	935 mm
Power Input	250 W	920 W	920 W
Defrosting	Automatic	Automatic	Automatic
Defrosting Input	490 W	1800 W	1800 W
Avg. Consumption	5.5 kWh/24h	14.4 kWh/24h	18.3 kWh/24h
Classification*	3L1	3L1	3L1
Temperature range	-25°C ... -18°C	-25°C ... -18°C	-25°C ... -18°C
Factory Setting	-21°C	-21°C	-21°C
Energy Class	D	E	E
Compressor	Embraco	Embraco	Embraco
Refrigerant	R290	R290	R290
Temperature Control	Digital	Digital	Digital
Evaporator	Finned Coil	Finned Coil	Finned Coil
Condenser Material	Steel	Aluminium	Aluminium
Condenser Type	Bent Wire	Maint. Free	Maint. Free
Lighting	LED	LED	LED
Cable Length	3 m	5 m	5 m
Service Frequency	36 months	36 months	36 months

*You can find the detailed explanation of product classification according to applicable standard using the link: www.astecoolers.com/products



7. ENVIRONMENTAL POLICY & RECYCLING

Environmental awareness is key throughout the complete life cycle of our products: from designing to producing it to finally recycling it.

We keep a close eye on the economical and effective use of new environmentally friendly materials in our products and production. Our target is to minimise the use of non-renewable natural resources.

We are convinced that sustainable production is the only correct way of working with respect for our customers, consumers and our planet today and in the future.

We strongly advise you to visit **www.astecoolers.com/products** to check the optimal storing temperatures for food and beverages. Incorrect temperature setting may result in spoilage and food waste.

8. DISPOSING OF THE APPLIANCE

WARNING!

Thermal insulation material is EPP.

The appliance contains some reusable materials and should be disposed of properly — not simply with unsorted household refuse. Appliances which are no longer needed must be disposed of in a professional and appropriate way, in accordance with the current local regulations and laws.

Please check your obligations in accordance with the national WEEE* provisions and the local WEEE disposal partner. Ensure that the piping is not damaged in the process.

Both insulating material and the coolant of the appliance bought by you are environment-friendly materials, which do not damage the ozone layer around the globe in any form.

*Waste Electrical and Electronic Equipment Directive

The warranty terminates upon:**

- outside & wrong usage
- not following the instructions
- negligence of maintenance

**The minimum duration of the warranty is 12 months. For more information, please contact the seller, your local service partner or get in touch with our after-sales service:

+358 (0)29 7020 0150 or via e-mail: **service@sisucoolers.com**

9. DETAILED PRODUCT INFORMATION

Detailed product information is available from European product database (EPREL).

1. **Use the QR code** on the rating plate to find the product information from EPREL.
2. You can also **access the EPREL** using the link:
<https://eprel.ec.europa.eu/>
3. You will be asked to **enter the model ID**. You can find the model ID on the rating plate.

HINT!

You can find product specifications, hints, recommendations, product cards and other helpful information from **www.astecoolers.com**



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