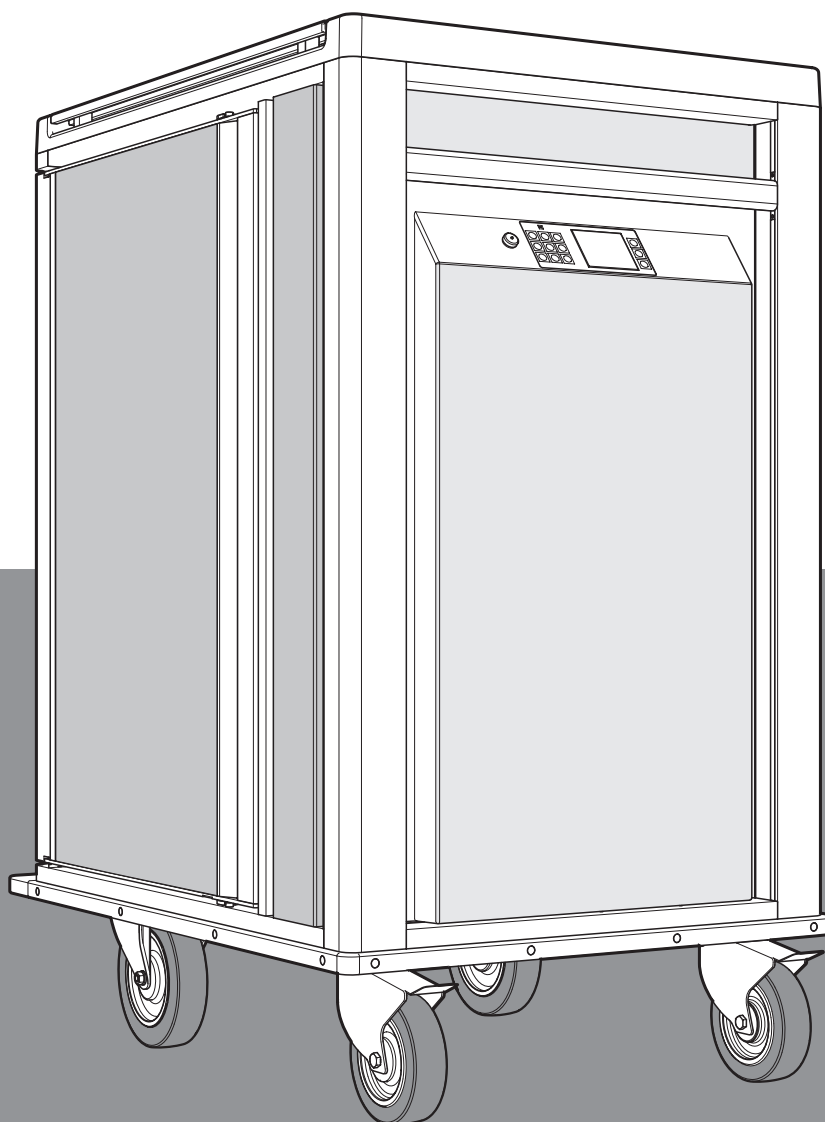


UNITRAY



EN

USE AND MAINTENANCE MANUAL
original instructions

INFORMATION ON SAFE EQUIPMENT USE

This chapter summarises the information contained in the use and maintenance manual for safe equipment use. Receiving this manual does not exempt the users from carefully reading all the instructions provided before equipment installation and use, especially the chapters concerning safety, installation and maintenance.

The manufacturer cannot be held liable if incorrect equipment installation and use cause injuries and damages.

The manual should be stored away from humidity and heat, in a known and easily accessible place so that it is always available when necessary.

SYMBOLS

To highlight certain parts of the text of significant importance or to indicate some important specifications, some symbols have been adopted in the use and maintenance manual whose meanings are described below.



HAZARD - WARNING

Indicates situations of severe hazard which, if neglected, could put personal health and safety at serious risk.



CAUTION - WARNING

Indicates that adequate procedures must be adopted to not put personal health and safety at risk or cause economic damages.



IMPORTANT

Indicates especially important technical information not to be neglected.



Carefully read this manual before using the device.

GENERAL WARNINGS



WARNING: before operating the equipment, carefully read the instructions in this Manual and those affixed directly on the equipment, following the instructions, especially those concerning safety.

- Do not sit, climb or transport people or things on the equipment.
- Do not leave the trolley on sloping bottoms.
- Avoid wearing clothes with parts that may become hooked on parts of the equipment.
- Avoid wearing ties or other loose clothing;
- Avoid heavy rings or bracelets that could catch hands in equipment parts.
- Equipment use with fixed and/or mobile parts removed is strictly prohibited.
- Inhibiting safety devices installed on the equipment or bypassing any device to exceed foreseen performance is strictly prohibited.
- Do not alter equipment parts for any reason.
- Do not leave flammable objects or material near the equipment.
- The equipment should not be used by children, individuals with physical/sensorial or mental disabilities or without proper training and experience.
- Make sure that children do not play with the equipment.
- Do not keep explosive substances such as spray cans with flammable propellant inside the equipment.
- Keep air vents on the equipment case free of obstructions.
- Do not use mechanical devices or other means to accelerate the defrosting process.
- Do not use electrical equipment inside equipment compartments unless they are recommended by the manufacturer.
- Mobile elements of the equipment should always be used according to the manufacturer's instructions, as indicated in this Manual, which should always be available at the workplace.
- All safety devices should be adequately protected and not altered or removed.
- In the event of fault, immediately contact the manufacturer's Technical Support Department.
- Do not use the equipment for purposes other than those intended by the manufacturer, for uses different to or not mentioned in the use and maintenance manual.
- Do not use the equipment in explosive or aggressive atmospheres or ones with a high concentration of dust or oily substances in suspension in the air.
- Do not use the equipment in atmospheres with fire risks.
- Do not use the equipment with safety devices bypassed or disabled;
- Do not use the equipment with electric bridges and/or mechanical means that cut out services/parts of the machine itself.
- If the power cord is damaged, it must be replaced by the manufacturer, its customer service centre or qualified personnel to avoid hazards.
- If the power cord is damaged, it must be replaced by the manufacturer, its customer service centre or qualified technician to avoid hazards.
- Do not put the product in motion with the folding surface open to avoid crushing the operator.
- Do not allow unsupervised children to perform cleaning and maintenance operations to be carried out by the final user.
- Refer to the maintenance chapter for cleaning and routine maintenance operations.

INFORMATION ON SAFE EQUIPMENT USE

■ INTENDED USE - FORESEEN USE - IMPROPER USE

The trolley is designed to transport and distribute pre-packaged food at a controlled temperature.

It is intended to maintain hot and cold food at certain temperatures and regenerate cold stored food in environments such as hospitals, clinics, retirement homes, etc.

The equipment is considered for indoor use only.

In “cooling” mode, continuous use may not exceed 24 hours.

In “heat cycle” mode, continuous use may not exceed 2 hours.

Failure to observe the recommendations for equipment use, maintenance and cleaning and use that creates poor hygienic conditions are considered improper equipment use.

Product use other than that specified by the manufacturer that could cause equipment damages and hazardous situations for the operator and/or individuals near the equipment is considered incorrect or improper use.



IMPORTANT: The manufacturer shall not be responsible for any damages to persons and/or objects caused by improper use of the trolley.

■ PRODUCT INFORMATION

- **Identification data and equipment plate** (Read the relative paragraph in this manual)
- **Identification data of manufacturer** (Read the relative paragraph in this manual).
- **Maximum equipment load** (Read the “Technical Data” paragraph in this manual)
- **Maximum empty equipment load** (Read the “Technical Data” paragraph in this manual)
- **Maximum load for each shelf of the space inside the carriage** (Read the “Technical Data” paragraph of this manual).

■ SAFETY

Careful equipment use limits accident probability to a minimum; however, the following residual risks found during equipment use that could not be eliminated should be taken into account:

- **Product leak risk:** make sure all food containers are suited to avoid loss and/or leaks during movement.
- **Product contamination risk:** ONLY use perfectly clean containers, utensils or accessories suited to come into contact with food to avoid toxicity and undesirable flavours, odours and colours.
- **Slipping risk:** when cleaning, make sure the surrounding floor is free of cleaning residue (liquid, grease, etc.) to avoid slipping hazards.
- **Lower limb contusion risks:** should third parties other than the operator be present, immediately stop movement and keep people away to avoid possible collision with the equipment.
- **Finger crushing risk:** be careful when closing doors and using the bag holder or folding shelf if installed.
- **Crushing risk to feet:** pay attention while handling the equipment. Use certified safety footwear to avoid crushing.

INFORMATION ON SAFE EQUIPMENT USE

- **Risk of cut / perforation:** pay attention and use the appropriate personal protective equipment while using the threading sensor.
- **Risk of corrosion/damages to eyes and skin:** Pay attention to liquid leakage in the event of breakage of the batteries. Avoid contact.
- **Risk of impact / crushing:** pay attention while assembling or disassembling heavy components of the equipment.
- **Risk of abrasion/cut:** Wear specific protective gloves and do not work with bare hands, when cleaning the tray support grates or fan protections, during all installation, maintenance and disposal phases.
- **Burn risk:** avoid accidental contact with internal equipment parts or utensils and food at the end of the hot cycle. At the end of the heat cycle, pay attention to the escaping hot steam while opening the hot compartment door.
- **Shock risk:** do not use the equipment in poor maintenance conditions, with the power cord damaged or with non-compliant electrical connections.
- **Additional risks:** using the equipment near other equipment or machines leads to additional risks. The operator must take such risks into account to prevent accidents.

If faults are found, these must be eliminated before resuming equipment operations and the expert who inspects the equipment must certify the repairs, consenting equipment use.

HANDLING AND LIFTING

- Handle and install the equipment as indicated on the packaging and instructions for use provided by the manufacturer.
- Only installers authorised by the manufacturer may handle, install, connect and adjust the equipment.
- Handling and lifting operations must be carried out by trained and qualified technicians, using proper means in order to avoid any risks for people safety and any damages to the equipment.
- Before handling and lifting the equipment, check the load barycentre; when moving the equipment, make always sure its weight is properly balanced in order to prevent any unexpected movements or falls.
- Always use vehicles able to support the equipment weight and dimensions ("TECHNICAL SPECIFICATIONS" paragraph in the use and maintenance manual), to avoid damaging it or people or surrounding objects.
- The customer remains responsible at all times for the equipment loading and unloading phases.
- During the equipment unloading from the means of transport and until it arrives at destination, it must remain in its protective package and fixed on the pallet.
- Handling and lifting with lorry equipped with tail lift:
Before handling the load, make sure there are no people in the tail lift surrounding area. Always position the trolley at the centre of the tail lift; make sure the parking brakes of the wheels are enabled.
Position the orange cones to delimit the danger zone.
- The manufacturer is not liable for damages to people or property due to lifting system use other than those described.

INFORMATION ON SAFE EQUIPMENT USE

- In order to guarantee maximum equipment drive safety, the following are PROHIBITED:
 - Tampering with any equipment part;
 - Using running yet not fully efficient equipment.
 - Modifying the equipment to change its original intended use without the Manufacturer's express authorisation.
 - Using the equipment in environmental conditions other than those described in the use and maintenance manual.

PACKAGING

- Read the section "Handling and lifting" to handle the equipment properly.

UNPACKING

- Read the section "Handling and lifting" to handle the equipment properly.
- Use the supplied appropriate means and/or methods to unpack the equipment, in order to avoid any hazards to human health.
- Two people, suitable equipped with personal protection equipment, may be required during unpacking.
- The purchaser is liable for correct packaging material disposal according to current waste regulations.

INSTALLATION PREPARATION

- An authorised installer, who must check that the power line meets current pertinent laws, regulations and specifications in effect in the country of use, should install the equipment.
- Before installing the equipment, check that the selected zone is suitable and has the necessary authorisations to run the equipment, is sufficiently ventilated and lit, stable and has sufficient surrounding space to easily perform movements, cleaning and maintenance operations.
- Check that the support surface is stable, levelled and that its surface is easy to clean to avoid the risk of dirt accumulation and contamination of food products.
- The customer must make sure that the installation environment of the equipment complies with this manual prescriptions.

ELECTRICAL SYSTEM PREPARATIONS

- Connections to the electrical system that powers and combines synchrony with other machines should be performed by specialised and qualified personnel according to the wiring diagram and provisions set by current law and/or technical standards regarding workplace safety and electrical systems.
- To achieve an adequate level of safety, the electrical system connected to the equipment must include a grounding system, fully installed by the user, according to the provisions in the user's country and anything else required for correct professional installation according to current Laws and/or technical regulations on workplace safety and electrical systems.

INFORMATION ON SAFE EQUIPMENT USE

- The mains must be dimensioned according to the requirements indicated on the equipment identification plate and according to the number of simultaneously connected trolleys.
- The equipment electrical socket must be easily accessible. Additionally, install a device upstream from this socket that ensures mains cut-off, with an opening distance between contacts that permits full cut-off in over-voltage category III conditions (3 mm).
- The equipotential grounding node connection must be available.

POSITIONING

- To permit correct operations, the equipment must always be positioned in spaces that meet the environmental conditions described in the Use and Maintenance Manual.


ELECTRICAL CONNECTION

Before connecting the equipment to the mains check that:

- Electrical sockets are efficient and fully integral, not wet and that each phase is included.
- The power supply line is protected from lightning and voltage surges above the tolerances normally stated by the electricity provider.
- All plugs are fitted in a safe, easy to reach place and protected against accidental impact.
- The equipment to be connected to the socket has its castor wheel brakes on (if available).
- The power cable and connection plug are secured at both ends, dry and in perfect condition, i.e. the insulating coating must not be worn, with no loose wires, and firmly fastened in place by the cable gland both on the plug end and the structure end.
- The ignition key on any optional towing device is removed from the control panel in the off position.
- Personnel authorised (installer) to perform electrical connections must ensure perfect electrical system grounding efficiency and check that the mains and frequency match the data indicated on the identification plate.
- Even if the equipment is complete with all safety devices, they may be integrated during the installation and connections phase, if necessary with other devices to meet current pertinent laws.
- If applicable, check that the main switch is released.



WARNING: always use an “Out of Service” sign when repairing a socket.

WARNING: safety regulations require you connect the equipotential contact, when the equipment is stopped and connected to the mains. (the equipotential grounding contact position is identified on the equipment by symbol )

- To correctly connect the equipotential contact, see the INSTALLATION chapter in the use and maintenance manual.




IMPORTANT: before running the equipment, inspect it to identify any faults. In this phase, it is important to check that all safety and hygiene conditions are strictly met. For inspection instructions, see the INSTALLATION chapter in the use and maintenance manual.

USE

- Only use as foreseen by the manufacturer in the use and maintenance manual and do not tamper with any device to achieve performances other than those foreseen.
- The equipment is considered for indoor use only.
- Observe the maximum capacities indicated in the “Technical Specifications” paragraph in the manual.
- Before use, make sure safety devices are perfectly installed and efficient. Users, in addition to meeting these requirements, must apply all the safety regulations and carefully read the control and commissioning descriptions.
- Handle the equipment using the special push bar.
- The trolley handling is allowed only when the foldaway shelf is closed.
- Always hook the doors to the stops on the back of the equipment when loading and unloading trays.
- Before handling the equipment, make sure the doors are securely shut.
- Always use the castor wheel parking break (if installed) if the equipment is not moving.
- Move the equipment making sure there is sufficient space for manoeuvres, that the path floor is suitable without irregularities or excessive offsets.
- Do not move the equipment on frontal gradients in the drive direction over 8% and lateral to the drive direction over 5%.
(Maximum 15% frontal gradients in the drive direction are admitted with motorised trolleys).
- To avoid burns caused by steam, do not suddenly open the doors at the end of the heat cycle. Gradually open doors to let steam escape upwards.
- To avoid burn risks, load or unload trays with the help of specific protection devices (oven mitts, pot holders. etc.).
- The pointed external probe shape exposes the users to injury risks. Improper and unauthorised use of this accessory is strictly prohibited.
- Be careful when opening/closing any folding surfaces or bag holders to avoid crushing hands.
- Equipment noise emissions are under 70dB(A) and do not generate hazards for operators; for further information, see the “Technical Specifications” paragraph in the use and maintenance manual.
- When handling the equipment using a lorry equipped with tail lift, please comply to all the indications specified in the section “Handling and lifting”.
- Take the following precautions when using the tow device:
 - Carefully read the use and maintenance manual chapter dedicated to tow device use.
 - Make sure the path is exclusively dedicating to equipment transit without damaging people or objects along the path.
 - Hook and unhook trolleys on horizontal surfaces and not on slanted floors.
 - Do not connect more than 4 TROLLEYS SIMULTANEOUSLY.
 - If towing with a motorised version trolley, the maximum number of trolleys that can be hooked together simultaneously, including the tow trolley, is 2.

MOTORISED EQUIPMENT USE

This paragraph is only applicable to motorised equipment.

- If a motorised drive device is installed on the equipment, carefully read the specific chapter in the use and maintenance manual.
- Over Drive speed is only intended for significantly long straight travel, with hallways over three metres wide specifically dedicated to service equipment transit where unauthorised pedestrian, visitor or patient transit is prohibited.
- Only use forward drive for straight travel with adequate space for manoeuvres that provide the operator with a sufficient view of the road to be travelled.
- Poor vision during forward drive further increases operator exposure to the risk of colliding with people or objects along the path.
- Only use forward drive for straight travel with adequate space for manoeuvres that provide the operator with a sufficient view of the road to be travelled.
- Reverse drive guarantees a better view but exposes the operator to accident risks, specifically foot crushing or, worse, lower limb fractures in the event of collision with the lower equipment bumpers.
Move backwards only in case of manoeuvre needs and go very slowly, continuously checking there is adequate space for manoeuvring.
- Before connecting the equipment to the electrical socket for normal heat cycles or battery charge, the trolley operator must turn the key to off () and remove it to prevent the trolley from accidentally moving when plugged in.

CLEANING

- Do not use corrosive or flammable cleaning products or products that contain substances harmful to human health.
- Only clean after have replaced the power plug in the correct position with the lock nut screwed onto the support to prevent it from getting wet when cleaning;
- If the purchased product does not include a power plug with lock nut and relevant support, avoid getting the plug wet at all costs.
- Before cleaning the equipment, make sure the main switch is released (if applicable) unplug the power cord from the electrical socket and hook it to the specific hook, if installed, making sure the lock nut is tight.
- Make sure the various socket covers are closed before cleaning the equipment. Make sure areas to be cleaned are fully cooled.
- Only clean with food-safe detergents. Do not use corrosive or flammable cleaning products or products that contain substances harmful to human health.
- Do not dampen parts in the technical compartment to avoid damaging components, especially electric and electronic components.
- Rubber gloves, face mask and protective goggles must be worn during cleaning as foreseen by current safety regulations.
- Always use the utmost caution when handling detergents.
- Only spray small amounts of detergent.
- Do not spray detergent on hot surfaces.
- Do not spray detergent on people or animals.

INFORMATION ON SAFE EQUIPMENT USE

- Follow the instructions on the detergent packaging and technical sheet.
- Rinse surfaces with drinking water and dry them.
- Can be cleaned with water as long as no jets are used.

MAINTENANCE

- Before performing any work, carefully read the equipment manual, especially the chapter dedicated to maintenance.



WARNING: The equipment must be disconnected from the power mains during cleaning, maintenance and part replacement.

- If the power cord is damaged, it must be replaced by the manufacturer, its customer service centre or qualified technician to avoid hazards.
- Every day, make sure safety devices are perfectly installed and efficient.
- Make all the checks and inspections at the set intervals and according to the methods described in the use and maintenance manual.
- Maintenance and repairs must always be carried out in well-lit environments.
- Before performing any maintenance, turn on all the safety devices and adequately inform the surrounding users and personnel.
- Maintain the equipment in maximum efficiency conditions, performing the scheduled maintenance set by the manufacturer and indicated in the product manual.
- Always use the specific personal protection equipment such as gloves, non-slip shoes and suitable clothing foreseen by current directives and regulations during maintenance.
- If a motorised drive device is installed on the equipment, make sure the wheels are lifted off the ground during maintenance. See the chapter on lifting and handling for the information required to work in safety conditions.
- In the event the power cord is disconnected from the power supply socket, the equipment must be in a position where the maintenance technician can constantly check that the cable remains disconnected.
- All equipment maintenance operations, repairs and cleaning must be carried out in conditions that comply with all applicable accident prevention and safety regulations. In order to satisfy this requirement, it is absolutely forbidden to perform any interventions until the equipment has been put into maintenance mode.
Read manual chapter 7 dedicated to maintenance for information necessary to put the equipment in maintenance conditions.
- When performing maintenance and repairs, it is best to apply the following recommendations:
 - Before starting work, place a “MAINTENANCE” sign in on the equipment in a highly visible location.
 - Do not use solvents or flammable materials.
 - Be careful not to pollute the environment with lubricants or coolants.
 - To access higher parts of the equipment, use means appropriate for the work to be performed.
 - Do not climb on the equipment since it was not designed to support people.
 - At the end of work, restore and correctly secure all removed or opened guards and protections.

DISMANTLING

- Do not discard in the environment: pollutant material. Manage waste according to pertinent current law.
- Illicit Electrical and Electronic Equipment Waste disposal is punishable with a fine regulated by current laws in the country of use. Electrical and Electronic Waste can contain hazardous substances with potentially toxic effects on the environment and health. We recommend correct waste disposal.

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1 PREFACE

1.1. SCOPE OF THE USE AND MAINTENANCE INSTRUCTIONS MANUAL

This instructions manual is an integral part of the equipment whose scope is to provide all the necessary information for:

- Correct operator awareness of safety problems;
- Safe packaged and unpacked equipment handling;
- Correct equipment installation;
- In-depth knowledge on its operations and limits;
- Its correct use in safe conditions;
- Correct and safe maintenance work;
- Safe equipment disposal according to workers safety and environmental protection laws.



System managers, where this equipment is installed, must, according to current regulations, carefully read this instructions manual and have it read by users and maintenance technicians.

Time dedicated to this purpose will be highly compensated for by correct operations and safe use conditions.

This document assumes that the systems, where the equipment is installed, meet current workplace safety and hygiene laws.

The instructions, drawings and documentation contained in this manual are of a confidential technical nature and the strict property of manufacturer, and may not be reproduced in any form, neither as a whole or in part.

The purchaser and/or use must ensure that, in the event this document is changed by the manufacturer, only updated Manual versions are actually found where the equipment is used.

1.2. HOW TO READ THE INSTRUCTIONS MANUAL

The manual is divided into independent chapters, dedicated to specific workers (INSTALLER, SYSTEM MANAGER, USER, SYSTEM SAFETY MANAGER, QUALIFIED TECHNICIAN OR QUALIFIED AND AUTHORISED TECHNICIAN) with the skills required to work in safe conditions.

The chapter sequence follows the chronological equipment working life logic.

To facilitate easy text comprehension, terms, abbreviations and pictograms are used and explained in paragraph 1.6.

1.3. STORING THE INSTRUCTIONS MANUAL

The Instructions manual should be stored with care and must accompany the equipment in all sales that may occur during the equipment working life.

Handle the manual with care, clean hands and do not rest it on dirty surfaces.

Parts should not be arbitrarily removed, torn or changed.

The manual should be stored away from humidity and heat, in a known and easily accessible place so that it is always available when necessary.

Upon user request, the manufacture may supply additional copies of the Instructions Manual

1.4. UPDATING THE INSTRUCTIONS MANUAL

The Manufacturer reserves the right to change the design and make improvements without prior notice and without updating the Manual already delivered to the user.

The manufacturer is liable for the descriptions in Italian; since any translations may not be fully verified, in the event of discrepancies, check the Italian version and contact the manufacturer who shall make the changes deemed necessary.

1.5. ADDRESSEES

This manual is intended for: the installer, the user, the system safety manager and the qualified or qualified and authorised technician authorised to carry out the equipment maintenance.

☐ INSTALLER

Technician authorised by the manufacturer and equipment handling, installation, connection and adjustment expert.

☐ USER/OPERATOR

The individual assigned to using and cleaning the equipment.

☐ SYSTEM MANAGER

The individual who adjusts and programs cycle settings.

☐ SYSTEM SAFETY MANAGER

The person in charge to make sure that all the applicable law concerning safety and all prescriptions specified in this manual are respected.

☐ QUALIFIED TECHNICIAN

The individual qualified according to his/her technical knowledge of the equipment and all the related safety procedures; he/she is able to perform routine maintenance and small repairs.

☐ QUALIFIED AND AUTHORISED TECHNICIAN

Highly qualified individual, authorised by the Manufacturer to perform sensitive and extraordinary maintenance and repairs during the warranty period.

☐ EXPOSED PERSON

Any person fully or partially within a hazardous zone (near the equipment and exposed to safety risks);

Addressees qualification

The equipment is designed for professional and non-generalised use for which it should be used by qualified individuals, specifically who:

- Are adults;
- Are physically and psycho-physically suited to perform technically difficult work;
- Are adequately trained on equipment use and maintenance;
- Were deemed suitable by the employer to perform the assigned tasks;
- Are able to understand and interpret the operator manual and safety instructions;
- Know the emergency procedures and how to implement them;
- Have the skills to run the specific type of equipment;
- Are familiar with the specific pertinent regulations;
- Have understood the operating procedures set by the equipment manufacturer.

1.6. TERMS AND DEFINITIONS

Some recurrent terms in this manual are described to provide a more complete view of their meanings.

- **Regeneration or warming:** food heating operation according to law on cold stored meals until the distribution temperature is rapidly reached.
- **Maintenance:** maintaining food temperature according to law.
- **Hot cycle:** heating cycle that includes the use of the oven system to maintain/regenerate food to a temperature over 35°C.
- **Cold cycle:** cooling cycle that includes the use of the refrigerator system to maintain food at a temperature up to 35°C
- **C/S (COOK & SERVE):** meal management system that consists in preparing food and keeping it at the temperature set for consumption until distribution.
- **C/C (COOK & CHILL):** meal management system that consists in preparing food, its cooling and maintenance at a temperature of 4°C until its distribution, where it is regenerated to the temperature suited for consumption and subsequent distribution.
- **C/F (COOK & FREEZE):** meal management system that consists in preparing food, it is cooling and maintenance at a temperature of -18°C until its distribution, where it is regenerated to the temperature suited for consumption and distribution.
- **Jolly cycle:** heating cycle that automatically adjusts its length to the quantity of food in the trolley.
- **Multipower:** optional function, to automatically or manually change heating power.
- **Stand-by:** initial conditions where the equipment is connected to the mains awaiting start. The display is on but the equipment is not running.

To highlight certain parts of the text of significant importance or to indicate some important specifications, some symbols have been adopted whose meanings are described below.



HAZARD - WARNING

Indicates situations of severe hazard which, if neglected, could put personal health and safety at serious risk.



CAUTION - WARNING

Indicates that adequate procedures must be adopted to not put personal health and safety at risk or cause economic damages.



IMPORTANT

Indicates especially important technical information not to be neglected.

The following pictogram stickers are affixed to the equipment according to the purchased version:



Equipotential terminal



Burn risk



Door handle position



RAEE symbol



Danger owing to electric current



Obligation to disconnect from the power supply



Hands and feet crushing hazards



Do not remove safety protections



Left side of the equipment



Right side of the equipment



OFF and speed selection symbols (motorised version)



Main switch ON/OFF symbol

2 GENERAL INFORMATION

2.1. INTENDED USE - FORESEEN USE - IMPROPER USE

☐ INTENDED USE

The equipment is used to transport and distribute pre-packaged food at a controlled temperature, in structures such as hospitals, care homes, nursing homes, recovery communities, etc.

☐ FORESEEN USE

The trolley was designed to transport and distribute food at a controlled temperature. It is intended to maintain hot and cold food at a certain temperature and regenerate cold stored food.

In "regeneration" mode, continuous use may not exceed 24 hours.

In "heat cycle" mode, continuous use may not exceed 2 hours.

The equipment is considered for indoor use only.

☐ IMPROPER USE



IMPORTANT: failure to observe the recommendations for equipment use, maintenance and cleaning and use that creates poor hygienic conditions are considered improper equipment use. Product use other than that specified by the manufacturer that could cause equipment damages and hazardous situations for the operator and/or individuals near the equipment is considered incorrect or improper use.

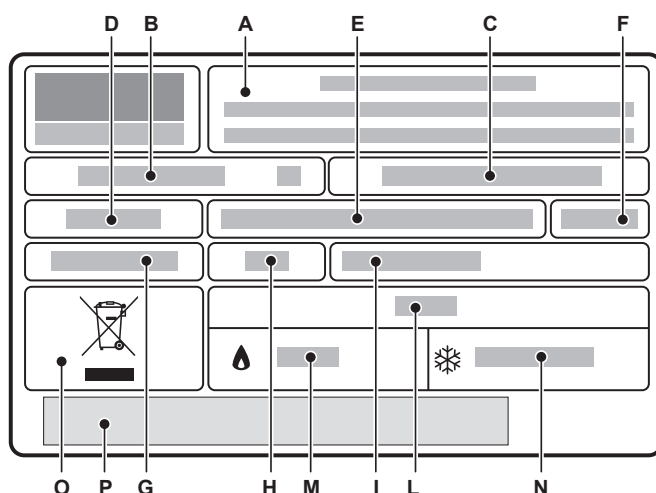


WICHTIG: Der Hersteller haftet nicht für Personen- und/oder Sachschäden, die durch unsachgemäßen Gebrauch des Wagens entstehen.

2.2. EQUIPMENT IDENTIFICATION DATA AND PLATES

Each piece of equipment is identified by a plate with indelible reference data and all instructions required for safe operations. For any communication to the manufacturer or service centre, always mention these references.

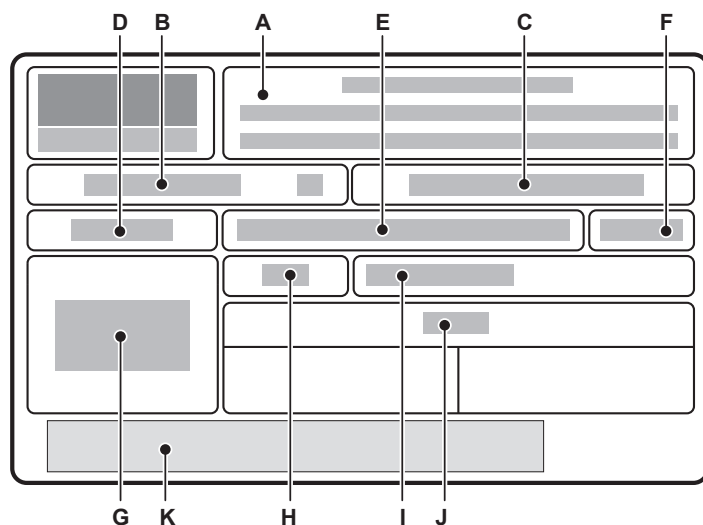
☐ UNITRAY "OTHER COUNTRIES"



- A) Manufacturer's identification
- B) Equipment model (see EQUIPMENT MODEL MEANING)
- C) Equipment code
- D) Serial number - Year of manufacture
- E) Job number (optional)
- F) Customer product code (optional)
- G) Coolant type and quantity
- H) Protection grade
- I) Wiring data
- L) Absorbed power
- M) Oven power
- N) Refrigerator power
- O) RAEE symbol "Electrical and Electronic Equipment Waste"
- P) Identification bar code

2 GENERAL INFORMATION

UNITRAY "NORTH AMERICA - CANADA"



- A)** Manufacturer's identification
- B)** Equipment model (see EQUIPMENT MODEL MEANING)
- C)** Equipment code
- D)** Serial number - Year of manufacture
- E)** Coolant low and high pressure value
- F)** Coolant type and quantity
- G)** Number of current conductors
- H)** Wiring data
- I)** Wiring data
- J)** Electrical power and absorbed current
- K)** Identification bar code



IMPORTANT: the warranty will be null and void and spare parts irreparable due to failed identifications if the plate is removed for any reason.

EQUIPMENT MODEL MEANING

	Dimensions	Compartment functions	Power voltage	Absorbed power
UNITRAY 2	y	z	j	w
	S	SR	A	1
	L	CS	B	2
		CC/CF	C	3
		RCU	D	4
			E	5
				6
				7
				8

Dimensions

S	766x1049x1360 mm
L	766x1049x1597 mm

Compartment functions

SR	Without refrigeration system
CS	A hot compartment and a cold compartment
CC/CF	A mixed compartment (hot-cold) and a cold compartment
RCU	Refrigerated single room

Power voltage

A	380-400V 3N~
B	220-230V 1N~
C	220-230V 3~
D	208V 3~
E	208V 1~

Absorbed power

1	8950-9770W (if j = A or C)
2	6700-7350W (if j = A or B)
3	5920-6470W (if j = A or B)

2 GENERAL INFORMATION

4	4200-4600W (if j = B)
5	3370-3690W (if j = B or C)
6	7000W (if j = D)
7	3300W (if j = E)
8	1150-1275W (if z =RCU)

2.3. MANUFACTURER IDENTIFICATION DATA

☐ MANUFACTURER:

Rational Production S.r.l.

☐ REGISTERED - ADMINISTRATIVE OFFICES:

via L. Galvani 7/H

24061 Albano S. Alessandro (BG) Italy

Tel.: 0039-0354521203

Fax: 0039-0354521983

☐ CONTACTS

info@rationalproduction.com

www.rationalproduction.com

2.4. CUSTOMER SERVICE INFORMATION

UNITRAY is covered by a warranty.

The warranty period is 24 months from delivery date.

The warranty covers all material and manufacturing malfunctions and defects that compromise operations or highlight aesthetic defects which do not conform with normal state-of-the-art standards.

Malfunctions and defects caused by improper handling and external influences are excluded.

The goods are shipped at the Customer's risk, any damage to products caused during transportation or unloading phases are not covered by the warranty unless specific insurance coverage is requested on the order.

No consumable materials and equipment supplied with the product are covered by this warranty.

The batteries delivered with the product are classified as consumable materials and are not covered by the warranty.

The Manufacturer reserves the right, at his own discretion, to make any changes or improvements deemed fit, even after the order has been received.



IMPORTANT: The warranty is automatically null and void following improper use or repairs performed by unqualified technicians or with non-original spare parts.

Damage to the equipment caused by faulty electricity supplies is not covered by the warranty.

Please note that any alterations made by the use without the manufacturer's explicit written authorisation shall null and void the warranty and hold the manufacturer harmless of any liabilities for damages caused by the defective product.

This especially applies when these alterations are made to safety devices, deteriorating their efficiency.

For all these reasons, we recommend our customers always call our Customer Service department.

2.5. CLIENT PROVISIONS

Unless otherwise agreed, the Customer usually:

- Prepares rooms, including any brickwork and/or required raceways;
- Powers the equipment according to the regulations in effect in the country of use. Special attention must be paid to the protection conductor, commonly called "ground" and circuit breaker efficiency protecting the power socket.
The purchaser is also expected to guarantee the efficiency of the above electrical plant, in compliance with safety regulations;
- Consumables or parts normally subject to wear;
- Unloading equipment at delivery and consequent liabilities.

3.1. GENERAL SAFETY WARNINGS



IMPORTANT: before operating the equipment, carefully read the instructions in this Manual and those affixed directly on the equipment, following the instructions, especially those concerning safety-

The manufacturer has strived to design this equipment, as much as possible, to be INTRINSICALLY SAFE.

The manufacturer has focused on the aspects that can cause personal safety and health risks and has constructed the equipment with specifically selected materials to guarantee food hygiene and operating functionality.

All the protection and safety devices deemed necessary were also implemented and, lastly the equipment is accompanied with sufficient information to be safely and correctly used.

The purpose of this information is to alert users so that they pay attention to avoid any operating or food risk. Caution is irreplaceable. Safety is also in the hands of those who interact with the equipment (installers and users).

To inform operators how to avoid hazardous situations that may lead to accidents, the purchaser should appoint a safety manager familiar with:

- all hazards deriving from the use of the system.
- the safety information in this manual
- the operator safety devices.
- rules for operators, maintenance technicians and cleaning personnel, as recommended in this manual.
- safety obligations required under current regulations.
- how to use the equipment.

Even after suitable training, upon first use, simulate some test manoeuvres to identify controls, especially start and stop and their main functions.

Before any operator starts work with the equipment, the safety manager must make sure that they are fully aware of the above points, and that the given provisions are fully applied. A copy of this manual must be made available to the operators, for immediate consultation as and when required.



IMPORTANT: this information must be strictly observed.

The user may suitably supplement the information provided by the manufacturer with additional work instructions, obviously not in contrast with that indicated in this Instructions Manual, to contribute to safe equipment use.

Whoever works with the equipment must pay special attention to the clothing they wear:

- Avoid wearing clothes with parts that may become hooked on parts of the equipment.;
- Avoid wearing ties or other loose clothing;
- Avoid heavy rings or bracelets that could catch hands in equipment parts.

When necessary, additional recommendations will be provided for the user in the manual on prevention measures, personal protection means, how to prevent human error and reasonably foreseeable improper behaviour to be avoided.

The following instructions must be strictly followed:

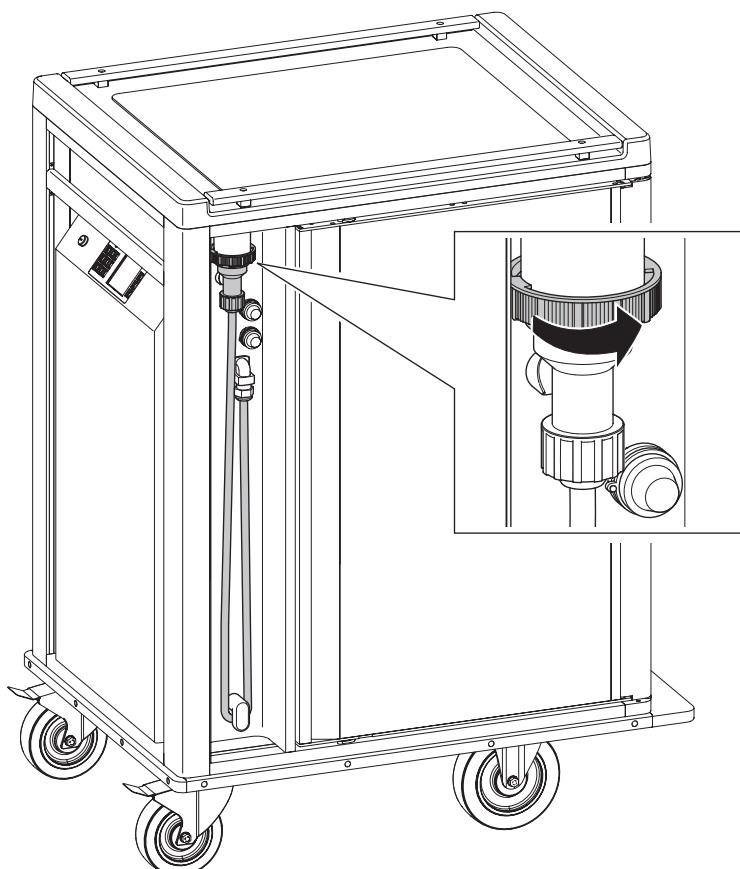
- Equipment use with fixed and/or mobile parts removed is strictly prohibited;
- Inhibiting safety devices installed on the equipment or bypassing any device to exceed foreseen performance is strictly prohibited;

3 SAFETY

- Only clean after have replaced the power plug in the correct position with the lock nut screwed onto the support to prevent it from getting wet when cleaning;



WARNING: if the purchased product does not include a power plug with lock nut and relevant support, avoid getting the plug wet at all costs.



- Do not alter equipment parts for any reason; in the event of malfunctions, due to failure to observe these instructions, the manufacturer cannot be held liable for the consequences. We recommend you request any modifications directly from the manufacturer;
- Clean the equipment when reasonably needed and, in any case, at the end of equipment use;
- Only use food-safe detergents. Do not use corrosive or flammable cleaning products or products that contain substances harmful to human health.
- Do not leave flammable objects or material near the equipment.
- The equipment should not be used by children, individuals with physical/sensorial or mental disabilities or without proper training and experience.
- Make sure that children do not play with the equipment.
- Do not keep explosive substances such as spray cans with flammable propellant inside the equipment.
- If the power cord is damaged, it must be replaced by the manufacturer, its customer service centre or "Qualified technician" to avoid hazards.
- Do not sit, climb or transport people or things on the equipment.
- Do not leave the trolley on sloping bottoms.



IMPORTANT: the manufacturer is not liable for damages caused by the machine to people, animals or property in the event of:

- **equipment use by personnel who were not specifically trained.;**
- **improper equipment use;**
- **defects in electric power supply;**
- **incorrect installation;**
- **negligent maintenance;**
- **unauthorised modifications or interventions;**
- **use of replacement parts that are non-original or not specific to the model;**
- **total or partial failure to observe the instructions;**
- **use which breaks the specific national laws;**
- **natural calamities and exceptional events.**

□ GENERAL INSTRUCTIONS

Mobile elements should always be used according to the manufacturer's instructions, as indicated in this Manual, which should always be available at the workplace.

All safety devices should be adequately protected and not altered or removed.

The user must promptly inform the employer or supervisor of any defects or faults found on the product.

□ CONTROLS AND INSPECTIONS.

Inspections must be carried out by a qualified or a qualified and authorised technician. Inspections must be visual and functional, with the aim of guaranteeing the equipment safety.

They include:

- inspection of all bearing structures, which should not have any cracks, breaks, damages, deformations, rust, wear or alteration from the original features;
- inspection of all mechanical parts;
- inspection of all safety devices installed on the equipment;
- inspection of all pin and screw connections;
- functional equipment inspection;
- equipment status inspection;
- correct electrical system operating and efficiency inspection

The results of these inspections must be reported on a specific sheet.



WARNING: the manufacturer is not liable for accident damages that may occur should worn or defective parts not be promptly replaced.

If faults are found, these must be eliminated before resuming equipment operations and the expert who inspects the equipment must certify the repairs, consenting equipment use.

If hazardous faults are found, the individual who performs the inspection must promptly inform the equipment manufacturer. Put the machine out of order if operating faults are found and perform suitable inspections and/or repairs.

After any maintenance work. make sure no object remains between moving parts or inside the equipment technical compartment.

In order to guarantee maximum equipment drive safety, the following are PROHIBITED:

- Tampering with any equipment part;
- Using running yet not fully efficient equipment;
- Modifying the equipment to change its original intended use without the Manufacturer's express authorisation;

□ SAFETY WARNINGS FOR ELECTRICAL EQUIPMENT

Electrical equipment was designed and constructed according to that set by pertinent regulations in effect. These regulations take operating conditions into account according to the surrounding environment. Necessary conditions for correct electrical equipment operations are listed below.

- Ambient temperature between 5°C and 43°C.
- Relative humidity rates must be between 50% (read at 40°C) and 90% (read at 20°C).
- The installation environment must not generate electromagnetic disturbance or radiation (X-rays, lasers etc.).
- There should not be potentially explosive gas and powder concentrations in the environment and/or fire hazards.
- The products and materials used during production and maintenance must not contain contaminating or corrosive agents (acids, chemical substances, salts etc.) and must not be allowed to penetrate and/or come into contact with the electric components.
- During transport and storage, the ambient temperature must be between -25 °C and 55 °C. If one or more of the listed essential conditions for electrical equipment operations cannot be met, supplementary solutions to be adopted to create more adequate conditions (for example, specific electrical components, air conditioning systems, etc.) must be agreed in the contract phase.

□ SAFETY WARNINGS FOR ENVIRONMENTAL IMPACT

Each organisation must apply procedures to identify and control the impact of its business (products, services, etc) on the environment. Procedures to identify significant impacts on the environment must take the following factors into account:

- Air emissions
- Liquid drains
- Waste Management
- Land contamination
- Use of raw materials and natural resources
- Local problems concerning environmental impact

For this reason, the manufacturer provides some information that may be taken into account by all those who are authorised to interact with the equipment during its working life to prevent environmental impacts.

- All packaging elements must be discarded according to current law in the country of use.
- During use and maintenance, avoid discarding pollutant products in the environment (oil, grease, etc.) and recycle according to the various material compositions and according to current pertinent law.
- When decommissioning the equipment, select all components according to their features and recycle.
- Do not discard pollutant material in the environment. Manage waste according to pertinent current law.

■ 3.2. CONTRAINDICATIONS FOR USE

The equipment must not be used:

- For use other than that intended by the manufacturer, for different use or not mentioned in the manual;
- In explosive or aggressive atmospheres or ones with a high concentration of dust or oily substances in suspension in the air;
- In atmospheres with a fire hazard;
- Exposed to the elements;
- With safety devices bypassed or disabled;
- With electric bridges and/or mechanical means that cut out services/parts of the machine itself..

3.3. HAZARDOUS ZONES

Operator work zones are substantially the entire equipment perimeter including the control panel and doors.

The remaining parts, such as the lower part, upper part and chamber interiors are to be considered just as hazardous as the entire area adjacent to the equipment, especially during repairs and maintenance.

The manoeuvre zone is the parking zone and entire equipment path.

The operator is liable for keeping people and objects out of the manoeuvre zone during equipment use and for avoiding damages to people, property or animals.

Using the equipment near other equipment or machines leads to additional risks.

The operator must take such risks into account to prevent accidents.

3.4. SAFETY DEVICES

Even if the equipment is complete with all safety devices, they may be integrated during the installation and connections phase, if necessary with other devices to meet current pertinent laws.



CAUTION - WARNING: every day, make sure safety devices are perfectly installed and efficient.

3.5. RESIDUAL RISKS

Careful equipment use limits accident probability to a minimum; however, the following residual risks found during equipment use that could not be eliminated should be taken into account:

- **Product leak risk:** make sure all food containers are suited to avoid loss and/or leaks during movement.
- **Product contamination risk:** ONLY use perfectly clean containers, utensils or accessories suited to come into contact with food to avoid toxicity and undesirable flavours, odours and colours.
- **Slipping risk:** when cleaning, make sure the surrounding floor is free of cleaning residue (liquid, grease, etc.) to avoid slipping hazards.
- **Lower limb contusion risks:** should third parties other than the operator be present, immediately stop movement and keep people away to avoid possible collision with the equipment.
- **Finger crushing risk:** be careful when closing doors and using the bag holder or folding shelf if installed.
- **Risk of crushing feet:** pay attention while handling the equipment. Use certified safety footwear to avoid crushing.
- **Risk of impact / crushing:** pay attention while assembling or disassembling heavy components of the equipment.
- **Risk of abrasion/cut:** Wear specific protective gloves and do not work with bare hands, when cleaning the tray support grates or fan protections, during all installation, maintenance and disposal phases.
- **Burn risk:** avoid accidental contact with internal equipment parts or utensils and food at the end of the hot cycle. At the end of the heat cycle, pay attention to the escaping hot steam while opening the hot compartment door.
- **Shock risk:** do not use the equipment in poor maintenance conditions, with the power cord damaged or with non-compliant electrical connections.
- **Risk of cut / perforation:** pay attention and use the appropriate personal protective equipment while using the threading sensor.



IMPORTANT: using the equipment near other equipment or machines leads to additional risks. The operator must take such risks into account to prevent accidents.

4 INSTALLATION

4.1. HANDLING AND INSTALALTION RECOMMENDATIONS

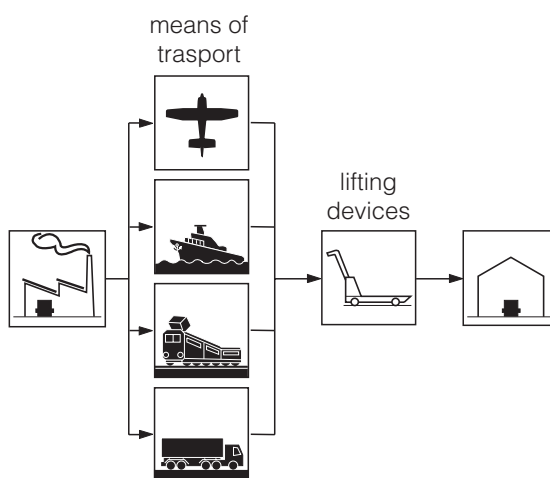
Handle and install the equipment as indicated on the packaging and instructions for use provided by the manufacturer. Only installers authorised by the manufacturer may handle, install, connect and adjust the equipment. Do not hit or drop the equipment during transport, handling and installation to avoid damaging its parts.

4.2. TRANSPORT METHODS

Different transport methods may be used, also according to the destination site. The diagram illustrates the most common solutions.

Anchor the container to the transportation vehicle during transport to avoid sudden movement.

Shipping is at the purchaser's own liability and care, even when carriage free, and the purchaser assumes all liability for any accidents or theft during transit.

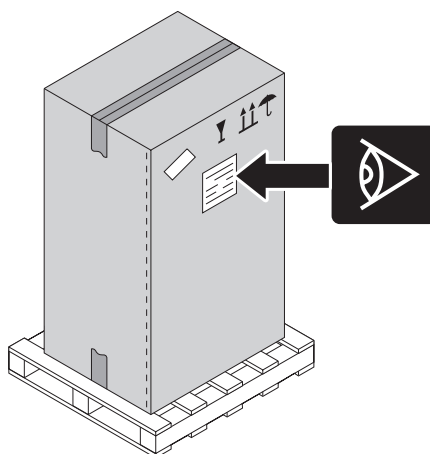


4.3. PACKAGING AND UNPACKING

The equipment is delivered packaged in a specific container and, if necessary, suitably stabilised with shock-proof material to ensure its integrity.

Packaging and general containment materials are also chosen in accordance with the selected shipping method.

To make shipping procedures easier, certain components can be disassembled and suitably packed and protected. All loading and unloading information is marked on the packaging. Packaging materials must be disposed of in accordance with the applicable laws in force.



WARNING: Read the section “Handling and lifting” to handle the equipment properly.

4 INSTALLATION

4.4. EQUIPMENT ACCEPTANCE AND INTEGRITY CHECK

Each shipment is accompanied by a document that includes a list and description of the boxes.

Upon receiving the boxes, check that the packing list actually matches the material received and that packaging is fully in tact.

The Customer's signature on the transport documents certifies that the equipment has been delivered.



IMPORTANT: in the event of damaged or missing parts, immediately inform the carrier of the fault, noting a description of the damages on the shipping documents before signing them.

Do not use the equipment and contact the retailer to decide on the procedure to be adopted.

For this reason, we recommend you check the packaging when unloading and, in the event of suspicion, open the packaging and check the equipment.

4.5. HANDLING AND LIFTING



WARNING: Handling and lifting operations must be carried out by trained and qualified technicians, using proper means in order to avoid any risks for people safety and any damages to the equipment.

Before handling and lifting the equipment, check the load barycentre; when moving the equipment, make always sure its weight is properly balanced in order to prevent any unexpected movements or falls.

Always use vehicles able to support the equipment weight and dimensions ("TECHNICAL SPECIFICATIONS" paragraph in the use and maintenance manual), to avoid damaging it or people or surrounding objects.



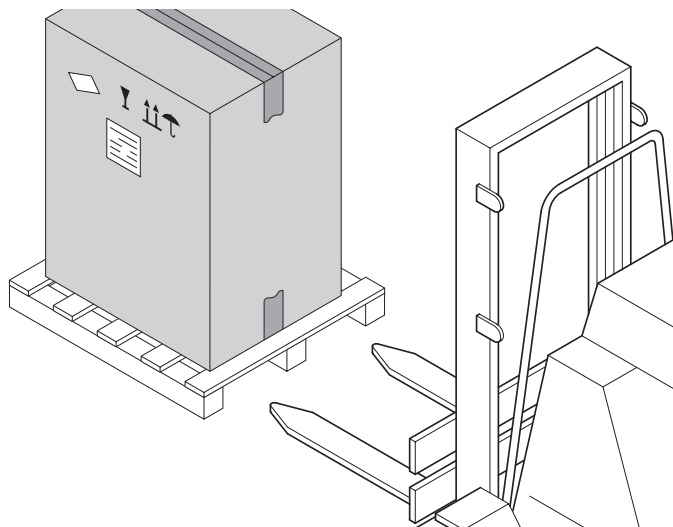
IMPORTANT: the customer remains responsible at all times for the equipment loading and unloading phases

☐ PACKAGED EQUIPMENT HANDLING/LIFTING

The equipment is delivered in its package on a properly arranged pallet.



WARNING: During the equipment unloading from the means of transport and until it arrives at destination, it must remain in its protective package and fixed on the pallet.



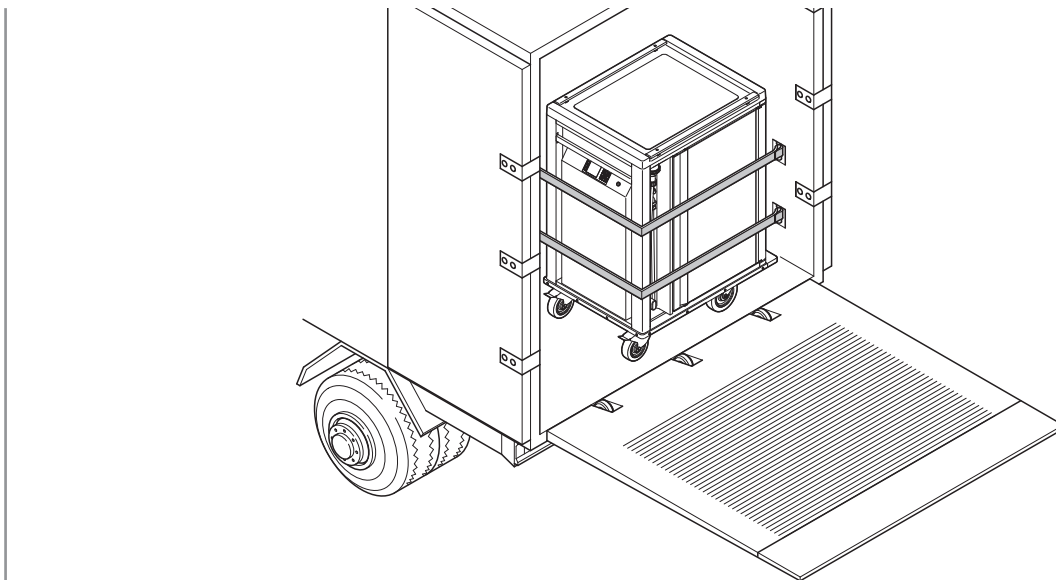
4 INSTALLATION

☐ EQUIPMENT HANDLING/LIFTING USING LORRY EQUIPPED WITH TAIL LIFT

The equipment may be handled/delivered without package using a lorry equipped with tail lift.



CAUTION - WARNING: Before handling the load, make sure there are no people in the tail lift surrounding area. Always position the trolley at the centre of the tail lift; make sure the parking brakes of the wheels are enabled. Position the orange cones to delimit the danger zone.



IMPORTANT: The manufacturer is not liable for damages to people or property due to lifting system use other than those described above.

4.6. UNPACKING



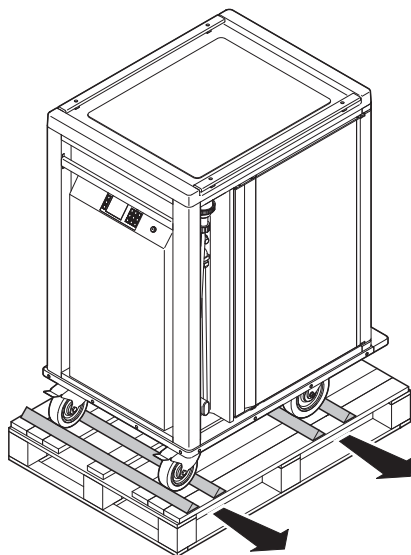
WARNING: Read the section “Handling and lifting” to handle the equipment properly.



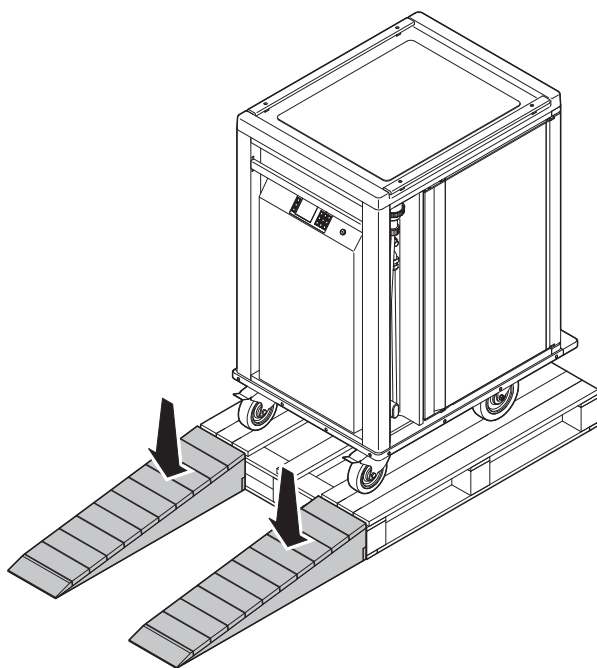
WARNING: Use the supplied appropriate means and/or methods to unpack the equipment, in order to avoid any hazards to human health.

4 INSTALLATION

- Following the instructions in the "Handling and Lifting" paragraph, move the packaged equipment to a level surface and with enough space to unpack it.
- Remove protective casings (straps, boxes, protective packaging sheets, etc.) using suitable tools to avoid damaging the content.
- Remove the wooden stops that block the wheels.

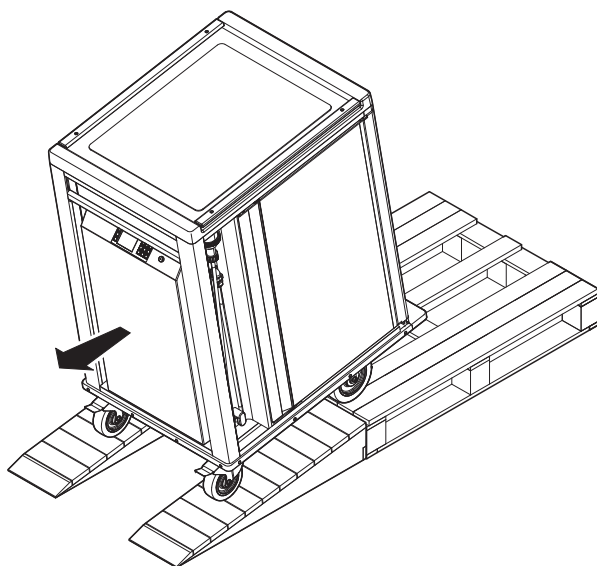


- Place the supplied ramp on the trolley push handle side. Make sure the metallic chute brackets are hooked to the pallet.



4 INSTALLATION

- Release the trolley parking brakes and cautiously complete unloading along the ramp at a controlled speed.



WARNING: Two people, suitable equipped with personal protection equipment, may be required during unpacking.



WARNING: The purchaser is liable for correct packaging material disposal according to current waste regulations.

4.7. STORAGE

Upon receiving the material, the purchaser must prepare an adequate space where packages are deposited to be stored. The storage area, in addition to having a stable support surface with adequate load capacity, must not have fire and/or explosion risks with suitable humidity and temperature and sufficient lighting.

We recommend you identify the storage area in the immediate vicinity of the installation area in order to only make short moves during the equipment installation phase.

To prevent boxes from causing hazards or deteriorating, adopt the following precautions:

- store in a covered area (preferably indoors) only accessible to workers;
- Protect against collisions and stress;
- Protect against humidity and high temperature changes;
- Avoid contact with corrosive substances.
- Charge any electrical batteries at regular intervals, 30 days for the motorised version and 60 for the version with data logger.



CAUTION-WARNING: In the event of prolonged storage, periodically check that there are no variations to storage conditions.

4.8. PROVISIONS

□ INSTALLATION PREPARATION

An authorised installer, who must check that the power line meets current pertinent laws, regulations and specifications in effect in the country of use, should install the equipment.

Before installing the equipment, check that the selected zone is suitable and has the necessary authorisations to run the equipment, is sufficiently ventilated and lit, stable and has sufficient surrounding space to easily perform movements, cleaning and maintenance operations.

Also check that the support surface is stable, level and that its surface is easy to clean to avoid the risk of dirt accumulation and contamination of food products.



WARNING: The customer must make sure that the installation environment of the equipment complies with this manual prescriptions.

□ ELECTRICAL SYSTEM PREPARATIONS

Connections to the electrical system that powers and combines synchrony with other machines should be performed by specialised and qualified personnel according to the wiring diagram and provisions set by current law and/or technical standards regarding workplace safety and electrical systems.

Adequate safety devices should be installed for its operations according to that prescribed by workplace safety regulations.



IMPORTANT: the manufacturer cannot be held liable for damages to property, people and/or animals caused by the failure to observe these instructions.

To achieve an adequate level of safety, the electrical system connected to the equipment must include a grounding system, fully installed by the user, according to the provisions in the user's country and anything else required for correct professional installation according to current Laws and/or technical regulations on workplace safety and electrical systems. The mains must be dimensioned according to the requirements indicated on the equipment identification plate and according to the number of simultaneously connected trolleys.

The equipment electrical socket must be easily accessible.

Additionally, install a device upstream from this socket that ensures mains cut-off, with an opening distance between contacts that permits full cut-off in over-voltage category III conditions (3 mm).

The equipotential grounding node connection must be available.



WARNING: the user is always fully responsible and liable for these preparations and no claims can be lodged against the manufacturer for damages to property, people and/or animals due to poor electrical connections.

4.9. POSITIONING

To permit correct operations, the equipment must always be positioned in spaces that meet the environmental conditions described in this manual.

4 INSTALLATION

4.10. CONNECTIONS

□ ELECTRICAL CONNECTION

Before connecting the equipment to the mains check that:

- Electrical sockets are efficient and fully integral, not wet and that each phase is included.
(always use an “Out of Service” sign when repairing a socket.)
A missing phase can cause damages to the equipment or contained food that may not be considered attributable to the manufacturer in any way.
- The power supply line is protected from lightning and voltage surges above the tolerances normally stated by the electricity provider.
- All plugs are fitted in a safe, easy to reach place and protected against accidental impact;
- The equipment to be connected to the socket has its castor wheel brakes on.
- The power cable and connection plug are secured at both ends, dry and in perfect condition, i.e. the insulating coating must not be worn, with no loose wires, and firmly fastened in place by the cable gland both on the plug end and the structure end.
- The ignition key on any optional towing device is removed from the control panel in the off position.

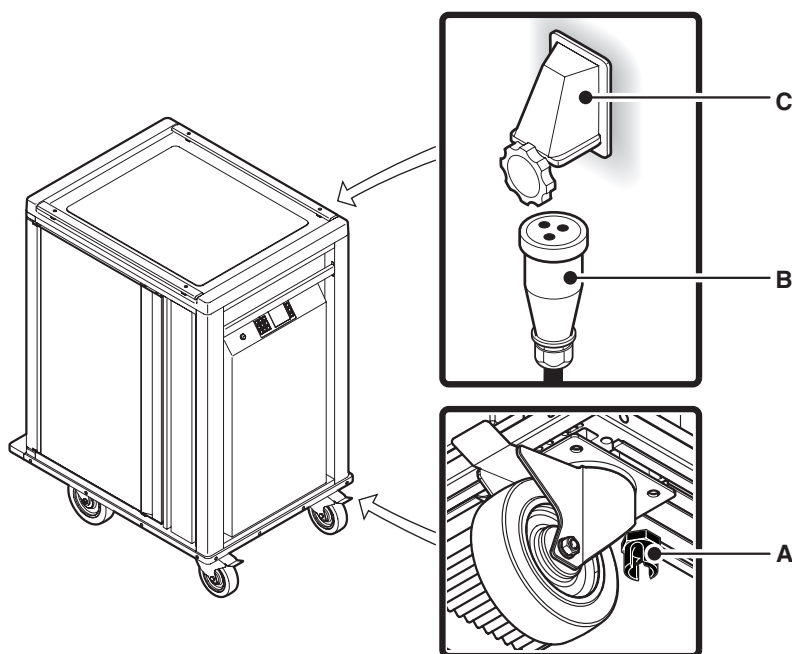
If installed on the trolley, check that the main switch is released.

Personnel authorised (installer) to perform electrical connections must ensure perfect electrical system grounding efficiency and check that the mains and frequency match the data indicated on the identification plate.



WARNING: safety regulations require you connect the equipotential contact, when the equipment is stopped and connected to the mains.

- Connect the equipotential terminal (**A**) to the one on other equipment, if necessary.
- The equipment is delivered complete with power cord with plug:
Connect the plug (**B**) to a set socket (**C**) based on equipment specifications.



4 INSTALLATION

4.11. EQUIPMENT INSPECTION



IMPORTANT: before running the equipment, inspect it to identify any faults. In this phase, it is important to check that all safety and hygiene conditions are strictly met.

Before using the equipment, perform the following operations:

- Check all safety systems;
- Check protections, check signs.

Before using the equipment, complete a series of inspections and checks to prevent errors or accidents during use:

- Make sure the equipment did not suffer any damages during the installation phase;
- Check, with special care, switchboard, control panel, wiring and pipe integrity;
- Check the exact connection of all external energy sources;
- Make sure the mains voltage complies with equipment voltage.
- Check that the safety devices function correctly.

Run an empty hot cycle to check correct equipment operations.

The equipment is delivered clean and free of processing residue; however, we recommend you sanitise it before use as indicated in paragraph 7.5 to adjust it to the user's hygiene standards.

After inspections, suitably train the user to acquire all the skills required to operate the equipment in safe conditions, as foreseen by current law.

4.12. RECOMMENDATIONS



WARNING: keep air vents on the equipment case free of obstructions.



WARNING: do not use mechanical devices or other means to accelerate the defrosting process.



WARNING: Do not use electrical equipment inside equipment compartments unless they are recommended by the manufacturer.

5 DESCRIPTION OF THE EQUIPMENT

5.1. OPERATING PRINCIPLE

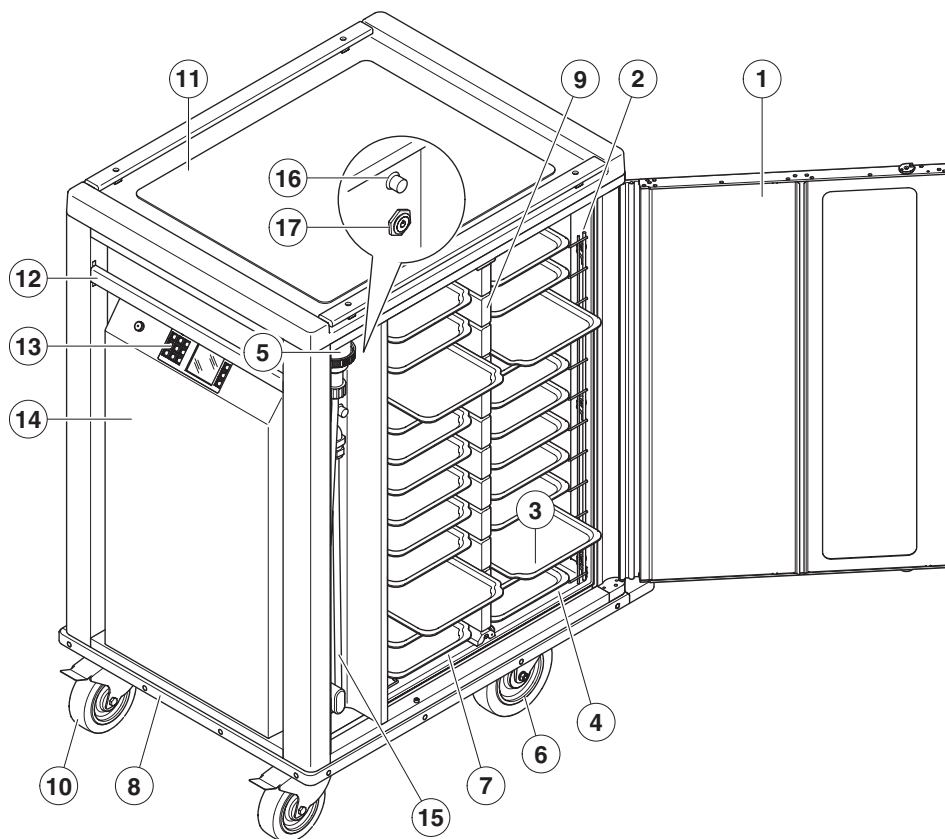
The **UNITRAY** trolley was designed to meet all needs in terms of meal distribution on trays.

It is made up of an oven zone and fridge zone, suitably separated by a central partition.

Food, both hot and cold, are placed on a single tray and inserted in the corresponding trolley compartment: heated for hot food and cooled for cold food.

At the end of the heat cycle of interest, meals can be distributed to guests in fully observance of current regulations.

5.2. MAIN PARTS

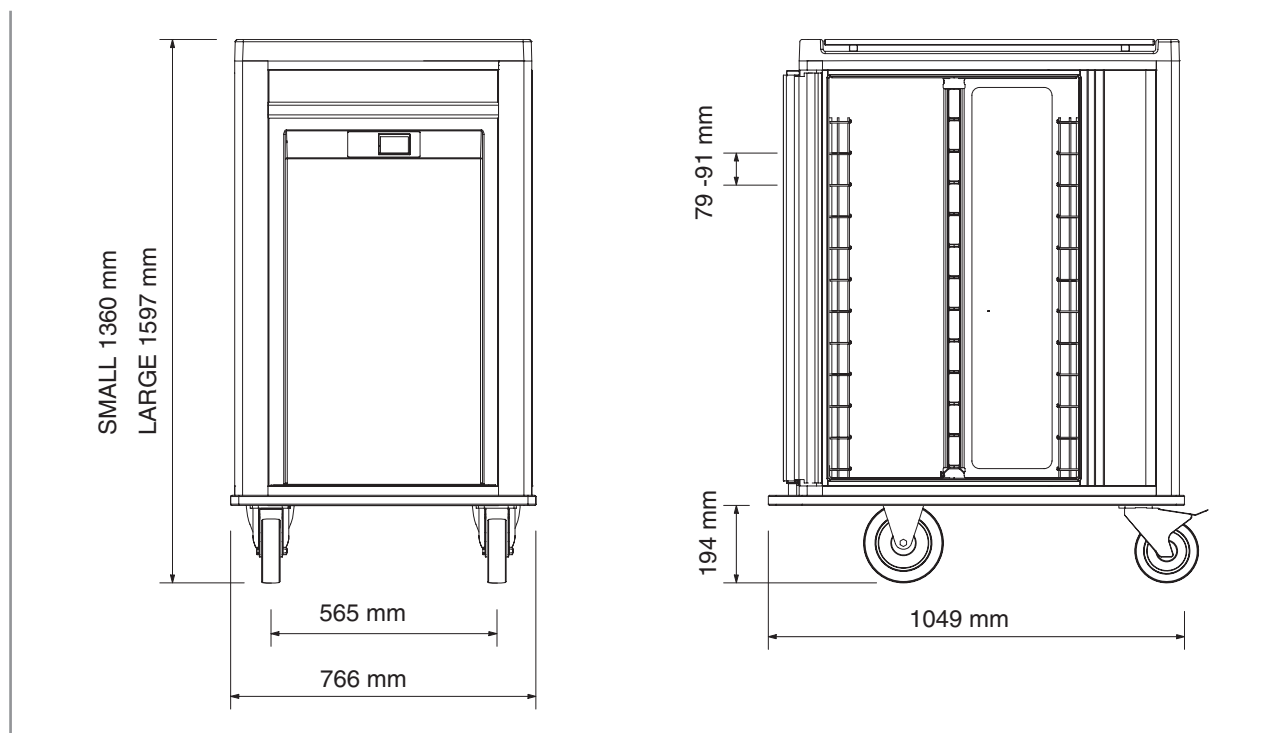


- | | | |
|----------------------------|--|---------------------------|
| 1 Door | 7 Oven zone | 12 Push handle |
| 2 Tray support | 8 Bumpers | 13 Control keyboard |
| 3 Tray | 9 Removable partition wall | 14 Control panel |
| 4 Fridge area | 10 Wheel with castor support and brake | 15 Power cord |
| 5 Power plug | 11 Lid | 16 Safety thermostat |
| 6 Wheel with fixed support | | 17 Main switch (optional) |

5 DESCRIPTION OF THE EQUIPMENT

5.3. DIMENSIONS

UNITRAY trolley overall dimensions in the SMALL and LARGE versions.



5.4. ENVIRONMENTAL CONDITIONS

The equipment guarantees safe operations in room temperature conditions between 5 and 43° C.

Optimal performance is in room temperatures between 15 and 25°C.

Use of the equipment is only permitted in closed premises, on level systems and protected from atmospheric agents such as rain, snow, hail and fog.

Avoid frequent equipment moves from cold to hot and humid rooms which could generate humidity condensation on the electronic boards causing premature wear, malfunctions or, in the worst case, damages to the boards.



WARNING: the equipment is not suited to work in rooms with explosive or corrosive atmospheres or with excessive dust.

If the work environment is subject to gas leaks, install active safety devices on the equipment that meet current safety regulations to prevent gas accumulation, reducing explosion and fire risks (i.e.: gas sensors and automatic cut-off valves).

The Manufacturer cannot be held liable for any damage due to explosions caused by the equipment operating in environments containing explosive gases.

5.5. LIGHTING

Although the equipment control panel is equipped with a back-lit display and equipment status indicator led, lighting in the work room must meet current laws in the country where the equipment is installed and must guarantee good visibility in all points, not create hazardous reflections and permit the clear reading of the control panel and identification of any emergency devices.

Maintenance and repairs must always be carried out in well-lit environments.

5 DESCRIPTION OF THE EQUIPMENT

5.6. VIBRATIONS

In use conditions compliant with the correct use instructions the equipment does not produce vibrations detectable by the operator. If this should occur, request customer service and suspend equipment use until the fault is repaired. Operation and movement is **prohibited** when strong vibrations or jerking occurs that could damage the equipment or its content. The equipment must be transported on a lorry but **may not operate** during transportation.

5.7. NOISE EMISSIONS

The equipment sound pressure level is under 70 dB(A), these emissions meet regulatory limits in effect and do not generate hazards for operators.

5.8. TECHNICAL SPECIFICATIONS

Main equipment technical specifications are provided below:

DESCRIPTION	UNIT OF MEASURE	VALUE	
		SMALL	LARGE
Dimensions (standard)	mm	766x1049x1360	766x1049x1597
Dimensions (with lowered bumpers)	mm	766x979x1360	766x979x1597
Dimensions (with rack provision)	mm	766x1049x1372	766x1049x1609
Dimensions (motorised trolley)	mm	766x1049x1401	766x1049x1638
Wheel diameter	mm	Fixed: 160 / 200 Castor: 160 / 200	
Power voltage	V	208 380-400 220-230	
Current frequency	Hz	50 / 60	
Absorbed power	kW	9,8 / 7,3 / 7 / 6,5 / 4,6 / 3,7 / 3,3	
Protection grade (Standard)		IPX5	
Protection grade (Motorised trolley)		IPX4	
Cold compartment minimum temperature	°C	-3	
Hot department maximum temperature	°C	130	
Tray capacity	no.	20 / 24	26 / 30
Tray step	mm	79 / 91.15	
Tray type		GN, EXT	
Capacity	kg	120 ⁽¹⁾ + 20 ⁽²⁾ + 15 ⁽³⁾	150 ⁽¹⁾ + 20 ⁽²⁾ + 15 ⁽³⁾
weight with wall and tray supports	kg	~187	~203
Noise Level	dB(A)	55	
Work environment temperature	°C	from 5 to 43°C	
Coolant gas		R134a	

⁽¹⁾ The maximum supportable load evenly divided on trolley shelves is considered.

⁽²⁾ The load stably placed on the top trolley cover that cannot compromise user safety in any way is considered.

⁽³⁾ The load stably placed on the folding shelf that cannot compromise user safety in any way is considered.

5.9. STANDARD SUPPLY

The equipment is supplied complete and ready for use.

The following is supplied in addition to this manual:

- Wiring diagram

6 EQUIPMENT USE

6.1. RECOMMENDATIONS FOR USE AND OPERATIONS

The percent of accidents due to device use depends on many factors that cannot always be prevented and controlled. Some accidents depend on unexpected environmental factors, other specifically on user behaviour. They, in addition to be authorised and suitably documented, if necessary, at first use, must simulate some manoeuvres to identify the main controls and functions.

Only use as foreseen by the manufacturer and do not tamper with any device to achieve performances other than those foreseen. Before use, make sure safety devices are perfectly installed and efficient. Users, in addition to meeting these requirements, must apply all the safety regulations and carefully read the control and commissioning descriptions.

6.2. GENERAL INFORMATION ON USE

☐ OPERATING MODE

The operator must learn the different operating modes for correct equipment use.

Two different use conditions are foreseen for the equipment, described below:

1. REFRIGERATION

Refrigeration automatically starts when the equipment is turned on (in both compartments is C/C - C/F version or only in the cold compartment for the C/S version).

Cooling operation continues until the heat cycle is turned on or the equipment is turned off.

The hot compartment and cold compartment temperatures are set independently, changing the values in the specific menus (see "Refrigeration menu").

2. HEAT CYCLE

This function lets you change the hot and cold compartment temperatures in a set time.

A heat cycle must be made up of at least one "step".

A "step" is made up of 3 values: a time that sets the duration, a hot compartment operating temperature and a cold compartment operating temperature.

Other steps can be added to the first to change the temperature of the relevant compartments, to adjust operations to the various use need.

If a cycle is made up of several steps, its duration will be the sum of times set for each single step.

Up to a maximum of 5 steps can be set for each cycle.

(see "Heat Cycles Menu").

Examples of a cycle with a single step and cycle with multiple steps

SINGLE STEP CYCLE			
STEP	TIME (min)	HOT COMPARTMENT (°C)	COLD COMPARTMENT (°C)
1	50	130	4

MULTIPLE STEP CYCLE			
STEP	TIME (min)	HOT COMPARTMENT (°C)	COLD COMPARTMENT (°C)
1	50	130	4
2	20	110	1
3	15	130	4

The operating mode must be set to correctly set the heat cycle (see "Heat Cycle Menu").

The two available choices are described below:

Normal Cycle Mode (default): the cycle duration is the one set in the time-temperature steps.

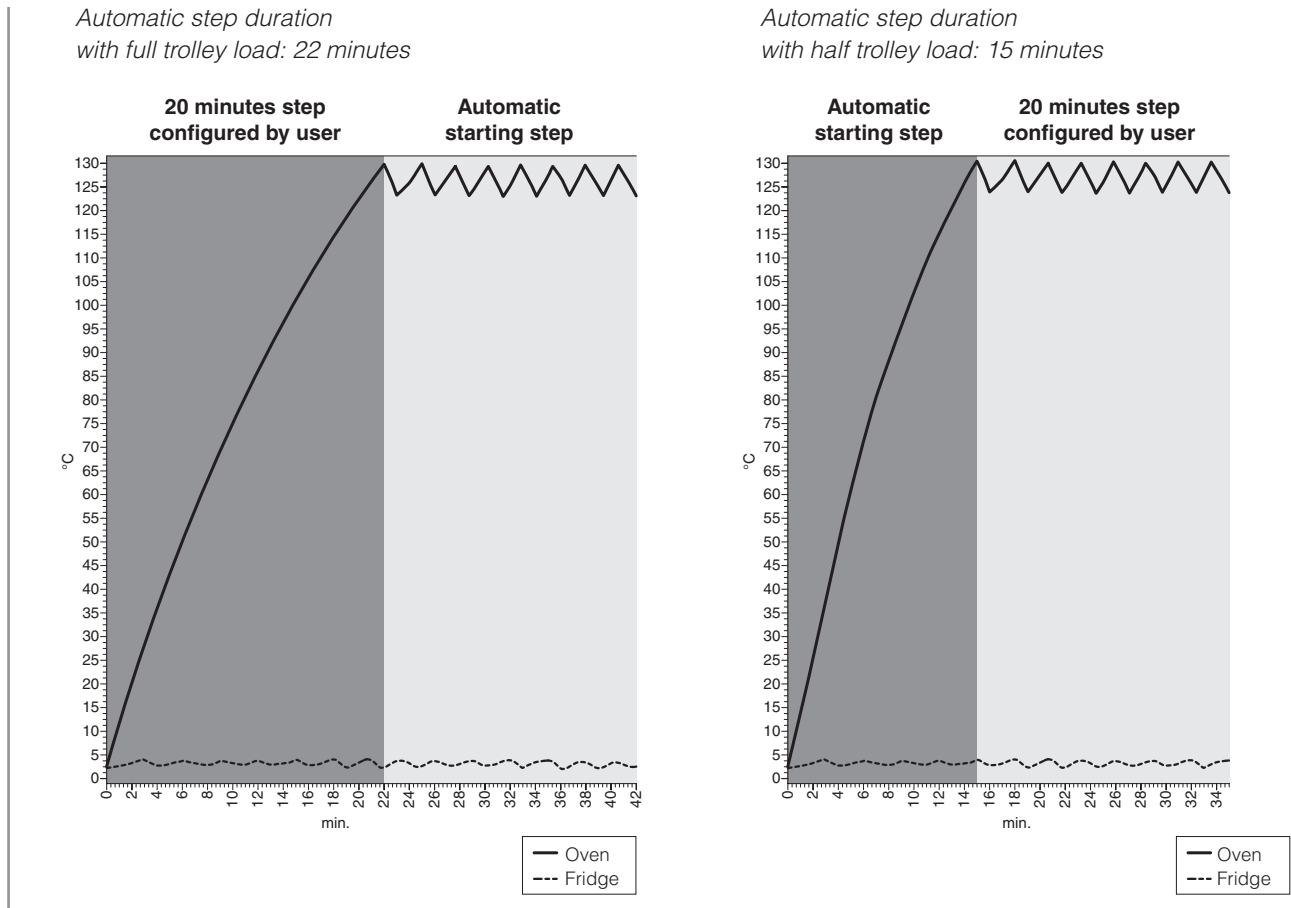
Jolly Cycle Mode: only the temperature can be set by the user in the first step. The duration will automatically change according to the amount of food introduced in the trolley.

6 EQUIPMENT USE

The cycle duration is the one set in the time-temperature steps plus the time required for the initial step to reach the first temperature set by the user.

This is useful since it optimises cycle time and the energy required to heat food.

The following example illustrates the difference between a jolly cycle with a full trolley load and a jolly cycle with a half trolley load.



Based on the set hot compartment temperatures, the cycle is run in two different ways called "hot cycle" and "cold cycle".

Hot cycle: It is run with the hot compartment temperature set over 35°C.

It uses the oven system to maintain/increase the temperature in the hot compartment.

Cold cycle: It is run with the hot compartment temperature set under 35°C.

It uses the refrigerator system to cool the hot compartment, while the temperature is only increased by heat exchange with the surrounding air.

It is used to serve "warm" meals when the oven system is not required to heat them.



WARNING: a cold cycle cannot be run after a hot cycle.



WARNING: a cold cycle cannot be run in Jolly mode.

6 EQUIPMENT USE

3. MAINTAINING

This functionality allows to maintain the compartments temperatures at the end of every heat cycle.

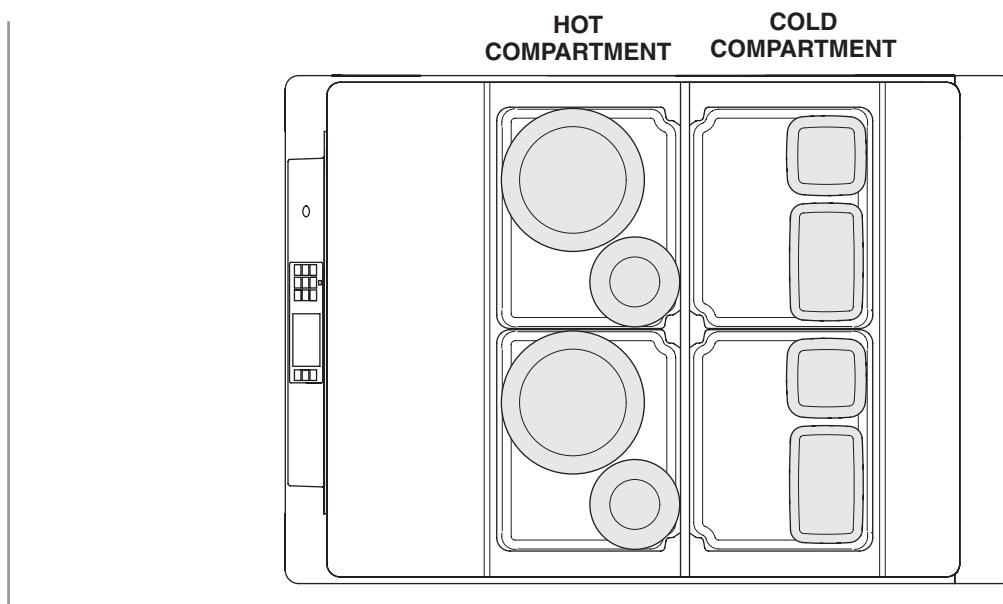
If it is enabled, it activates automatically and it maintains the temperatures set in the latest step of the cycle just finished. It is necessary to turn the equipment OFF to interrupt the maintaining.

☐ FOOD CONTAINERS - TRAY COMPOSITION



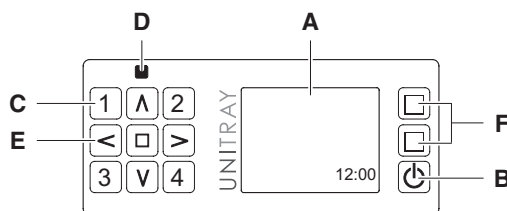
IMPORTANT: for best equipment performance and high distributed food quality, we recommend you use porcelain containers and the relevant lids supplied upon request by the manufacturer.

Even the container distribution on the trays is important to achieve the best results. The diagram illustrates the recommended container arrangement on trays.



6.3. CONTROL PANEL

The device is equipped with the listed control devices, required to run its main functions.



A) Display:

- in Standby, with the trolley powered, it displays the current time and, if set, ward and station number.
- with the device on, it displays hot and cold compartment temperatures, any automatic cycle starts, the current time and alarm message codes; when the cycle is running, it displays the current cycle identification number and remaining time in addition to temperatures. Icons linked to function keys are also displayed.
- in programming mode, it displays menus with functions and operating parameter settings.

B) ON/OFF key:

used to enable the equipment after connection to the mains. If applicable, check that the main switch is on (lighted button); the blue coloured led and hot and cold compartment temperature display indicate that the device is running. Hold the key down to turn the device off; the clock and logo screen indicates that the trolley is off but electrically powered. When a cycle is running, hold this key down to turn off the device and cancel the cycle.

6 EQUIPMENT USE

C) Keys "1" "2" "3" "4":

used to start one of the previously programmed heating cycles (regeneration or maintenance); when the cycle is running, press the key repeatedly to view the set temperatures.

D) Led:

- on, blue, indicates maintenance in refrigeration.
- on, yellow, indicates previously programmed work cycle start (regeneration or maintenance).
- blinking, yellow, indicates cycle end.
- blinking, red, indicates an alarm.

E) Menu navigation keys:

Let you open and navigate menus during the device settings edit and programming phase.

F) Function keys:

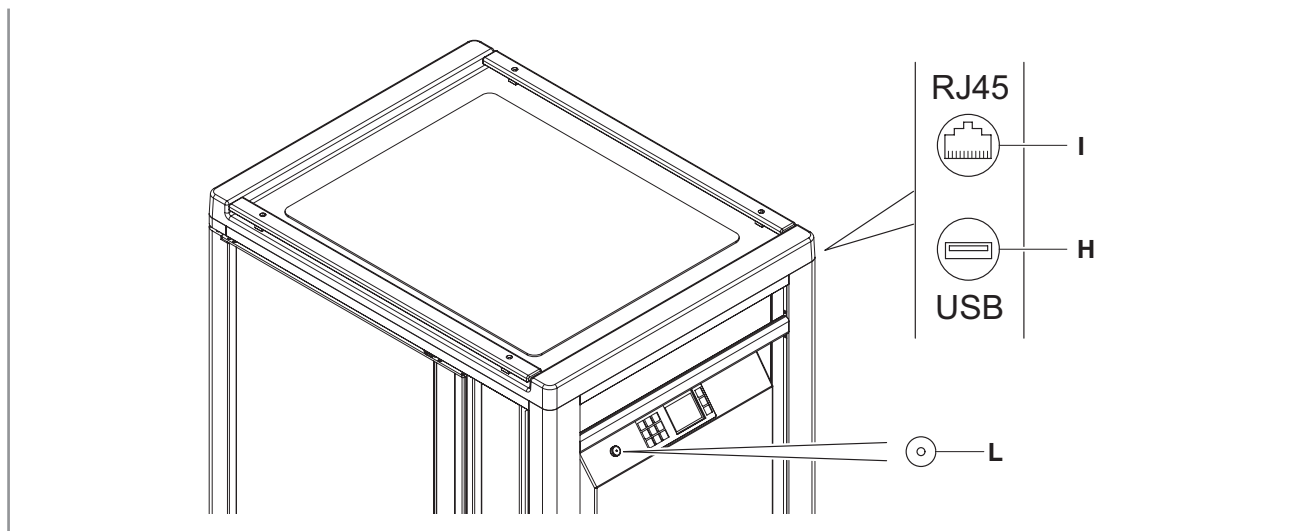
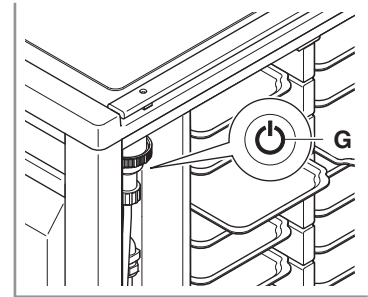
Linked to the displayed icons, when pressed, they run the following functions:

- Last run cycle temperature graph display
- End cycle acknowledgement
- Alarm acknowledgement
- Brief description of the current alarm
- Save temperature read by the external probe

G) Main switch:

If installed, it is used to turn the station on after connecting it to the power mains. The light is lit when on.

Only installed on machines for the North America - Canada market.



H) USB port:

The basic function with the USB key lets you update equipment firmware and import and export operating parameters. The optional function lets you export temperatures and alarms saved by a data logger and analyse them using the "Communicator USB" software.

I) Ethernet port (optional):

Lets you connect the trolley to an Ethernet network for full management from a remote PC. "Communicator Plus" Software is required.

6 EQUIPMENT USE



IMPORTANT: use a shielded and protected network cable, less than 3 metres long, that belongs to category 7 SFTP.

L) External probe jack (optional):

Lets you connect an external probe to check food temperatures when loading the trolley or before ward distribution.



WARNING: make sure the various socket covers are closed before cleaning the equipment.

6.4. ENTERING THE PASSWORD

PROGRAMMING MENU PASSWORD


There are 3 user levels with different login permissions to programming parameters:



- **Basic user** who uses the trolley but does not set or edit cycle parameters.
- **System administrator** who sets or edits cycle parameters, with password protected login.
- **Qualified technician authorised** by the manufacturer who sets basic trolley parameters that radically change operations, with password protected login.

Consequently, 2 different types of password logins are possible, according to whether the System administrator or Qualified and Authorised technician edits trolley operating parameters.

N.B. You can access the programming menu only if the device is at stand-by

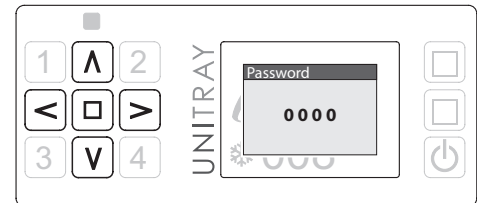
Proceed as follows:

Press the () menu login key to display the password entry window::

- use keys  to move to the value to be edited
- use keys **AV** to set the number from 0 to 9 corresponding to the pertinent password (**the default password is: 0202**)
- confirm the password by pressing the central key ()

If the entered password is correct, the programming menu homepage is displayed.



The password can be changed in the settings menu → password.



KEYBOARD PASSWORD

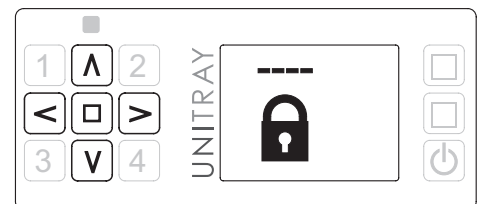
An additional password can be set to lock the keyboard. It is requested when one of the cycle start keys is pressed as illustrated.

Proceed as follows:

- use keys  to move to the value to be edited
- use keys **AV** to set the number from 0 to 9 corresponding to the password
- confirm the password by pressing the central key ()

The password can be set or changed, enabled or disabled, in the settings menu → keyboard


(function reserved to the System administrator or Qualified and Authorised technician).

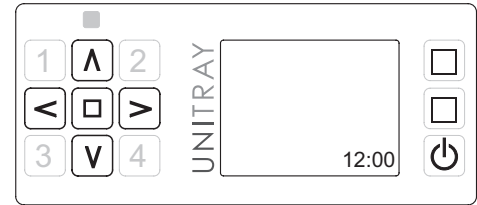


6 EQUIPMENT USE



6.5. NAVIGATION MENU

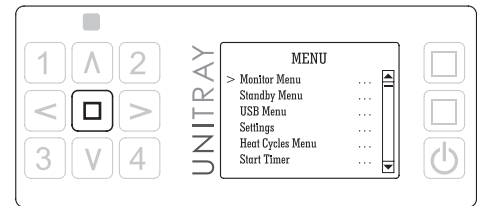
Menu navigation keys:

- The central key () opens the main menu, confirms and saves selections, exits the programming menu.
- **V** key (down arrow) moves to the next item in a menu page; decreases the displayed value or scrolls down amongst the selection options when editing parameters.
- **^** key (up arrow) moves to the previous item in a menu page; increases the displayed value or scrolls up amongst the selection options when editing parameters.
- **>** key (right arrow) moves to the next menu page in sequence.
- **<** key (left arrow) moves to the previous menu page in sequence.

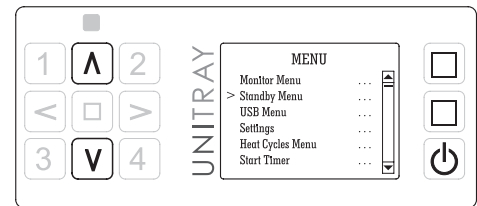


USING THE MENU

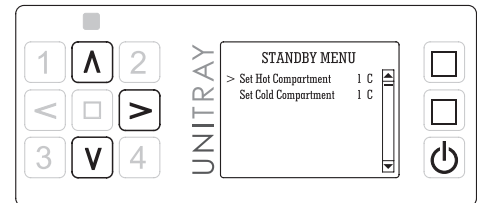
- 1) With the equipment in stand-by, press the central key () to open the menu; enter the login password and confirm by pressing the central key ().




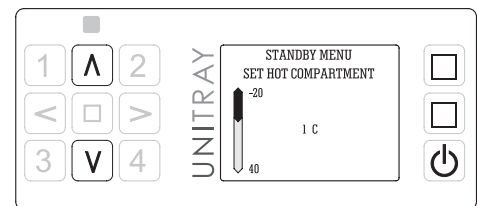
- 2) Select the required menu by pressing the **^****V** keys.



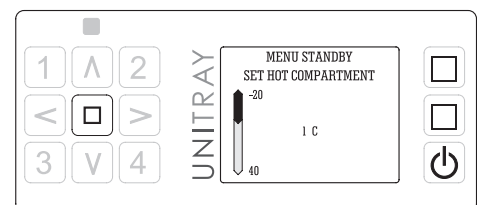
- 3) Press the **>** key to open the next pages
Use the **^****V** keys to move to the setting to be edited.




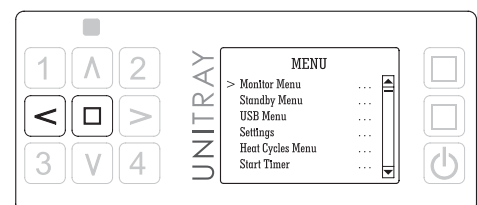
- 4) Use the **^****V** keys to increase/decrease the value or scroll the displayed options.
In menus with several fields, in addition to keys **^****V** use the  to move to the value to be edited



- 5) Confirm and save new settings using the central key ().



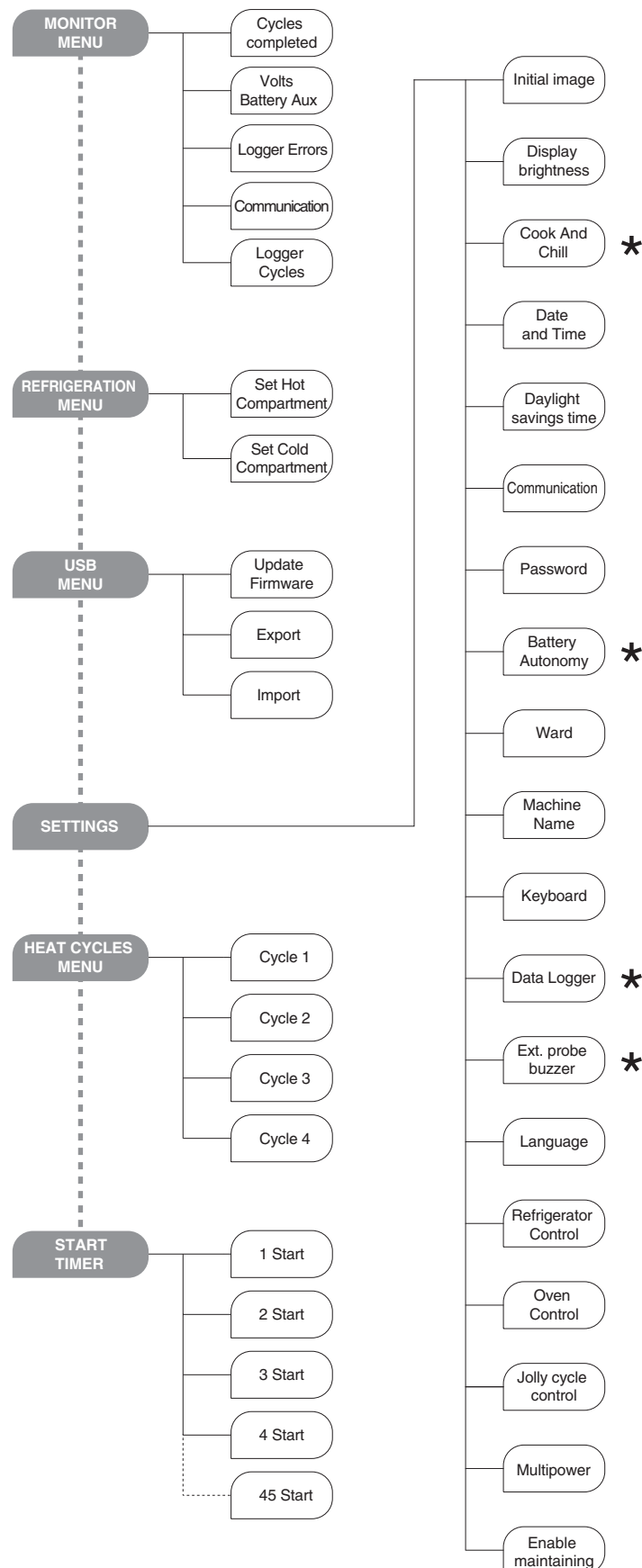
- 6) Use the **<** key to return to the main menu or directly exit the programming menu by pressing the central key ().



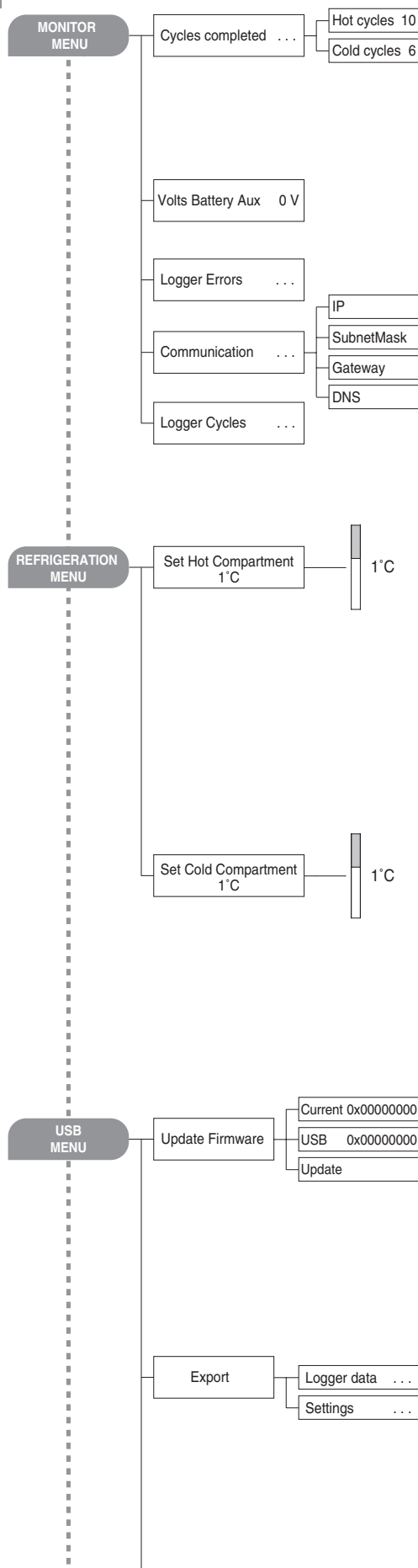
6 EQUIPMENT USE

MAIN MENU

* N.B.: Depending on equipment type, some items may not be present in the menu or they may be included as optional.



6 EQUIPMENT USE



MONITOR MENU

CYCLES COMPLETED

Lets you view the cycles completed by the equipment.

- 1) Press the **>** key in sequence to view the number of completed hot and cold cycles.
- 2) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

VOLTS BATTERY AUX

If included, it displays auxiliary battery voltage.

LOGGER ERRORS

Lets you view the log of errors found during device operations.

- 1) Press the **>** key to view the error list.
- 2) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

LOGGER CYCLES

Lets you view the completed cycle log and characteristics.

- 1) Press the **>** key to view the cycle list.
- 2) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

REFRIGERATION MENU

SET HOT COMPARTMENT

Lets you set the trolley hot area temperature set. This temperature set is only used when the hot side of the trolley is also used for refrigeration and when no cycle is running.

When a hot cycle is run, cooling is disabled until the trolley is turned on again.

- 1) From the Standby menu, press the **>** key.
- 2) Press the **>** key to open the set temperature editing screen.
- 3) Use the **▲▼** keys to increase or decrease the value.
- 4) Confirm and save changes using the central key.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

SET COLD COMPARTMENT

Lets you set the trolley cold area temperature set.

At the beginning and end of each cycle, refrigeration continues to run to keep the set temperature. (only with disabled Maintaining function)

- 1) From the Standby menu, press the **>** key.
- 2) Press the **V** key to select the cold compartment set.
- 3) Press the **>** key to open the set temperature editing screen.
- 4) Use the **▲▼** keys to increase or decrease the value.
- 5) Confirm and save changes using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

USB MENU

UPDATE FIRMWARE

Lets you update firmware management firmware.

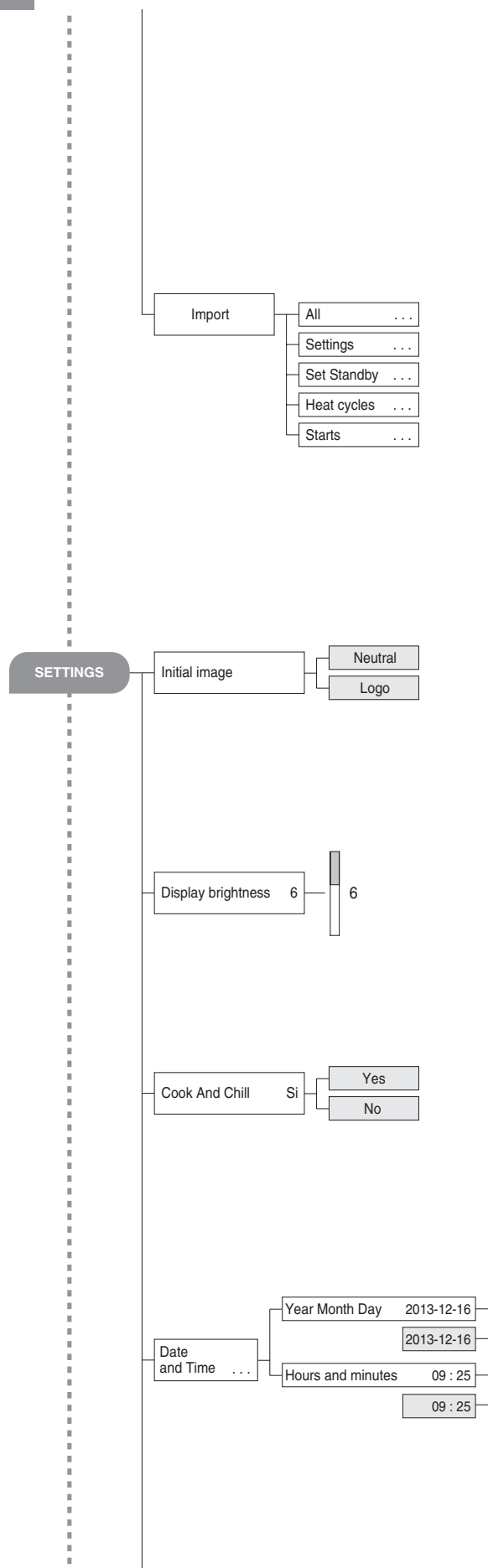
- 1) Insert the key with the update in the USB slot on the right side of the trolley.
- 2) From the USB menu, press the **>** key until the Update Firmware screen appears.
- 3) Use the **V** key to select "UPDATE".
- 4) Press the **>** key to start the update procedure.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.
- 6) When updating has completed, press any key to end the operation.

N.B. The operation takes several minutes, do not use the equipment until the operation has completed.

EXPORT

Lets you export trolley settings or data saved by the optional data logger to a USB key.

- 1) Insert a USB key in the USB slot on the right side of the trolley.
- 2) From the USB menu, press the **>** key.
- 3) Use the **V** key to select Export and press the **>** key.
- 4) Select the required type of export with the **V** key.



All Logger Data: exports all temperature and event data saved in the memory including those already downloaded.
 Last Logger Data: exports temperature and event data saved but not yet downloaded.

Settings: export standard equipment operating parameters.

Set Refrigeration: exports the temperature set for the hot and cold compartments.

Heat cycles: export saved cycle settings.

Starts: export programmed start data for saved cycles.

- When finished, press the **<** key to return to the main menu or press the central key to exit the programming menu.

Remove the key from the USB slot.

N.B. Replace the USB slot cover to prevent dust or cleaning operations from causing malfunctions.

IMPORT

Lets you import trolley programming data set on a PC or exported from another trolley.

- From a PC or other device, save the data to be imported on the USB key. Insert the USB key in the USB slot on the right side of the trolley.

- From the USB menu, press the **>** key.

- Use key **V** to select Import and press key **>**.

- Select the required type of import with the **V** key:

Settings: import standard trolley operating parameters.

Set Refrigeration: import the temperature set for the hot and cold compartments.

Heat cycles: import saved cycle settings.

Starts: import programmed start data for saved cycles.

- When finished, press the **<** key to return to the main menu or press the central key to exit the programming menu.

N.B. Replace the USB slot cover to prevent dust or cleaning operations from causing malfunctions.

SETTINGS MENU

INITIAL IMAGE

It allows you to choose the initial boot image.

- From the Settings menu, press the **>** key.

- Use key **V** to select Initial Image and press the key **>** to view the settings window.

- Use keys **^V** to select Neutral or Logo.

- Confirm and save changes using the central key.

- Use the **<** key to return to the main menu or press the central key to exit the programming menu.

DISPLAY BRIGHTNESS

Lets you adjust display brightness.

- From the Settings menu, press the **>** key.

- Use the **V** key to select Display Brightness and press the **>** key to view the brightness adjustment window.

- Use the **^V** keys to increase or decrease the value.

- Confirm and save changes using the central key.

- Use the **<** key to return to the main menu or press the central key to exit the programming menu.

COOK AND CHILL (optional)

Lets you enable/disable Cook and Chill mode.

Chill. The menu is only enabled if the device is factory set for this type of operation.

- From the Settings menu, press the **>** key.

- Use the **V** key to select Cook and Chill and press the **>** key to view the settings window.

- Use the **^V** keys to enable/disable the function.

- Confirm and save changes using the central key.

- Use the **<** key to return to the main menu or press the central key to exit the programming menu.

DATE AND TIME

Lets you set the current Date and Time.

- From the Settings menu, press the **>** key.

- Use the **V** key to select Date and Time and press the **>** key.

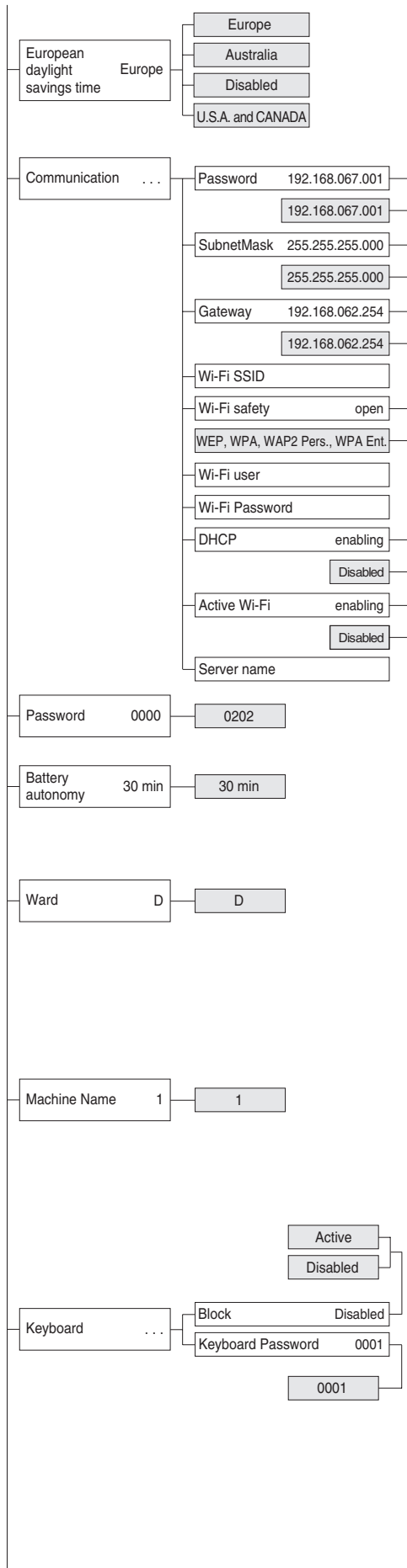
- Use the **^V** keys to select the data to be edited and press the **>** key.

- The first editable value blinks: if necessary, change using the **^V** , keys or move to the required value using the **<>** keys.

N.B. Always enter the current time, daylight savings time is automatically managed.

- Confirm and save changes using the central key.

- Press the **<** key to return to the main menu or press the central key to exit the programming menu.



DAYLIGHT SAVINGS TIME

Lets you set automatic daylight savings time management.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Daylight Savings Time and press the **>** key.
- 3) Use the **▲▼** keys to set the required mode, selecting from the list.
- 4) Confirm and save changes using the central key.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

COMMUNICATION

Lets you set network addresses for remote trolley connection.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Communication and press the **>** key.
- 3) Use the **▲▼** keys to select the data to be edited and press the **>** key.
- 4) The first editable value blinks: if necessary, change using the **▲▼** keys or move to the required value using the **<>** keys.
- 5) Confirm and save changes using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

PASSWORD

Lets you change the programming menu login password.

The default password is: 0202

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Password and press the **>** key.
- 3) The first editable value blinks: if necessary, change using the **▲▼** keys or move to the required value using the **<>** keys.
- 4) Confirm and save changes using the central key.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

BATTERY AUTONOMY (optional)

Lets you set additional battery autonomy time that keeps trolley electronic management on during movement.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Battery Autonomy and press the **>** key.
- 3) Adjust battery autonomy time using the **▲▼** keys.
- 4) Confirm and save changes using the central key.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

WARD

Lets you indicate the trolley ward to univocally identify the trolley.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Ward and press the **>** key.
- 3) Set data using the **▲▼** keys. Use the **<>** keys to enter additional characters (max 20 alphanumeric characters) or select from the list.
- 4) Confirm and save changes using the central key.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

MACHINE NAME

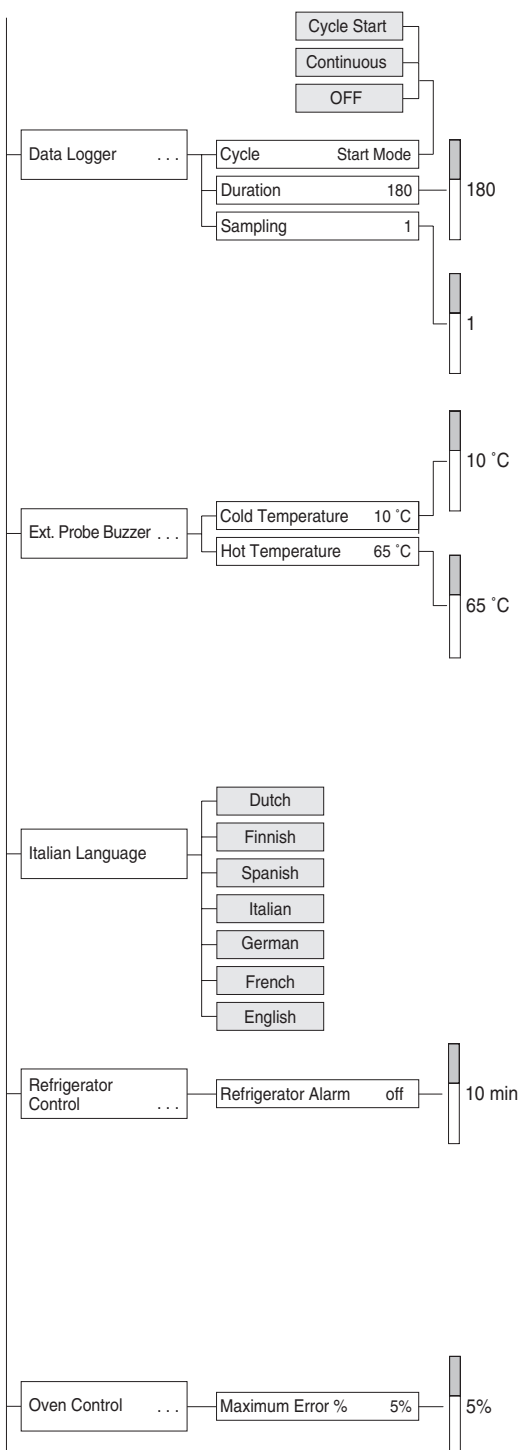
Lets you assign a machine ID reference.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Machine Name and press the **>** key.
- 3) Set data using the **▲▼** keys. Use the **<>** keys to enter additional characters (max 10 alphanumeric characters) or select from the list.
- 4) Confirm and save changes using the central key.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

KEYBOARD

Lets you control keyboard use.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Keyboard and press the **>** key.
- 3) Use the **▲▼** keys to select the data to be edited and press the **>** key.
- 4) To Block the keyboard, use the **▲▼** keys to select Enable/Disable.
 - 3) For the Password, the first editable value blinks: if necessary, change using the **▲▼** keys or move to the required value using the **<>** keys.
- 5) Confirm and save changes using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.



DATA LOGGER (optional)

Lets you set Data Logger operations.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Data Logger and press the **>** key.
- 3) Use the **▲V** keys to select the data to be edited and press the **>** key.
- 4) Use the **▲V** keys to select one of the following Modes:

- record at Cycle Start;
- Continuously record
- recording off (OFF).

By default, recording duration is set to 180 minutes; it indicates data logger operating minutes from start data saving that corresponds in Cycle start mode to cycle start and in continuous mode to trolley start when the ON key is pressed. Recording stops at the end of the set time.

For Sampling, enter the time interval between one recording and the next using the **▲V** keys. The settable value range is between 1 and 10 minutes.

- 5) Confirm and save changes using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

EXT PROBE BUZZER (optional probe)

Food temperature can be read using the external probe: when over the set hot temperature or under the set cold temperature a buzzer warns that the food temperature is correct.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Ext Probe Buzzer and press the **>** key.
- 3) Use the **▲V** keys to select the data to be edited and press the **>** key.
- 4) Set temperature using the **▲V** keys.
- 5) Confirm and save changes using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

LANGUAGE

Lets you select the trolley management language.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Language and press the **>** key.
- 3) Set the required language using the **▲V** keys.
- 4) Confirm and save changes using the central key.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

REFRIGERATOR CONTROL

Lets you set the refrigerator control mode.

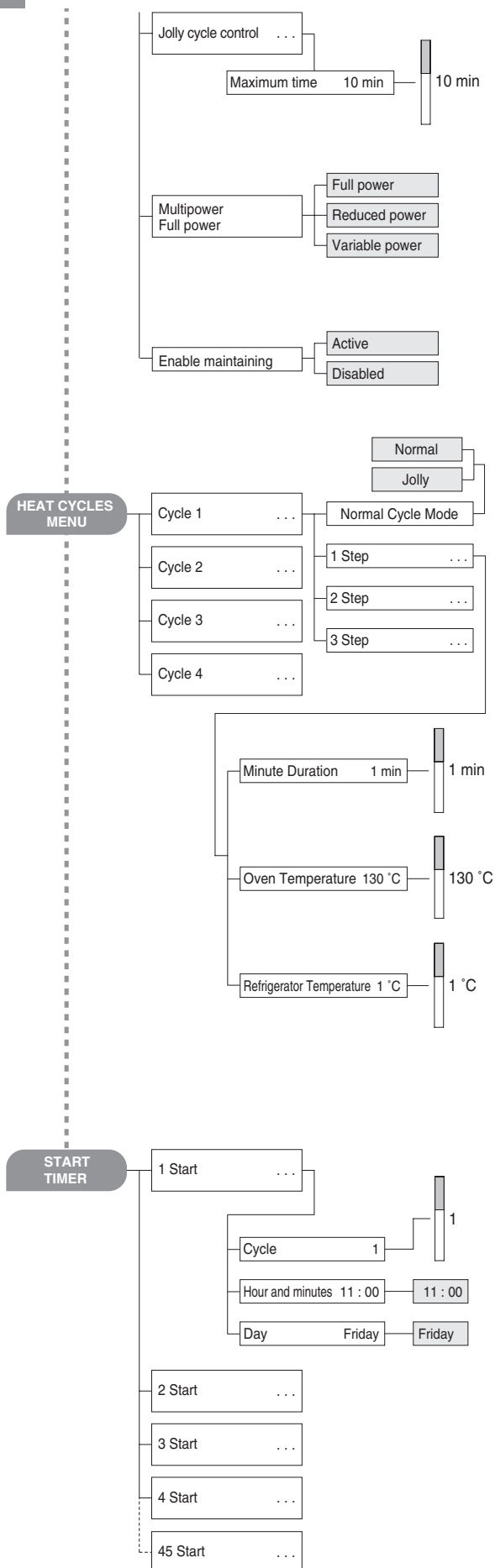
- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Refrigerator Control and press the **>** key.
- 3) The current mode is displayed; press the **>** key to open the editing window.
- 4) Use the **▲V** keys to set the required mode. If activated, use the **▲V** keys to set time from device start to reach the set temperature set before an error message is sent.
- 5) Confirm and save changes using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

OVEN CONTROL

Lets you set the oven control mode.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Oven Control and press the **>** key.
- 3) The current settings are displayed; press the **>** key to open the editing window.
- 4) Use the **▲V** keys to set the required value for the percent temperature error at end cycle in the oven compartment, beyond which an error message is sent.
- 5) Confirm and save changes using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

6 EQUIPMENT USE



JOLLY CYCLE CONTROL

Lets you set the oven control mode in Jolly Cycle mode.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Jolly Cycle Control and press the **>** key.
- 3) The current settings are displayed; press the **>** key to open the editing window.
- 4) Use the **▲ V** keys to set cycle start time to reach the set temperature set before an error message is sent.
- 5) Confirm and save changes using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

MULTIPOWER

Lets you set the oven operating power.

- 1) From the Settings menu, press the **>** key.
- 2) Use the **V** key to select Multipower and press the **>** key.
- 3) Use the **▲ V** keys to set the required value.
- 4) Confirm and save changes using the central key.
- 5) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

ENABLE MAINTAINING:

It allows to activate the "Maintaining" operation mode.

ENABLE: It enables the functionality

DISABLE: It disables the functionality.

HEAT CYCLES MENU

CYCLE 1 - CYCLE 2 - CYCLE 3 - CYCLE 4

Lets you save 4 heating/cooling cycles based on set parameters.

The cycle mode can be set for each cycle:

Normal – The cycle is made up of one or more set duration steps.

Jolly – The cycle is made up of a variable initial step that depends on the amount of portions inserted in the trolley, not manageable by the user, and of one or more set duration steps.

- 1) From the Heat Cycles menu, press the **>** key.
- 2) Use the **▲ V** key to select the concerned cycle and then press the **>** key to view the Cycle Mode window.
- 3) Use the **▲ V** keys to select between Normal/Jolly mode
- 4) Confirm and the change using the central key.

Each cycle can be made up of a series of steps with its own duration and refrigerator/oven temperatures.

An empty cycle has a first step with values set to zero.

- 1) Use the **▲ V** and **<>** keys to open the various parameters and set the duration and temperatures using the **▲ V** keys.
 - 2) Confirm all changes using the central key.
- Setting a first step duration other than zero automatically creates the next step which, if necessary, can be set according to food heating/cooling needs and so on whenever the duration of the last step is changed to a maximum of 5 steps. Setting the duration of one step to zero disables any subsequent programmed steps which will not be run nor displayed in the menu. Changing the previous value set to 0 will enable the hidden steps which will be run.
- 3) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

START TIMER MENU (C/C AND C/F VERSIONS ONLY)

Lets you program automatic cycle starts.

A maximum of 45 starts can be programmed.

- 1) From the Start Time menu, press the **>** key.
- 2) Use the **▲ V** key to select the concerned start and press the **>** key to view the parameters to be set.
- 3) Use the **▲ V** keys to select the parameter to be edited and press the **>** key to view the parameter editing page.
- 4) For the Cycle, use the **▲ V** keys to set one of the four saved cycles. N.B. If the cycle is set to "0", it will not be started. For the Hours and minutes, the first editable value blinks: if necessary, change using the **▲ V** keys or move to the required value using the **<>** keys. For Days, use the **▲ V** keys to set start every day of the week or just on single days.
- 5) Confirm and the change using the central key.
- 6) Press the **<** key to return to the main menu or press the central key to exit the programming menu.

6 EQUIPMENT USE

6.6. EQUIPMENT USE

Proceed as follows:

1. Place trays with food products in the trolley and correctly close the doors.

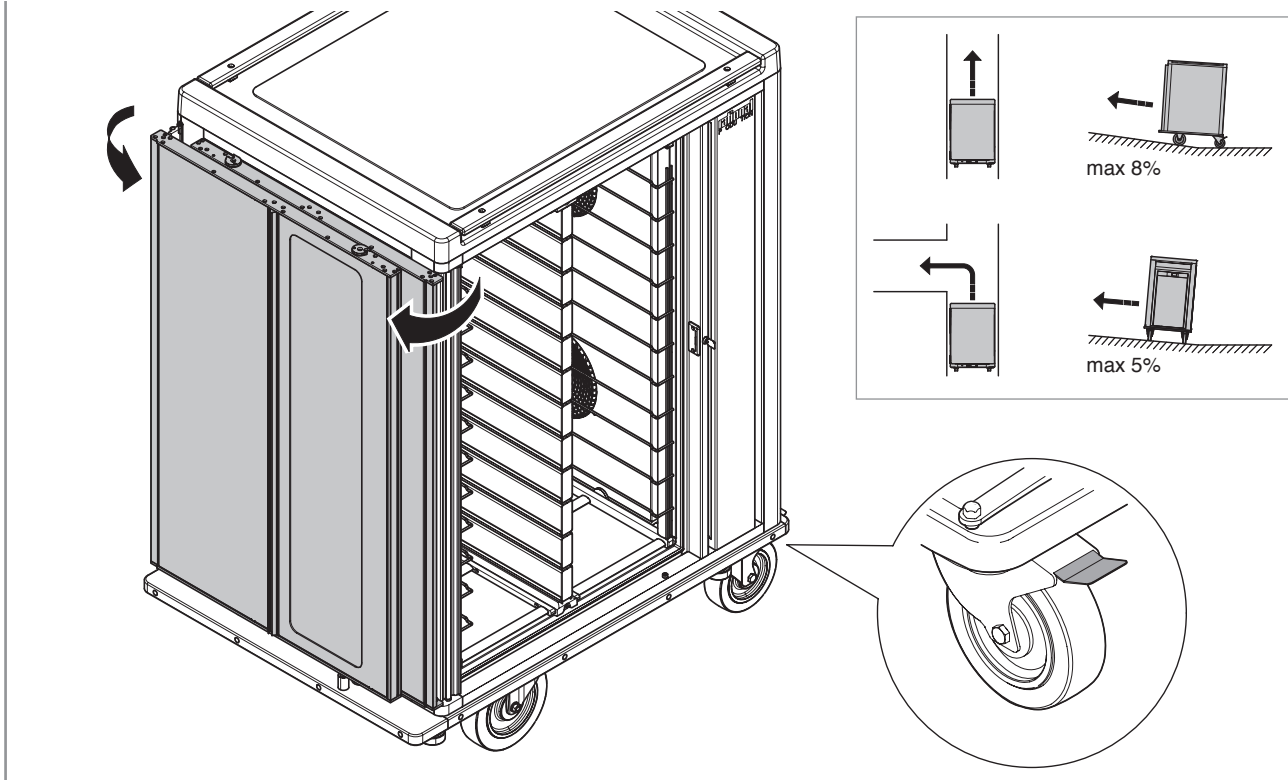


CAUTION-WARNING:

- always hook the doors to the stops on the back of the equipment when loading and unloading trays.
- before handling the equipment, make sure the doors are securely shut.
- always use the castor wheel parking break if the equipment is not moving.
- do not move the equipment on frontal gradients in the drive direction over 8% and lateral to the drive direction over 5%. (Maximum 15% frontal gradients in the drive direction are admitted with motorised trolleys).
- Handle the equipment using only and exclusively the special push bar, making sure there is enough space for manoeuvring and that the path is made of a suitable paving, free of irregularities.
- Before and after handling the equipment, carefully check if there are any things or people that may be damaged/ injured on the path.
- Do not sit or hang on the equipment.
- Do not leave the equipment on sloping bottoms
- The trolley handling is allowed only when the foldaway shelf is closed.
- When handling the equipment using a lorry equipped with tail lift, please comply to all the indications specified in the section "Handling and lifting".



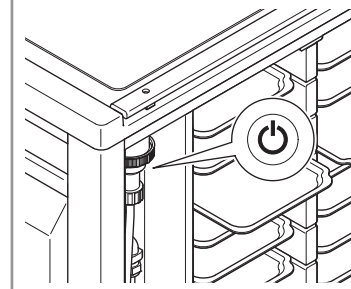
IMPORTANT: make sure food and/or relevant containers transported in the trolley are suited for movement on slanted surfaces.



IMPORTANT: ONLY place food products in the compartment suited for their storage (hot or cold) to avoid deterioration.

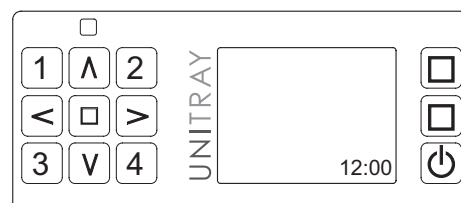
6 EQUIPMENT USE

2. Connect the equipment plug to the power socket and turn on the main switch (if applicable).



4. Wait until the illustrated screen is displayed, as in the figure. Cooling automatically starts according to the temperature set in the refrigeration menu until the heat cycle starts or trolley is turned off.

4. Start the required heat cycle (see "Starting the standard heat cycle" - "Starting the heat cycle with automatic start on").



5. If the keyboard is locked, enter the password. (see "Entering the password").
6. At the end of the selected heat cycle, distribute products. (see "Heat cycle end").



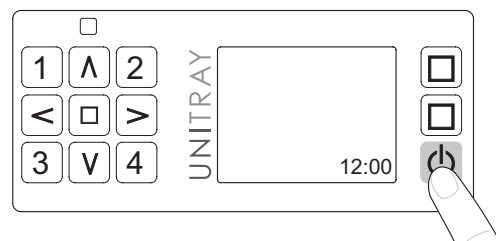
CAUTION-WARNING: to avoid burns caused by steam, do not suddenly open the doors at the end of the heat cycle. Gradually open doors to let steam escape upwards.

To avoid burn risks, load or unload trays with the help of specific protection devices (oven mitts, pot holders. etc.).

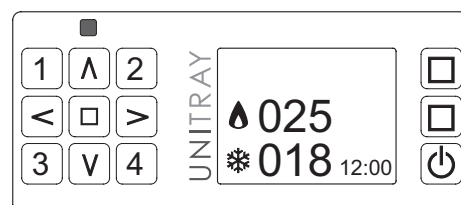
6.7. STANDARD HEAT CYCLE START


Proceed as follows:

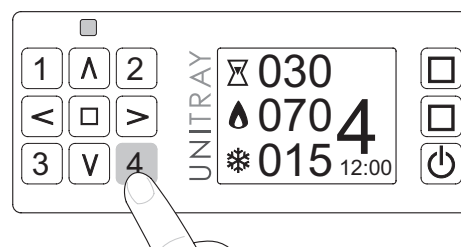
1. Press () key on the control panel to turn on the equipment.



2. Wait until the illustrated screen is displayed.
The displayed values indicate the current hot and cold zone temperatures and time. Cooling starts in the cold zone and, if set, in the hot zone.
The led turns on coloured blue.



3. Press one of the keys (1-2-3-4) to start the required heat cycle.
The led turns yellow; the screen displays the current cycle number, that is red for hot cycle and blue for cold cycle, and the residual time, the hot and cold zone temperatures and the current time. For control purposes, you can view the temperatures set for the current step by pressing the cycle key when the cycle is running.
If necessary, press and hold down the () key on the control panel for about 3 seconds to turn off the cycle.

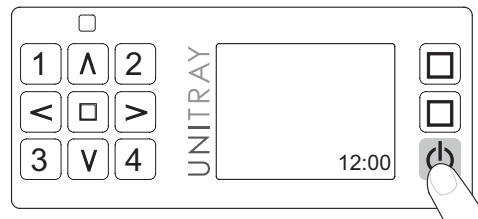


6 EQUIPMENT USE

6.8. HEAT CYCLE START WITH AUTOMATIC START ON (C/C and C/F versions only)

Proceed as follows:

1. Press () key on the control panel to turn on the equipment.




2. Wait until the illustrated screen is displayed.

3. The trolley recognises the closest programmed start and displays the start time and cycle programmed for the next automatic start in addition to the two compartment temperatures.

If no automatic start is set, it must be programmed (see "Start Timer Menu").



IMPORTANT: when running any cycle, each programmed start that overlaps the current cycle is ignored.

4. To cancel automatic starts, turn off the equipment holding down the () key on the control panel for at least 3 seconds.



This procedure suspends automatic starts until the next time the trolley is turned on.

For control purposes, you can view the temperatures set for the current step by pressing the cycle key when the cycle is running.



If necessary, press and hold down the () key on the control panel for about 3 seconds to turn off the cycle.

6.9. HEAT CYCLE END

The led blinks yellow at the end of the heat cycle and a buzzer sounds intermittently. The following screen appears.

1. Press the () key next to the () symbol to mute the buzzer.
2. At the end of the hot cycles (temperature >35°C) cold compartment cooling continues at the temperature set in the refrigeration menu while the oven side turns off until the next time the equipment is turned on.

At the end of the cold cycles (temperature <35°C) cold compartment cooling continues at the temperature set in the refrigeration menu while the oven side only turns on if its interior temperature permits it.

3. For food distribution, turn off the equipment by holding down the () key on the control panel until the initial screen is displayed with the time; next press the main switch to turn the trolley off (if applicable) and unplug the power cord. When the "Communicator USB" package is installed and the equipment is unplugged, press the () key on the control panel to activate the display to use the external probe to read food temperature or monitor oven or fridge temperatures. The function remains on for the time set in the "Settings - Battery Autonomy" menu (see paragraph 6.12 Communicator USB settings).
4. Use the lever on both castor wheels to remove the parking brake and proceed with food distribution.



6 EQUIPMENT USE

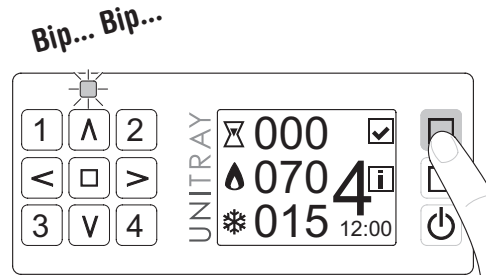
6.10. CYCLE END WITH ACTIVE MAINTAINING FUNCTION

The led blinks yellow at the end of the heat cycle and a buzzer sounds intermittently. The following screen appears.


1. Press the (☒) key next to the (☐) symbol to mute the buzzer.
2. At the end of hot/cold cycles, the cold compartment cooling continues to operate aiming to the set point at the latest step of the just ended cycle.
3. At the end of hot/cold cycles, the hot compartment heating continues to operate aiming to the set point at the latest step of the just ended cycle.



IMPORTANT: By enabling the function, it activates on any performed cycle.



6.11. READING THE TEMPERATURE GRAPH

When operating, press the (☐) key next to the () symbol, when applicable) to view the graph of temperatures saved since the last time the trolley was turned on.



6.12. FRIDGE CONTROL/OVEN CONTROL/JOLLY CYCLE CONTROL

The equipment allows to check the temperatures set for the various operating phases.

Fridge Control: (see menu "fridge control")

If on, it lets you set the maximum time admitted from trolley start to reach the temperature set in the refrigeration menu (see refrigeration menu).

If the set limit is exceeded, the trolley displays the corresponding error message.

Oven Control (see menu "oven control")

If on, it lets you check correct oven compartment heating comparing the maximum temperature reached during the heat cycle with the temperature set for the cycle. For cycles with several steps, the one with the highest temperature is considered.

activating the control sets the percent difference between the two temperatures; if the measured difference is higher than the one set in the control, the corresponding error message is displayed.

Jolly cycle control (see menu "jolly cycle control")

If on, it lets you set the maximum time admitted from "jolly" cycle start to reach the first temperature set in the cycle. (see menu heat cycles).

If the set limit is exceeded, the trolley displays the corresponding error message.

6.13. AUTOMATIC BLACKOUT MANAGEMENT

The equipment (version with additional battery only) is able to automatically manage blackouts in different ways according to whether a heat cycle or refrigeration maintenance was running and according to how the the blackout is.

6 EQUIPMENT USE


❑ BLACKOUT DURING A HEAT CYCLE

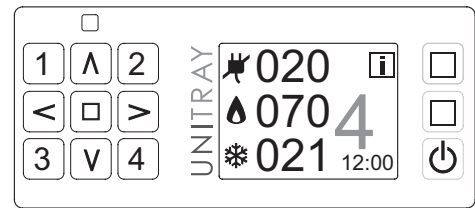
Upon blackout, the equipment saves the current cycle parameters and starts a timer that measures blackout duration.

If the blackout duration is shorter than the maximum time admitted (time programmed by the qualified and authorised technician in concert with the user. Default 5 minutes), when power returns, the equipment resumes the cycle where it left off.

If blackout time is longer than the maximum time admitted, all cycles are interrupted and a fault is signalled with an error message (see "alarm list table").

The equipment cannot be used since the food has probably deteriorated.


Only the assigned manager can turn off the equipment by pressing the () key on the control panel and, subsequently, restart the trolley and new cycle.

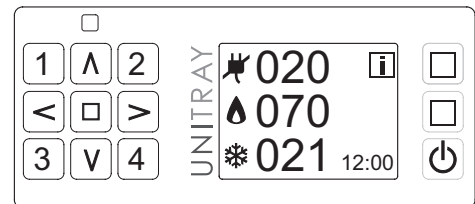


❑ BLACKOUT DURING REFRIGERATION MAINTENANCE

Upon blackout, the equipment starts a timer that measures blackout duration.

If the blackout duration is shorter than the maximum time admitted (time programmed by the qualified and authorised technician in concert with the user. Default 10 minutes), when power returns, the equipment resumes refrigeration maintenance.

If blackout time is longer than the maximum time admitted, all cycles are interrupted and a fault is signalled with an error message (see "alarm list table"). The equipment cannot be used since the food has probably deteriorated. Only the assigned manager can turn off the equipment by pressing the () key on the control panel and then restart the equipment.



6.14. COMMUNICATOR USB SETTINGS (OPTIONAL)

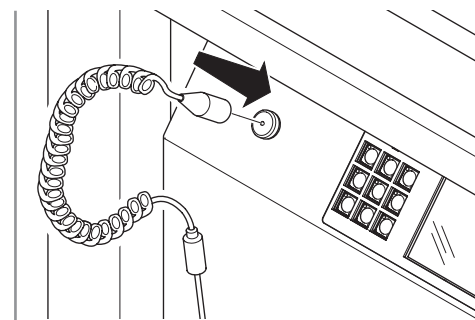
❑ EXTERNAL PROBE SOCKET

An external probe, combined with the use of a core probe, lets you control and save temperatures at the centre of food.

Proceed as follows:

1. Connect the external probe to the connector, as illustrated.
2. Insert the probe in the products.
 - If the equipment is on in refrigeration mode, the probe symbol and temperature read in products is displayed along with the oven and fridge zone temperatures as illustrated.
 - If a heat cycle is running, the cycle time display is replaced by the probe symbol and temperature read in products.
 - If the equipment is in Stand-By mode (connected to the mains with only the time displayed) or off (unplugged) the probe symbol and temperature read in products are displayed

The equipment beeps when the temperatures read are over 65°C or under 10°C (settable by the user in the Settings menu - Ext. Probe Buzzer) to indicate that food, hot and/or cold are distributed at temperatures that meet current regulations (this function can be disabled upon request).





6 EQUIPMENT USE



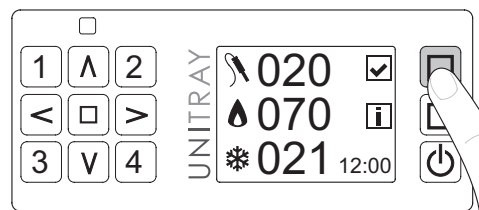
CAUTION - WARNING: external probes may only be used by qualified personnel authorised by the purchaser who is fully liable for the sanitary hygienic aspects and aspects tied to safety.

The pointed external probe shape exposes the users to injury risks.

Improper and unauthorised use of this accessory is strictly prohibited.

To add the temperatures read by the external probe to the values automatically saved by the Data Logger, after inserting the external probe in food, wait several seconds until the value read stabilises and press () next to symbol () to save the value.


A buzzer will sound to confirm that the read temperature was saved and added to the data logger.



ADDITIONAL BATTERY

The additional battery keeps the equipment electronics on when unplugged, for example, when moving.

Thus the oven or fridge temperature can be viewed or, connecting an external probe, the internal food temperature read. Furthermore, automatic temperature saving via the Data Logger is not interrupted.

To view oven and fridge zone temperatures, press () key on the control panel, while the display automatically activates when the external probe is connected.

This mode is logically connected to battery charge autonomy.

This value, expressed in minutes, can be adjusted in the settings menu - Battery Autonomy.



IMPORTANT: a 1:5 ration should be kept between set battery autonomy time and each mains connection time.

Example: if the equipment is connected to the mains for 20 minutes, the maximum settable battery autonomy time is 30 minutes. If the proportion is not met, the battery may gradually deplete and be damaged.

DATA LOGGER

The Data Logger lets you save and send heat cycle temperature data to a PC and save internal food temperatures read with the external probe.



IMPORTANT: to be correctly saved, the equipment ID number and internal clock must be set.

You can select between saving at cycle start with sampling at subsequent intervals and continuous saving for a set duration (see Settings menu - Data Logger).

In cycle start mode the equipment starts saving the start cycle date and time, cycle started and oven and fridge compartment temperatures at the start of one of the oven/fridge cycles .

The next time data is saved depends on the time interval set in the Settings menu - Data Logger - Sampling.

The event date and time with an end cycle marker are saved at the end of the cycle.

When an external probe is installed, the values read can be added to those automatically saved.

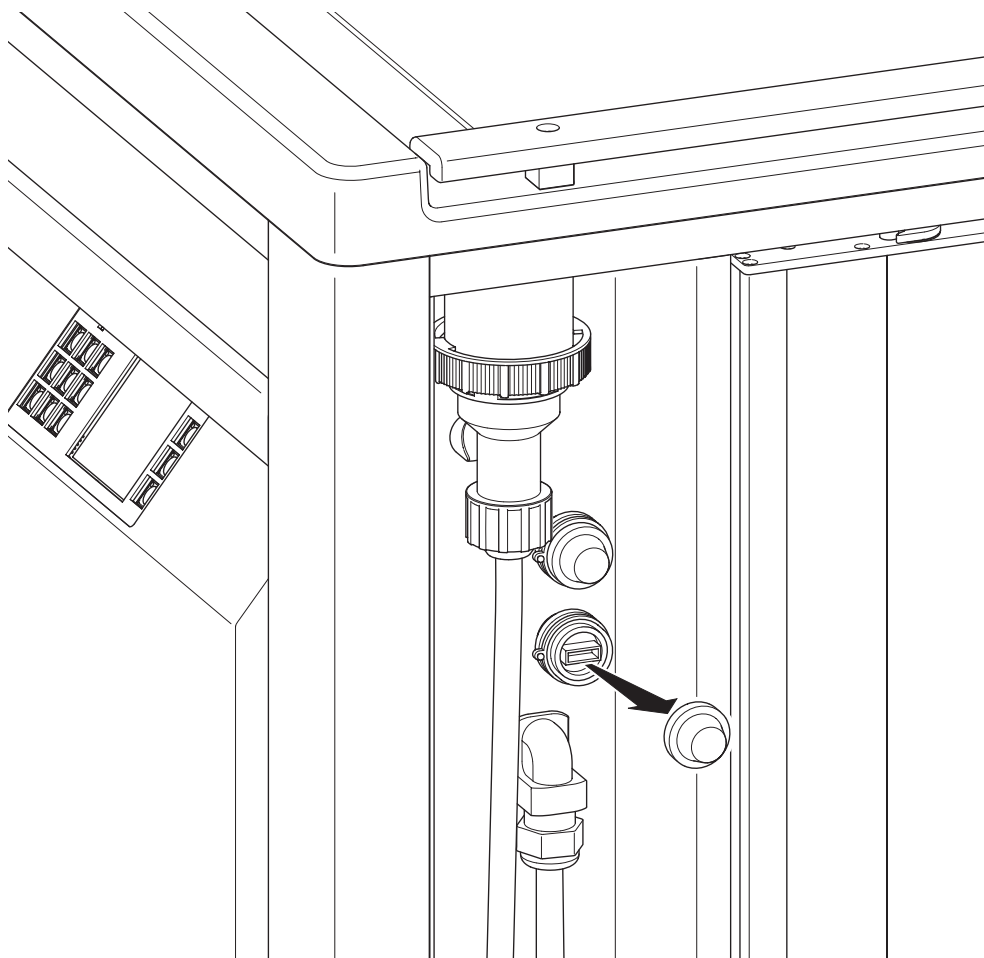
Each event that generates an alarm message is saved when it occurs.

Data is sent by the equipment to the computer via the USB port on the equipment and relevant "Communicator USB" software.

Each time the USB is removed, close the USB port with a cap to prevent cleaning or dust from causing malfunctions.

When the data memory is full, the oldest data is overwritten with new data.

See the relevant manual for further information.



6.15. MULTIPOWER (OPTIONAL)

Function which, on set devices, lets you manually or automatically change the absorbed power.

From the "Multipower" menu, select one of the three operating modes:

- **Full power (default):** oven system running always using maximum power available to the device.
- **Reduced power:** oven system running always using reduced power compared to maximum available power. (the % power reduction varies according to the maximum starting power).
- **Variable power:** the oven system runs at full power until the oven compartment temperature is reached, set by the first cycle step. When the set temperature is reached, the oven system runs at reduced power until the cycle ends.

Equipment use in "variable power" mode:

- **Does not penalise oven system performance (time and quality).**
- **Is helpful in system where power surge management must be optimised to reduce energy costs to a minimum.**

6 EQUIPMENT USE

6.16. EQUIPMENT REMOTE CONTROL (OPTIONAL)

The device can be connected to an Ethernet network.

This option lets you fully manage all device functions from one or more PCS.

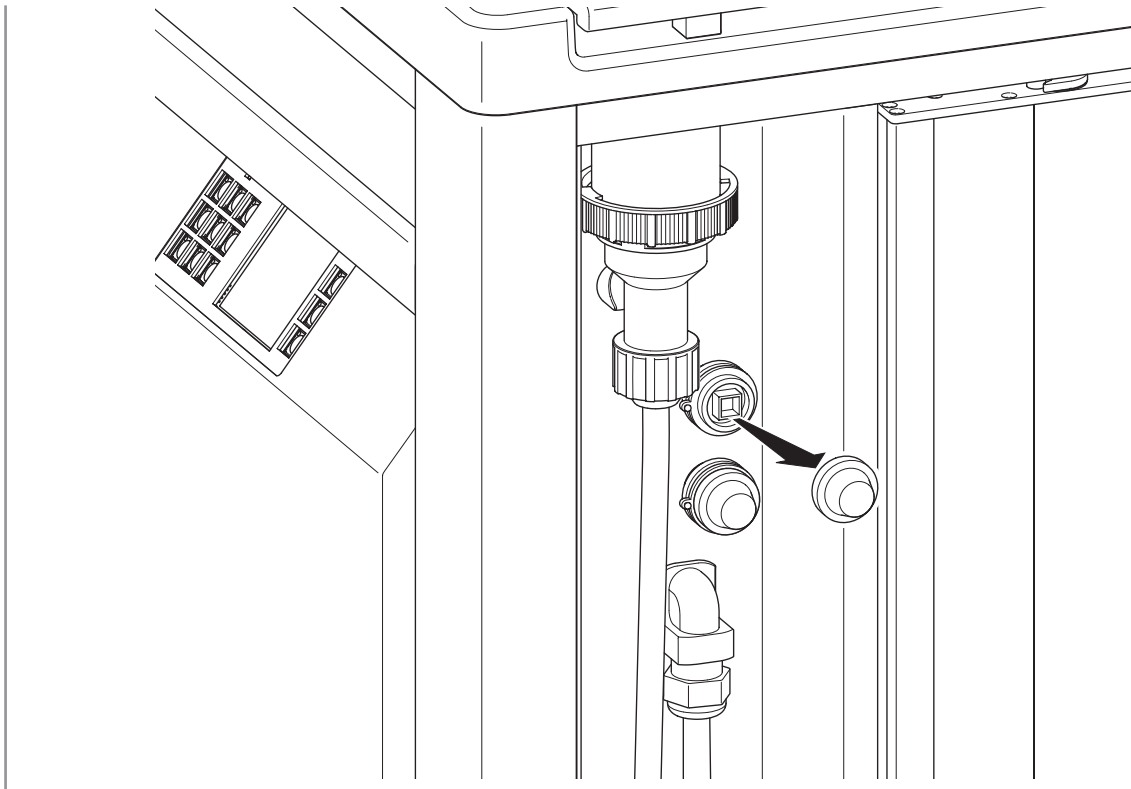
This is possible via an additional electronic board that interfaces the equipment and Ethernet and the "Communicator Plus" software to dialogue between the device and PC.

The device can also be remotely controlled via Wi-Fi, wireless, replacing the ethernet module with a Wi-Fi one.

To connect with the network, remove the RJ45 jack cap and insert the relevant connector. When the equipment is turned on, the board initialises to ready for dialogue with the control PC.

Each time the connection cable is removed, close the RJ45 jack with a cap to prevent cleaning or dust from causing malfunctions.

See the relevant manual for further information.



6.17. TOW DEVICE USE

The optional tow device lets you move one or more trolleys with the help of a tractor with maximum 3.5 km/h speed.

Proceed as follows:

1. Lower the swinging rod (A) and hook it to the tractor tow hook with the pin (B).
2. Insert the safety pin (C)

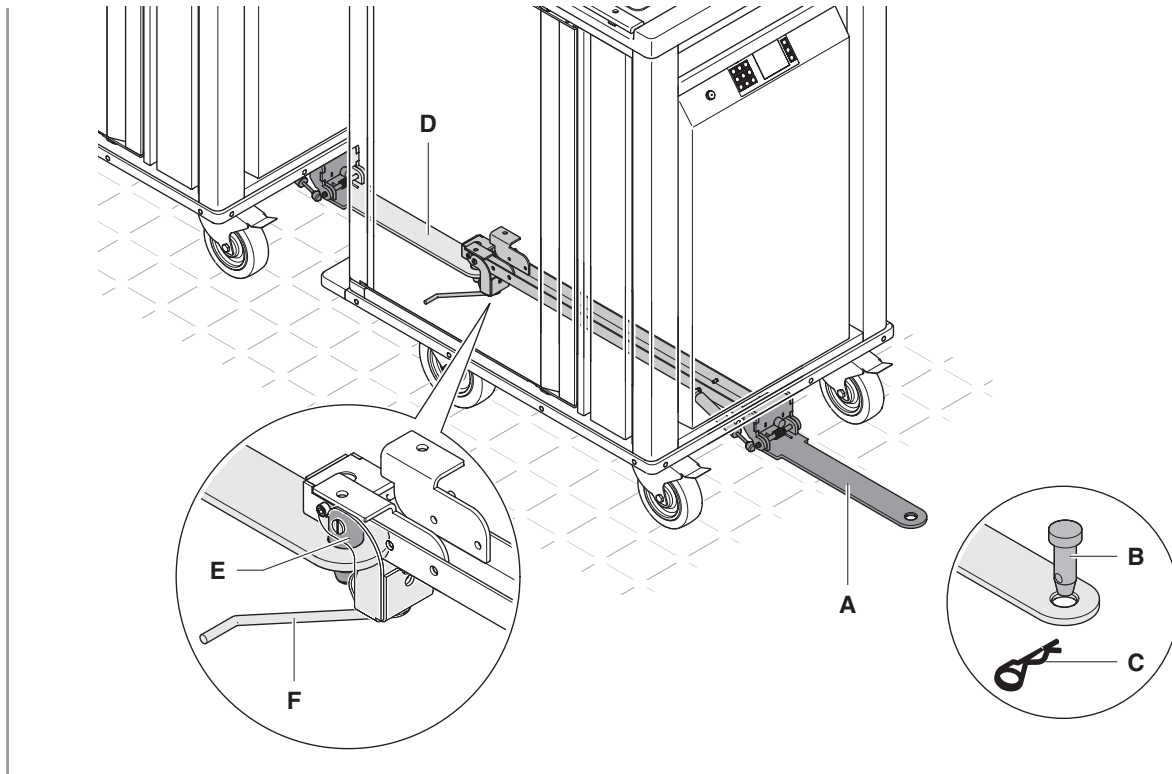


WARNING: the plant safety manager must carefully assess the path of the trained trolley, making sure there is sufficient space for manoeuvres, that the path floor is suitable without irregularities or excessive offsets and, above all, that this path is exclusively dedicated to equipment towing without damaging people or property along the path. He/she is also responsible for choosing a maximum number of trainable trolleys that cannot exceed the number specified in this manual.

6 EQUIPMENT USE

To add other carriages to the first, proceed as follows.

1. Lower the swinging rod (D) on the second trolley and hook it to the first trolley pin (E).
2. Make sure the automatic safety stop (F) is closed.
3. Repeat for subsequent trolleys.



To unhook trolley, press the lever (F) down to free the pin (E) and remove the swinging rod (D).
For the trolley attached to the tractor, remove the safety pin (C) and pin (B).



WARNING: hook and unhook trolleys on horizontal surfaces and not on slanted floors.



WARNING: up to a maximum of 4 TROLLEYS CAN BE HOOKED TOGETHER SIMULTANEOUSLY.



WARNING: If towing with a UNITRAY 2 motorised version trolley, the maximum number of trolleys that can hooked together simultaneously, including the tow trolley, is 2.

6 EQUIPMENT USE

6.18. FOLDING SHELF/FOLDING SHELF WITH BUILT-IN BAG HOLDER/BAG HOLDER USE (OPTIONAL)

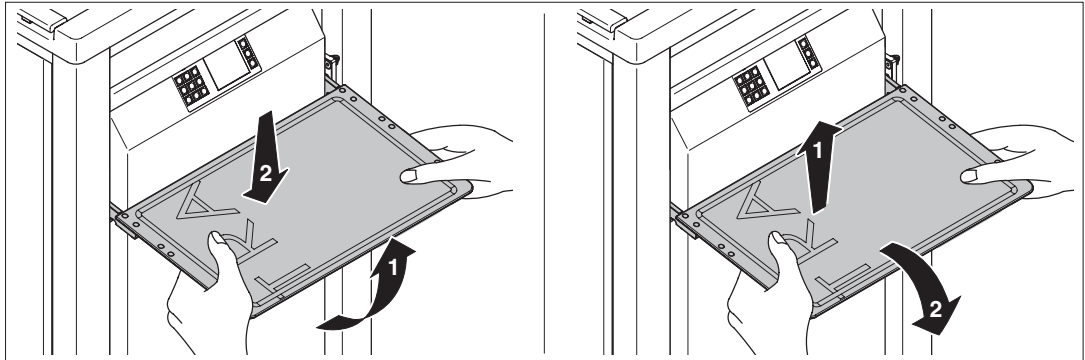
A bag holder or folding shelf with or without built-in bag holder can be installed on the trolley.



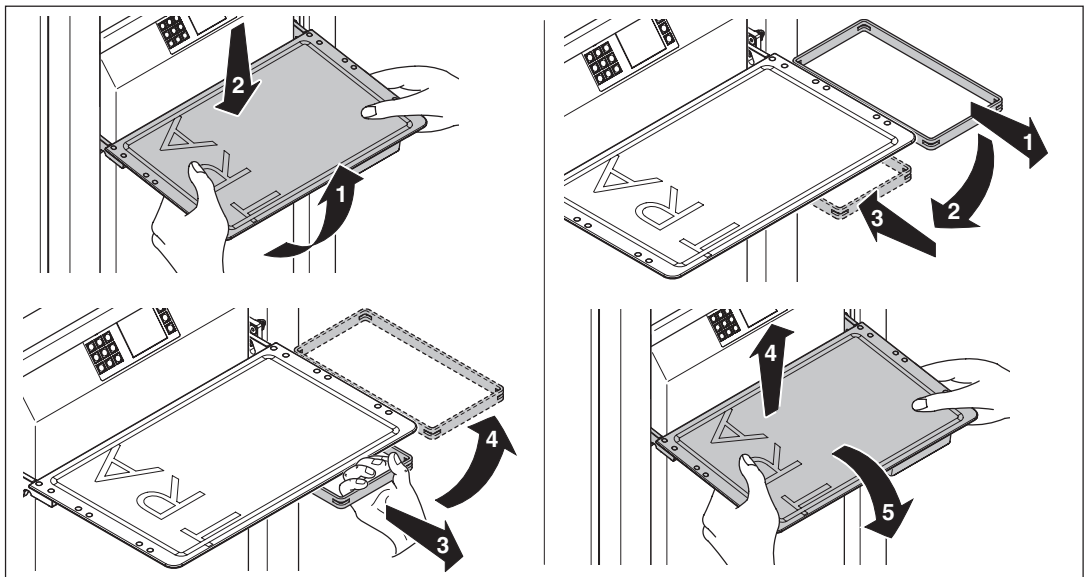
HAZARD - WARNING: be careful when opening/closing them to avoid crushing your hands.

The diagram illustrates the correct sequence for safe work.

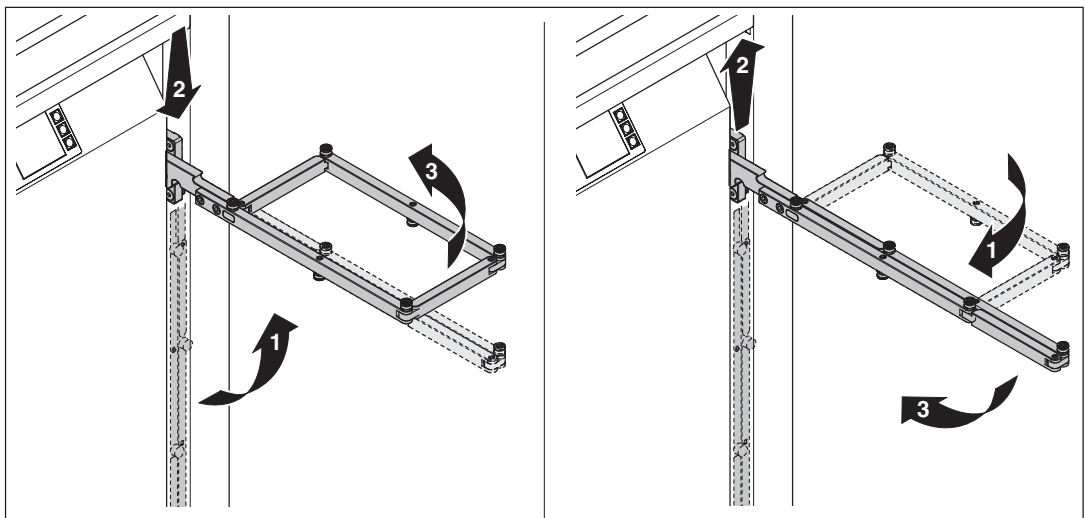
Opening/
Closure
Folding shelf



Opening/
Closure
Folding shelf
with built-in bag
holder



Opening/
Closure
Bag holder



6.19. SERVICE TROLLEY AND REMOVABLE BASKET TRANSFER USE (OPTIONAL)

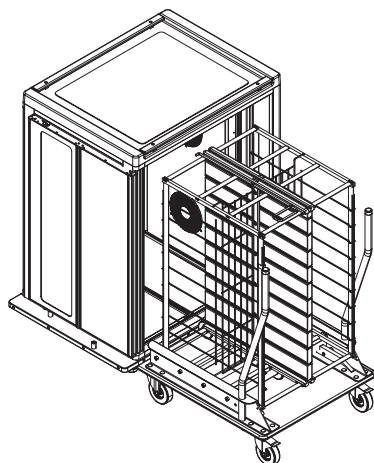
Upon request, the Unitray trolley can be equipped with a connection for a service trolley and basket housing.

The basket is a specific cage structure which, due to its special shape and dimensions, can be easily transferred from the service trolley to the regeneration trolley, moving all food at once.

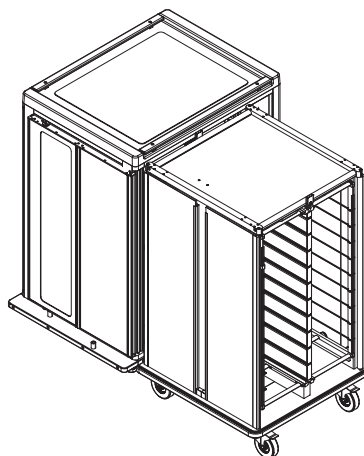
Use this optional device to park the Unitray trolley in the ward while waiting to load food to be regenerated.

The basket is moved from the kitchen/canteen to the ward by the service trolley. Upon arrival, the basket is moved into the Unitray trolley to regenerate food and then moved back into the service trolley to distribute meals.

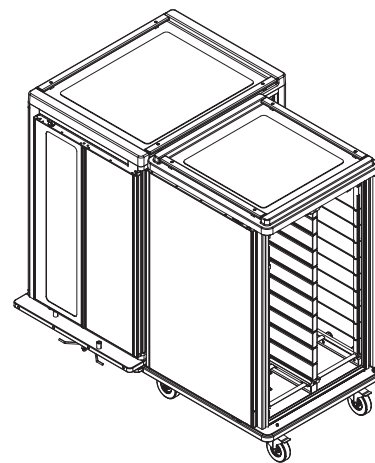
The diagram illustrates the various solutions.



UNITRAY WITH UNISERV
JOLLY SHUTTLE



UNITRAY WITH UNISERV
STANDARD SHUTTLE



UNITRAY WITH UNISERV
PLUS SHUTTLE

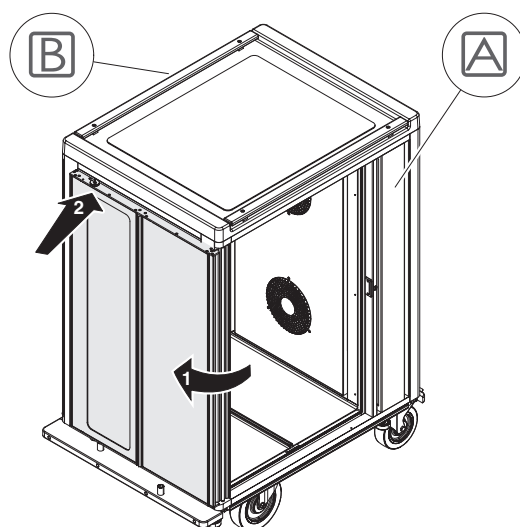
The trolley equipped for this use (optional) has two centring wheels on the lower part to guide the service trolleys in the right direction to transfer the basket.

The basket is moved from the service trolley to the regeneration one or vice versa by the retractable handle that allows for this manoeuvre to be performed without assuming unnatural positions and without burn risks (the handle is located on the cold compartment).

For easy tray loading, the part of the basket that enters the cold compartment is coloured blue while the part that enters the hot side is coloured red.

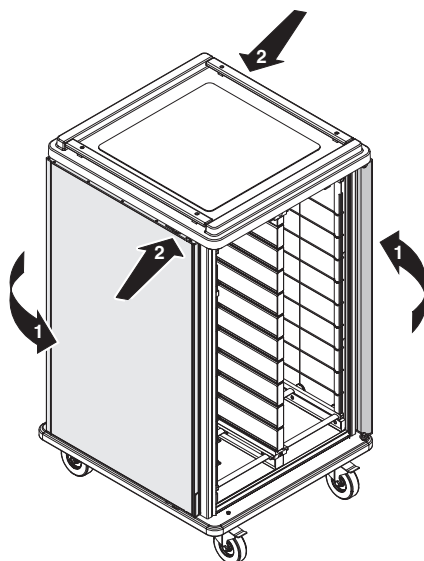
Proceed as follows to transfer the basket from the service trolley to the Unitray trolley:

- Open the door (2-door Unitray) or doors (4-door Unitray) on the left side marked with the letter "A" (1).
- Lock the doors open using the door locks (2).

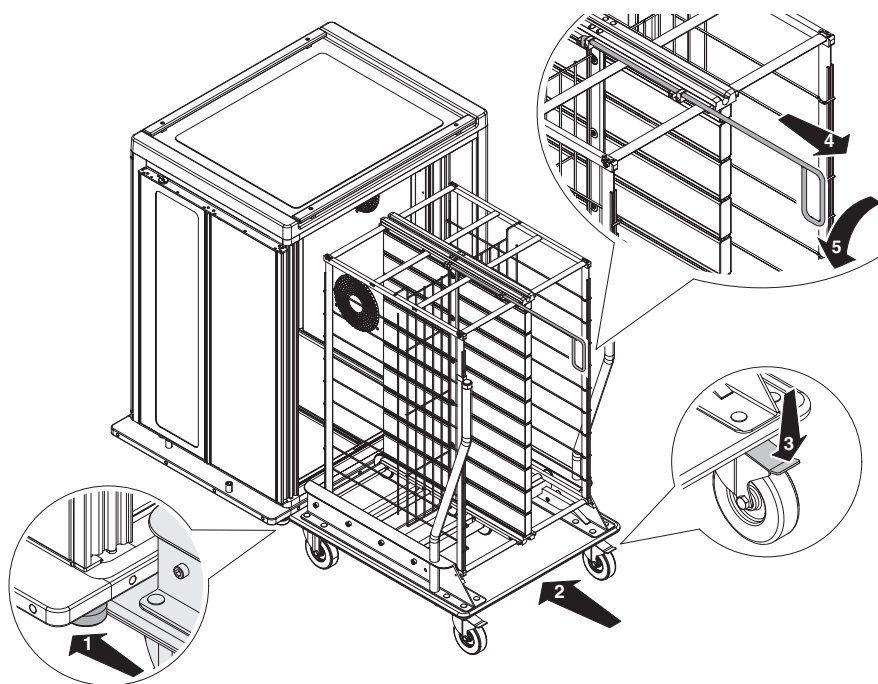


6 EQUIPMENT USE

- For shuttles (Standard/Plus) open both doors (1) and lock them open using the specific door locks (2).

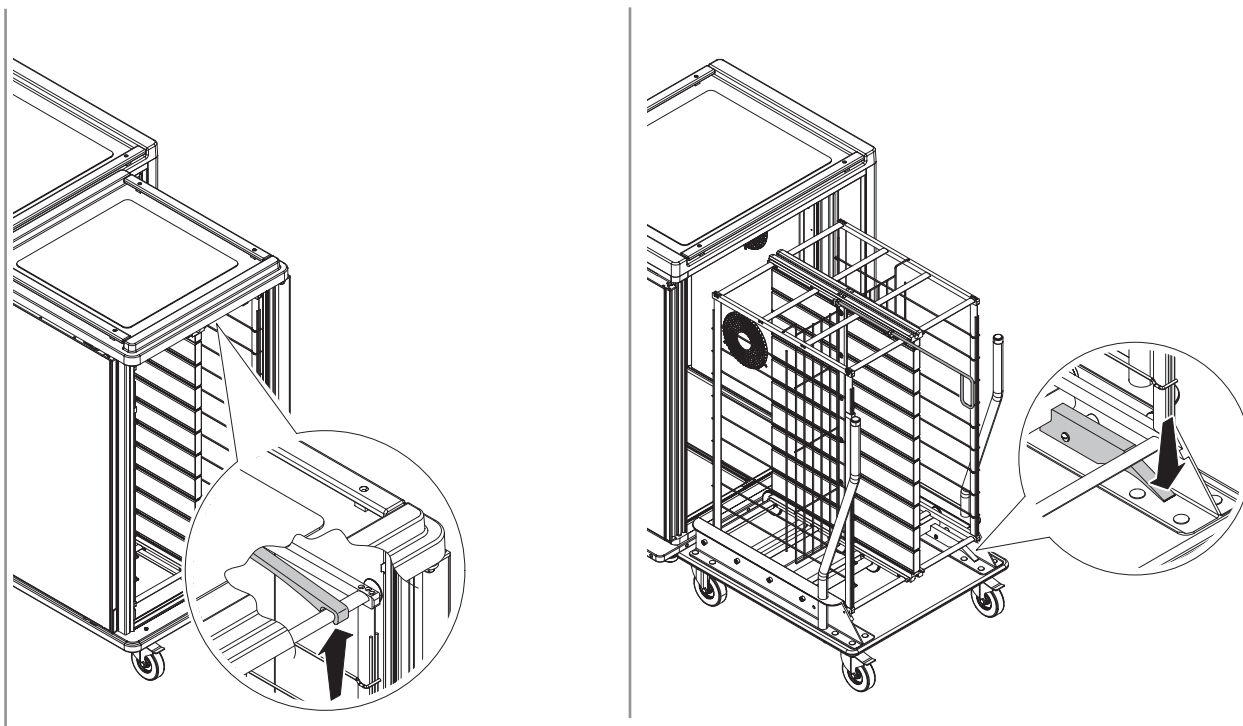


- Move the service trolley near the Unitray trolley, centring the base within the two centring wheels (1).
- Rest the service trolley against the Unitray trolley being sure they are perpendicular (2).
- Put on the service trolley brakes (3).
- Pull the basket handle outward and rotate it counter-clockwise 90° (4, 5).

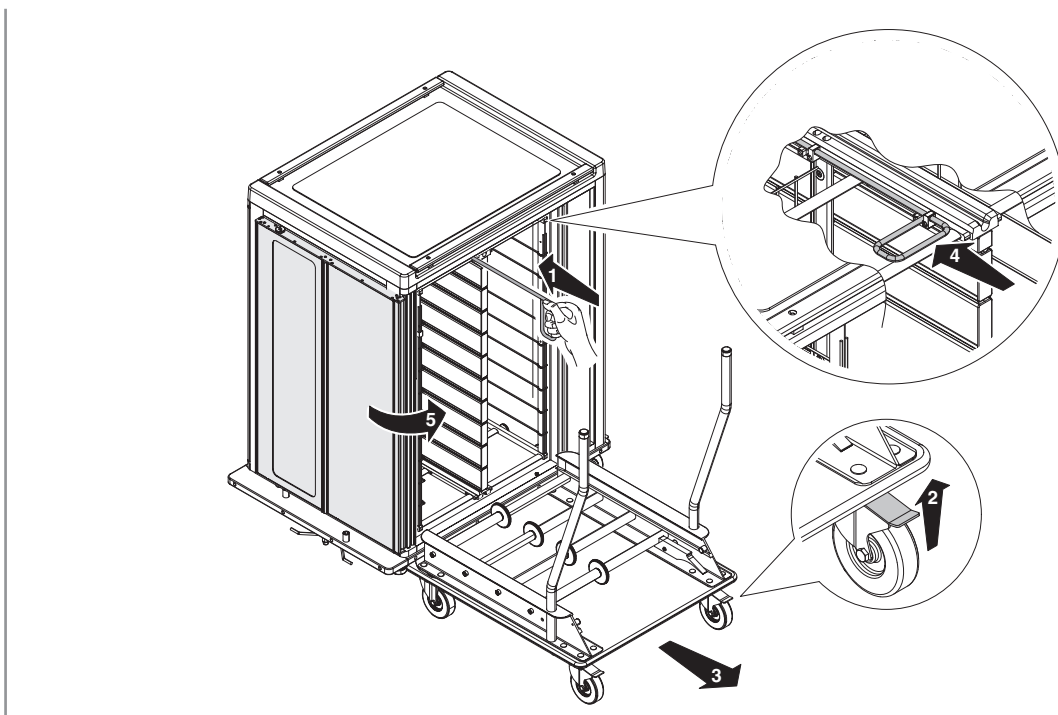


6 EQUIPMENT USE

- Release the basket by pulling the lock lever upward or pushing the pedal according to the type of shuttle or Jolly trolley.



- Push the service trolley towards the Unitray trolley using the handle until the entire basket is inside the Unitray (1).
- Make sure the red basket parts are correctly inserted in the Unitray hot compartment.
- Release the brakes and move the service trolley away from the Unitray (2, 3).
- Turn the basket handle clockwise 90° and push it inwards so it does not protrude from the basket (4).
- Close the Unitray doors (5).



6 EQUIPMENT USE

Proceed as follows to transfer the basket from Unitray to the service trolley:

- Open the doors on the left side of Unitray and lock them open using the specific door locks.
- Pull out the basket handle and rotate it counter-clockwise 90°.
- For shuttles, open both doors and lock them open using the specific door locks.
- Move the service trolley near the Unitray trolley, centring the base within the two centring wheels.
- Rest the service trolley against the Unitray trolley being sure they are perpendicular.
- Put on the service trolley brakes.
- Pull the basket out of the Unitray into the service trolley using the handle so that the basket is correctly positioned and held still by the basket stop lever.
- Turn the basket handle clockwise 90° and push it inwards so it does not protrude from the basket.
- Release the brakes and move the service trolley away from the Unitray.
- Close service trolley doors if applicable.

6.20. MOTORISED UNITRAY (OPTIONAL)

PREMISE

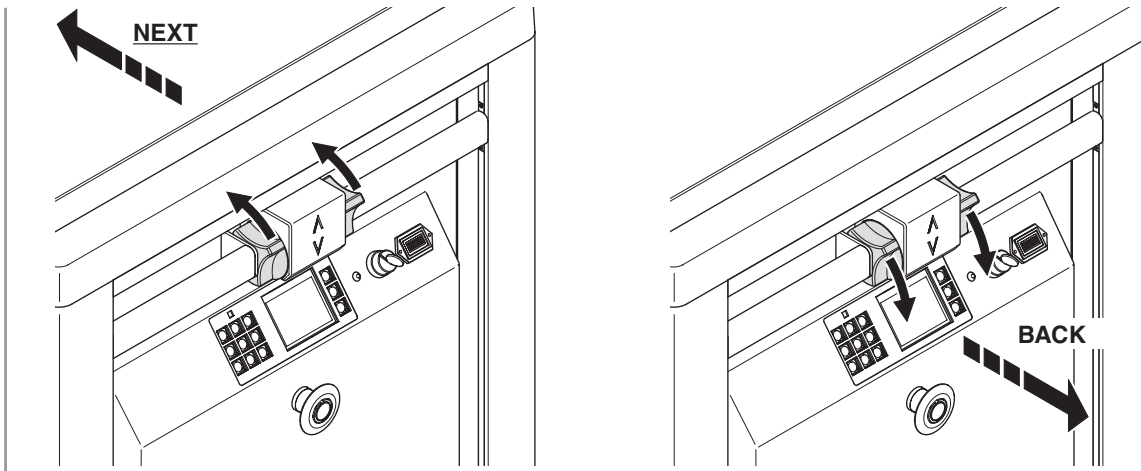
The motorised Unitray is an option designed to make equipment movement easier on long routes or ramps.

The option consists of a battery-powered tow device complete with control console and progressive manual accelerator to forward and reverse drive.

The motorised Unitray trolley can easily travel over 15% gradients, compatible with the ramp adherence characteristics, without operator effort.

Maximum speed at full load is:

- 2 km/h for standard forward drive (ignition key turned to >)
- 1 km/h for standard reverse drive, 3,5 km/h for forward Over Drive (ignition key turned to >>),
- 2 km/h for reverse Over Drive.



WARNING: Over Drive speed is only intended for significantly long straight travel, with hallways over three metres wide specifically dedicated to service equipment transit where unauthorised pedestrian, visitor or patient transit is prohibited.



WARNING: only use forward drive for straight travel with adequate space for manoeuvres that provide the operator with a sufficient view of the road to be travelled.

6 EQUIPMENT USE

□ SWITCHING ON AND DRIVING

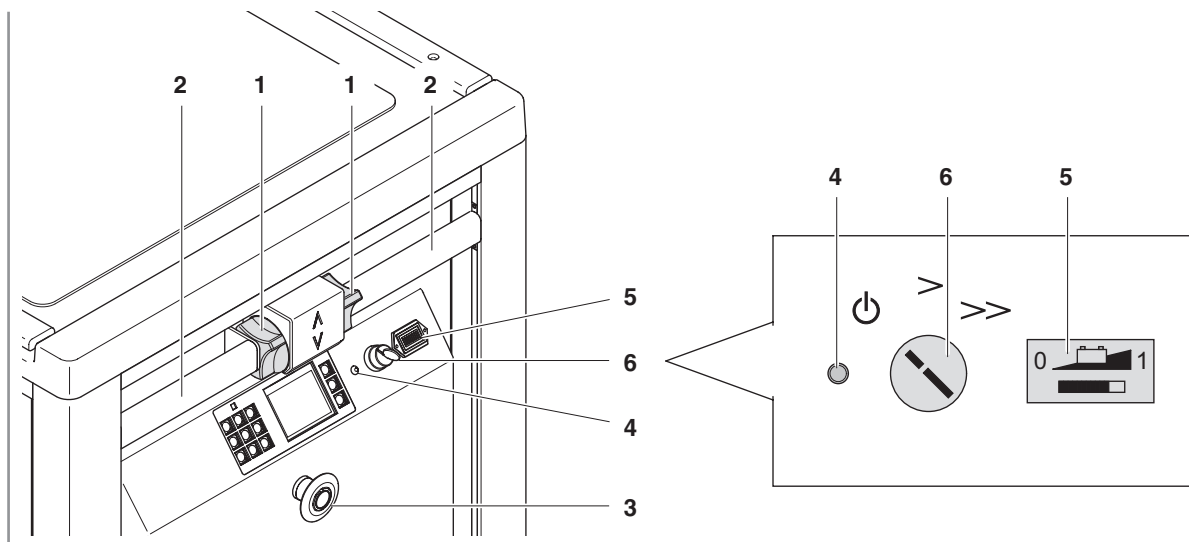
Turn the ignition key (6) to standard drive > or overdrive >>.

The green led (4) indicates that power is on and the device is correctly operating; the green led blinks to indicate operating faults that require technical service.

The charge indicator (5) indicates the battery charge level; the bar furthest to the right indicates maximum charge, those between the right and left indicate intermediate charge between maximum and minimum.

When the bar furthest to the left starts to blink, the equipment may only move towards the charging station.

Grasp the handles (2) with both hands to be able to rotate the accelerator wheels with your thumbs (1). Rotate the accelerator forward to move the equipment forward in front of the operator. Vice versa, rotate the accelerator backwards to move in reverse.



Accelerator rotation sets equipment speed in the selected direction. The operator has full control of the trolley at the speed set using the accelerator according to the type of floor and presence of obstacles. The 2 km/h maximum standard speed for forward drive and 1 km/h for reverse drive is a non-alterable safety limit.

Release the accelerator to stop the trolley within 0.3 and 0.5 metres according to speed and charge. Press the safety stop button (3) in emergency situations or in the event of malfunctions to cut off power to the tow device and stop it.

Should the operator accidentally find him/herself between an obstacle and the equipment, the protruding mushroom-head stop button only activates when the equipment comes into contact with the operator.

□ BATTERY CHARGE

Batteries can be charged in two ways:

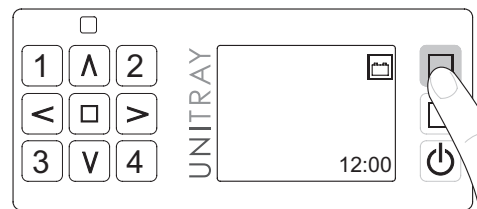
MANUAL (default)

- Turn the switch (6) off (P) and remove the key.
- Connect the equipment to the power supply (the same used for heat cycles).
- Press the "Battery" function key in the Stand-By screen

The remaining charge time, in hours, is display. 0 time is displayed when fully charged.

When charged, press the "Battery" function key and disconnect the equipment from the mains.

Press the "Battery" function key when charging to stop charging.



CAUTION WARNING: do not partially charge batteries; wait until fully charged (Timer=0). Partial charges shorten battery working life.

6 EQUIPMENT USE

AUTOMATIC (settable upon request by the Qualified and Authorised Technician)

If set, each time the equipment is turned on for normal use, batteries will be charged until the equipment is turned off.



IMPORTANT: batteries can be manually charged even if automatic charge is set.



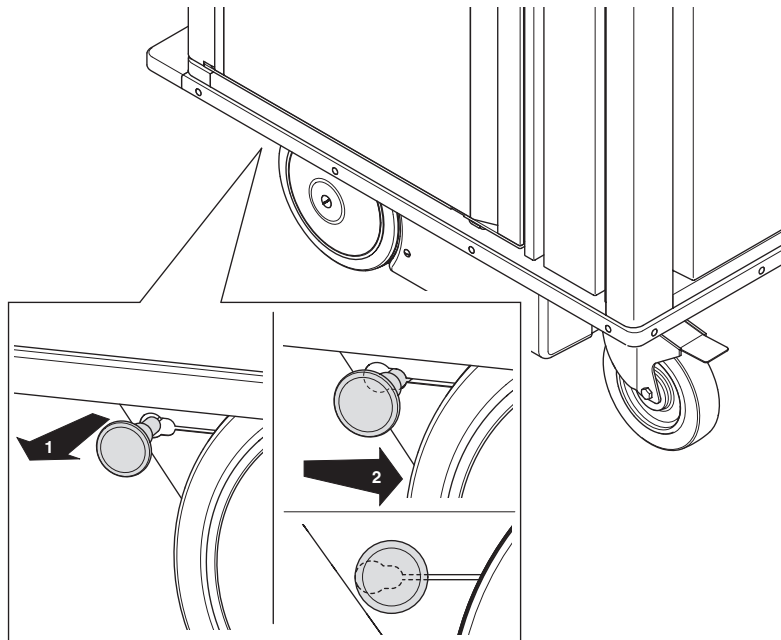
CAUTION - WARNING: battery charge in automatic mode significantly reduces battery working life. Only set if strictly necessary and after consulting the Qualified and Authorised Technician.

☐ **MOTOR BRAKE RELEASE**

In the event of tow device malfunction that prevents use and the trolley must be moved to a ward or returned to the repairs room, the motor brake can be mechanically released by turning the illustrated release knob:

slightly pull the knob (about 2 cm) to move it to the right in the smaller housing. The knob cannot return to its housing in this position and the motor brake is manually released.

To restore normal use conditions, slightly pull the knob to move it to the left to the larger housing. Release the knob which, re-entering, re-enables the mechanical brake. The Unitray trolley can be pushed, with more effort, when the brake is released.



6 EQUIPMENT USE

□ SPECIAL RECOMMENDATIONS

Poor vision during forward drive further increases operator exposure to the risk of colliding with people or objects along the path.

Only use forward drive for straight travel with adequate space for manoeuvres that provide the operator with a sufficient view of the road to be travelled.

Reverse drive guarantees a better view but exposes the operator to accident risks, specifically foot crushing or, worse, lower limb fractures in the event of collision with the lower equipment bumpers.

Move backwards only in case of manoeuvre needs and go very slowly, continuously checking there is adequate space for manoeuvring.

Before connecting the equipment to the electrical socket for normal heat cycles or battery charge, **the trolley operator must turn the key (6) to off (⏻) and remove it to prevent the trolley from accidentally moving when plugged in.** When plugged in and powered, tow device use is automatically inhibited even if the key is left in the ignition.



WARNING: towing is only inhibited when the socket is powered. Otherwise, if plugged in but the socket is OFF, towing is not automatically inhibited and the unattended equipment could be inappropriately used by unauthorised personnel who, moving the trolley, could damage the power cord and socket. Never leave the equipment unattended with the key in the ignition to guarantee that only qualified personnel have access to use it.

Upon request, training sessions can be organised for motorised Unitray purchasers, issuing a certificate of qualification for users to improve equipment use safety conditions for customers.

The purchaser must train operators. This condition is essential and the user is still liable for evaluating path conditions (obstacles, people, wet floor, uneven floor, winding paths, limited manoeuvre space, etc.) and equipment efficiency conditions.



WARNING: the manufacturer cannot be held liable for user operations even if they possess a certificate of qualification.

■ 6.20. DECOMMISSIONING

For long periods of disuse, proceed as follows:

- turn off the equipment by pressing the main switch (if applicable).
- unplug the equipment from the power supply.
- accurately clean the equipment and surrounding areas.
- place the equipment in a protected area where hygiene is guaranteed on a stable surface.
- leave doors ajar to avoid unpleasant odours from forming inside compartments.
- cover the equipment to prevent dust from accumulating.
- make sure environmental conditions are suited to preserve the equipment in time
- charge any electrical batteries at regular intervals, 30 days for the motorised version and 60 for the version with data logger.

7 MAINTENANCE

7.1. MAINTENANCE RECOMMENDATIONS

Maintain the equipment in maximum efficiency conditions, performing the scheduled maintenance set by the manufacturer. If well performed, it will provide the best performance, longer working life and constant safety conditions. Always use the specific personal protection equipment such as gloves, non-slip shoes and suitable clothing foreseen by current directives and regulations.



WARNING: before performing any maintenance, turn on all the safety devices and adequately inform the surrounding users and personnel.

ATTENTION: if a motorised drive device is installed on the equipment, make sure the wheels are lifted off the ground. See the chapter on lifting and handling for the information required to work in safety conditions.

7.2. EQUIPMENT ISOLATION

All equipment maintenance operations, repairs and cleaning must be carried out in conditions that comply with all applicable accident prevention and safety regulations.

In order to satisfy this requirement, it is absolutely forbidden to perform any of the aforementioned interventions without warning all concerned that the equipment has been put into maintenance mode, checking that:

- In the event the power cord is disconnected from the power supply socket, the equipment must be in a position where the maintenance technician can constantly check that the cable remains disconnected.
- The area where the device undergoing maintenance work is installed is suitable for such types of interventions.
- No unauthorised personnel are near the equipment.
- All device power cables have been unplugged from the mains.
- All device parts are at room temperature.
- There are no moving parts (fans, motors, etc.).
- Wheel brakes are on.

7.3. SPECIAL PRECAUTIONS

When performing maintenance and repairs, it is best to apply the following recommendations:

- Before starting work, place a "MAINTENANCE" sign in on the equipment in a highly visible location;
- Do not use solvents or flammable materials;
- Be careful not to pollute the environment with lubricants or coolants;
- To access higher parts of the equipment, use means appropriate for the work to be performed;
- Do not climb on the equipment since it was not designed to support people;
- At the end of work, restore and correctly secure all removed or opened guards and protections.

The manufacturer cannot be held liable for failure to observe the listed recommendations or any other other use not mentioned in these instructions.

7.4. CLEANING



WARNING: Before cleaning the equipment (at the end of the day or when necessary), make sure the main switch is released (if applicable), unplug the power plug from the electrical socket and ensure it never gets wet for any reason. Make sure the various socket covers are closed before cleaning. Make sure areas to be cleaned are fully cooled.



WARNING: if the purchased product does not include a power plug with lock nut and relevant support, avoid getting the plug wet at all costs.

7 MAINTENANCE

☐ CLEANING WITH A DAMP CLOTH

1. Open the doors
2. Remove the partition walls and tray supports
3. Clean equipment surfaces and accessories with a damp cloth or slightly dampened with suitable detergent (for appropriate detergents, see "sanitising the equipment").



CAUTION - WARNING: only clean with food-safe detergents. Do not use corrosive or flammable cleaning products or products that contain substances harmful to human health. Do not dampen parts in the technical compartment to avoid damaging components, especially electric and electronic components.

☐ CLEANING WITH WATER

Can be cleaned with water as long as no jets are used.

1. Open the doors
2. Remove the partition wall and tray supports that are easier to clean outside the trolley.
3. Clean equipment surfaces and accessories following the previous instructions and using suitable detergent (for appropriate detergents, see "sanitising the equipment").



CAUTION - WARNING: only clean with food-safe detergents. Do not use corrosive or flammable cleaning products or products that contain substances harmful to human health. Do not dampen parts in the technical compartment to avoid damaging components, especially electric and electronic components.

4. Thoroughly rinse and dry equipment and accessories.
5. Reassemble all previously removed elements.

☐ DISHWASHER CLEANING

Only tray supports and utensils supplied with the equipment are dishwasher safe. Limit the use of aggressive detergents and following the dishwasher manufacturer's instructions.

7.5. SANITISING THE EQUIPMENT

When considering that the equipment is used to prepare food for human consumption, pay special attention to all that concerns hygiene and always keep the equipment and surrounding area clean.



CAUTION – WARNING: before cleaning the equipment, unplug the power cord from the electrical socket and hook it to the specific hook making sure the lock nut is tight.

Make sure the various socket covers are closed before cleaning the equipment.

Make sure areas to be cleaned are fully cooled.

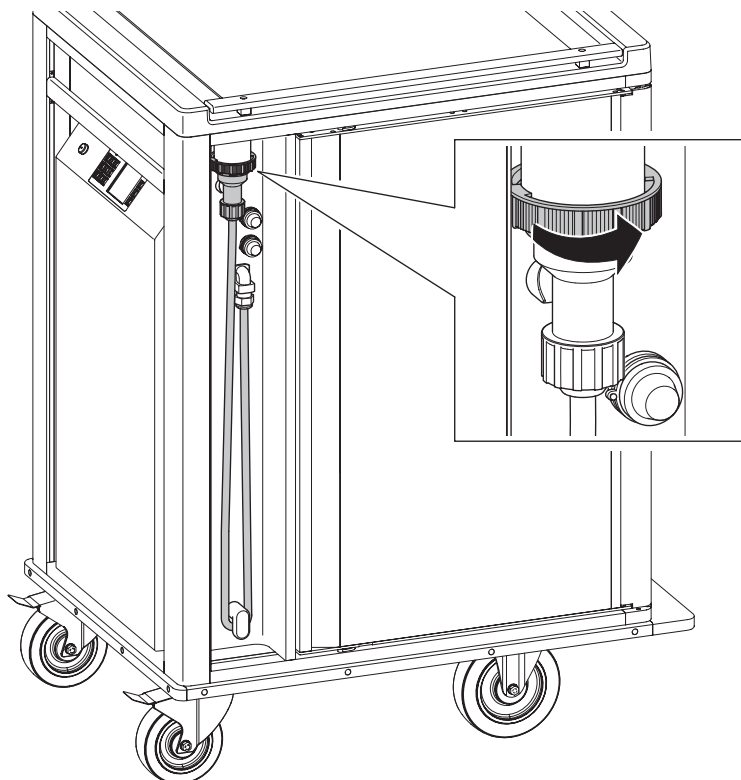
Sanitising products

- to wash and rinse: softened drinking water (max hardness 10°f) at maximum 65°C
- to clean and dry: non-abrasive cloth that does not leave any residue
- admitted detergent and/or sanitising products: detergents (retail) diluted in water, specific for aluminium and compatible with plastic such as PP, PE and ABS
- odour removal products: citric acid or acetic acid based products



CAUTION – WARNING: before restarting the equipment, accurately rinse and dry all surfaces and make sure all detergents, sanitising and polishing product residue has been removed."

7 MAINTENANCE



Apply the following recommendations:



CAUTION – WARNING: rubber gloves, face mask and protective goggles must be worn during cleaning as foreseen by current safety regulations.

- Always use the utmost caution when handling detergents.
- Only spray small amounts of detergent.
- Do not spray detergent on hot surfaces.
- Do not spray detergent on people or animals
- Follow the instructions on the detergent packaging and technical sheet.
- To clean equipment parts, only use warm water and non-abrasive food-safe detergents.

Do not use products that contain products harmful or hazardous to human health (solvents, petrol, etc.).

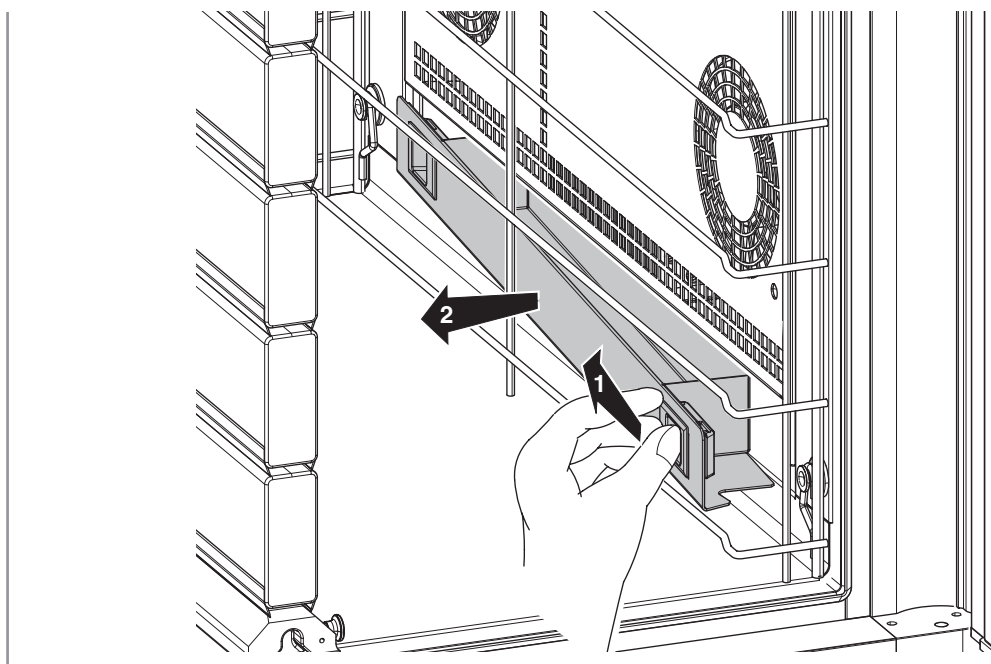
Do not clean epoxy painted and/or synthetic surfaces with products for stainless steel, to avoid damages.

- Rinse surfaces with drinking water and dry them.
- Remove trays before cleaning internal parts.
- Be careful of stainless steel surfaces to avoid damaging them. Specifically, avoid using corrosive products, do not use abrasive materials, sharp tools or other metals. Residue from other metals can form chemical compounds that could cause rust.
- Avoid any contact with iron and steel. If stainless steel comes into contact with these materials, rust may form.
- Promptly clean food residue to avoid hardening.
- Clean any lime scale that may form on equipment surfaces.
- ONLY clean more resistant dirt with a natural bristle or plastic brush to avoid damaging equipment components.
- Stainless steel parts should not be left in prolonged contact with acids, spices, salts, etc. Even acid steam that develops when cleaning tiles can cause corrosion.

7 MAINTENANCE

7.6. CONDENSATION WATER TANK CLEANING

Remove and clean the condensation water tank in the fridge zone every day.
Remove the tank all illustrated and empty water. Replace the tank when finished.



7.7. REFRIGERATION EFFICIENCY TEST

Room temperature must be max 30°C when performing this test. Proceed as follows:

1. Place empty trays in the trolley and correctly close the doors.
2. Start a "warming" cycle at 120°C for 30 minutes.

At the end of the cycle, the cold zone temperature read on the display should not be over 3°C (with fridge set to 1°C in the refrigeration menu).



IMPORTANT: In the event of fault, immediately contact the manufacturer's Technical Support Department.

7.8. WHEEL EFFICIENCY TEST

Proceed as follows:

☐ EVERY MONTH

- Check castor wheel lock brake efficiency.
Put on the brakes one at a time and move the equipment longitudinally and crosswise several centimetres in alternation. The wheel with the brake on should slide on the floor without rotating on the horizontal axis (longitudinal movement) or vertical axis (support rotation).
- Check wheel rotating efficiency.
Travel a short distance on a flat and even floor. The device should proceed evenly, without jerks or excessive effort. Otherwise, make sure the wheel treads are evenly worn (uneven wear could be caused by towing the equipment with one or more of the wheels locked) or that threads, cloths or foreign objects are not wrapped around the wheel hubs.
- Check for good castor wheel support rotation.
Move the trolley several centimetres in the four directions to form a circle with a half-metre diameter. Wheel support rotation should be even without excessive effort and/or jams.

7 MAINTENANCE

□ EVERY 6 MONTHS

- Check and tighten wheel lock screws. Use a torque wrench to make sure the screw torque is 25 Nm (2.5 Kgm).
For very loose screws, fully unscrew and tighten after applying an average effect thread brake on the thread (LOXEAL 53.14 recommended).
- Check and tighten central wheel rotation axis lock nuts.



IMPORTANT: In the event of fault, immediately contact the manufacturer's Technical Support Department.

■ 7.9. WHEEL GREASING

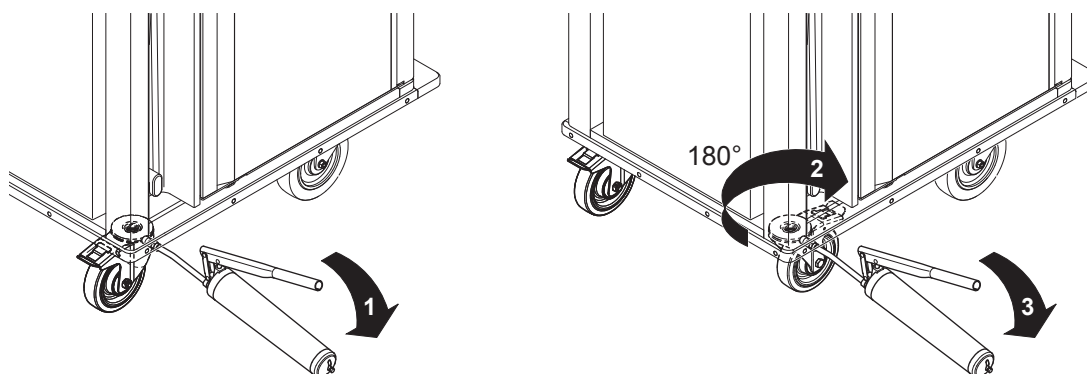


WARNING: Only for wheels equipped with greaser.

Grease the heel joint using grease type: MOLYGUARD GS ROLLER DR.

Proceed as follows:

- locate the greasing hole on the wheel joint.
 - grease the wheel using a nozzle greaser or a grease gun.
 - perform a wheel rotation of 180° and grease again. The rotation of 180° is necessary to guarantee the best greasing.
- Perform the greasing operation whenever it is necessary.



7 MAINTENANCE

7.10. TOW DEVICE EFFICIENCY TEST (OPTIONAL)

Proceed as follows:

☐ EVERY MONTH

- Make sure the tow bar can be easily moved from the idle position to the work position without jams or jerks.
The rod return spring should have enough force to recall and hold the tow bar in the idle position.
- Check and tighten tow device lock nuts.



IMPORTANT: always accompany the tow bar in recall movement to avoid gaining speed and kinetic energy hazardous to the user.

☐ EVERY 6 MONTHS

- Check safety stop operations and integrity



IMPORTANT: In the event of fault, immediately contact the manufacturer's Technical Support Department.

7.11. ROUTINE MAINTENANCE

☐ GENERAL INSTRUCTIONS

Only have qualified technician troubleshoot equipment in the event of faults.

The equipment was designed to reduce routine maintenance to a minimum. The user should judge its status and suitability for use.

Stop the equipment and perform maintenance whenever non-optimal performance is suspected to maintain maximum efficiency.

Visually check the condition of individual equipment parts, verifying that there are no anomalies due to damage or deformation.

7.12. SCHEDULED MAINTENANCE

The following operations should be performed at the indicated intervals.



IMPORTANT: The manufacturer's warranty is null and void in the event of failure to observe these instructions.

Scheduled routine maintenance includes inspections, checks and work aimed to prevent equipment downtime and faults. Even if it is a valid instrument for accident prevention, preventive maintenance does not exempt the User from his responsibility to evaluate the efficiency and safety of the equipment before using it in order to avoid the risk of injuries or damage.

□ SCHEDULED MAINTENANCE TABLE

FREQUENCY	ADDRESSEE	COMPONENT	INTERVENTION TYPE	INTERVENTION METHODS	REFERENCE
Every day	Operator	Equipment	General cleaning		"Cleaning"
Every month	Qualified technician	Seals	General checks	Check operations and integrity	
		Power cord and plug	General checks	Check operations and integrity	
		Doors and locks	General checks	Check operations and integrity	
		Refrigeration system	Functional test	Check operations	
		Wheels and parking brakes	General checks	Check bolt tightness, operations and integrity	"Wheel efficiency test"
		Tow hook.	General checks	Check bolt tightness, operations and integrity	"Tow device efficiency test (optional)"
		Motorised unit	Functional test	Check operations and integrity	
				Emergency stop button operating check	
		Bumpers	General checks	Integrity check	
Every 6 months	Qualified technician	Control panel	General checks	Check operations and integrity	
		Refrigeration system condenser	General cleaning	IMPORTANT Perform annually if modest dust accumulation is found upon first intervention	
		Evaporators	General cleaning		
		Resistance compartment	General cleaning		
		Door lock system	General checks	Check operations and integrity	
		Suspension system (if applicable)	General checks	Check bolt tightness, operations and integrity	
Once a year	Qualified technician	Electric wiring	General checks	Check electrical connection and resistance integrity	
		Electrical compartment	General cleaning	Clean with a jet of air	
Every 3 years	Qualified technician	"Data logger" battery	Replace	Contact the manufacturer's authorised service centre	
		Clock battery	Replace		

7 MAINTENANCE

7.13. DIAGNOSTICS AND TROUBLESHOOTING

□ TROUBLESHOOTING

The equipment was tested before commissioning. The information below aims to assist in identifying and solving anomalies and malfunctions that could arise when using the system.

Please contact the manufacturer for equipment faults or malfunctions not described in this manual.



IMPORTANT: do not remove internal equipment parts.

The manufacturer is not liable for any damages caused by tampering.

□ TROUBLESHOOTING TABLE

PROBLEM	CAUSE	SOLUTION
The equipment does not turn on.	No power on the mains line	Make sure the plug is correctly inserted in the electrical socket.
		Make sure the electrical socket safety switch is on
		Check for electricity in the socket
		If applicable, check that the main switch is on (lighted button).
	Power cord damaged	Contact Technical Support
	Equipment power circuit damaged	Contact Technical Support
The trolley heats but does not cool	Refrigerator compartment temperature set too high	Correct the temperature
	Refrigeration system fault	Contact Technical Support
The hot compartment works in heating mode but not in cooling mode	Equipment not designed or not enabled for this purpose	Make sure the equipment is designed for this purpose and, enable refrigeration
	Hot compartment temperature set too high in refrigeration	Correct the temperature
	Refrigeration system fault	Contact Technical Support
	Doors open or ajar	Correctly close doors
Refrigeration system performance poor	Seal gaskets worn	Check and replace damaged gaskets
	Room temperature too high	Lower room temperature
	Food introduced at too high temperature or trays backward (hot in cold)	Check food temperature before inserting it in the mobile shuttle and correctly insert trays
	Refrigeration system fault	Contact Technical Support
	Doors open or ajar	Correctly close doors
During the heat cycle, the cold compartment temperature excessively rises	Partition wall damaged, not correctly inserted or missing	Check partition wall integrity and insertion
	Seal gaskets worn	Check and replace damaged gaskets
	Refrigeration system fault	Contact Technical Support
	Doors open or ajar	Correctly close doors
The equipment does not resume operations after a blackout	Internal equipment battery dead (blackout longer than battery autonomy time)	If power returns after the battery dies, the equipment cannot automatically resume operations. To check whether the internal battery operates correctly, turn on the equipment and run any heat cycle, turn off and turn back on after 2 minutes. The equipment should resume normal operations. Otherwise, contact customer service.

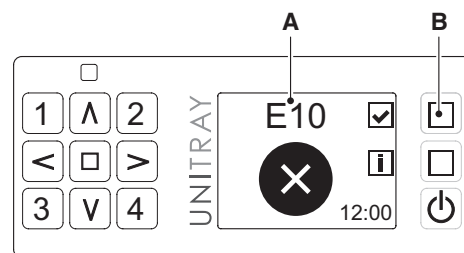
7 MAINTENANCE

ALARM SIGNAL

If the problem or malfunction is not listed in the "Troubleshooting" table, check the "Error Messages" table found below.

The described information aims to identify the alarm signals that appear on the display (A).

Some alarms can be muted using the function key (B) while others require the equipment be turned off to be muted.



ALARM LIST TABLE

CODE ALARM	PROBLEM	SOLUTION	NOTES
E40	Tripped safety thermostat	Wait until the equipment cools and reset the safety thermostat If the problem persists, contact the manufacturer's technical service centre.	
E41	High oven fan overheating	Make sure no foreign objects prevent motor rotation Wait until the motor cools. If the problem persists, contact the manufacturer's technical service centre.	The electrical motor safety thermostat automatically resets.
E42	Central oven fan overheating	Make sure no foreign objects prevent motor rotation Wait until the motor cools. If the problem persists, please contact Technical Support.	The electrical motor safety thermostat automatically resets.
E43	Low oven fan overheating	Make sure no foreign objects prevent motor rotation Wait until the motor cools. If the problem persists, contact the manufacturer's technical service centre.	The electrical motor safety thermostat automatically resets.
E44	One of the two compartments or both have a temperature out of foreseen limits for equipment operations.	Turn the equipment off and back on.	
E45	Cold compartment temperature measured over 45°C. Cannot cool	Check for the partition wall and seal and that the temperature of products in the equipment or work room are not too high. If the problem persists, contact the manufacturer's technical service centre.	The equipment cannot be used until the problem is fixed.
E46	Oven compartment probe fault	Contact Technical Support	The equipment cannot be used until the problem is fixed.
E47	Cold compartment probe fault	Contact Technical Support	The equipment cannot be used until the problem is fixed.
E48	External probe fault	If available, try using another external probe If the problem persists, contact the manufacturer's technical service centre.	The equipment can be used without the external probe.

7 MAINTENANCE

CODE ALARM	PROBLEM	SOLUTION	NOTES
E49	No electrical current in the L1 power phase	Check wiring integrity If the problem persists, contact the manufacturer's technical service centre.	The equipment cannot be used until the problem is fixed.
E50	No electrical current in one or both L2 and L3 power phases	Check wiring integrity If the problem persists, contact the manufacturer's technical service centre.	The device will continue to work but at reduced power.
E51	The compartment did not reach the set cooling temperature within the set time	Check correct refrigeration system operations running the test described in chapter 7.7. If the test is passed, check set temperature and reprogram suitable time to reach the temperature.	If the problem persists, contact the manufacturer's service centre
		Check for the partition wall and seal and that the temperature of the products in the equipment or work room are not too high.	
		Make sure doors are correctly closed and the relevant gaskets.	
E52	The temperature set in the oven compartment was not reached during the work cycle.	Reprogram the cycle and set a time suited to reach the set temperature.	
		Current socket fuses blown or electrical resistance fault. Check whether the equipment works by connecting it to another socket.	If the problem persists, Contact the manufacturer's service centre.
E53	The temperature set in the oven compartment was not reached within the set time during the work cycle in jolly mode.	Set a "jolly cycle control" time suited to equipment use.	If the problem persists, Contact the manufacturer's service centre.
		Current socket fuses blown or electrical resistance fault. Check whether the equipment works by connecting it to another socket.	
E56	Heat cycle set with zero-minute time	Reprogram the cycle and set suitable time.	If the problem persists, Contact the manufacturer's service centre.
E57	Cannot run cold cycle after a hot one	Turn the equipment off and back on.	A new cold cycle can only be run if the temperature read in the compartments after restart permit it.
E58	The time set for the heat cycle is out of the permitted limits.	Reprogram the cycle and set suitable time.	A new cold cycle can only be run if the temperature read in the compartments after restart permit it.

7 MAINTENANCE

CODE ALARM	PROBLEM	SOLUTION	NOTES
E59	Several programmed starts set at the same time	Check set parameters and reprogram the correct values.	A new cold cycle can only be run if the temperature read in the compartments after restart permit it.
E60	A blackout was longer than the limit set for refrigeration operations.	Decide whether to discard products or resume operations.	To set a different value contact the manufacturer's service centre.
E61	A blackout was longer than the limit set for heat cycle 1 operations.	Decide whether to discard products or resume operations.	To set a different value contact the manufacturer's service centre.
E62	A blackout was longer than the limit set for heat cycle 2 operations.	Decide whether to discard products or resume operations.	To set a different value contact the manufacturer's service centre.
E63	A blackout was longer than the limit set for heat cycle 3 operations.	Decide whether to discard products or resume operations.	To set a different value contact the manufacturer's service centre.
E64	A blackout was longer than the limit set for heat cycle 4 operations.	Decide whether to discard products or resume operations.	To set a different value contact the manufacturer's service centre.
E65	The equipment is not set for oven compartment cooling. Cold cycles cannot be run with this product.	Reprogram the cycle and Set suitable values	
E66	Firmware update failed	Turn the equipment off and back on and repeat the update procedure	If the problem persists, contact the manufacturer's service centre
E67	The data logger file is already saved on the USB device	Download data already on the USB device to the PC	
E68	A cold Jolly cycle cannot be run	Correctly reprogram the heating cycle	
E69	The required cycle cannot be run, it includes cold and hot steps	Correctly reprogram the heating cycle	
E70	Internal equipment SD memory damaged or not installed	Contact technical support	The equipment cannot be used until the cause of the alarm is removed.
E71	USB device damaged or not connected	Try reconnecting the USB device	The error does not jeopardise normal equipment operations.
		Try replacing the USB device. If the problem persists, contact the manufacturer's technical service centre.	

7 MAINTENANCE

CODE ALARM	PROBLEM	SOLUTION	NOTES
E72	Operation run on SD device incorrect	Repeat the operation. If the problem persists, contact the manufacturer's technical service centre.	
E73	Operation run on USB device incorrect	Repeat the operation. If the problem persists, contact the manufacturer's technical service centre.	The error does not jeopardise normal equipment operations.
		Try replacing the USB device. If the problem persists, contact the manufacturer's technical service centre.	
E74	Parameter import from SD device failed due to lack of file to be imported	Contact technical support	
E75	Parameter import from USB device failed due to lack of file to be imported	Check the USB key content	If the problem persists, contact the manufacturer's technical service centre.
		Format the USB device, upload data and repeat the operation	If the problem persists, contact the manufacturer's technical service centre.
E76	SD memory data access error	Contact technical support	
E77	USB memory data access error	Format the USB device, upload data and repeat the operation. If the problem persists, contact the manufacturer's technical service centre	If the problem persists, contact the manufacturer's technical service centre.
		Try replacing the USB device	If the problem persists, contact the manufacturer's technical service centre.
E78	The cards inserted in the equipment are incompatible	Contact technical support	Do not use the equipment until the causes for the alarm have been removed
E79	Parameter reading incorrectly completed	Upload the configuration files on the USB device and repeat the operation	If the problem persists, contact the manufacturer's technical service centre.
		Format the USB device, upload data and repeat the operation. If the problem persists, contact the manufacturer's technical service centre	If the problem persists, contact the manufacturer's technical service centre.
		Try replacing the USB device	If the problem persists, contact the manufacturer's technical service centre.
E80	Internal communication error	Turn the device off and back on, disconnecting it from the power mains	If the problem persists, contact the manufacturer's technical service centre.
E82	Data logger battery may be damaged or exhausted.	Check and replace data logger battery if necessary.	
E83	The system detected a data setting error.	Properly set the date.	It is necessary to replace the system clock battery, if the problem persists after battery replacement.
E84	Oven protection prove breakage	Contact After-Sales Service Centre	Do not use the equipment until the causes for the alarm have been removed

8 SPARE PARTS

8.1. CUSTOMER SERVICE

The Manufacturer is always available to provide any and all information concerning equipment use, installation and maintenance.

The Customer should ask clear questions with references to this manual and listed instructions.

We recommend the SYSTEM MANAGER evaluates the fault found, consulting paragraph "7.12" that identifies some solutions to more frequent problems to avoid useless urgent intervention and machine downtime due to disservices.

8.2. SPARE PARTS

Contact the manufacturer for any spare part.

ALWAYS USE ORIGINAL SPARE PARTS.



IMPORTANT: the manufacturer cannot be held liable for any damages due to the use of non-original spare parts.

A form is provided by the manufacturer to quickly identify the spare part to be ordered. The use of non original spare parts and unqualified and unauthorised technicians is prohibited. Where used, the warranty shall be null and void (if still applicable) and the manufacturer cannot be held liable for damage caused to persons and/or objects deriving from the subsequent use of the machine. Fill in the enclosed form following the instructions to order spare parts.



IMPORTANT: indicate the equipment model, code and serial number when ordering spare parts or requesting service.

We recommend you use this form (or photocopy) to avoid any kind of error.

Precisely indicate table references and send it to the manufacturer.

For efficient interactions with our technicians, please follow the instructions below when ordering spare parts:

- a) contact customer service and describe the type of fault found;**
- b) describe any part that does not work;**
- c) find the spare part to be ordered in the table;**
- d) order the part using the order form found on the next page.**

8 SPARE PARTS

8.3. SPARE PART ORDER FORM

☐ EQUIPMENT DATA

Model:	
Code:	
Serial nr.:	
Fault found:	

☐ LIST OF PARTS TO BE ORDERED

Code	Description	Q.ty

9 ADDITIONAL INSTRUCTIONS

9.1. WASTE DISPOSAL

The user must ensure the correct disposal of any waste produced by the equipment according to current law in the country of use.

Any gas or fluids and replaced parts must be disposed of according to current regulations in the country of use.

9.2. DECOMMISSIONING AND DISMANTLING

During decommissioning, the steps below must be followed so that the equipment and its parts do not hinder passages and are not easily accessible.

To prevent the equipment from causing personal and environmental hazards, disconnect it from all power sources (electrical, etc.) and drain all liquids and gases (lubricants, oil, coolant, etc.).

The equipment must be handled by qualified operators with suitable means to avoid health risks.

Always ensure that the weight of the equipment is correctly balanced when transporting it in order to avoid unexpected shifts or falls.

Always use vehicles able to support the equipment weight and dimensions ("TECHNICAL SPECIFICATIONS" paragraph in this manual), to avoid damaging it or people or surrounding objects.

Depending on the used lifting handling means, comply to the procedures specified for a proper and safe use (section "HANDLING AND LIFTING" in this manual).

Place the equipment in a suitable area, out of reach and suitably fenced off to prevent any access.

With reference to the RAEE 2012/19/EC directive (Electrical and Electronic Equipment Waste), the user, when decommissioning the equipment, must discard equipment in authorised waste collection centres or return equipment to the retailer upon purchasing a new device.

All equipment that must be discarded as per directive RAEE 2012/19/EC are marked with a specific symbol.

Special attention must be paid to discarding the **additional batteries for which specific regulations apply-(directive 2006/66/EC)**.

These must always be removed from the equipment and safely disposed, making sure the equipment is not plugged in when the batteries are removed.



IMPORTANT: do not discard in the environment: pollutant material. Manage waste according to pertinent current law.



IMPORTANT: illicit Electrical and Electronic Equipment Waste disposal is punishable with a fine regulated by current laws in the country of use. Electrical and Electronic Waste can contain hazardous substances with potentially toxic effects on the environment and health. We recommend correct waste disposal.

9.3. SAFE WORK PROCEDURES

Instruct workers on specific procedures and suitably inform them of:

- Safe equipment use;
- Emergency situations

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