

LCIE SUD EST Laboratoire de Moirans Z.I. Centr'Alp 170, Rue de Chatagnon 38430 MOIRANS - FRANCE

GENERAL INFORMATION

FCCID: 2AAW8-MI9330

1.1. Product description





LCIE SUD EST

Laboratoire de Moirans Z.I. Centr'Alp 170, Rue de Chatagnon 38430 MOIRANS - FRANCE

English

EN

This manual comprises a text section and an illustrated section. You will find the illustrated section at the end of the text section.

Keep this information to hand so you can refer back to it at a later date.

Important note

Find all of your product's documentation on our website by scanning the QR code on the cover or by visiting www.markem-imaje.com.



WARNING

Risk of puncture When replacing the cartridges, do not touch the nozzle.

Safety

This equipment design generally applies to industrial equipment to be installed in areas where only adults are normally present.

Before using this printer, please read and fully comply with these instructions, the material safety data sheet (MSDS) for consumables used, and safety labels affixed to the printer.

Servicing must be performed only by knowledgeable or qualified people who are appropriately trained.

Liability

Markem-Imaje shall not be liable for any damage or injury resulting from any failure to follow these safety instructions, as well as good manufacturing practices and safety standards that are generally applicable in the industry, when installing, using or servicing Markem-Imaje equipment.

Any user who modifies or repairs Markem-Imaje equipment, uses consumables, spare parts or accessories other than those supplied by Markem-Imaje, or fails to comply with Markem-Imaje specifications shall have sole responsibility for the consequences thereof.

Markem-Imaje shall not be liable for any malfunction or damage caused by any modification of the equipment or use of the equipment for any purposes other than those for which it is designed. The user shall be solely responsible for taking any precautions required by any use to which the user puts the Markem-Imaje equipment.

Markem-Imaje consumables (inks, cleaning products and other consumables), spare parts and accessories are designed for use with Markem-Imaje equipment.

Use of consumables, spare parts or accessories, that are not produced or recommended by Markem-Imaje for use with the specific Markem-Imaje equipment may harm the equipment and cause performance failures.

Because Markem-Imaje equipment is tested with Markem-Imaje consumables and spare parts for conformity with certain regulations and safety standards, use of non-Markem-Imaje consumables and spare parts also may be inconsistent with testing conditions and affect compliance of the equipment with certain standards. The user shall bear all risks associated with use of unsuitable consumables and spare parts.

This equipment is certified in accordance with the requirements for CE marking.



For certain consumables:

 Wearing contact lenses when handling these consumables is strictly prohibited.

 Ink-resistant gloves and safety goggles are recommended during cleaning operation.

Max. noise level	< 70 dbA
Operating temperature	+5°C to +40°C (+41°F to +104°F)
Humidity	0 - 90% RH with no condensation

The use of certain inks may limit the temperature and humidity ranges (see the ink specification sheet).

The printer must not be used in explosive atmospheres.



CAUTION: For continued protection against possible fire, use only the ink/additive mixtures specified by Markem-Imaje.

If your printer uses flammable ink or additive:

 Never leave containers containing ink, additive or cleaning products, or ink-soaked rags (even dry) near the printer.

 Install a foam, CO2 or powder extinguisher immediately adjacent to the printer (maximum 10 meters).

Never smoke near the printer. Affix a sign «NO



LCIE SUD EST Laboratoire de Moirans Z.I. Centr'Alp 170, Rue de Chatagnon 38430 MOIRANS - FRANCE

SMOKING, FLAMMABLE INK» near the printer. Ensure that the printer is kept particularly clean, as dried ink deposits remain highly flammable.

Drums of ink, additive and cleaning solution must be closed and stored in a ventilated room, in accordance with the temperatures indicated on the products, away from any source of heat, flame or sparks.

Handling

When a printer contains consumables, it may only be moved in a vertical position, over a short distance (e.g. within a workshop). Completely drain the printer before moving it in a position other than vertical, or if it is to be transported for a longer distance (e.g. in a vehicle).

Printer weight* 18,5 Kg (40.8 lbs) * Without option, without ink

Due to the weight of the system, several people are required to handle it.

Installation

Installation work must be performed without fail by a team of Markem-Imaje technicians. Any person modifying the installation shall be wholly liable for such modifications.

The print head must be secured firmly in place with fastening devices.

The printer must be installed in a ventilated location, away from any source of heat, flames or sparks.

The printer installation on the production line must not generate any risks for staff. The console must not be integrated on a moving system.

The operator's work station faces the printer.

The printer must be connected to a single phase mains electricity network with TT or TN type earth ground, using the cable supplied with the printer. The mains electricity network connection via the mains plug must be easily accessible.

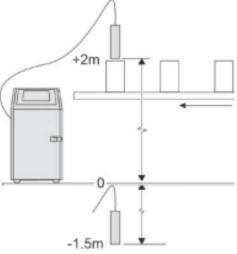
The electrical and pneumatic installations upline of the printer must comply with applicable regulations. Printer electrical characteristics: see manufacturer's plate inside the door near the consumables.

When the printer or a part thereof is attached to a stand, the stand must be connected to earth ground.

Earth ground all conducting parts not at a voltage reference and which are related to or close to the printer (metal frames, protective guards, etc.).

For information on fastening a Markem-Imaje accessory, refer to the assembly instructions delivered with it. The printer must be placed on a perfectly horizontal and unimpeded surface (the underside of the printer must not be obstructed).

The print head must be between -1.5 m and +2 m from the bottom of the console.



There are three types of installation:

(see the illustrated section at the end of the document)

1	Wall-mounted	The fasteners (anchors + bolts) must withstand a weight of at least 35 kg.			
2	Tabletop				
3	On base (Markem-Imaje)	Stabilizer weights (x 2) mandatory. They can be mounted above.			

Use

The printer is designed for contact-free printing by projecting ink. Any other use of the printer is prohibited, and any consequences shall be under the entire responsibility of the user.

The printer must not be connected directly to the public telecommunications network.

Servicing

We recommend that maintenance work be carried out only by staff who have received technical training from Markem-Imaje and who have the appropriate personal protective equipment (safety shoes, glasses, gloves, etc.). Any maintenance work not described in the User Manual must be carried out by Markem-Imaje technicians.



LCIE SUD EST Laboratoire de Moirans Z.I. Centr'Alp 170, Rue de Chatagnon 38430 MOIRANS - FRANCE

The printer must always be disconnected from the mains by the mains plug before any operations requiring it to be switched off.

Use appropriate tools for any work on the electrical and hydraulic circuits.

When working on the ink circuit, immediately wipe off any spillage and visually check for leaks.

After each maintenance operation, the waste recepticles used should be emptied and cleaned. Do not leave rags soaked with consumables near the printer.

This unit contains a non-replaceable internal lithium ion battery. The battery may burst or explode, releasing hazardous chemicals. To reduce the risk, of fire or burns, do not crush, puncture, or dispose of the battery in fire or water.

Recycling



Disposal of used batteries and rechargeable batteries (applicable in European Union countries and other European countries with selective waste collection systems).



Disposal of used electrical and electronic equipment (applicable in European Union countries and other European countries with selective waste collection systems).

These symbols indicate that the electrical and electronic device, and the batteries and rechargeable batteries therein, must not be disposed of at the end of its life as ordinary municipal solid waste. By ensuring that these items are disposed of appropriately, you play an active role in avoiding the harmful consequences that incorrect disposal could have on the environment and human health. The recycling of materials contributes to the preservation of natural resources.

By entrusting your end-of-life electrical devices to a duly authorized disposal company, you ensure that all the items therein will be handled correctly. In all other cases and in order to safely remove batteries, rechargeable batteries and other materials, see the user manual or contact your Markem-Imaje representative.

Waste consumables

The Consumable waste must be managed in compliance with local regulations related to waste management and dangerous goods transport.

Transport, transit, treatment of consumable waste must be operated by entity owning appropriate

10106923-AA

waste management licences.

Consumable waste must be treated in compliance with local regulations either by recycling solution (e.g distillation), incineration with energy recovery, incineration or specific land filling.

Radio

An RFID tag is fitted to each ink cartridge and contains the set-up information of the cartridge as required by the printer.

The printer reads the RFID tag during the calibration process and 'pairs' with the cartridge. The RFID radio frequency is 13.56MHz with a maximum power limit of 10mW from the antenna.



Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canada, Industry Canada (IC) Notices

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: this device may not cause interference and this device must accept any interference, including interference that may cause undesired operation of the device.

For Marking & Coding Equipment. Photographs and drawings are not binding in detail. This document was originally written in French. The French text of this document shall alone be authentic



LCIE SUD EST

Laboratoire de Moirans Z.I. Centr'Alp 170, Rue de Chatagnon 38430 MOIRANS - FRANCE

1.2. Tested System Details

Equipment information:

RF mode:	Transmitter	\checkmark	Transceiver	Receiver		□ Standby		
Туре:	⊠ RFID	□ EAS		Other:				
Bandwidth:	□ Narrowband			Wideband : 13.56MHz				
Equipment intended for use as a	✓ Fixed		□	□ Mobile		Portable		
Type of equipment:	✓ Stand-alone		🗆 PI	ug-in	Combined			
Antenna Type:	External			☑ Internal				
Antenna connector:	Permanent external	Permanent internal		□ None		 Temporary (only for tests) 		
Antenna Gain:	Nc* dBi							
Duty cycle:	☑ Continuous duty		Interm	ittent duty		□ Continuous operation		
Equipment type:	Production model			☑ Prototype				
	Tmin:	□ -20°C		□ 0°C		⊠ 5 °C		
Temperature range:	Tnom:			20°C				
	Tmax:	□ 35°C		□ 55°C	;	⊠ 40 °C		
Type of power source:	AC power supp	ly	□ DC pow	□ DC power supply		Battery (Select type)		
	Vmin:		☑ 90.0V/50Hz					
Test source voltage in §5:	Vnom:		☑ 230V/50Hz			□ VDC		
	Vmax		☑ 264V/50Hz					

Nc*: Not communicated

1.3. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 or/and ANSI C63.10, FCC Part 15 SubPart 15B and 15C.

Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

1.4. Test facility

Tests have been performed: February 18, 2020 to February 20, 2020

This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4 or/and ANSI C63.10.

This test facility has also been accredited by COFRAC (French accreditation authority for European Union test lab accreditation organization) according to NF EN ISO/IEC 17025, as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55032/CISPR32 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.