



How to clean your printer

We recommend you purchase a Cleaning Kit (Magicard part no. M9005-761) which consists of cleaning cards, pens and rollers. We recommend that you clean your printer using a cleaning card each time you replace the dye-film.

To clean the printer feed mechanism :

- Remove the card hopper and open the top door (the red light comes on).
- Take a fresh cleaning card from its packaging.
- Insert the narrow end into the card feed slot.
- Press the black button on the back of the printer (located above the USB connector). The card is drawn into the printer and then ejected. Repeat this several times with both sides of the same card.
- To ensure that the rear feed rollers situated under the card hopper are thoroughly cleaned, set the printer to its cleaning cycle, and instead of inserting the card, simply hold it against these rollers.
- You are provided with 5 cleaning cards and one roller with your printer.

Replacing the cleaning roller

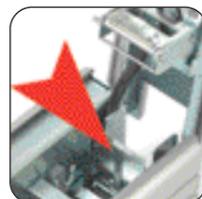
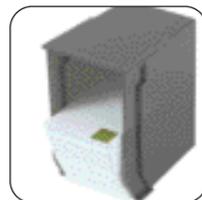
There is a cleaning roller inside the printer. It is recommended that it is replaced after every 1,000 prints. A spare roller is provided with each printer.

To see instructions for replacing the cleaning roller, see section 6 ('Prepare the cleaning cassette') in this guide. You re-use the cassette, but replace the roller within it.

To clean the printhead :

Open the printer and draw the pen several times, in the same direction, along the complete length of the printhead.

The only other user maintenance is replacement of the printhead. This should normally only be necessary following damage by dirt, so cards must be kept clean before loading into the printer.



How to set up your Rio 2e and Tango 2e to use HoloPatch cards

When used with HoloPatch cardstock, the HoloKote watermark provides a defense against card fraud. Cards with this feature are available for both plain and magstripe formats.

To select this feature, ensure that the card design allows space for the HoloPatch cut-out. In the printer driver, set HoloPatch to 'Yes' and click OK. Cards will be printed with a 'cookie cutter' hole in the image lining up with the gold patch on the card.

Note: HoloPatch cards should be fed with the gold patch on top, and on the right-hand side (viewed from the front).

How to adjust card thickness

The print engine adjusts automatically to the cards used. However, to prevent misfeeds the card feed preventor should be set using the lever in front of the card hopper which is best accessed by removing the cleaning cassette. Card thicknesses between 0.38mm to 1.6mm can be accommodated.

How to use a custom key to:

- Print custom HoloKote watermarks.
- Lock the printer.

The printer should be set up before introducing your custom key with the power switched off. Insert the key into the slot on the lower left hand side of the front of the printer, ensuring the correct orientation which is clearly marked on the label, and the key is pushed in. Now switch on the printer. Providing the key is not removed, all cards printed will now include your own custom mark into the HoloKote pattern.

If the custom key has been programmed with a locking facility, then the printer will not allow any card printing or encoding operation unless the original locking custom key is inserted before power up the printer remains in place.

Note: Do not insert or remove the custom key while the printer is powered on as this may damage the key.

Note: Driver settings are available to adjust the orientation of the custom mark for 0°, 90°, 180° and 270°.

How to use magnetic stripe cards

When loading magnetic stripe cards, make sure that the stripe is on the right and underneath when viewing from the front of the printer.

1 Unpacking

Rio 2e/Tango 2e

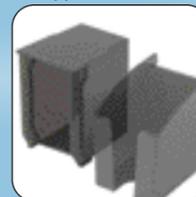
Hopper and Stacker

Power Cable

USB Cable

USB Port

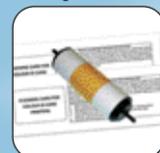
Driver CD



2 Consumables

Cleaning Cards & Roller

Dye Film and Cards



Note: To complete installation and begin using your printer you will require a roll of Magicard dye-film and cards (not included).

3 Printer location requirements

- Sufficient space for:
 - opening the top cover
 - cable access at the rear.
 - allowance for air circulation.
- An adequately ventilated dust free room.
- Access to a properly grounded power supply.
- Ambient temperature +10 to 30 degrees C.
- Relative humidity 20 - 70%.
- Protection from direct sunlight and chemicals.
- Protection from abrupt temperature changes.

4 Attach the card output staker

Insert the card collection staker into the aperture in the front panel and hook into place.

The staker can hold up to 50, 30mil thick cards, after which it should be emptied. The printer can be operated without the staker if you wish.



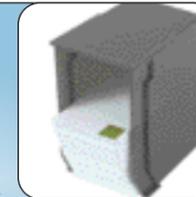
5 Attach the Card Feed Hopper

- Open a clean pack of cards and make sure they are not sticking together. Load the cards into the feed hopper. Avoid touching the card surfaces because finger marks can effect image quality.

Note: When using magstripe cards, ensure the stripe is on the right and underneath when viewed from the front.

- Tilt the loaded hopper back as shown, and lower gently into the receptacle at the rear of the printer. You will be able to lower the hopper about an inch (25mm).

- At this point, tilt the hopper forward to the vertical position and lower all the way down until the hopper is completely within the body of the printer.



7 Install the dye film

- Open a new roll of dye film.
- Place the loaded spool into the rear clips and press it into place. The orientation is correct when the bar code on the end of the spool to the left hand side when viewed from the front. Rotate to make sure that the slot engages with the lug.
- Place the empty take up spool into the front clips, and adjust the film tension so that the film is lying flat and straight between the two spools.
- Press the top cover down until it clicks into the closed position. The printer will automatically recognize the type of film that has been loaded.

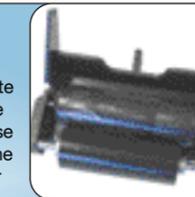


6 Prepare the cleaning cassette

Press down on the top cover, operate the top cover release catch and open the cover. First remove the white tape holding the black plastic cleaning cassette. Grip the handle between finger and thumb, then push and release the cleaning cassette. Remove the orange tape and protective layer from the disposable cleaning cassette roller.

Note: This is a good time to familiarise yourself with the way that this automatic cleaning system is designed to operate.

Finally replace the cleaning cassette by inserting the roller shaft into the U shaped guides and clicking into place.



8 Plug in the printer

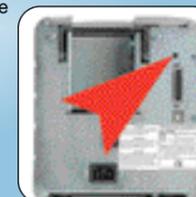
Make sure that the printer is turned Off, i.e. the On/Off button is slightly protruding from the front panel.

Plug the power supply lead provided into the socket on the rear panel of your printer, and the other end into a properly grounded electrical outlet.



9 Print a test card

- Switch the printer on. You will hear some motor activity and see the indicators flash.
- When ready, the red Error indicator should be off and the green indicator on.
- Press and release the small test push button on the rear panel once.
- After several seconds, the printer will print a test pattern on a card, and feed it to the card output staker. This indicates that all is well with the printer, i.e. cards loaded, dye film loaded, power is on and lid is closed.



10 Load the CD into your PC

Make sure the printer is switched off. Load the driver CD ROM into the PC you have connected to the printer. If the CD does not run automatically, click the start button, then click on "run". Type "D:\autorun", where D is the drive letter for your CD drive, then press the return key.

Now follow the on screen instructions to install the printer drivers. On completion of installation, you will be able to print cards.

WARNING. Only connect one interface (USB or Ethernet or Parallel) to your PC. Do not connect multiple interfaces, as this can cause incorrect operation.



WARRANTY

UltraCoverPlus Extended Warranty & Loaner Service

If you purchased your Magicard printer in North America or the EU, you should be covered by our **free** three year UltraCoverPlus extended warranty and loaner program. Outside of these territories our standard one year limited warranty applies (See below).

- Ultra will**
- Replace a failed printhead without charge whatever the cause of failure (provided Ultra consumables have been used exclusively).
 - Repair a failed printer without charge.
 - Provide a loan unit on request to replace a printer returned for repair.
 - Pay for all shipments to the customer.

- You must**
- Keep this warranty information in a safe place.
 - Contact the service line above if you have a problem.
 - Promptly ship to Ultra:
 - A failed printhead for replacement.
 - A failed printer for repair.
 - A loan printer when your unit is returned.
 - Pay for all shipments to Ultra.

Making a Claim

- If your product is exhibiting a problem and is covered by UltraCoverPlus, FIRST contact our website for troubleshooting. The phone number is listed below.
- If Technical Support cannot solve the problem and your product is defective, a Manufacturer's Return Authorisation Number (MRAN) will be issued to you. Please have the product's model and serial number ready for warranty verification. (See label on the rear of the printer).
- Once is has been verified that you product is covered by UltraCoverPlus, please ensure the consignment address is forwarded before 1pm so that there is no delay in shipment of a loan printer if required.
- On receipt of the loan unit, please ship the defective product to your Magicard Service Center promptly to avoid rental charges for the loan unit. Retain all necessary items for your with the loan unit.
- The product should be securely packed in its original packaging with a description of the problem and quoting the MRAN number. Please also mark the MRAN number on the outside of the shipping carton.
- If your defective unit is not received within one week of the loan machine being dispatched from Ultra, a rental charge will apply.
- Once your product has been repaired it will be shipped back to you. On receipt, please return the loan unit promptly. After a period of one week, unless agreed in writing by Ultra, a rental charge will become payable.
- Insurance and shipping costs incurred in sending the original product for service and returning the loan unit are the responsibility of the customer. Ultra will pay freight costs to ship the loan unit out and to return the repaired item. If your printer is not covered by UltraCoverPlus, it may still be covered by our standard 12 month warranty.

SAFETY INSTRUCTIONS

Please read all of these instructions before using your printer. Observe the markings on the rear panel of the printer.

- To prevent electric shock do not remove covers.
- Do not attempt to service the printer yourself.
- There are no user serviceable parts inside. In the event of malfunction, refer servicing to your nearest Ultra Electronics Service Center.
- Use only a power source within the limits marked on the rear panel label.
- Take care not to spill any liquid on the printer.
- Ensure that the power supply cord is not longer than 6 feet (2 metres) and includes a properly grounded connection.
- If using this printer in Germany:
To provide adequate short-circuit protection and over-current protection for this printer, the building installation must be protected by a 16 Amp circuit breaker. Bei Anschluß des Druckers an die Stromversorgung muß sichergestellt werden, daß die Gebäudeinstallation mit einem 16-A-Überstromschalter abgesichert ist.

Warnings, Cautions and Notes

Throughout this guide and in text on the CD, the following conventions are used to identify important information.

WARNING - Warning messages indicate where personal injury could result from not following the correct procedures.

CAUTION - Caution messages indicate where damage to equipment could result from not following the correct procedures.

NOTE - Notes convey important information that is identified within the text.

When Handling the Printer

Avoid touching the thermal printing edge of the thermal printhead. Grease and contamination will shorten its life.

Before transporting the printer, remove the dye film and card hoppers. Pack the printer in its original packaging.

If you have a problem with the installation or operation of your Magicard printer, please first recheck to ensure that you have followed the instructions given in this guide and on the CD ROM.

CONSUMABLES

The Magicard Rio 2e and Tango 2e are dye-sublimation printers which transfer color from a dye film or ribbon onto the surface of a PVC printable card. For best results, use only Magicard dye film.

Dye film and cards are available as follows:-

Rio 2e and Tango 2e

LC1 : YMCKO 5 panel dye film 350 images per roll (Part No. M9005-751).

LC3 : Monochrome resin black 1,000 images per roll (Part No. M9005-753).

LC6 : KO 2 panel dyefilm (black and overcoat) 600 images per roll (Part No. M9005-756).

LC8 : YMCKOK 6 panel dye film 300 images - Tango 2e only - (Part No. M9005-758).

Range of monochrome ribbons (red, blue, green, gold, silver or white) 1,000 images per roll.

PVC ISO CR80 sized cards. Magnetic stripe, contactless (proximity), smart, adhesive backed and HoloPatch cards available.

CLEANING KITS

Rio 2e and Tango 2e (Part No. M9005-761)

Using externally fed T-Card plus replaceable cleaning roller.

The Magicard T-Card cleaning system is easy to use. Regular cleaning is essential to keeping your printer in good working condition.



Ultra ELECTRONICS **MAGICARD**

RIO 2e and TANGO 2e Printers

QUICKSTART GUIDE



Free 3-year warranty
in North America and EU only



ABOUT THIS GUIDE

This guide is to assist you with the set-up and use of your Rio 2e or Tango 2e ID card printer.

The information contained in this guide is subject to change without notice. Ultra Electronics Limited shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

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The HoloKote® feature of Magicard® printers is protected by US PATENT No: 5,990,918 and by European PATENT SPECIFICATION EP 0 817 726 B1.

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LIMITED WARRANTY INFORMATION

1) Coverage: Ultra Electronics Ltd warrants that the MAGICARD printer shipped with this Warranty statement will conform to the manufacturers specifications and be free from defects in materials or workmanship for a period of **12 months** from the date of original purchase by the user, but there are additional conditions on the printhead Warranty (see paragraph 2).

2) Limited Printhead Warranty: Ultra warrants that, under normal use and service, thermal printheads will be free from defects in material and workmanship for a period of twelve (12) months from the date of original purchase or for a quantity of 40,000 printed cards, whichever comes first, provided that Ultra-approved card media is utilised. If a Warranty claim is submitted for a defective printhead, Ultra will have the right to inspect the printhead and samples of the printed and blank ID cards used with it for the purpose of verifying that the claimed defect has not been caused by non- Ultra approved media, or by foreign particles or substances which have caused chemical or physical damage. Ultra's decision in any such claims shall be final.

3) Warranty Claims: If the MAGICARD printer proves defective during this period, please contact the Ultra Service Center, at the address and telephone/fax number given below. The Ultra Service Center personnel may first ask you to carry out certain simple checks to confirm the nature of the problem, and if a return is appropriate they will give you a Return Authorisation Number and consignment instructions to the appropriate repair center. Ultra will, at its option, repair or replace the defective parts at no charge to the customer.

4) Warranty Limitations: The Warranty does not apply to MAGICARD printers that have been:

- Damaged through physical or electrical mishandling.
- Damaged through operation in environments which are outside normal office conditions in terms of corrosive atmosphere, temperature, humidity, shock or vibration.
- Improperly installed or interfaced to other products which may exhibit software problems or expose the MAGICARD to improper voltages or control signals.
- Fitted with dye film rolls from any source other than Ultra Electronics, or have been used to print on anything other than card surfaces which are approved by Ultra and which will generally be made of PVC, be completely flat, and be free of harmful particles or substances.
- Serviced or interfered with by anyone other than an Ultra Authorised Service provider.

5) Shipping: Insurance and shipping costs incurred in sending the MAGICARD printer for Warranty service are the responsibility of the customer. Whenever possible Ultra Service Centres will use the same class of shipping service selected and paid for by the customer to return the printer. Return shipping costs from Ultra to the customer will be at Ultra's expense. After obtaining the Return Authorisation Number as described above, the printer should be securely packed in its original packaging with proof of date of purchase and a note describing the problem and quoting the Return Authorisation Number. The printer must be sent to the service center address supplied with the Return Authorisation Number by the main service center. This address may be different to the address listed below, but will generally be closer to you. Please also mark the Return Authorisation Number on the outside of the shipping carton. All customs duties and taxes, if applicable, are the responsibility of the customer.

6) Applicability: The Warranty and remedy provided above are exclusive and in lieu of all other warrants, either express or implied, including but not limited to, implied warranties of merchantability and fitness for a particular purpose. Any statements or representations made by any other person or firm are void. Neither Ultra Electronics Ltd nor its affiliates shall be liable for any loss, inconvenience, or damage, including direct, special, incidental, or consequential damages, resulting from the use or inability to use the Ultra product, whether resulting from breach of Warranty or other legal theory even if Ultra has been advised of the possibility of such damage or loss.

This Warranty is governed by the laws of England. Any dispute arising out of or relating to this Warranty shall be submitted for arbitration of this dispute or disputes pursuant to the rules and regulations of the UK Arbitration Act. This Warranty gives you specific legal rights, and you may also have other legal rights which vary from country to country so the above limitations and exclusions may not apply to all customers.

If you have warranty enquiries or experience a problem, visit our website www.magicard.com for support

or call our service center:

CALL EU +44 (0)1305 762 115

Ultra Electronics Limited
MAGICARD Service Centre
Waverley House, Hampshire Road, Granby Estate
Weymouth, Dorset, DT4 9XD, UK
Fax: +44 (0) 1305 777 904

CALL US (425) 556 9708

Ultra Electronics Inc.
MAGICARD US Service Center
6711 - 176th Avenue NE
Redmond, WA 98052, USA
Fax: (425) 556 3962



EMC

Federal Communications Commission (FCC) Statement

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

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

Canadian Department of Communications Statement

This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le Matériel Brouilleur du Canada.

EU Declaration of Conformity

The EU Directives covered by this Declaration
89/336/EEC Electromagnetic Compatibility Directive,
amended by 92/31/EEC & 93/68/EEC
72/23/EEC Low Voltage Equipment Directive, amended
by 93/68/EEC

The Product Covered by this Declaration
Magicard Rio 2/Tango 2 Card Printer
The Basis on which Conformity is being Declared
The product identified above complies with the requirements of the above EU Directives by meeting the following standards
EN 55022:1998+A1:2000 - Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
EN61000-3-2:2000 - Limits for harmonic emissions
EN61000-3-3:1995+A1:2001 - Limitation of voltage fluctuations and flicker in LV supply systems.
EN 55024:1998+A1:2001+A2:2003 - Information technology equipment - Immunity characteristics - Limits and methods of measurement.
BS EN 60 950-1: 2001 - Safety of Information technology Equipment Including Business Equipment.

The technical documentation required to demonstrate that the product meets the requirements of the Low Voltage Directive has been compiled and is available for inspection by the relevant enforcement authorities.

HOLOKOTE SECURITY



Ultra's patented HoloKote watermark system is a built-in feature of your Magicard printer and cannot be copied or bypassed. HoloKote costs absolutely nothing to use.

CUSTOM KEY



The custom key enables you to use your own personal HoloKote watermark. It can also be used as a printer lock.

HOLOPATCH® CARDS



For more visible security, try HoloPatch cards. When you print with HoloPatch cards, one area of the HoloKote security pattern is highlighted by a highly reflective 'super-diffuser' patch, making the logo clearly visible at a distance and under all lighting conditions.