

1 Unpacking

Consumables

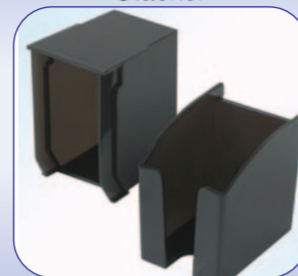


Note: To complete installation and begin using your printer you will also require a roll of suitable Magicard dye-film and cards (not included).

Rio 2 or Tango 2



Hopper and Stacker



Power Cable



USB Cable



Parallel Cable



Driver CD



Cleaning Card



How to clean your printer

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 dye film
- 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.

Inside the printer is a cleaning roller. It is recommended that this is replaced after every 1000 prints. A spare roller is provided with each printer. To see instructions for replacing the cleaning roller, see section 5 ("Preparing the cleaning cassette") in this guide. You need to re-use the cassette, but replace the roller within it.

You are provided with 5 cleaning cards and 1 cleaning roller with each Rio 2 or Tango 2. You can purchase a Cleaning Kit (Magicard part no. M9005-761), which includes more cards, rollers and a cleaning pen.

To clean the printhead: Obtain a purpose made cleaning pen (available from your Magicard dealer as part of the Cleaning Kit, Magicard part number M9005-761). Open the printer and draw the pen several times, in the same direction, along the complete length of the printhead.

The only other maintenance procedure feasible for the user is replacement of the printhead. This should normally only be necessary after many thousands of prints. The print head can be damaged by dirt, so cards must be kept clean before loading into the printer.

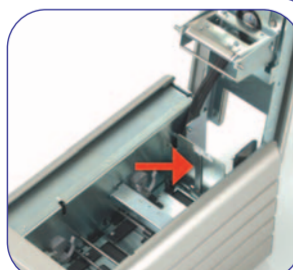
How to set up the Rio 2 and Tango 2 to use HoloPatch™ Cards



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, go to 'Printer Settings' from the start menu on your PC, open the 'Magicard Printer Sries and Right Click' on it. From the drop down menu under 'Printer Options' select 'Printing Preferences' and then "Advanced Options" - 'Printing Options'. 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 only if 'colour hole' is selected.

Note: HoloPatch™ cards should be fed with the gold patch on top, and

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 0.015in to 0.063in (0.38mm to 1.6mm) can be accommodated.

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.

2 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 deg C.
- Relative humidity 20 - 70%.
- Protection from direct sunlight and chemicals.
- Protection from abrupt temperature changes.

How to set print properties

When you print cards, you have the option of configuring the printer driver. This is usually done by clicking on the 'Properties' button that comes up from your application. There are 2 main pop-up control panels :

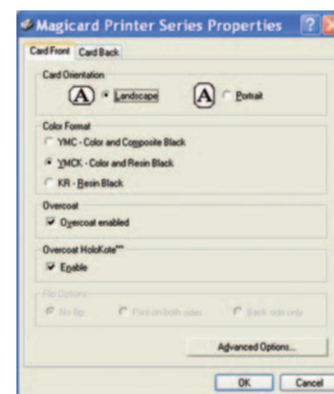
- The Magicard Rio 2/Tango 2 Printer Properties
- The Magicard Rio 2/Tango 2 Printer Advanced

Normally, the Printer Properties panel will be all you need to set.

Printer properties

Card orientation : Choose one of Landscape or Portrait format, to match the on-screen layout of your card design.

Color format : YMCK : The normal choice for color printing - this prints using the three color panels (YMC) and the black (K) panel to produce crisp black where required for text and barcodes. YMC : If you are printing a picture only, with no text or barcodes, then this option will result in a slightly faster print time. KR : Black only, for printing text and/or barcodes. This option is usually used when using a monochrome ribbon. It can also be used with a YMCKO ribbon.



Overcoat : It is important to leave this ticked, to protect the card with an overcoat layer that prevents rapid image fading. The only reason to untick this option is if the card is subsequently laminated.

Overcoat Holokote : If ticked, the Holokote 'key' or 'interlocking rings' pattern is frosted into the overcoat (recommended).

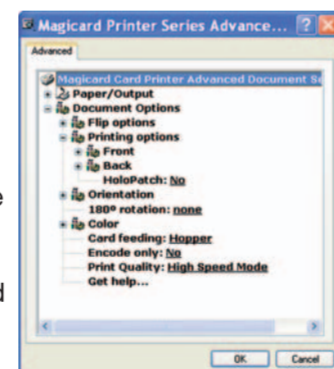
Advanced properties

Paper/Output : Normally set to CR-80 Edge to Edge. (CR-80 is the standard size for a plastic card).

Document options : Resin Black settings are advanced options. Please refer to the Support pages at www.ultramagicard.com. Overcoat settings are advanced settings, for example allowing some areas of the card (like magnetic stripes) not to be covered by the overcoat. Please refer to www.ultramagicard.com.

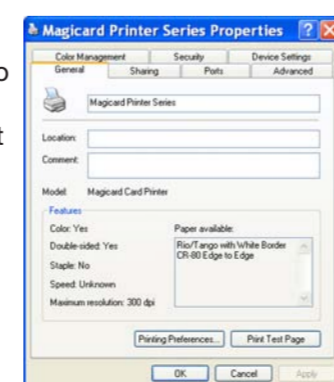
Printer head power : Allows for fine tuning to compensate for color density issues related to the use of different card stocks.

Color : Gamma correction default setting gives a boost to mid-tone colors, gamma 3 is good for photos. RGB adjustments can be made to images whose color mix you wish to change.



How to set up the printer driver

It is recommended for the user not to change these settings to start with. Try printing a few cards first. Your IT administrator may need to make some changes to suit your network. To change the default settings in Windows XP, choose 'Printers & Faxes' from the 'Start' menu, and then right click your mouse on the relevant printer and select 'Properties'. You will see this Properties menu with 6 tabs. The options available here are described in the Support section at www.ultramagicard.com.



3 Attach the card output stacker

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

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



4 Attach the card feed hopper

1. Open a clean pack of cards and shuffle them to 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, make sure the stripe is on the right and underneath when viewed from the front.

2. 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).

3. 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.



Install the dye film

1. Open a new roll of dye film.

2. 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.



3. 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.

4. Press the top cover down until it clicks into the closed position. The printer will automatically recognise the type of film that has been loaded.

CAUTION - The use of non Ultra Magicard approved dye film may degrade images and could shorten the printhead life. Damage due to the use of non-approved dye film is not covered by the warranty. Always check the dye film packaging.

5 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.

6 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.

Caution: Check the label on the rear panel to make sure that the supply requirements of your printer are met by your local AC power supply.

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.

8 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 stacker. This indicates that all is well with the printer, i.e. cards loaded, dye film loaded, power is on and lid is closed.

WARNING

Do not connect your printer to the PC before step 9. Connect only when the printer driver tells you to.

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.

How to get service or support if things go wrong

If you have a problem with the installation or operation of your Magicard printer, then first please re-check to ensure that you have followed the instructions given in this guide.

Rio 2 and Tango 2 Printer Support

We also recommend that you visit our website www.ultramagicard.com where additional FAQs and technical support information are available, together with a "contact us" E-mail form to report any problems.

If you still have a problem you will be covered by our standard warranty.

Follow the instructions under "Limited Warranty Information" to obtain assistance.

WARRANTY

UltraCoverplus™ Extended Warranty & Loaner Service

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

Ultra will	<ul style="list-style-type: none"> Replace without charge a failed printhead whatever the cause of failure (provided Ultra consumables have been used exclusively). Repair without charge a failed printer Provide on request a loan unit to replace a printer returned for repair Pay for all shipments to the customer
You must	<ul style="list-style-type: none"> Keep this warranty information in a safe place Contact the service line indicated above if you have a problem Promptly ship to Ultra <ul style="list-style-type: none"> 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 Tech Support team for troubleshooting. The phone number is listed below.
- If Tech Support cannot solve the problem and your product is defective, a Manufacturer's Return Authorization Number (MRAN) will be issued to you. Please have the product's model and serial number ready for warranty verification. (See label on rear of printer).
- Once it has been verified that your product is covered by UltraCoverplus, please ensure the consignment address is forwarded before 1pm so that there is no delay in shipment of the 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 accessory items for use 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.

Limited Warranty Information

- 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).
- 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.
- 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.
- 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.
- Shipping:** Insurance and shipping costs incurred in sending the MAGICARD printer for Warranty service are the responsibility of the customer. Whenever possible Ultra Service Centers 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.
- Applicability:** The Warranty and remedy provided above are exclusive and in lieu of all other warranties, 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.

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, then first please recheck to ensure that you have followed the instructions given in this guide and on the CD ROM.

We also recommend that you visit our website www.ultramagicard.com where additional FAQs and technical support information is available, together with a "contact us" E-mail form to report any problems.

EMC

Federal Communications Commission (FCC) Statement

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 in which case the user will be required to correct the interference at his own expense.

Canadian Department of Communications Statement

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications 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

BS EN 50 081-1	EMC Generic Emission Standard Part 1
BS EN 50 082-1	EMC Generic Emission Standard Part 1
BS EN 60 950 : 1992	Safety of Information Technology Equipment including Electrical Business Equipment

CONSUMABLES

The Magicard Rio 2/Tango 2 is a dye-sublimation printer which transfers 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 2 and Tango 2

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 dye film (black and overcoat) 600 images per roll (Part No. M9005-746).

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

Range of color 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 2 and Tango 2

- Consists of cleaning cards, pens and rollers.
- It is recommended to clean the printer with a card each time you replace the ribbon, and to replace the cleaning roller after every 1000 prints or sooner. The pen is for cleaning the print head as necessary



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.

ORDERING A CUSTOM KEY

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

To specify go to www.ultramagicard.com/support.

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.

Contact your dealer for supplies



MAGICARD®

QUICKSTART GUIDE



Free 2 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 2 or Tango 2 ID card printer.

The printer models covered by this document include:-

- M9006-749 - Magicard Rio 2 Secure ID card printer
- M9006-745 - Magicard Tango 2 Secure Double-sided ID card printer
- M9006-751 - Magicard Rio 2 Secure ID card printer with built-in magnetic stripe card encoder
- M9006-747- Magicard Tango 2 Secure Double-sided ID card printer with built-in magnetic stripe card encoder
- M9006-820 - Magicard Rio 2 Secure ID card printer with built-in contact chip card encoder
- M9006-821- Magicard Tango 2 Secure Double-sided ID card printer with built-in contact chip card encoder

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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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If you have warranty enquiries or experience a problem, call or fax our service center or visit our web site (www.ultramagicard.com)

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