

OWNER MANUAL

# YOMANI

## colourful innovation



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### Document information

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# Introduction

This document includes information for both the XR and the ML configurations of the YOMANI terminal. It is intended as a resource where distributors can find the information they need to assemble and translate their own documentation.

Information specific to one or other configuration is identified as shown:

- information that only applies to the XR configuration is shown in **green**
- information that applies only to the ML configuration is shown in **blue**
- places where cross-references should be included are identified with [xref]

Key features of the YOMANI range:

- reads chip cards, magstripe cards and (optionally) contactless cards and devices  
Where to read each type of card or device is clear, thanks to thoughtful positioning of readers. Configurable lighting shows the location of each active interface.
- large colour display  
More user-interface possibilities for both customers and for merchants!
- integrated privacy shield, an essential feature for customer security  
In addition to this very visible feature, many internal features (both software and hardware) also help make the YOMANI a highly secure terminal. This is guaranteed by PCI PTS 3.x certification.
- fast processor, more memory and superior cryptographic functionalities for the best in performance

## Variants

### YOMANI ML

The ML configuration offers multi-lane payment for large retailers, with a USB device interface offering a single-wire solution for connecting the YOMANI to ePOS equipment.

### YOMANI XR

The XR is the fully-equipped configuration for all retail environments. In addition to all the features of the YOMANI ML, it offers:

- USB host interface providing connectivity to various types of peripherals such as biometric devices, barcode readers, cheque readers and signature pads
- fast thermal printer (optional)

- support for PSTN dial-up (optional)

### **YOMANI XR with built-in antenna**

In addition to all the features of the YOMANI XR, it offers support for a range of optional wireless communication technologies including 2G/3G and WiFi/Bluetooth.

All variants can be ordered with an optional slot for a Kensington™ lock.

## **About this manual**

This manual contains information for owners of YOMANI ML/XR terminals, with sections covering:

- terminal and accessories
- installing the terminal
- powering up the terminal
- using the terminal
- maintaining the terminal
- troubleshooting
- safety information
- technical specifications

## **What is new in this version**

Changes/updates in this version are indicated with a change bar. A change bar for a heading or title means that changes or updates have been made in that section.

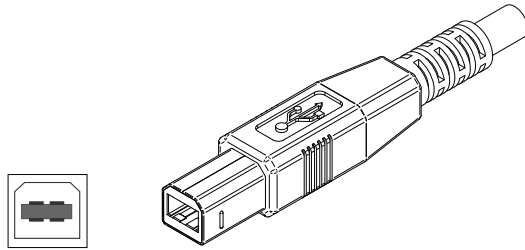
Version 2.2 contains extra information about recommended security checks, and about secure decommissioning of the terminal.

Significant deletions are ~~struck through in grey~~.



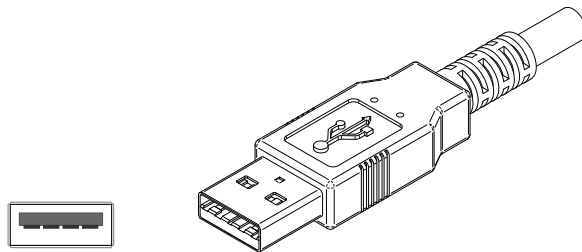
## USB terminology

The YOMANI ML/XR always has a USB device (USB B) socket.



*Figure 1. USB device (USB B) socket and connector*

The YOMANI XR also has a USB host (USB A) socket.



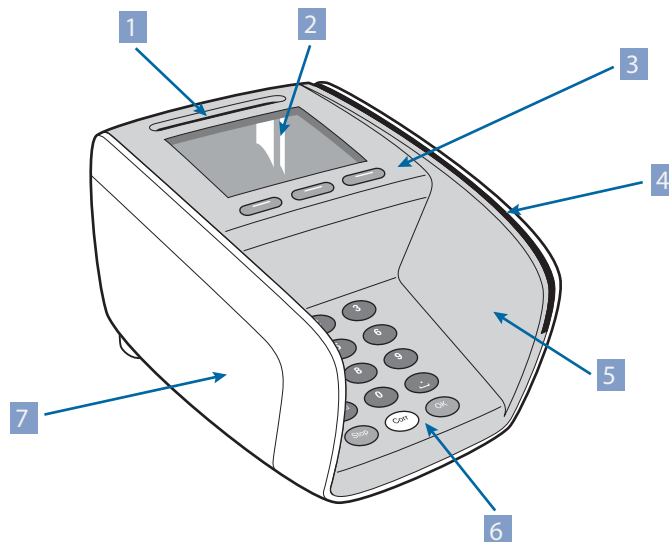
*Figure 2. USB host (USB A) socket and connector*



## YOMANI terminal and accessories

The drawings below identify the main parts of the YOMANI terminal.

- front view
- back/base view



*Figure 3. YOMANI – front view*

1	chip-card reader
2	colour display
3	function keys
4	magstripe-card reader
5	inside cover (top housing)
6	keypad
7	outside cover (bottom housing)

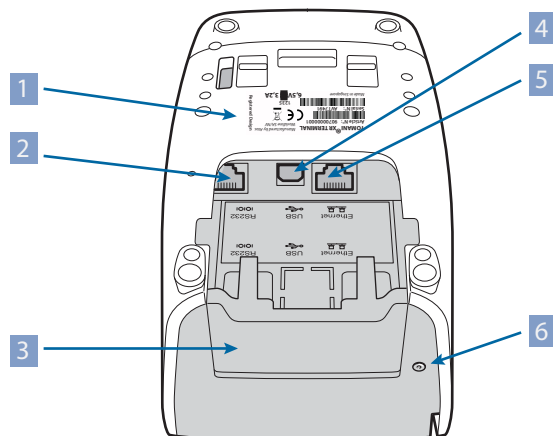


Figure 4. YOMANI ML – back/base view

1	connector for contactless reader
2	rating plate
3	RS-232 serial socket
4	SAM-slot cover
5	USB device socket
6	Ethernet socket
7	Reset button

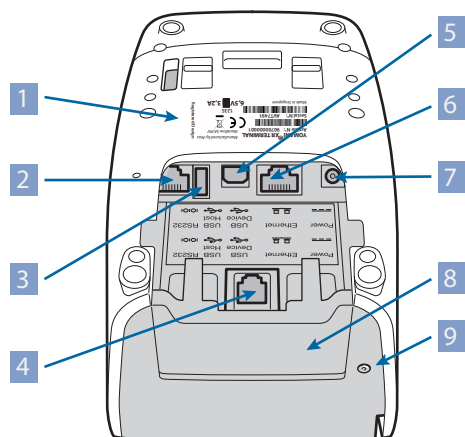
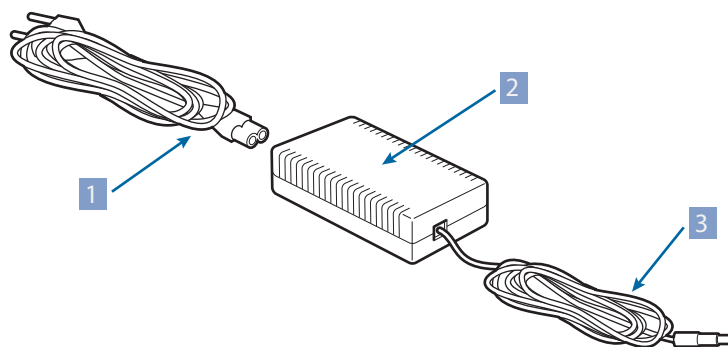


Figure 5. YOMANI XR – back/base view

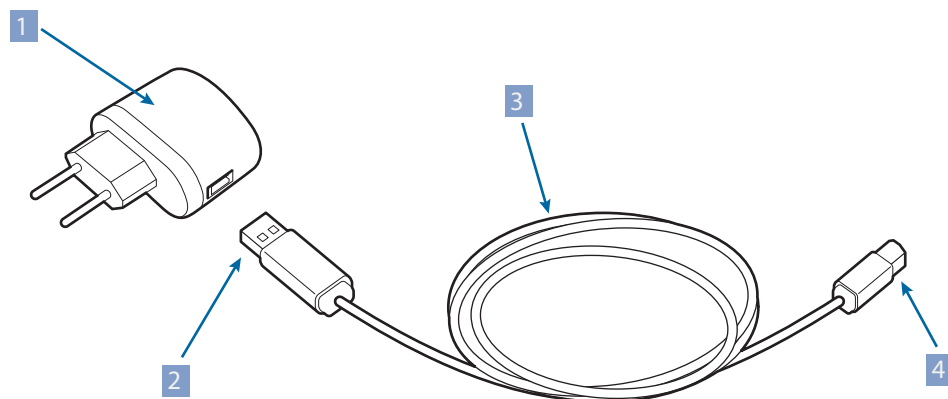
1	connector for contactless reader
2	rating plate
3	RS-232 serial socket

4	USB host socket
5	optional PSTN interface
6	USB device socket
7	Ethernet socket
8	power input socket
9	SAM-slot cover
10	Reset button



*Figure 6. Mains adaptor*

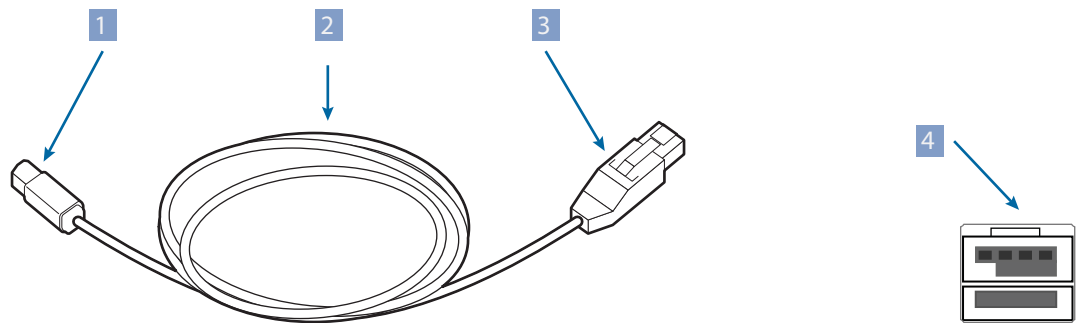
1	mains cable (to mains power socket)
2	mains adaptor
3	power cable (from mains adaptor to terminal)



*Figure 7. USB adaptor and cable*

1	USB adaptor (plug type depends on country)
---	--

2	USB host connector to fit USB host socket on adaptor or ePOS equipment
3	USB cable
4	USB device connector to fit USB device socket on terminal



<i>Figure 8. USB cable with clip</i>	
1	USB device connector to fit USB device socket on terminal
2	USB cable (3m)
3	USB host connector with clip, to fit powered USB host socket on ePOS equipment
4	powered USB host socket (12V) on ePOS equipment

## YOMANI accessories

Whenever you want, Worldline approved technicians can equip your YOMANI with one or more optional accessories:

- contactless reader
- thermal printer (XR only)
- communications interface board (XR only)

### Contactless reader

The contactless reader allows fully secure, fast payments with contactless devices of all signalling schemes defined in the ISO 14443 standard.

Remember: to read contactless cards/devices, you also need to install the appropriate software on your terminal

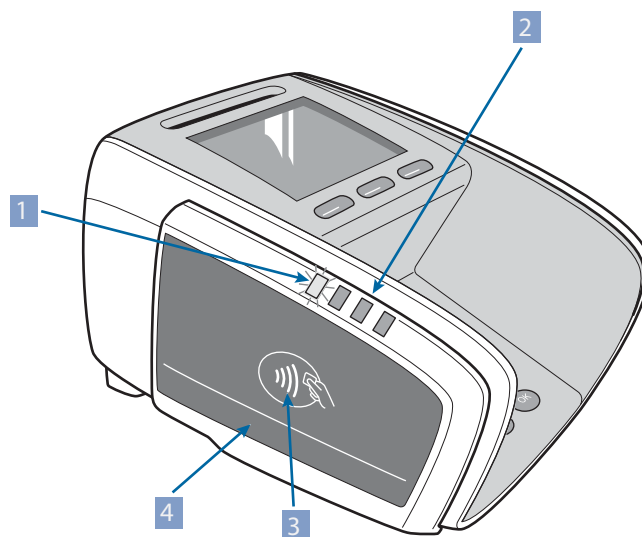


Figure 9. Contactless reader

1	LED – contactless field active
2	LEDs – card reading in progress
3	landing zone for contactless devices
4	sticker area (below white line) for logos of supported brands

### Printer

The fast thermal graphic printer has a printing width of 48 mm on 58 mm paper rolls (length up to 30 m) and a resolution of up to 8 dots per mm, 384 dots per line.

Loading paper is easy, and the printer has detectors for paper out and overheating.

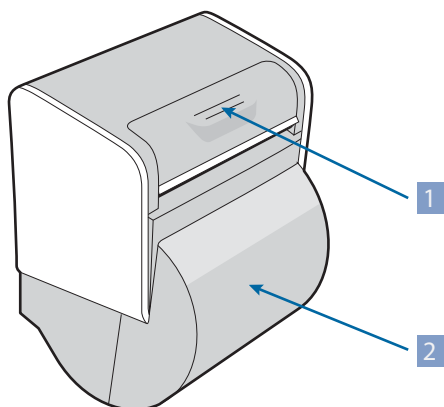


Figure 10. Printer

1	release button for paper-roll cover
2	paper-roll cover

### Communications interface boards

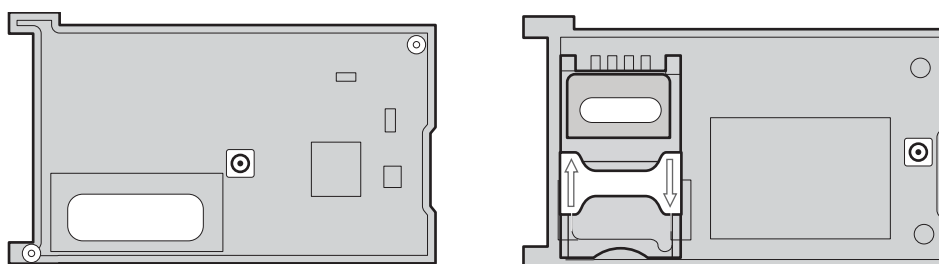


Figure 11. Communications Interface boards

### PSTN

A PSTN communications interface board can be fitted to a YOMANI XR to support communications over an analogue telephone network

### wireless communications



A wireless communications interface board can be fitted to a YOMANI XR with built-in antenna.

- WiFi/Bluetooth, for short and mid-range point to point wireless communications
  - WiFi, IEEE 802.11 b/g/n
  - Bluetooth class 1.5
- 2G (GSM/GPRS/Edge) 850-900-1800-1900 MHz
- 3G (HSDPA/UMTS)

Two versions of the 3G interface board are available, for:



- 900-1800-2100 MHz
- 850-1900 MHz

## Other accessories

A number of other accessories are available, to make working with your YOMANI even more comfortable.

### Merchant Unit

The Merchant Unit makes your tasks easier where the terminal is not connected to ePOS equipment or a PC.

With a Merchant Unit installed, you do not need, for example, to turn around the YOMANI terminal to enter the amount the customer has to pay or to check whether the electronic payment has been correctly performed.

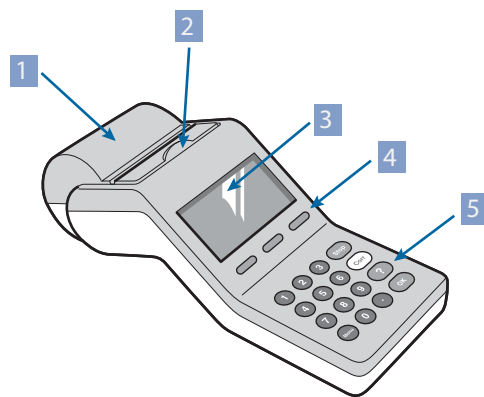
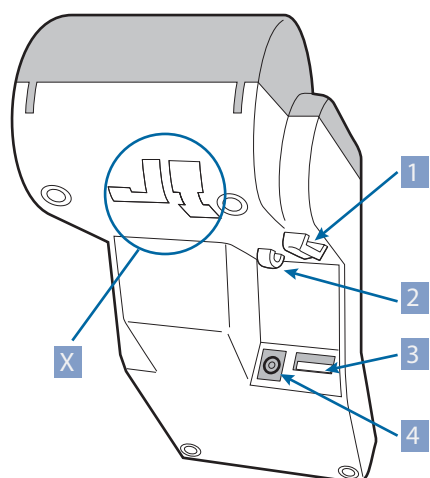


Figure 12. Merchant Unit – front view

1	paper-roll cover
2	release button for paper-roll cover
3	monochrome display
4	function keys
5	keypad



*Figure 13. Merchant Unit – bottom view*

1	USB cable strain relief
2	power cable strain relief
3	USB host socket, for connecting to terminal
4	power input socket
X	do not use

## Fixation plate

To make sure that the YOMANI always remains in the exact spot where you have chosen to put it, you can have it mounted on a fixation plate. The plate is fastened to the countertop, and the terminal clicks on to it.



The fixation plate is shipped with the side lip attached – if your YOMANI is fitted with a contactless reader, remove the side lip before attaching the YOMANI to the plate.

To guide cables through the bottom of the fixation plate, press out the cable opening cover and put it in the rear cable opening. See [Installing a fixation plate – optional](#) [xref] for more information.

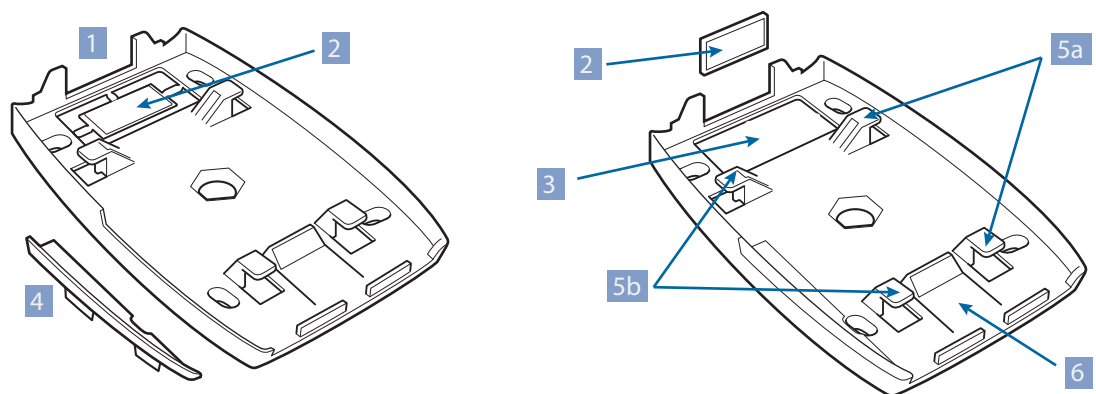


Figure 14. Fixation plate

1	rear cable opening
2	cable opening cover
3	bottom cable opening
4	side lip (remove when installing/using a contactless reader)
5	terminal fixation snaps
6	terminal release lever

## Swivel

To let you turn a YOMANI easily – typically so the merchant can enter information on one side of the counter and then turn the terminal to face the customer on the other side – you can attach it to a swivel.



The swivel is shipped with the side lip attached – if your YOMANI is fitted with a contactless reader, remove the side lip before attaching the YOMANI to the swivel.

- the terminal clicks on to the swivel in the same way it clicks on to the fixation plate
- the swivel can be left free-standing, or fixed to the counter

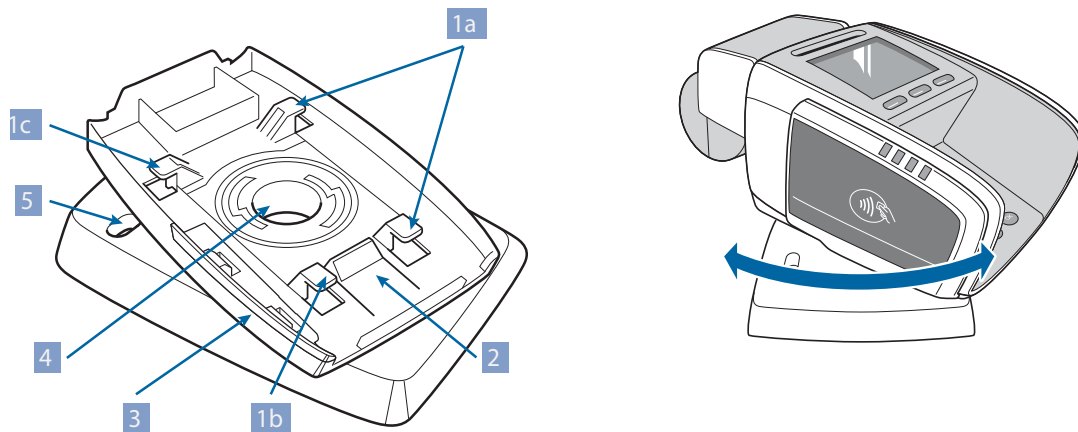


Figure 15. Swivel

1	terminal fixation snaps
2	terminal release lever
3	side lip (remove when installing/using a contactless reader)
4	central cable opening
5	hole for fastening screw (one at each corner)

Guide cables through the bottom of the swivel before clicking the terminal in place. See [Installing a swivel – optional](#) [xref] for more information.

# Installing YOMANI

You can call a technician or a field engineer to help you install your terminal or you can do it yourself. If you decide to install the terminal yourself, follow the guidelines below:

- remember that neither Worldline nor its vendor will bear any responsibility or cost for malfunctioning, breakdowns or any anomaly that may result from incorrect manipulation of the terminal
- read the [Safety information](#), on page 51, before proceeding with the installation of your YOMANI
- if you notice that any part of the YOMANI does not fit, blocks or shows any other malfunction, contact your vendor – do not try yourself to repair or alter it in any way
- use only accessories (mains adaptor, cables and so on) provided by your vendor or by an approved source

## Checking the terminal package

1. Check whether the contents of the package are complete.

You should find at least the following parts:

- YOMANI terminal
- documentation from your vendor

If either of these is missing, contact your vendor immediately.

2. Inspect the package and its contents for damage.

If any of the contents have been damaged, immediately contact your shipping company and notify your vendor.

3. Check the terminal as described in [Security recommendations](#), on page 37.



Save the cartons and packing material for repacking or moving your equipment in the future.

## Unpacking the optional Merchant Unit

If the configuration of your YOMANI includes a Merchant Unit, open the package labelled “YOMANI ML/XR Merchant Unit”.

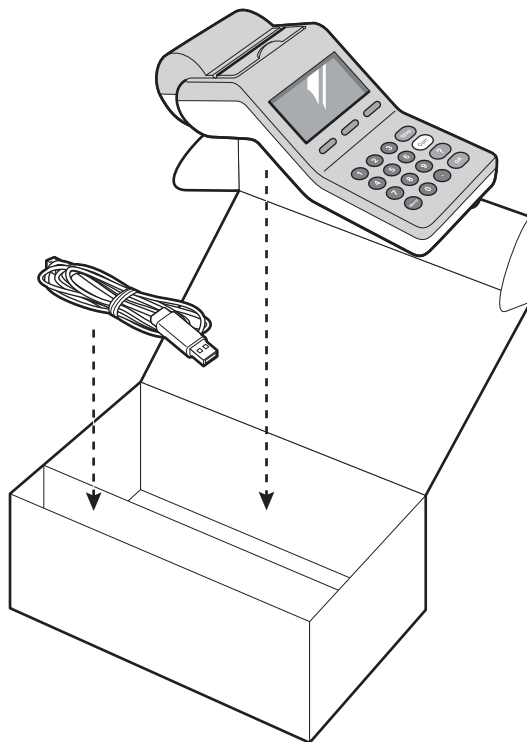


Figure 16. Merchant Unit package

1. Check whether the contents of the package are complete.

You should find at least the following parts:

- Merchant Unit
- USB cable for connecting to the YOMANI

If either of them is missing, contact your vendor immediately.

2. Inspect the box and its contents for damage.

If any of the contents have been damaged, immediately contact your shipping company and notify your vendor.



Save the cartons and packing material for repacking or moving your equipment in the future.

## Selecting a location

Finding a proper location is an important aspect of installing your YOMANI.

If you are using an optional Merchant Unit, for example, you need to find a place where the merchant can easily enter the amount to be paid.

Follow the guidelines below to find a location that is convenient for both you and your customers, and make sure that:

- the keypad and the display are facing the customer
- the terminal is at an appropriate height for the customer:
  - for people who will be sitting down to use the terminal, the height of a standard table is appropriate
  - for people who will be standing up to use the terminal, the appropriate height is between 90 and 120 centimeters
- there is enough space (typically 10 cm on all sides) around the YOMANI, so that it is easy to:
  - insert a chip card in the chip-card reader
  - swipe a magstripe card with the magstripe-card reader
  - tap a contactless device on to the landing zone
  - open the cover of the printer and replace the paper
  - reach the reset button
- direct light sources do not make it difficult to read the display or the keypad

## Cables

Make sure that cables are positioned so that they:

- allow for the necessary movement of the terminal
- do not get in the way of you or your customers
- are tie-wrapped together, as explained under “Tie-wrapping and attaching cables” on page [\[xref\]](#)



Keep the cables neatly tied together by guiding them through:

- a hole in the surface which the YOMANI is placed on
- the opening at the back of the YOMANI

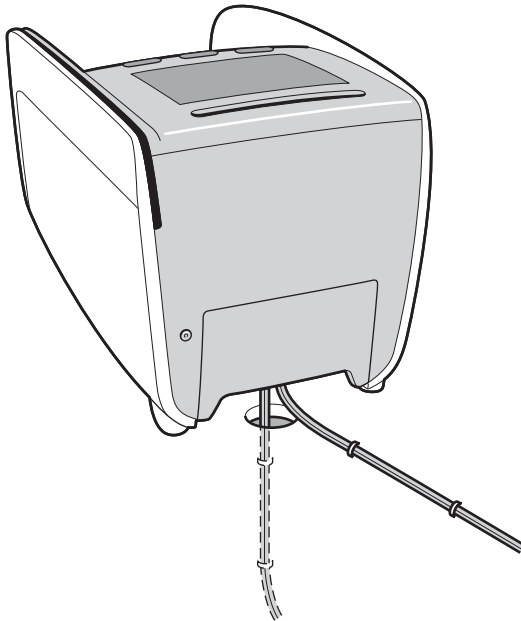


Figure 17. Guiding the cables

## Physical surroundings

YOMANI has been designed for use:

- on a flat and stable surface
- at an operating temperature between 0° C and 50° C
- in an operating relative humidity (RH) between 20% and 90%, non-condensing



Always avoid exposing your YOMANI to:

- shocks and vibrations
- excessive heat and dust
- explosive environments
- oil or moisture
- water or condensation
- direct sunlight or objects that radiate heat
- environments where humidity fluctuations might occur

Do not place your YOMANI:

- close to devices that cause excessive voltage fluctuations and/or electromagnetic fields such as electric motors or high-frequency devices
- less than 80 centimetres away from any low-frequency Electronic Article Surveillance (EAS) system



- less than 20 centimetres from any high-frequency (8 MHz and above) Electronic Article Surveillance (EAS) system

EAS gates are commonly placed at store exits, to identify potentially stolen items as customers leave the store.

## Security

Make sure that customers have the necessary privacy when entering their PIN code. This means locating the YOMANI terminal outside the field of vision of cameras, mirrors and so on.

YOMANI has been designed to be a secure, freestanding device:

- all sides but the bottom should be visible  
Building the YOMANI into a desk or panel is not allowed. Other models are available if you need a terminal for unattended/semi-unattended use.
- except for accessories supplied by Worldline, nothing may be attached to the terminal

## Customisation

There are no restrictions on painting a company logo or text on the terminal or accessories, but there are restrictions on stickers:

- stickers should always have a transparent background, so they do not hide anything from customers
- stickers must never be applied on the areas shaded in blue in the illustration

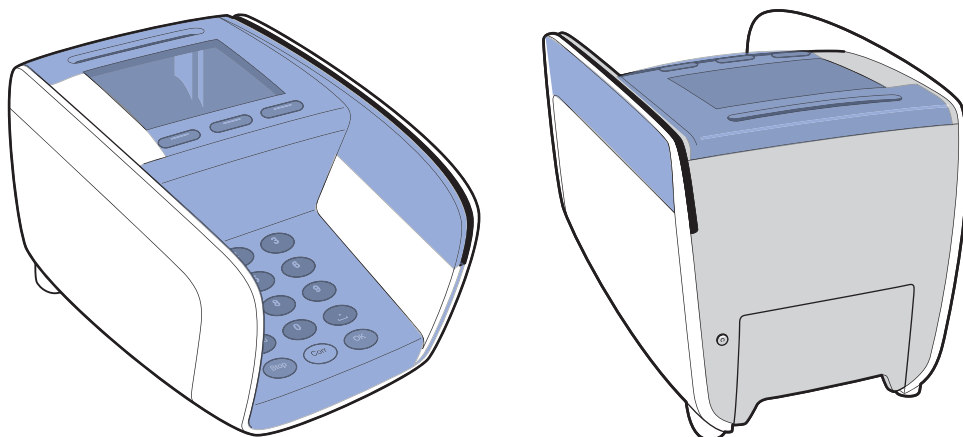
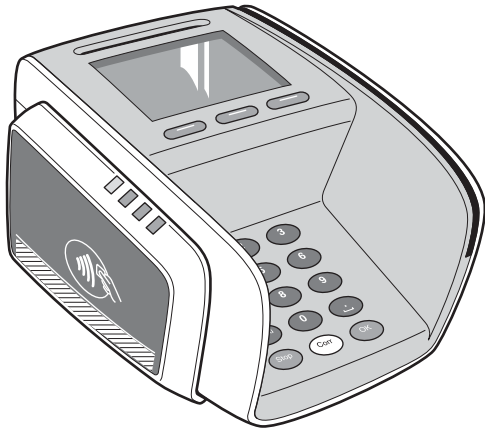


Figure 18. Sticker-free areas

- on the contactless reader
  - the landing-zone icon and LEDs must remain clearly visible
  - payment scheme logos may only be added below the white line, on the area

highlighted with stripes in the illustration



*Figure 19. Sticker placement on contactless reader*

- no restrictions apply to the printer, Merchant Unit, fixation plate or swivel

## Preparing the YOMANI ML for operation

At this stage, you need to:

1. Install the SAM (Secure Application Module) card, if you are using one.
2. Connect all communication and power cables to the terminal.

## Preparing the YOMANI XR for operation

At this stage, you need to:

1. Install the SAM (Secure Application Module) card, if you are using one.
2. Install the SIM card, if you are using 2G or 3G wireless communication
3. Connect all communication and power cables to the YOMANI.

## Installing SAM card(s) – optional



Avoid electrostatic discharge, as this can severely damage the equipment. For guidelines on minimising the risk of electrostatic discharge, see the Safety recommendations, on page [\[xref\]](#).

1. Make sure the YOMANI is not connected to a power supply: disconnect the mains adaptor or the USB cable, depending on how your terminal is powered.
2. Remove the SAM-slot cover.

To release and open the cover, press on the lower part of the cover with your thumb in the direction indicated by the arrow in the drawing below.

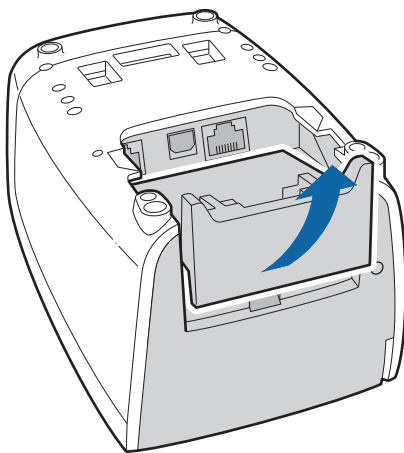


Figure 20. Removing the SAM-slot cover

3. Locate the two SAM-card holders and open the latch on an empty holder; slide the latch towards the open end of the holder till it clicks.

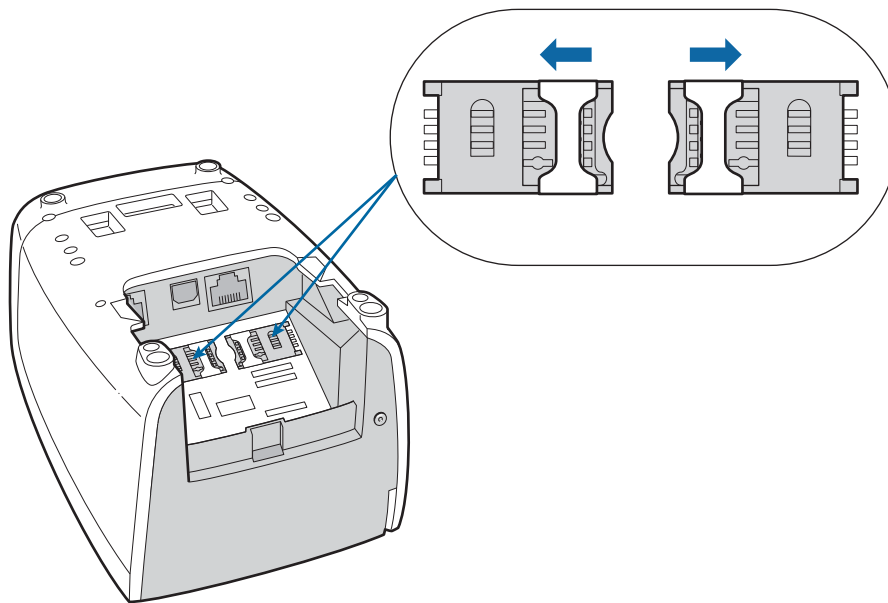


Figure 21. Opening the SAM-card holders

4. Open one of the SAM-card holders, and insert the SAM card with the bevel in the direction shown in the drawing below.

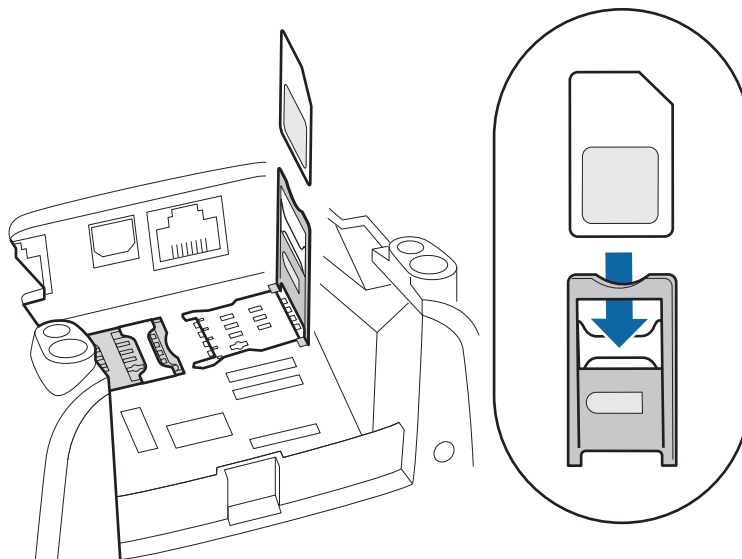


Figure 22. Sliding a SAM card into its holder

5. Make sure that the SAM card is completely inserted, and that the bevel on the card fits behind the corner.

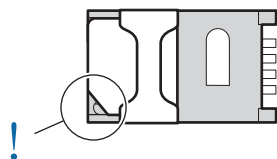


Figure 23. SAM correctly fitted in holder

6. Close the SAM-card holder and slide the latch away from the open end of the holder till it clicks, to close it.

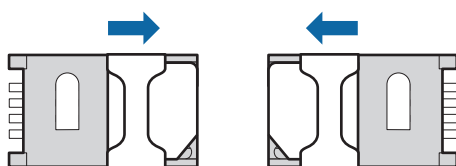


Figure 24. Closing the SAM-card holders

7. Make sure both the SAM-card holders are closed, then replace the SAM-slot cover.

### Installing SIM card – optional

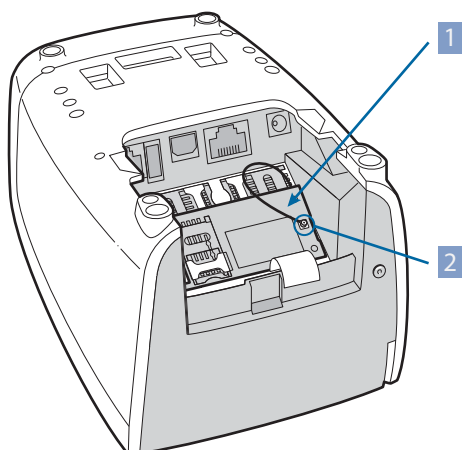


Avoid electrostatic discharge, as this can severely damage the equipment. For guidelines on minimizing the risk of electrostatic discharge, see the Safety recommendations, on page [xref].

1. Make sure the YOMANI is not connected to a power supply: disconnect the mains adaptor or the USB cable, depending on how your terminal is powered.
2. Remove the SAM-slot cover.

To release and open the cover, press on the lower part of the cover with your thumb in the direction indicated by the arrow [xref to fig. 19]

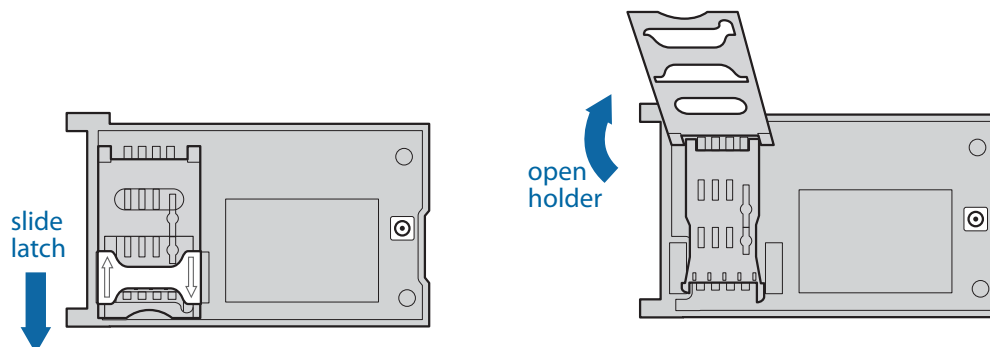
3. Make sure the 2G/3G interface board has been installed and the antenna cable has been connected.



*Figure 25. 2G/3G interface board with antenna connection*

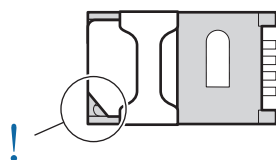
1	interface board
2	antenna cable (connected)

4. Locate the SIM-card holder on the interface board and open the latch: slide the latch towards the open end of the holder till it clicks.



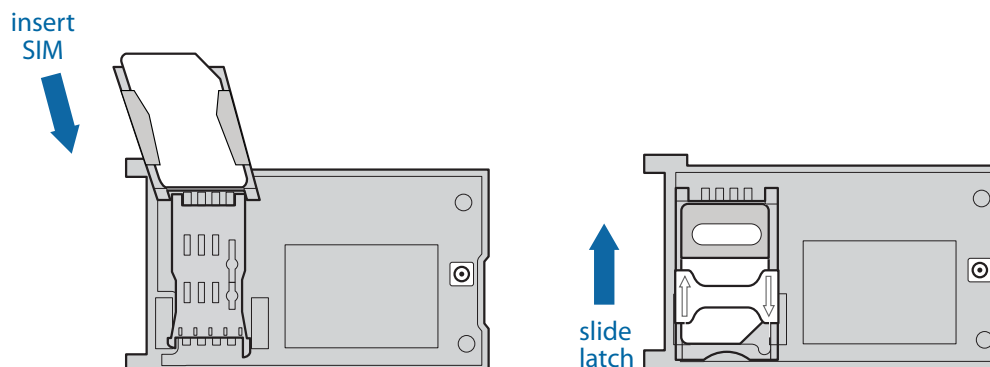
*Figure 26. Opening SIM-card holder*

5. Open the SIM-card holder, and insert the SIM as shown in the diagram.
6. Make sure that the bevel on the card fits behind the corner, and that the SIM is completely inserted.



*Figure 27. SIM correctly fitted in holder*

7. Close the SIM-card holder and slide the latch away from the open end of the holder till it clicks.



*Figure 28. Fitting SIM and closing holder*

Connecting cables – YOMANI ML

YOMANI ML comes with three communications interfaces as standard:

- USB device (USB B)  
The USB device interface can be used for power supply and data communications.
- Ethernet
- serial

Connect the appropriate cables to the YOMANI ML in this order:

1. Plug in the Ethernet cable, the serial (RS-232) cable, or both.
2. Plug the USB device connector of the USB cable into the USB device socket on the YOMANI.



Use only the USB cable (type AWG20-28) supplied by your vendor. A cable length of 3m maximum is recommended.

3. Tie-wrap the cables and attach them to the SAM-slot cover or to one of the side ribs. (see [xref])

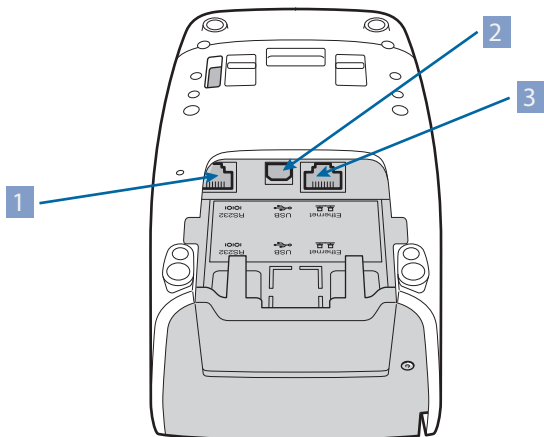


Figure 29. Communication interfaces on YOMANI ML	
1	RS-232 serial
2	USB device
3	Ethernet

Connecting cables – YOMANI XR

YOMANI XR comes with four communications interfaces as standard:

- USB host (USB A)
- USB device (USB B)
- Ethernet

- serial

An optional interface for dial-up communications (PSTN) may also be available.

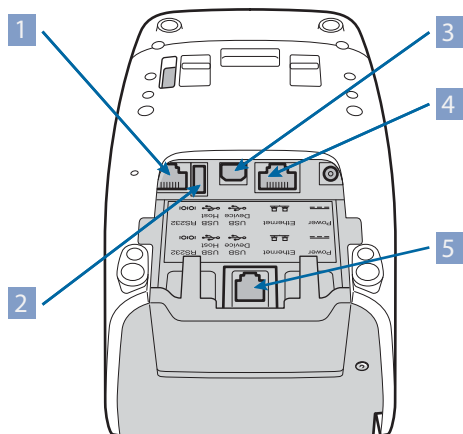


Figure 30. Communication interfaces on YOMANI XR

1	RS-232 serial
2	USB host (USB A)
3	USB device (USB B)
4	Ethernet
5	PSTN (optional)

In the XR configuration, the YOMANI is normally powered from a mains adaptor connected to the power input socket. For more information, see “Powering up YOMANI XR” on page [xref].

Connect the appropriate cables to the YOMANI XR in this order:

1. Plug in the Ethernet cable, the serial (RS-232) cable, or both.
2. To connect the YOMANI to USB master equipment – ePOS equipment, a PC or a Merchant Unit – plug the USB device connector of the USB cable into the USB device socket on the YOMANI.
3. To connect the YOMANI to USB slave equipment such as a cheque reader or biometrics device, plug the USB host connector of the USB cable into the USB host socket on the YOMANI.



Only use the USB cable (type AWG20-28) supplied by your vendor. A cable length of 3m maximum is recommended.

4. If you are using a mains adaptor to power your YOMANI XR:
  - a. plug the power cable from the adaptor in to the power input socket on the terminal
  - b. guide the power cable back over the SAM-slot cover



5. optional: If you ordered a YOMANI XR with the optional PSTN interface, connect the PSTN cable to the LINE-connector on the interface board.  
See PSTN interface board, on page [xref], for a picture and more information.

## Tie-wrapping and attaching cables

1. Divide the cables into two groups.
2. Tie-wrap each group, and attach it to one of the strain relief points on the SAM-slot cover or to one of the internal pillars.

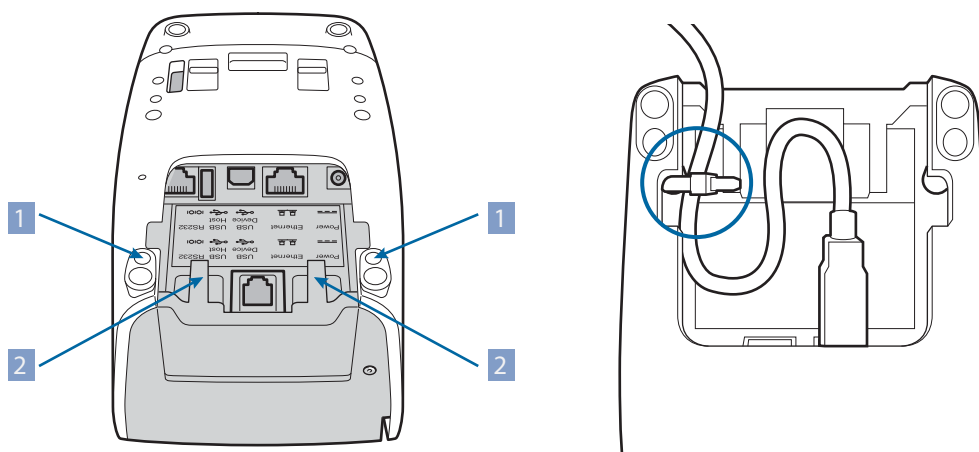


Figure 31. Strain relief points

1	pillars under the screw covers
2	ribs on the SAM-slot cover



Do not tie-wrap all cables to the same support. Use the different options available to avoid additional stress on the cables.

## Connecting the Merchant Unit - optional

The Merchant Unit and the YOMANI are connected by a USB cable. Make sure the cable is connected to the terminal before connecting it to the Merchant Unit.

1. Plug the USB host connector of the USB cable into the USB host socket on the Merchant Unit.
2. Tie-wrap the USB cable to the USB cable strain relief.

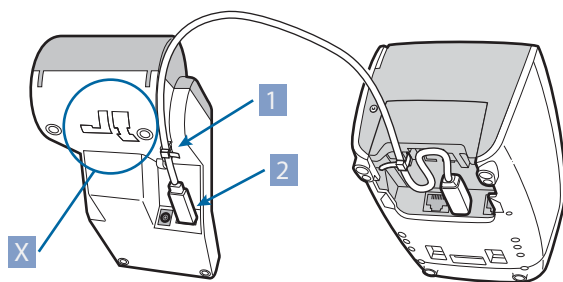


Figure 32. Tie-wrapping USB cable to Merchant Unit

1	USB cable strain relief
2	USB host socket, for connecting to terminal
X	do not use

## Installing a fixation plate – optional

The fixation plate is used to attach the YOMANI to the counter or another fixed surface. This makes the terminal more stable, and helps keep cables tied neatly together.



1. If your YOMANI has a contactless reader, remove the side lip from the fixation plate.

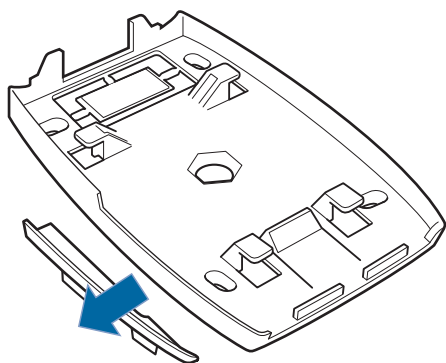


Figure 33. Removing the side lip from a fixation plate

2. Make sure the surface where you are going to attach the fixation plate is flat.
3. Attach the fixation plate to the counter surface using either:

- four fixing screws, passing through the oval holes of the plate

Use screws that are appropriate for the surface under the fixation plate.

- non-damaging means, such as double-sided adhesive tape or Velcro

## Guiding cables when using a fixation plate

You can route the cables through:

- the bottom cable opening in the fixation plate and a hole in the counter surface

To guide the cables through a hole in the counter surface, detach the cable opening cover from the bottom cable opening and guide the cable through the hole you have created.

- the rear cable opening on the fixation plate

## Attaching YOMANI to the fixation plate

1. Make sure the cables have been routed through one of the cable openings in the fixation plate, and that they are long enough to connect to the YOMANI before it is attached to the plate.
2. Place the terminal on the fixation plate as shown below.

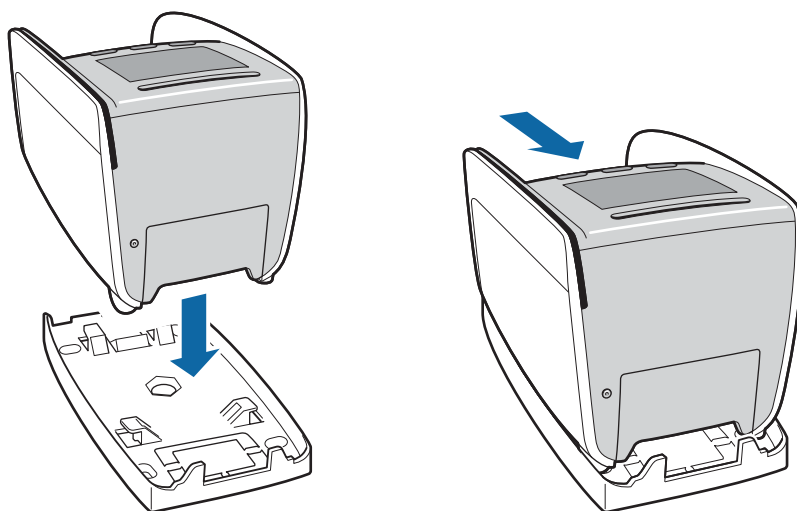


Figure 34. Placing and locking YOMANI on fixation plate

3. Push the terminal towards the back of the plate until it snaps into its locked position.

## Removing YOMANI from the fixation plate

If you need to remove the YOMANI from the fixation plate:

1. Carefully insert a flat object such as a screwdriver under the front of the terminal, centrally.
2. Raise the flat object slightly to press down the release lever, and hold the release lever down while pulling the terminal towards you.  
The terminal should shift about one centimetre

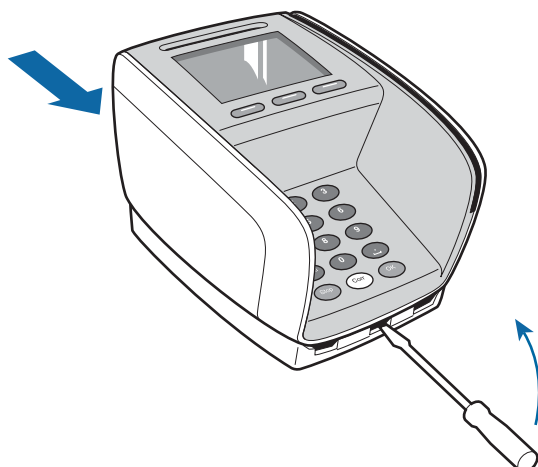


Figure 35. Lifting YOMANI off fixation plate

3. Disconnect all cables and remove the terminal from the fixation plate.

## Installing a swivel – optional



1. If your YOMANI has a contactless reader, remove the side lip from the swivel.

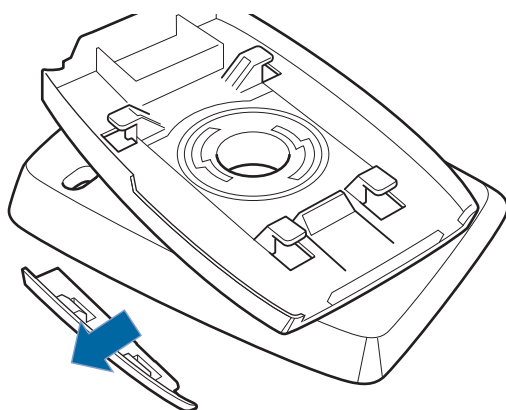
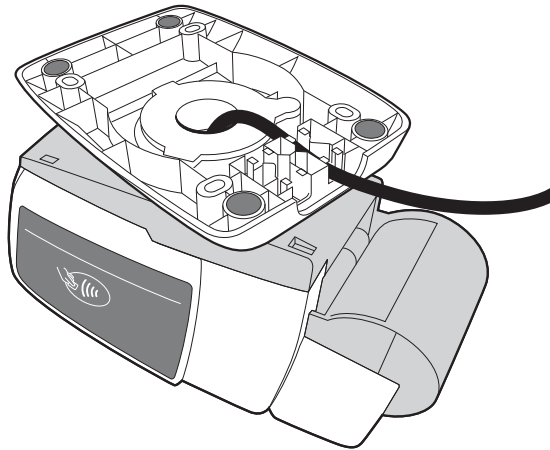


Figure 36. Removing side-lip from swivel

2. Make sure the surface where you are going to install the swivel is flat.
3. Guide the cables through the central cable opening of the swivel.
4. Snap the terminal on to the swivel the same way you snap a terminal on to the fixation plate: place the terminal on the swivel about one centimeter from the back edge, and push the terminal towards the back edge until it clicks into its locked position.
5. Turn the terminal and swivel upside down and clamp the cables in the cable guides on the underside of the swivel.



*Figure 37. Cable guides on underside of swivel*

You may screw the swivel to the counter. Use screws that are appropriate for the surface where you want to attach the swivel. Always use four screws.

## Removing the YOMANI from the swivel

If you need to remove the YOMANI from the swivel:

1. Carefully insert a flat object such as a screwdriver under the front of the terminal, centrally.
2. Raise the flat object slightly to press down the release lever, and hold the release lever down while pulling the terminal towards you.

The terminal should shift about one centimeter.



## Powering up YOMANI ML

How you power up your YOMANI ML terminal depends on:

- whether you are using a USB adaptor or a USB connection to ePOS equipment or a PC
- whether a Merchant Unit is attached

## YOMANI ML without Merchant Unit

When you are using a YOMANI without a Merchant Unit, you can power it from ePOS equipment, a PC or a USB adaptor.

### Power from ePOS equipment or PC

At the ePOS equipment/PC side, put the USB host connector of the USB cable into a free USB host socket (5V, 500 mA). The display lights up and the YOMANI ML is ready for use.



You can also use a USB cable with clip. See [xref] “USB cable with clip”]

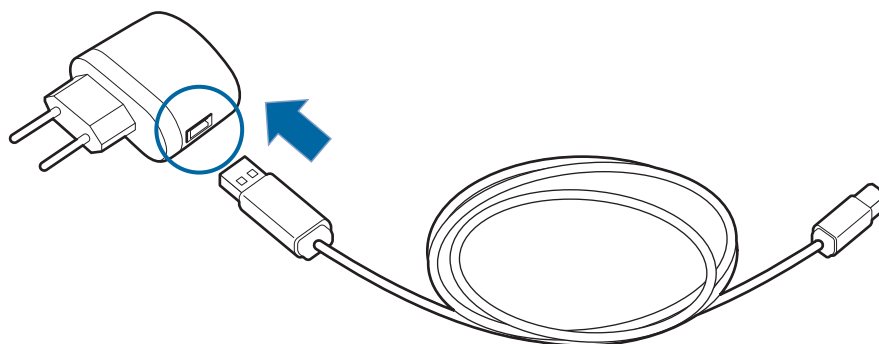
### Power from USB adaptor



Only use the USB adaptor that is supplied by your vendor.

Always connect the USB cable to the USB adaptor **before** plugging the adaptor in to the mains power socket.

1. Plug the USB host connector of the USB cable into the USB host socket on the adaptor.



*Figure 38. USB adaptor and cable*

2. Plug the adaptor into the mains power socket.  
The display lights up and the YOMANI ML is ready for use.

## YOMANI ML with Merchant Unit



Only use the mains adaptor that is supplied by your vendor.

Always connect the Merchant Unit to the mains adaptor before plugging the mains cable into the mains power socket.

1. Connect the YOMANI ML correctly to the Merchant Unit.  
See Connecting the Merchant Unit - optional, on page [xref].
2. Connect the Merchant Unit to the mains adaptor.
3. Tie-wrap the cable to the power cable strain relief.

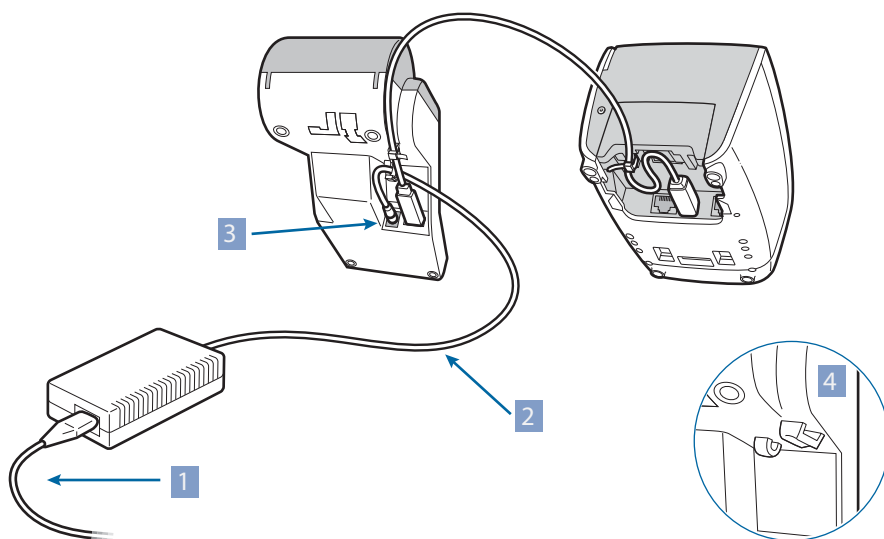


Figure 39. Power cable tie-wrapped to Merchant Unit

1	mains cable (to mains power socket)
2	power cable (from mains adaptor to Merchant Unit)
3	power input socket
4	strain-relief points on Merchant Unit

4. Connect the mains cable to the mains adaptor and plug it into the mains power socket.  
Both displays light up and the YOMANI ML is ready for use.



## Powering up YOMANI XR

In the XR configuration, the YOMANI is normally powered from a mains adaptor connected to the power input socket.



Only use the mains adaptor that is supplied by your vendor.

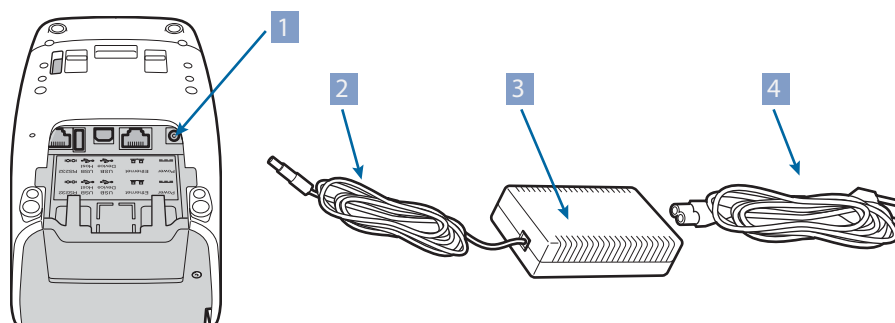


Figure 40. Powering YOMANI XR with mains adaptor

1	power input socket
2	power cable (from mains adaptor to terminal)
3	mains adaptor
4	mains cable (to mains power socket)



You must power the YOMANI through the power input socket:

- if the YOMANI terminal is fitted with a printer, a communications interface board, or both
- if anything is plugged in to the USB host socket

Exceptionally, when you are using a terminal without a printer or a communications interface board **and** without anything plugged into the USB host socket, you can power the terminal through the USB device socket, from:

- ePOS equipment or a PC
- a USB adaptor
- a Merchant Unit

## YOMANI XR without Merchant Unit

Connect the country-specific mains cable to the mains adaptor and plug it into the mains power socket. The display lights up and the terminal is ready for use.

## YOMANI XR with Merchant Unit



Always connect the Merchant Unit to the mains adaptor before plugging the mains cable into the mains power socket.

1. Connect the YOMANI XR correctly to the Merchant Unit.  
See Connecting the Merchant Unit - optional, on page [xref].
2. Connect the Merchant Unit to the mains adaptor.
3. Tie-wrap the power cable to the power-cable strain relief.

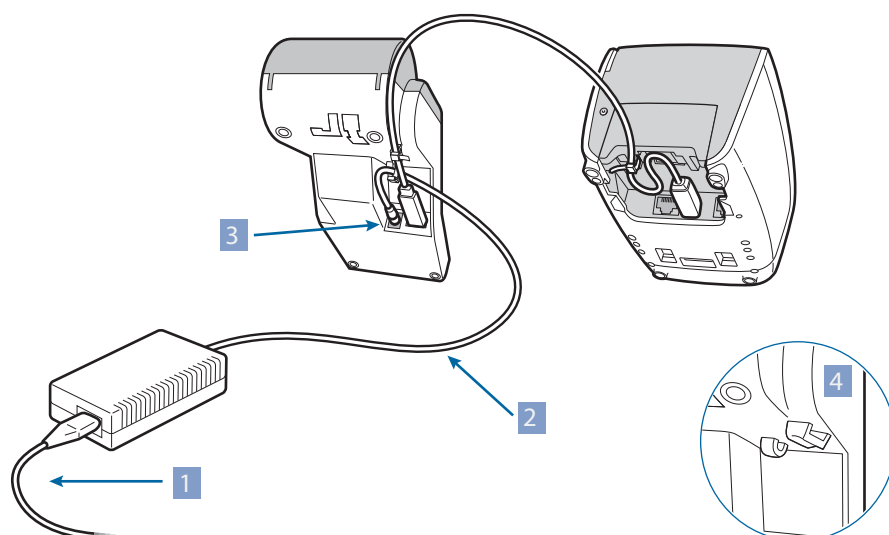


Figure 41. Power cable tie-wrapped to Merchant Unit

1	mains cable (to mains power socket)
2	power cable (from mains adaptor to Merchant Unit)
3	power input socket (Merchant Unit)
4	strain-relief points on Merchant Unit

4. Connect the mains cable to the mains adaptor and plug it into the mains power socket.

Both displays light up and the YOMANI XR is ready for use.

# Using YOMANI

This chapter covers:

- daily checks
- reading cards
- using a printer
- resetting YOMANI

## | Security recommendations

For security reasons, you are advised to check your YOMANI every working day. Make sure that:

- there is no sign of unusual cables connected anywhere on the terminal
- there is no foreign object in either of the card-readers
- the keypad is firmly in place
- the terminal is not displaying any warning message
- the housing is not visibly damaged
- the terminal serial number (on the label) corresponds to the inventory

## Reading cards

With the YOMANI, you can read chip cards, magstripe cards and (optionally) contactless cards.

### Chip cards

Insert the chip card in the chip-card reader with the chip facing the customer.

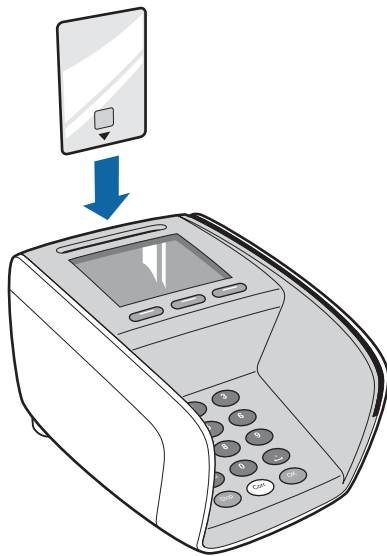


Figure 42. Inserting a chip card

## Magstripe cards

Slide the card through the magstripe-card reader with the stripe facing the keypad.  
You can slide the card in either direction.

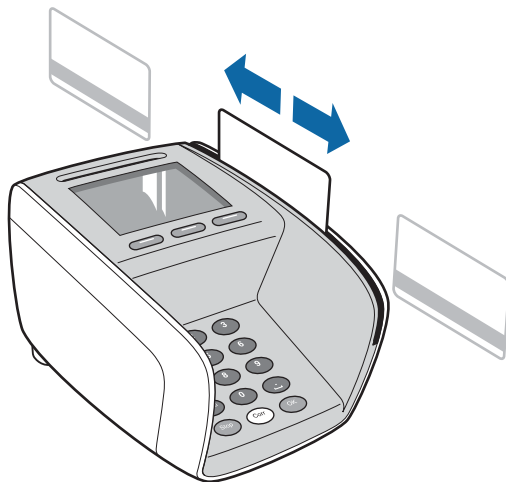


Figure 43. Swiping a magstripe card

## Contactless cards or devices

Contactless devices can be read up to 4cm from the landing zone.

To read a contactless card or device:

1. Wait for the reader to become active.

When the LED at the back is lit, the reader is ready to read contactless cards and devices.

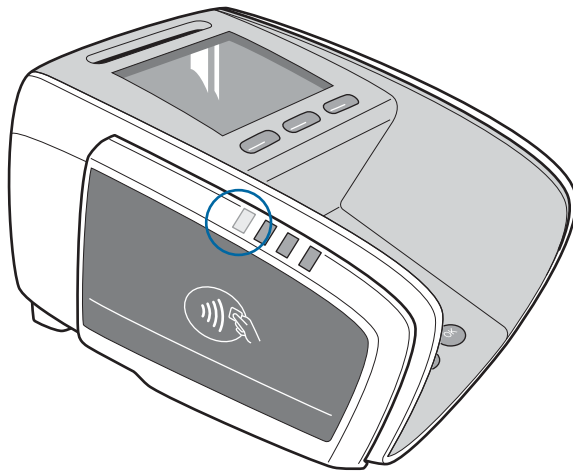


Figure 44. Contactless reader active LED

2. Tap the contactless card or device on the landing zone of the contactless reader. The landing zone, marked by the Contactless symbol, indicates the spot where the radio frequency signal is the strongest.

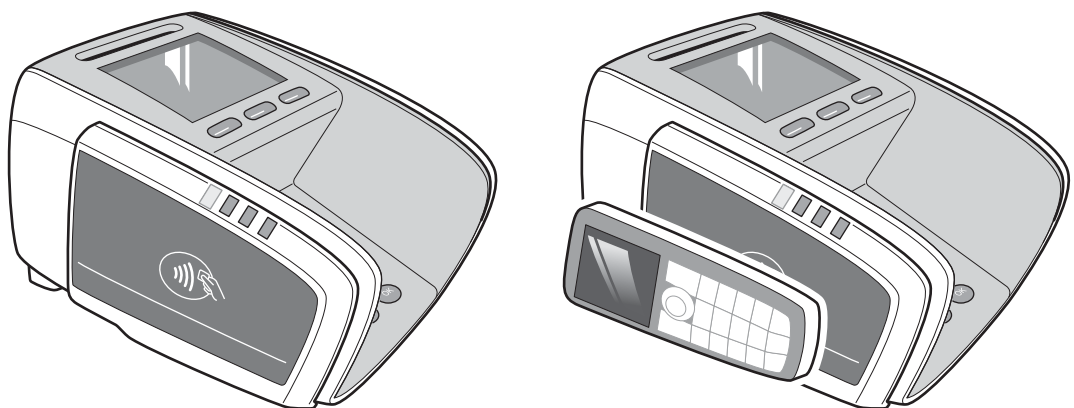


Figure 45. Tapping a contactless card or device

The three LEDs towards the front of the contactless reader provide feedback on the card reading progress. Their exact behaviour depends on the payment scheme or the application. A beep notifies customers that they must take their card or device away from the active field.



The audible cue for “transaction successfully completed” must be heard from the terminal at the end of the transaction.

## Using a printer

This description applies to using the printer in the Merchant Unit.

The description here is valid both for the printer in the Merchant Unit and for the optional printer for the terminal.

## Inserting paper



Only use paper approved by Worldline.

This paper can be recognized by the approval seal printed on the back of the paper. If you want to order paper from your local paper supplier, contact your vendor.

1. Open the paper-roll cover, by pressing the release button as indicated below.



Figure 46. Opening the paper-roll cover – Merchant Unit

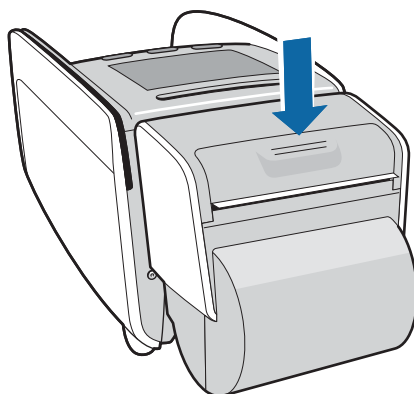


Figure 47. Opening the paper-roll cover – terminal

2. Unroll about 5 centimetres of paper, and insert it as shown on the sticker.  
When inserting a new paper roll, make sure that:
  - the paper reservoir is empty
  - the paper is not cracked, wrinkled or sealed
  - the paper comes out straight

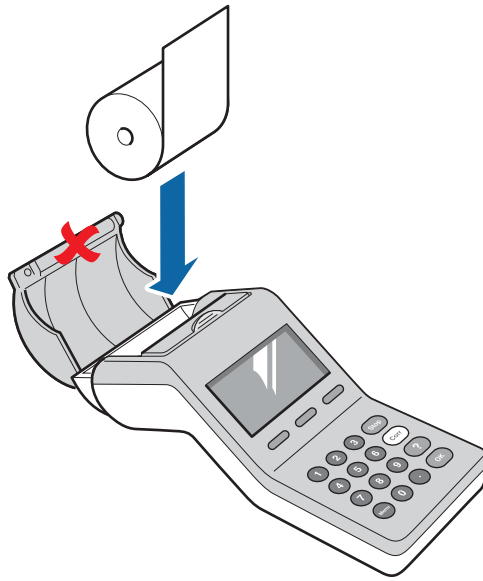


Figure 48. Inserting paper roll – Merchant Unit

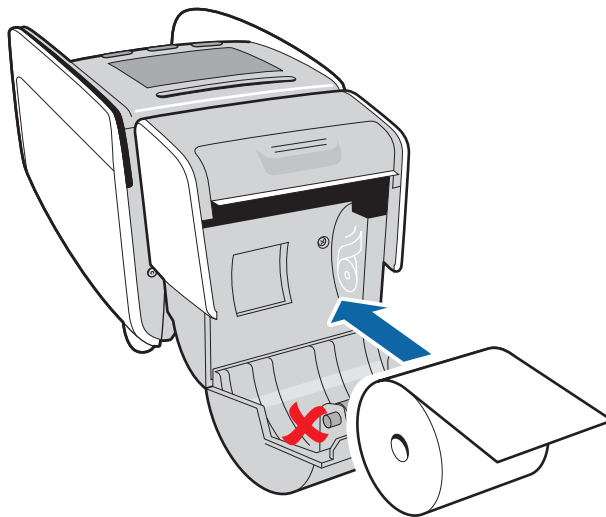


Figure 49. Inserting paper roll – terminal

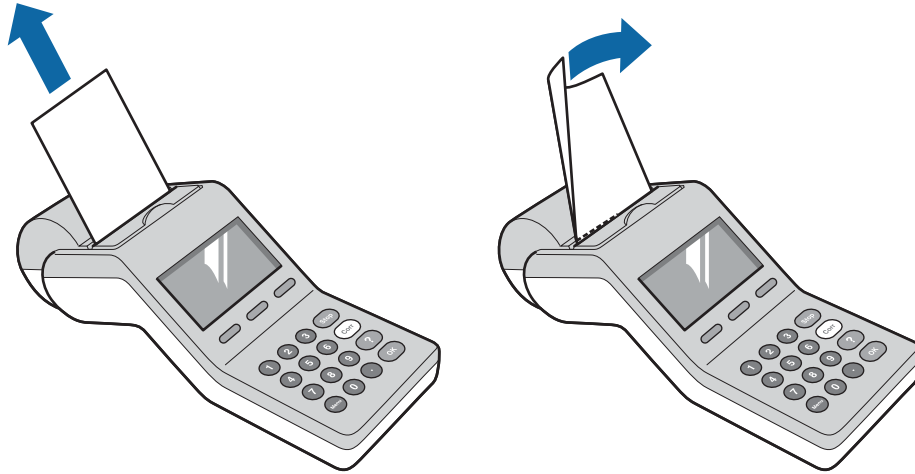


Do not remove the rubber roller on the inside of the printer cover.

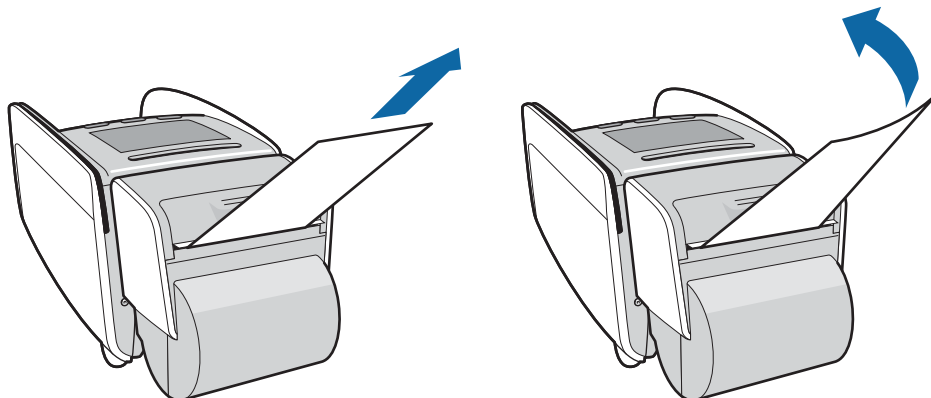
3. Close the printer by pressing firmly until you hear a click.

## Tearing off the ticket

Grasp the ticket as shown below and tear it off along the cutting edge.



*Figure 50. Tearing off the ticket – Merchant Unit*



*Figure 51. Tearing off the ticket – terminal*



## Resetting YOMANI

If the YOMANI terminal locks up for any reason, you can reset it by pushing the reset button at the back of the terminal. Push the button very firmly with a pencil or some other pointed object and hold it until the screen goes blank. Release the button and wait for the terminal to reboot.

**Note:** the time the terminal takes to reboot depends on the applications installed.

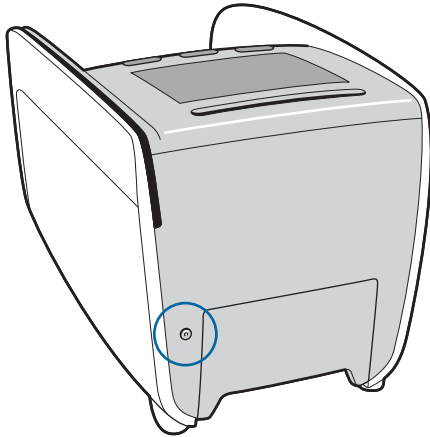


Figure 52. Reset button



# Cleaning YOMANI terminals

This section covers:

- cleaning the equipment
- cleaning the card interfaces

For advice on daily checks, see also [Security recommendations](#), on page 37.

## Cleaning the equipment

For optimal functioning, the YOMANI terminal – and any accessories such as contactless reader, printer, or Merchant Unit – should be kept clean and cleaned regularly.

When cleaning your equipment, proceed as follows:

1. Disconnect the equipment from the power supply.
2. Clean the equipment with a soft damp cleaning cloth.
3. Clean the screen with a cleaning tissue (binderless mixed textile fibre) and display- and multimedia cleaner; these products should be ordered from a specialised supplier such as [ECS](#).

After cleaning, do not forget to re-connect the equipment.

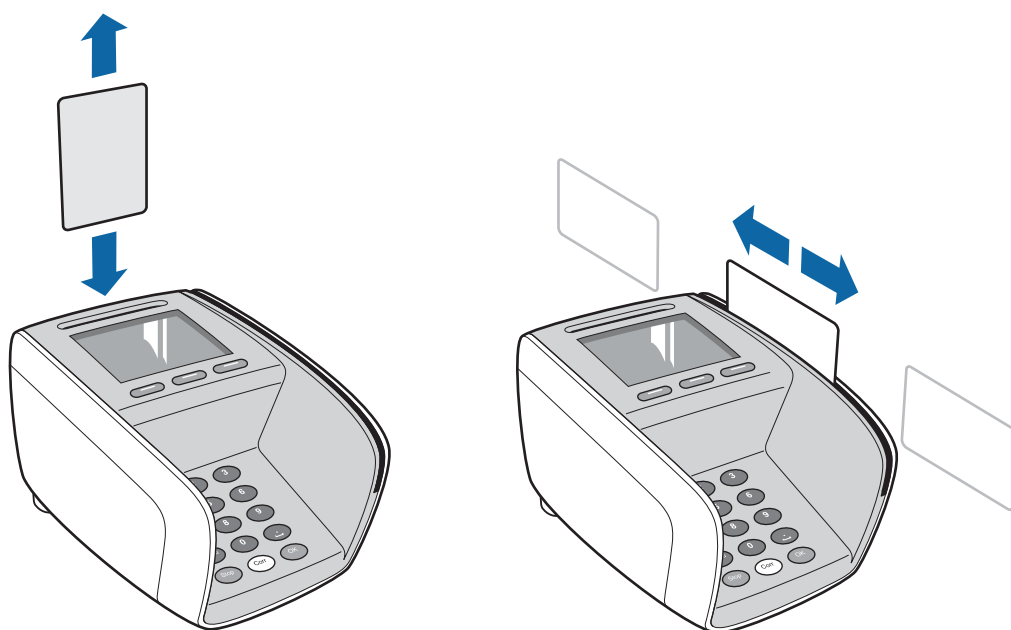


Other detergents, solvents or alcohol may damage the surface of the terminal and render transparent parts opaque. Make sure that dirt does not enter the card readers.

## Cleaning the card readers

The chip-card reader and the magstripe-card reader should be cleaned every two weeks with a cleaning card.

- chip-card reader: insert and remove the cleaning card several times, always with the same side of the card
- magstripe-card reader: pull the cleaning card several times through the reader, always with the same side of the card



*Figure 53. Cleaning the card readers*

Contact your vendor for information about specific types of cleaning card, for example “wet” cleaning cards from a specialised supplier such as [ECS](#).



If you use dry cleaning cards, mark the used side of the card after each cleaning. The card can be used one time per side, giving four cleanings with each card. See order list for details.

## Appendix A. Troubleshooting



If problems persist, contact your vendor. Check that installation/maintenance operations are performed by a trusted person. Log all maintenance operations, including the name of the operator.

### **Warning message displayed**

In the tampered state, the device displays a warning message and it is not possible to use the terminal to make a payment. When a warning message is displayed:

1. take the terminal out of service
2. contact the supplier immediately, who may then report the problem to Worldline
3. keep the terminal available for possible forensic investigation

### **YOMANI powered from USB or Merchant Unit – display not working**

Is the USB cable connected to the terminal?

Is the USB cable connected to the ePOS equipment/PC, the USB adaptor or the Merchant Unit?

Unplug the USB cable and re-insert it.

Try another USB socket on the ePOS equipment/PC: the socket the YOMANI is connected to may not be supplying power.

Try another wall socket: the socket the USB adaptor is connected to may not be supplying power.

### **YOMANI XR powered from mains adaptor – display not working**

Is the power cable from the mains adaptor connected to the terminal?

Is the mains cable from the mains adaptor connected to the mains power socket and the mains adaptor?

Try another mains power socket: the socket the adaptor is connected to may not be supplying power.

### **Merchant Unit display not working**

Is the power cable from the mains adaptor connected to the Merchant Unit?

Is the mains cable from the mains adaptor connected to the mains power socket and the mains adaptor?

Try another wall socket: the socket the adaptor is connected to may not be supplying power.

### **YOMANI/Merchant Unit display working, but equipment does not respond to key presses**

Press the reset button with a pointed object and wait for the equipment to reboot.

Disconnect and reconnect the power supply.

#### **YOMANI XR cannot make PSTN connection**

Check that the PSTN cable is connected to the PSTN interface.

Check that the PSTN cable is connected to the PSTN outlet.

Check that the correct telephone numbers have been entered.

Check the PSTN line. If it is not working, contact the telecom company to check the status of the line.

Make sure that no other devices attached to the same telecom media are interfering with the communication of the terminal.

Make sure that the system that your terminal is trying to call is operational.

#### **YOMANI XR cannot make 2G/3G/WiFi/Bluetooth connection**

Check that the antenna is connected to the interface board.

For 2G/3G, make sure that there is enough coverage; this may be indicated in the status bar on the display.

For WiFi/Bluetooth, make sure all components of the network are operational. The connection status may be indicated in the status bar on the display.

#### **YOMANI cannot read cards**

Make sure you swipe or insert the card correctly.

Check the card for damage, and try another card to determine whether or not the problem is caused by a defective card.

Clean the card readers with a cleaning card.

If your payment application allows it, try to complete the transaction manually using the keypad instead of the card reader. After the manual transaction has been completed, contact your vendor to have your terminal repaired or replaced.

#### **Printer does not work**

Open the printer cover and check whether there is enough paper.

Check that the rubber roller on the inside of the printer cover is present and correctly put in place.

Check that the printer cover is properly closed.

Check that the paper is inserted correctly.

Check if there is a paper jam: remove the paper roll, carefully cut the damaged paper from the roll and replace the roll.

**Connection with ePOS equipment/PC through USB does not function**

Normally, the USB cable is recognized by the ePOS equipment/PC.

In case of installation problems, contact your vendor for a compatible USB driver.





## Appendix B. Safety information



Worldline declines any liability if the instructions and precautions contained in this manual are not observed.

## Compliances

### Electrical codes

The YOMANI operates safely when used according to its marked electrical ratings and product usage instructions.

Use facilities that comply with the following electrical codes to ensure the safe operation of the YOMANI:

- In the United States, operate the product in commercial or residential structures that have electrical installations in compliance with American National Standards Institute/National Fire Protection Association (ANSI/NFPA) 70, United States National Electric Code, or ANSI/NFPA 75, Protection of Electronic Computer / Data Processing Equipment, with branch circuit current protection of up to 20 A
- In Canada, operate the product in commercial or residential structures that have electrical installations in compliance with Canadian Standards Association (CAN / CSA) C22.1, Canadian Electrical Code
- In all other countries, operate the product in commercial or residential structures that have electrical installations in compliance with local and regional office and residential electrical wiring codes such as International Electrotechnical Commission (IEC) 364 parts 1 through 7

### R&TTE

The YOMANI complies with R&TTE Directive 1999/5/EG on radio equipment and telecommunications terminal equipment intended to be connected to public telecommunications networks.

### FCC rules

#### FCC Rules Sections 15.103 and 15.21

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.

The user may find the following booklet prepared by the Federal Communications Commission helpful: How to identify and Resolve Radio-TV Interference Problems.

This booklet is available from the U.S. Government Printing Office, Washington DC 20402, Stock No 004-000-00345-4

## FCC Rules Section 15.105

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

## FCC Rules Section 15.19

This device complies with Part 15 of the FCC Rules and with RSS-210 and ICES-003 of Industry Canada.

Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation

## FCC Rules Sections 15.21

Changes or modifications made to this equipment not expressly approved by Worldline SA/NV may void the FCC authorization to operate this equipment.

Radio frequency radiation exposure Information: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## 15.21 FCC Warning

The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

**Note:** in order for the installation of this product to maintain compliance with the limits for a Class B device, shielded cables or a ferrite choke on the cable should be used for the Ethernet link.

## FCC Part 68

This equipment has been shown to be capable of compliance with applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in the Registration procedure under Part 68 of the FCC Rules.

## CE certification

Worldline declares that the YOMANI ML/XR complies with the R&TTE directive 1999/5/EC. Only use the certified mains adaptor that is supplied by your vendor.

The declaration of conformity (DoC) can be consulted on the website [terminals.worldline.com](http://terminals.worldline.com)

## Safety recommendations

The YOMANI can only be used as a payment terminal and not for any other purposes.

- handle your YOMANI with care: there is no warranty against breakage
- disconnect the power supply before cleaning the YOMANI
- check regularly that the mains adaptor is not overheating
- never use extension cables for the DC outlet of the mains adaptor
- do not store or use the YOMANI in conditions that may harm or interfere with electronic equipment
- do not drop the YOMANI, throw it or slam it; do not put any heavy equipment on top of it or squeeze it
- do not expose the YOMANI to extreme temperatures (refrigerators, hot-air driers, freezers ...)
- do not spray the YOMANI with water or immerse it

## Printers and paper

Impact, friction, temperature, humidity, light, and oil affect the colouring and storage characteristic of thermal printer paper.

Handle and store the paper rolls outside the mentioned conditions.

Only load paper rolls that do not have folds, wrinkles, tears, or holes.

Do not pull paper out of the printer; this could damage the feed mechanism.

Only use paper that is approved by Worldline.

## Opening YOMANI

Only open the YOMANI for adjustments that are described in this manual. Never remove or open any part that is not described in this manual.

When opening the YOMANI take the necessary precautions to avoid electrostatic discharge (ESD). An electrostatic charge can build up on the human body and then be discharged when you touch a circuit board. ESD can damage equipment and impair electrical circuitry.

In order to minimize the risk of ESD damage, always follow these guidelines when removing and replacing interface boards and other system components:

- handle interface boards by the edges only
- store boards in the antistatic envelope
- use a grounded wrist strap whenever you touch a board or other system component

## Opening accessories

Never open:

- the contactless reader
- the Merchant Unit, except for its paper-roll cover
- the swivel
- the printer, except for its paper-roll cover

## Servicing

All servicing other than the actions described in this manual must be performed by Worldline or an approved service centre.

## Decommissioning a YOMANI

When your YOMANI or any of its accessories is at the end of its life, do not simply throw it away, give it away or sell it. Remember that:

- security awareness requires erasing cryptographic components securely and completely
- sustainability requires recycling as many components as possible
- environmental awareness requires disposing of hazardous materials professionally

Start by removing all secured content. When you have done this, contact your vendor for information about how to dispose of the equipment.

1. Inspect terminal for completeness, signs of intrusion and tampering, as explained under [Security recommendations](#), on page 37  
If you find any evidence of tampering:
  - a. take the terminal out of service
  - b. contact the supplier immediately, who may then report the problem to Worldline
  - c. keep the terminal available for possible forensic investigation
2. Put the terminal into “tampered” state to erase all cryptographic components on board.
3. Dispose of the terminal following local rules and regulations for disposal of electronic equipment, such as WEEE. Make sure that the person or organisation responsible effectively destroys the terminal and its components.
4. Log all actions – removal of secured content and physical disposal of terminal – in the assets register.



## Appendix C. YOMANI ML Specifications

### Type

countertop POS terminal

### Processor

dual ARM™ 9 processor cores  
superior cryptographic functionalities

### Memory

64 Mb of RAM, 128 Mb of Flash memory  
SAMs 2 slots (type ID 0)

### Security

3-DES, AES and RSA encryption algorithms  
DUKPT key management  
SSL v3.0  
additional security schemes available

### Approvals

EMV4.3 level 1 and 2  
PCI PTS 3.x, including SRED and Open Protocols  
TQM  
CE, EMC

### Software

Linux® operating system  
Linux-based development kit (C and Java™)  
secure remote software download

### Keypad

backlit ergonomic keypad

### Display

colour TFT graphic display, ¼ VGA, size 2.8" (240 x 320 pixels), 16 bit

### Card readers

chip-card reader (EMV 4.3 level 1 compliant)  
triple-track magstripe-card reader (ISO 1/2/3)

contactless card/device reader NFC ISO14443 A & B (optional)

### **Communication**

USB device, Ethernet, serial (RS-232)

### **Power supply**

via USB (5V, 500 mA)

### **Dimensions**

107 x 103 x 170 mm (approximate)

### **Weight**

550 g (approximate)

### **Environment**

operating temperature 0 °C to +50 °C

operating humidity 20% to 90%, non-condensing

RoHS2 and WEEE-compliant

### **Accessories**

contactless reader (NFC)

merchant Unit

fixation plate

swivel



## Appendix D. YOMANI XR Specifications

### Type

countertop POS terminal

### Processor

dual ARM™ 9 processor cores  
superior cryptographic functionalities

### Memory

64 Mb RAM, 128 Mb of Flash memory  
SAMs 2 slots (type ID 0)

### Security

3-DES, AES and RSA encryption algorithms  
DUKPT key management  
SSL v3.0  
additional security schemes available

### Approvals

EMV4.3 level 1 and 2  
PCI PTS 3.x, including SRED and Open Protocols  
TQM  
CE, EMC

### Software

Linux® operating system  
Linux-based development kit (C and Java™)  
secure remote software download

### Keypad

backlit ergonomic keypad

### Display

colour TFT graphic display, ¼ VGA, size 2.8" (240 x 320 pixels), 16 bit

### Card readers

chip-card reader (EMV 4.3 level 1 compliant)  
triple-track magstripe-card reader (ISO 1/2/3)

contactless card/device reader NFC ISO14443 A & B (optional)

### **Communication**

USB host and USB device, Ethernet, serial (RS-232)

### **Power supply**

via mains adaptor: 100-250 VAC; frequency 47-63 Hz

under strictly defined conditions: via USB: 5V, 500 mA. See Powering up YOMANI XR [xref]

### **Dimensions/weight (without optional printer)**

dimensions: 107 x 103 x 170 mm (approximate)

weight: 550 g (approximate, without paper roll)

### **Environment**

operating temperature 0 °C to +50 °C

operating humidity 20% to 90%, non-condensing

RoHS2 and WEEE-compliant

### **Accessories**

contactless reader (NFC)

printer

PSTN interface board

WiFi/Bluetooth interface board

2G interface board

3G interface board

Merchant Unit

fixation plate

swivel

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