



beyond
payment



iPP320 (with
privacy shield)



iPP350 (with
privacy shield)

iPP300

Operation and Product Support Guide

iPP300 Operation and Product Support Guide
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Revisions

Date	Revision	Changes

Notes

1. Introduction

Ingenico's iPP300 secure electronic payment devices include the iPP320 and the iPP350.

Each device consists of the following:

- 2.7" graphical monochrome LCD display (iPP320)
- 2.7" TFT color QVGA display (iPP350)
- Bi-directional magnetic stripe reader
- Smart card reader
- ADA-friendly keypad
- Privacy shield (separate, in box or field install)
- Integrated contactless card reader (optional/field install)

All devices support:

- Payment information processing
- Advertising

The iPP300 device can communicate with a host device such as a POS or PC via RS-232, USB, and Ethernet. Tailgate (RS-485), Dial, and 3201 communications are not supported. Peripherals such as check readers and printers can be connected to the device via the appropriate port.

1.1. Conventions Used in this Manual

The following table explains the conventions used in this manual.

Table 1: Manual Conventions

Convention	Use	Example
[Brackets]	Identifies the key to press on the device.	[1]
Reverse Video	Reverse highlights the selected menu option on the iPP300.	TELIUM MANAGER CONSULT EVOL INIT DIAG DEL
<i>Italics</i>	Identifies referenced documents.	<i>Applname</i>

 This manual uses the term POS (Point of Sale) to refer to a register.

1.2. Two Device Models

There are two models in the iPP300 product range.

- iPP320 features:
 - Graphical monochrome LCD display
 - Resolution of 128 x 64
- iPP350 features:
 - Graphical active 2.7” color TFT QVGA display
 - Resolution of 320 x 240 with 2096 colors

The difference between the iPP320 and the iPP350 is the iPP320 does not have color and the iPP350 has color.

Refer to section 10.1 Hardware on page 35 for more information on the display and memory.

1.3. Payment Types

The iPP300 device supports payment information processing. With the appropriate application software, the iPP300 device supports the following payment types:

- Credit
- Debit
- EMV
- Contactless
- Electronic Benefits Transfer (EBT)
- Gift Card and Loyalty
- WIC

The iPP300 can also act as a utility platform for electronic marketing, such as advertising and loyalty programs. In addition to payment, the device can be used for the following:

- Customer Graphics Display
- Item Scrolling
- Loyalty Programs
- Advertising
- Instant Credit
- Personal Messaging
- Cross Selling
- Electronic Couponing
- Email Address Capturing

- Customer Surveys
- Driver's License
- Branch automation
- Kiosk
- Price checker (if used with bar code scanning device)

1.4. Device Parts Overview



Figure 1: iPP300 Device Parts

Contactless Card Reader LEDs: These LEDs illuminate in green to indicate that the device is ready to read a contactless payment card. It lights up from one light to four lights when the card is read.

Magnetic Stripe Reader LED: This LED illuminates in green when the device is ready for a magnetic card swipe.

Magnetic Stripe Reader: The MSR is a bi-directional track through which a magnetic stripe card is swiped and read. The iPP300 supports the reading of three tracks.

Privacy Shield (optional): The privacy shield comes separate and can be user installed or field installed.

Keypad: The white backlit ADA-compliant keypad features keys [0] through [9], [F], [.,#*], [Enter] (O), [Cancel] (X), and [Clear] (<). To enter alpha characters, press the appropriate numeric key at least two times until the desired letter appears. Lowercase and uppercase letters are available. For example, to enter the uppercase C, press [2] four times. To enter the lowercase c, press [2] 7 times.

Smart Card Reader LEDs: These LEDs illuminate when the device is ready for a smart card.

Smart Card Reader: A smart card can be inserted into the smart card reader. When the application prompts you and the smart card LEDs are green, you may insert a card or remove a card.

Function Keys: Four functions keys used to navigate through the application.

Graphical Display Screen: The large and clear screen displays messages. The iPP320 has a graphical monochrome screen while the iPP350 has a color screen with 4096 colors.

Contactless Card Reader: The area to place the contactless payment card so the device can read it.

SAM: The device comes with three security access module (SAM) slots to hold full-size SAM cards. These cards store proprietary information on smart card-based applications, such as loyalty or stored value. SAM use is not required in the United States.

Port: There is one port on the back of the device.

- The master port can be attached to an adapter or attached to cables to connect to the POS or PC via USB, RS-232, or Ethernet.

1.5. Applications/Integration Kits

The following kits are available from your Ingenico representative. The kits allow for the integration of the applications that run on the iPP300 device.

1.5.1. POS for .NET Integration Kit

This kit provides every component needed to allow a programmer to develop a custom application for a POS or PC that interfaces with the iPP300 using POS for .NET. The POS for .NET Software Integration Kit integrates the UnifiedPOS (UPOS) Interface Application (UIA) and contains programs, files, and all necessary manuals.

1.5.2. OPOS Software Integration Kit

This kit provides every component needed to allow a programmer to develop a custom application for a POS or PC that interfaces with an iPP300 using OPOS. The OPOS Software Integration Kit integrates the UnifiedPOS (UPOS) Interface Application (UIA) and contains programs, files, and all necessary manuals.

1.5.3. Retail Base Application (RBA) Integration Kit

This kit allows for the connection of the iPP300 to a POS or PC for communicating, downloading a program and/or parameters, and using LLT.

1.5.4. JPOS Software Integration Kit

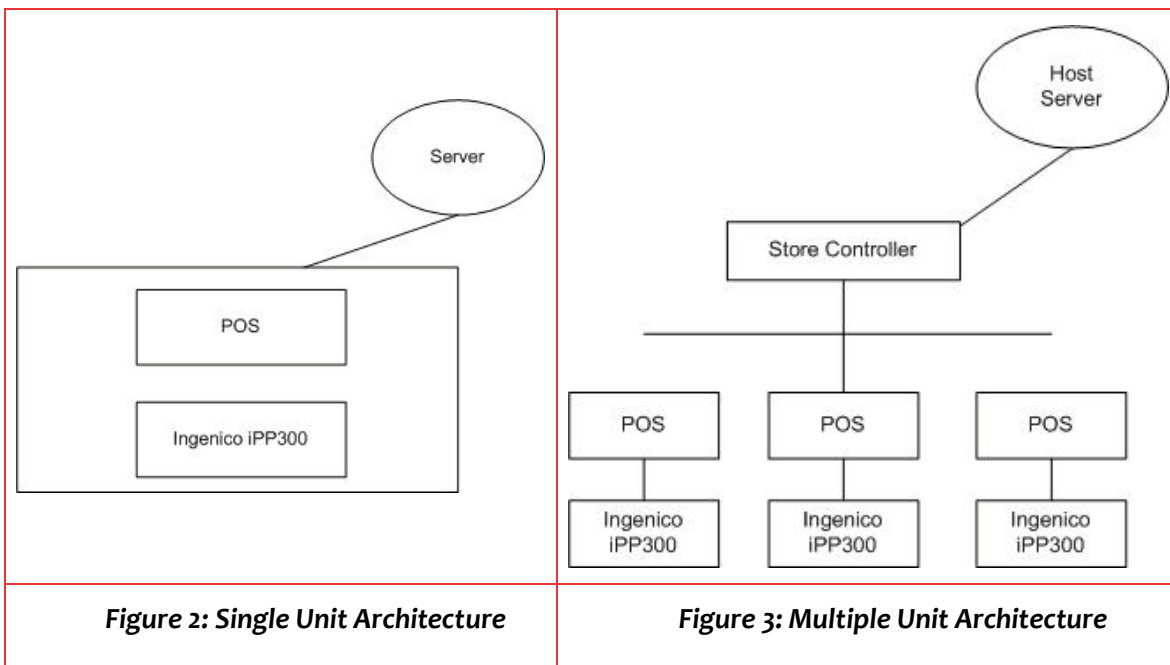
This kit provides every component needed to allow a programmer to develop a custom application for a POS or PC that interfaces with the iPP300 using JavaPOS (Java for retail point of sale). The JavaPOS Software Integration Kit integrates the UnifiedPOS (UPOS) Interface Application (UIA) and contains programs, files, and all necessary manuals.

1.6. Architecture

This section explains the system architecture and how the unit connects to the host device.

1.6.1. System Architecture

The server (local or remote) sends information to the local server for Store Controller (if present), which sends it to each POS, and each POS sends it to the iPP300 device attached to it. When using Ethernet, the server can send information directly to the iPP300 device. The iPP300 device in turn sends information back through the chain. Figure 2: Single Unit Architecture and Figure 3: Multiple Unit Architecture illustrate the information flow for stores with and without a store controller.



1.6.2. Host Connections

The Point of Sale (POS) system, which can be comprised of the server, store controller, and host devices, communicates with the iPP300 device through an RS-232 serial interface, Ethernet LAN, or USB, depending on the requirements of the host device (typically a computer or POS). Data is sent using one of these interfaces over a cable that connects the host device to the iPP300 device.

The iPP300 device can connect directly to a POS, PC, or Ethernet LAN. Peripherals such as check readers, printers, and contactless card readers can be connected to the appropriate port.

The main port, which connects to a POS, can connect to the following protocols: RS-232 or USB/Powered USB depending on the cable connected.

The Ethernet port (Ethernet 10BASE-T) is available if using the correct cable.

1.6.3. Downloading Application Files

LLT and the application files are installed on the server. The customer is responsible for sending the code from the server to the POS. Each POS sends the code to its iPP300 device.

2. Device Installation

This chapter describes how to install the iPP300 device. The installation procedure includes:

- Selecting the device location
- Connecting the device
- Connecting a power supply (if required)
- Attaching the privacy shield (if desired)

2.1. Box Contents

⚠ Carefully inspect the shipping carton and contents for any shipping damage. If the device is damaged, file a claim immediately with the shipping company and notify Ingenico.

1. Remove the contents from the box.

The box contains the following items:

- iPP300 device
 - *DIV350783 Installation and Quick Reference Guide*
 - Connection cable or cable adapter
 - Privacy shield (for optional use, if desired)
 - 3 screws
 - Application user guide (optional)
2. Save the carton and packing material for repackaging or moving/shipping the device in the future.

2.2. Selecting the Device Location

The iPP300 device may be mounted on a flat surface or customer stand (recommended). Power may be provided from a host Point of Sale system or from an Ingenico power supply. If using an Ingenico power supply, the device must be placed close to an easily-accessible power outlet.

Info *Ingenico recommends physically securing the device to avoid theft.*

⚠ Do not place the iPP300 device on a PC monitor, adjacent to an electronically active security tag deactivation system, or near other sources of magnetic fields.

The iPP300 device must be at least 12 inches away from an electronically active type of security tag deactivation pad. There are two types of security tag deactivation systems:

- An electronically active system sends out a powerful and potentially disruptive signal to deactivate the security tag. If the iPP300 device is placed too close to the system's pad, or placed above the pad, malfunction may occur.
- A passive system is a permanent magnet type that does not send out a signal. This type does not affect the iPP300 device.

Info When selecting the device location, keep in mind that you must perform daily tasks to ensure the security and compliance of your device. Refer to section o Notes

Info Security on page 30 for more information.

2.3. Installing the Contactless Card Reader Module

If you have purchased the optional contactless card reader, refer to Installing the Contactless Card Reader Module Guide.

2.4. Connecting the Device

- ⚠ Do not connect a power cord to the iPP300 device until instructed to do so.**
1. Place the iPP300 device in front of you with the bottom of the unit facing up. Be careful not to place the device on a surface where the device can be scratched or damaged.
 2. If provided with a cable adapter, go to step 5.
 3. If provided with a cable, pull the handle up on the device connection side of the cable.
 4. Place the cable connector in the port and push firmly in place.



Figure 4: Cable placed in iPP300 port

5. If using a cable adapter, place the cable connector in the port and push firmly in place.
 6. Connect the interface cable to the adapter port.
 7. If required, use 2 of the provided screws to secure cable (or cable adapter) to the base of the iPP300.
 8. If using a cable, push the handle on the cable down to secure the cable in place.
 9. Connect the other end of the cable into the POS or PC as appropriate (see Table 2: iPP300 Connection Types).
 10. Remove the protective film from the graphical display screen.
- ⚠ Fitting the screws if optional. Please note that if the device needs to be replaced, the screws will need to be removed as part of the process.**

Table 2: iPP300 Connection Types

Connection Type	Description
ETHERNET	8-pin RJ45. Use to connect Ethernet 10/100 BASE-T.
USB	USB 2.0 Host high speed. 5V, 500 mA max. Supports peripheral USB devices.
RS-232	9-pin MiniDIN9 port. Use to connect RS-232 and USB 2.0 full speed device. Use this port to connect host devices (POS or PC) directly. The iPP300 receives power through this connection. ⚠ For this device to be USB-IF compliant, use only the approved USB cable from Ingenico.
Power Supply	Some cables have a power supply input plug at the far end of the cable (away from the iPP300). Do not plug in the Power Supply until you are instructed to do so.

- ⚠ To avoid accidental damage, secure cables and power cords.**

2.5. Connecting a Power Supply

A separate Ingenico DC power supply (179901469) is required when connecting the iPP300 device via Ethernet and 5M length RS-232 cables. When the device is powered from a POS, power may be provided via a USB (Power over USB is 5V, 500mA). For more information on power, refer to section 10.4 Physical Characteristics on page 36. For information on Ingenico power supply cables and part numbers, refer to Appendix o Notes

Power Supply on page 38.

⚠ Connect the cable to the iPP300's port before connecting the device to power. Only use the power supply provided by Ingenico.

1. If your device came with a power supply, plug the power supply connector into the jack on the interface cable (refer to Appendix o Notes
2. Power Supply on page 38).



Figure 5: Sample power cable connection

3. Plug the power supply into a power outlet.
4. The iPP300 initializes when power is applied.

2.6. Attaching the Privacy Shield (optional)

A Privacy Shield is provided for optional use. To attach the privacy shield to the iPP300 device, do the following:

1. Align the ends of the privacy shield notches to the slots on the outside of the bottom of the keypad (near the red and green keys).
2. Insert the privacy shield's bottom notches into the device's slots.
3. Push the privacy shield down onto the device to secure it.

3. Operations

3.1. Powering On

After you apply power to the iPP300 device, the device is ready for use. The iPP300 device may be left on indefinitely, or may be disconnected from power as necessary.

3.2. Restarting the Device

To restart the device, press [Clear] and [.,#*] simultaneously. Alternatively, disconnect and reconnect the device's power source.

3.3. Swiping a Magnetic Stripe Card



The iPP300 device's magnetic stripe reader reads debit, credit, and all standard magnetic stripe cards. When the application prompts for a magnetic stripe card, the magnetic stripe logo on the top of the device illuminates. Be sure the magnetic stripe side of the card is facing towards the iPP300 graphical display screen. Slide the card in either direction. For best results, slide the card in a continuous motion.

3.4. Using a Smart “Chip” Card Reader



When the application prompts for a smart card, the smart card logos illuminate. Insert the smart card into the slot on the front of the device with the chip facing up and towards the slot. Green lights on top of the smart card reader slot, under software control, can prompt the cardholder when to insert or remove a card. If PIN entry is required, the keypad can also be programmed to illuminate under application control.

3.5. Using a Contactless Payment Card (optional)



The iPP300 contactless card reader reads contactless payment cards. Hold the contactless payment card close to the active zone around the display. A series of green lights illuminate on the top of the device when the contactless card has been read.

Notes

4. Telium Manager Overview

⚠ Ingenico recommends only accessing menus that are detailed in this guide.

4.1. Navigating Telium Manager's Submenus

When navigating Telium Manager's menus, the current menu name displays on the first line, and the menu options appear on subsequent lines.

The following table lists the keys used to scroll through and select menu options:

Table 3: iPP300 Device Key Descriptions

Key	Action
F1	No action.
F2	Scroll down one item.
F3	Scroll up one item.
F4	Scroll up one item.
Green key [Enter]	Initiate selected menu option.
Yellow key [Clear]	Acts as a backspace key in data entry. Sometimes will return to the previous menu.
Red key [Cancel]	Sometimes will return to the previous menu. Sometimes returns to menus viewed earlier.

Navigate options in a menu by:

- Using the keys: [F2] and [F3]

When you navigate to the desired option:

- The option will be in reverse highlight

After navigating to the desired option, select the option from a menu by:

- Pressing [Enter].
- Pressing the number on the keypad of the number that corresponds with the option in the menu.

To navigate away from a screen or cancel your selection, you can:

- Press [Cancel].

4.2. Telium Manager

Use the Telium Manager to set the device's date, time, date format, MSR track, and Ethernet settings.

4.2.1. Accessing Telium Manager

To access Telium Manager:

- At the Startup/splash screen, press [2], [6], [3], [4], [Enter], [F], to view the FUNCTIONS menu.

The FUNCTIONS menu displays the Telium Manager and any applications in the device:

FUNCTIONS

0 – TELIUM MANAGER

1 – Application 1

2 – Application 2

Select MANAGER to go to the TELIUM MANAGER.

TELIUM MANAGER

1 - Consultation

2 - Evolution

3 - Initialization

4 - Diagnosis

5 - Deletion

4.2.2. Telium Manager Menu Options

The TELIUM MANAGER menu contains the following menu options:

- **Consultation** – This menu is reserved for Ingenico use only and is not discussed in this document.
- **Evolution** – This menu is reserved for Ingenico use only and is not discussed in this document.
- **Initialization** – This menu allows you to set the device's date, time, date format, MSR track, and Ethernet settings. Refer to the following sections for more information.
- **Diagnosis** – This menu is reserved for Ingenico use only and is not discussed in this document.
- **Deletion** – This menu is reserved for Ingenico use only and is not discussed in this document.

4.2.3. Setting the Date and Time

4.2.3.1. Setting the Date

From Telium Manager, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	TELIUM MANAGER 1 – Consultation 2 – Evolution 3 – Initialization 4 – Diagnosis ↓	Press [3] for Initialization.	
2.	INITIALIZATION 1 – Parameters 2 – Hardware 3 – Password 4 – Header ↓	Press [1] for Parameters.	
3.	INITIALIZATION Date and time Language Terminal Number Currency ↓	Press [Enter] to select Date and time.	
4.	DATE AND TIME Set date Set time Date format	Press [Enter] to select Set date.	
5.	SET DATE 08/11/2010 MM/DD/YYYY	Enter the current date in the correct format and press [Enter].	The current date setting displays on the first line. The correct format displays on the second line.

4.2.3.2. Setting the Time

From Telium Manager, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	TELIUM MANAGER 1 – Consultation 2 – Evolution 3 – Initialization 4 – Diagnosis ↓	Press [3] for Initialization.	

Step	Terminal Display	Merchant Action	Notes
2.	INITIALIZATION 1 – Parameters 2 – Hardware 3 – Password 4 – Header ↓	Press [1] for Parameters.	
3.	INITIALIZATION Date and time Language Terminal Number Currency ↓	Press [Enter] to select Date and time.	
4.	DATE AND TIME Set date Set time Date format	Scroll to Set time and press [Enter].	
5.	SET TIME 23:31 (HH:MM)	Enter the current time in HHMM format (time on 24-hour clock) and press [Enter].	The current time setting displays on the first line. The time format displays on the second line.

4.2.3.3. Setting the Date Format

From Telium Manager, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	TELUM MANAGER 1 – Consultation 2 – Evolution 3 – Initialization 4 – Diagnosis ↓	Press [3] for Initialization.	
2.	INITIALIZATION 1 – Parameters 2 – Hardware 3 – Password 4 – Header ↓	Press [1] for Parameters.	
3.	INITIALIZATION Date and time Language Terminal Number Currency ↓	Press [Enter] to select Date and time.	

Step	Terminal Display	Merchant Action	Notes
4.	DATE AND TIME Set date Set time Date format	Scroll to Date format and press [Enter].	
5.	DATE FORMAT DD/MM/YYYY <input type="radio"/> YYYY/MM/DD <input checked="" type="radio"/> DD.MM.YYYY <input type="radio"/>	Select the date format you want and press [Enter].	The current time setting displays on the first line. The time format displays on the second line.


4.2.4. Setting the MSR Track

From Telium Manager, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	TELUM MANAGER 1- Consultation 2- Evolution 3- Initialization 4- Diagnosis ↓	Press [3] for Initialization.	
2.	INITIALIZATION 1- Parameters 2- Hardware 3- Password 4- Header ↓	Press [1] for Parameters.	
3.	INITIALIZATION Currency Swipe Serial Number Network Access ↓	Scroll to Swipe and press [Enter].	
4.	SWIPE Iso2 <input type="radio"/> Iso2 + Iso1 <input checked="" type="radio"/> Iso2 + Iso3 <input type="radio"/> Iso1 + Iso2 + Iso3 <input type="radio"/>	Select how many tracks you want active and press [Enter].	Ingenico recommends selecting Iso2 + Iso1.

4.2.5. Configuring Ethernet Settings

To set the device up for Ethernet, navigate to the Ethernet Setup menu as described below.

 Ask your network provider for IP Address information.

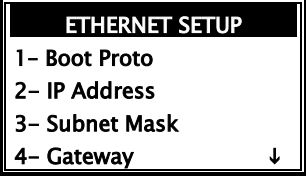
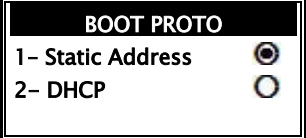
From Telium Manager, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	<div>TELUM MANAGER 1 – Consultation 2 – Evolution 3 – Initialization 4 – Diagnosis ↓</div>	Press [3] for Initialization.	
2.	<div>INITIALIZATION 1 – Parameters 2 – Hardware 3 – Password 4 – Header ↓</div>	Press [2] for Hardware.	
3.	<div>CONFIGURATION 1 – Ethernet Setup 2 – Display</div>	Press [1] for Ethernet Setup.	
4.	<div>ETHERNET SETUP 1 – Boot Proto 2 – IP Address 3 – Subnet Mask 4 – Gateway 5 – DNS1 6 – DNS2 7 – Speed 8 – Ping 9 – Print 10 – Save 11 – Quit 12 – Reload Setup 13 – Reset Conf.</div>		Only the first 4 parameters display on the screen.

From the ETHERNET SETUP menu, configure the Boot Proto, IP Address, and Subnet Mask.

4.2.5.1. Defining the Boot Proto

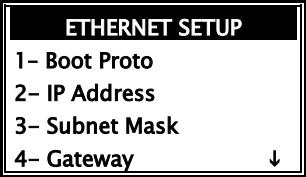
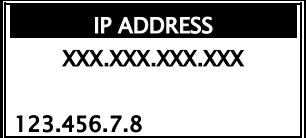
Select whether you want a static or dynamic IP (DHCP) address. If you select DHCP, skip to section 4.2.5.3 Defining the Subnet Mask on page 20.

Step	Terminal Display	Merchant Action	Notes
1.		Press [1] for Boot Proto.	
2.		Press [1] for Static Address. -or- Press [2] for DHCP.	

4.2.5.2. Defining the IP Address

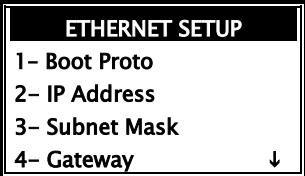
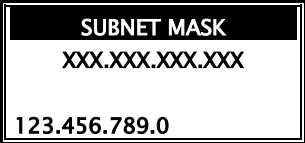
 If you selected DHCP in the BOOT PROTO menu, you do not need to set your IP Address.

The IP address identifies the device on the network.

Step	Terminal Display	Merchant Action	Notes
1.		Press [2] for IP Address.	
2.		Enter the IP address and press [Enter].	

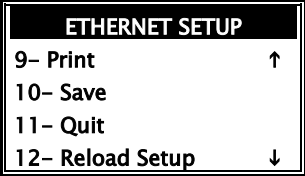
4.2.5.3. Defining the Subnet Mask

The subnet mask masks the IP address and is unique for your network.

Step	Terminal Display	Merchant Action	Notes
1.		Press [3] for Subnet Mask.	
2.		Enter the subnet mask and press [Enter].	

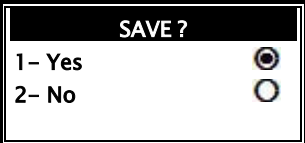
4.2.5.4. Saving Ethernet Settings

After you finish setting your Ethernet settings, select **Save** in the Ethernet Setup menu to save your changes. The device automatically reboots.

Step	Terminal Display	Merchant Action	Notes
1.		Press [10] to select Save.	



Sometimes when you exit an Ethernet Setup menu option, a **SAVE ?** screen displays as shown below. If you select Yes, the device automatically reboots.

Step	Terminal Display	Merchant Action	Notes
1.		Press [1] to select Save and reboot the device.	

5. Viewing System Information

5.1. Accessing the Configuration Menu

To access the CONFIGURATION menu, from Telium Manager, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	<div>TELIUM MANAGER 1 – Consultation 2 – Evolution 3 – Initialization 4 – Diagnosis ↓</div>	Press [1] for Consultation.	
2.	<div>CONSULTATION 1 – State 2 – Configuration</div>	Press [2] for Configuration.	
3.	<div>CONFIGURATION 1 – Hardware 2 – Software</div>		

5.1.1. Viewing Hardware Information

From the CONFIGURATION menu, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	<div>CONFIGURATION 1 – Hardware 2 – Software</div>	Press [1] for Hardware.	
2.	<div>CONFIGURATION General Infos Activation Infos Memory Infos Hardware Infos Software Infos</div>	Select the type of information you want to view.	Only the first 4 options display on the screen.

Step	Terminal Display	Merchant Action	Notes
3.	CONFIGURATION Name : Id. : Serial : Code : Const. : Ref. : Date : NbCam : CamHard: : CamSoft :	Displays if you choose General Infos.	
4.	CONFIGURATION First : SXX : Country : EXX :	Displays if you choose Activation Infos.	
5.	CONFIGURATION Flash Memory : RAM Memory :	Displays if you choose Memory Infos.	
6.	CONFIGURATION PRINTER : DISPLAY : BUZZER : COM0 : -- COM1: COM2: -- COM3: USB HOST : USB DEVICE : ETHERNET : HWADDR : IPADDR : NETMASK : GATEWAY : ISO1 : -- ISO2: ISO3 : CAM1 " -- CAM2: CAM3 : SAM1: -- SAM2 : SAM3: -- SAM4:	Displays if you choose Hardware Infos.	
7.	CONFIGURATION Country: Firmware Version: Booster: Thunder:	Displays if you choose Software Infos.	

5.1.2. Viewing Software Information

From the CONFIGURATION menu, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	CONFIGURATION 1 – Hardware 2 – Software	Press [2] for Software.	
2.	CONFIGURATION Application Telium Manager Telium System		
3.	CONFIGURATION Application Telium Manager Telium System	Select the type of information you want to view.	
4.	TELIUM MANAGER M2OS: CRC= Type= Lg = *Code= *Data=	Displays if Telium Manager selected.	
5.	TELIUM SYSTEM Version= CRC = Lg = Modele= Accept= Archi.= NoSerie: Flash Tot. Flash Dispo. RAM Tot. RAM Dispo.	Displays if Telium System selected.	

Notes

6. Downloading Applications

Download applications using the downloading tool or using a USB flash drive.

6.1. Downloading Tool

The downloading tool utilizes commands within UPOS and RBA to download files from the POS to the iPP350. These files may include the operating system (OS), Telium Manager, applications, configurations, and forms.

6.2. USB Download

See iPP300 USB Download Guides for more information.

Notes

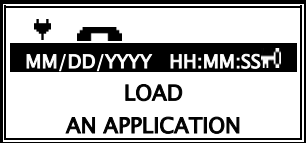

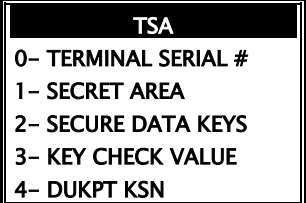

7. Troubleshooting

This chapter covers basic troubleshooting. If the solutions listed do not solve the problem, call your internal Help Desk or the Ingenico Help Desk number listed on the front inside cover of this manual.

7.1. Key Check Values

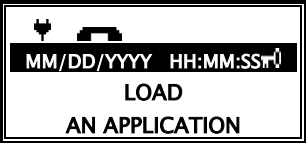
7.1.1. Finding the Key Check Value: Special Keys

To find the key check value of special keys, do the following:

Step	Terminal Display	Merchant Action	Notes
1.		Press [F].	
2.		Press [1] for TSA.	
3.		Press [3] for KEY CHECK VALUE.	
4.		Press [0] for SPECIAL KEYS.	

7.1.2. Finding the Key Check Value: Master/Session Keys

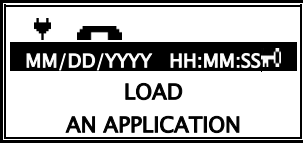
To find the key check value of master and session keys, do the following:

Step	Terminal Display	Merchant Action	Notes
1.		Press [F].	

Step	Terminal Display	Merchant Action	Notes
2.	FUNCTIONS 0- TELIUM MANAGER 1- TSA	Press [1] for TSA.	
3.	TSA 0- TERMINAL SERIAL # 1- SECRET AREA 2- SECURE DATA KEYS 3- KEY CHECK VALUE 4- DUKPT KSN	Press [3] for KEY CHECK VALUE.	
4.	KEY CHECK VALUE 0- SPECIAL KES 1- MASTER/SESSION	Press [1] for MASTER/SESSION.	

7.1.3. Finding the Key Check Value: DUKPT KSN

To find the DUKPT KSN, do the following:

Step	Terminal Display	Merchant Action	Notes
1.	 MM/DD/YYYY HH:MM:SS LOAD AN APPLICATION	Press [F].	
2.	FUNCTIONS 0- TELIUM MANAGER 1- TSA	Press [1] for TSA.	
3.	TSA 0- TERMINAL SERIAL # 1- SECRET AREA 2- SECURE DATA KEYS 3- KEY CHECK VALUE 4- DUKPT KSN	Press [4] for KEY CHECK VALUE.	

7.2. Magnetic Card Reader Does Not Work Properly

1. Slide the card through the reader as described in section 3.3 Swiping a Magnetic Stripe Card on page 11.
2. Swipe the card at a faster or slower steady speed.
3. Swipe the card in the other direction.
4. Inspect the magnetic stripe on the card to make sure it is not scratched or badly worn.

5. To determine if the problem is with the card:
 - If your host device has a magnetic stripe reader, try swiping the card there.
 - If you have another working iPP300 device, try swiping the card there.
6. If there is still a problem, contact your internal Help Desk.

7.3. No Information is Visible on Screen

1. Make sure the iPP300 cable connector is fully inserted into the back of the device.
 2. Restart the device. See section 3.2 Restarting the Device on page 11.
 3. Unplug the device and examine the connector's pins. If there are any pins that are bent, replace with a new cable or cable adapter.
 4. If you have another working iPP300 device, swap the devices to determine if the problem is with the device, cable, POS, PC, or power supply.
 5. Reset the host by turning it off and back on again.
- ⚠ Changes or modifications to this device not expressly approved by Ingenico will void the warranty.**

Notes

8. Security

Your device fulfils current applicable PCI PED security requirements.

8.1. Security Assurance

Perform the following tasks daily to ensure the security and compliance of your device:

8.1.1. Checking the Device's Integrity

Ensure that no attempts have been made to tamper with the device, using the following method:

1. Check that there is NO external damage to the device, particularly around the keypad, display, and reader areas.
2. Keypad is firmly in place.
3. Ensure that there are NO additional cables protruding from the device or associated equipment.
4. Check that there are NO holes drilled into the device's housing.

8.1.2. Alert Irruption!

Your iPP300 device detects any “tampered state”. In this state the terminal will repeatedly flash the message “Alert Irruption!” and further use of the terminal will not be possible. If you observe the “Alert Irruption!” message, you should contact the terminal helpdesk immediately.

8.1.3. Checking the Installation Side

1. Ensure that there are NO security cameras focusing on the device.
2. Ensure that there are NO objects close by in which cameras could be hidden.
3. Ensure that the device CANNOT be observed from outside (any window or door) during PIN entry.

⚠ NEVER ask the customer to divulge their PIN code. Customers should be advised to ensure that they are not being overlooked when entering their PIN.

Notes




9. Cleaning

9.1. Cleaning the Magnetic Stripe Reader

If the magnetic stripe reader (MSR) head is dirty, it can be cleaned using a card swipe cleaner for the magnetic heads on POS devices (order from your Ingenico representative: part number CM00969 for a pack of 10 cards). Do not use tissues, wipes moistened with soap or moisturizer, or other cleaning fluids, as they may damage the MSR head.

9.2. Cleaning the Device

To clean the device, follow these instructions:

1. To prevent damage to the device and to avoid electric shock, unplug the power supply before cleaning the device.
 2. To remove dust from the device, wipe with a damp cloth.
-  **Do not spray or pour cleaning liquid directly onto the device. If you allow any liquid to enter inside the case, serious damage to the device may result.**
 -  **Do not use abrasive cleaners; they could destroy the plastic and cause serious damage to the device.**
 -  **Any liquid spill must be removed immediately.**

Notes

10. Specifications

10.1. Hardware

Processors:	Main Processor: RISC 32-bit ARM9 processor, 450 MIPS Integrated Crypto Processor: RISC 32-bit ARM7 processor, 50 MIPS
Operating System	Telium 2 with HTML GUI
Hardware Part Numbers	iPP320 <ul style="list-style-type: none">• iPP320 – 01P1300• iPP320 – 1P1304A (contactless): iPP350 <ul style="list-style-type: none">• iPP350 – 01P1302• iPP350 – 01P1306A (contactless)
Display:	<ul style="list-style-type: none">• iPP320<ul style="list-style-type: none">– Graphical monochrome LCD with display resolution of 128 x 64• iPP350<ul style="list-style-type: none">– Graphical active 2.7” TFT color QVGA display with display resolution of 320 x 240 with 4096 colors
Memory:	16 MB SDRAM, 128 MB Flash. External: µSD supporting up to 8 GB.
Keypad:	19 keys including four function keys; raised markings, ADA-friendly. White backlit.
Privacy Shield:	Separate. In box or field install.
SAMs:	3 SAM slots
Video	Full video capability. All format conversion is supported through the Integration Kit.
Buzzer	65 dB at 1M.
Communications:	HOST port: RS-232, USB, and Ethernet (TCP/IP)
Magnetic Stripe Card Reader	Bi-directional magnetic stripe card reader, triple track. Magnetic stripe logo illuminates.
Smart Card Reader:	Optional. EMV L1 and L2 certified – meets EMV 4.0 specifications Complies with IS 7816 1/2/3, asynchronous T=0 and T=1 cards Smart card logo illuminates.
Contactless Card Reader	Optional.

10.2. Software Applications

Integration Kits	POS for .NET Software Integration Kit OPOS Software Integration Kit RBA Integration Kit JPOS Software Integration Kit
Support:	Supports credit, debit, EBT, customer graphics display, and contactless card reader

10.3. Regulations

Safety	UL/CSA 60951-1
Security:	PCI PTS 2.x and Interac (Canada)
RFID	IC and FCC: Part 15B and Part 15C

10.4. Physical Characteristics

Color:	Face plate: Ingenico gray (optional customer branding)
Weight:	9.5 oz (269 g) (without cable and privacy shield)
Dimensions:	6.3" x 3.3" x 1.6" (168 mm x 88 mm x 41 mm) (without privacy shield)
Power:	Unit can be powered from a Powered RS-232 (5V or 12V), POS, Powered USB (5V 500mA), external and standalone power supply

10.5. Environmental Requirements

Temperature:	<ul style="list-style-type: none">Operating: 41° F to 113° F (+5° C to 45° C)Storage: -4° F to 158° F (-20° C to +70° C)
Humidity:	<ul style="list-style-type: none">Operating: 85% RH (non-condensing) at 131° F (+55° C)Storage: 85% RH non-condensing at 131° F (+55° C)

A. Cable Options

A.1. RS-232 Cables

Part Number	Description
296100041	2m (Power derived from Host/PC)
296107514	5m, requires power supply (179901469)

A.2. Tailgate (RS-485) Cable Options

Not available.

A.3. USB Cable Options

Part Number	Description
296100039	2m (Power derived from Host/PC)

A.4. Ethernet Cable Options

Part Number	Description
296106335	2m, requires power supply (179901469)

A.5. Cable Adapters

Part Number	Description
296100053	RS-232/USB Adapter
296100055	Ethernet Adapter

Notes

B. Power Supply

Part Number	Description
179901469	Power supply.

Notes

C. Contactless Module

Part Number	Description
296100036AE	Contactless Module

Notes