

# Oracle® MICROS Tablet 700 Series Setup Guide



E91732-09  
January 2022



Oracle MICROS Tablet 700 Series Setup Guide,

E91732-09

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# Preface

The Oracle MICROS Tablet 700 Series tablets are designed for the hospitality market.

## Audience

This document is intended for those who will be setting up, installing, and operating the Oracle MICROS Tablet 720, Oracle MICROS Tablet 721, or Oracle MICROS Tablet 721P. It is not specific to a particular software application.

## Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to recreate
- Exact error message received
- Screenshots of each step you take

## Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at <http://docs.oracle.com/en/industries/food-beverage/>.

## Revision History

Date	Description of Change
December 2017	Initial Publication
February 2018	Updated the battery information in the Accessories section
April 2019	Miscellaneous improvements
June 2020	Added Tablet 721P
November 2021	Miscellaneous improvements
January 2022	Updated tablet accessories information.

# 1

## The Oracle MICROS Tablet 700 Series

The Oracle MICROS Tablet 700 Series (Tablet 720, Tablet 721, and Tablet 721P) features slim yet rugged enclosures, a 7-inch TFT display powered by the Intel Atom quad-core processor, and offers an optimal combination of performance and power savings. It provides integrated Wi-Fi and Bluetooth connectivity, a magnetic stripe reader, an optional barcode scanner, an optional camera (Tablet 721/721P only), and an optional RFID reader. The Tablet 721P features an ultra-ruggedized enclosure for added protection.



# Tablet 721P Features

Figure 1-1 The Features of the Oracle MICROS Tablet 721P



Table 1-1 Oracle MICROS Tablet 721P Features

Feature	Description
1. Power button	Turns the tablet on or off.
2. Headphone port	Use to connect a headphone, a microphone, or a headset.
3. High speed USB port	Use to connect peripherals such as storage devices, printers, and displays.

**Table 1-1 (Cont.) Oracle MICROS Tablet 721P Features**

<b>Feature</b>	<b>Description</b>
4. 12V DC power input	Use to connect a power supply to provide power to your tablet and charge the battery.
5. Battery charge indicator	Use to connect a power supply to provide power to your tablet and charge the battery.
6. Barcode scanner button	Use to activate the barcode scanner.
7. Barcode scanner (optional)	Captures and reads information contained in a bar code.
8. Magnetic Stripe Reader (MSR)	Reads the information encoded in the magnetic stripe of payment cards.
9. Camera (optional)	Use to take photographs.
10. Anchor (2x) for safety tether or third-party shoulder strap	Use to attach a safety tether or shoulder strap.
11. Battery latch	Use to unlock and remove the battery.
12. Mounting points (4x) for PIN entry device, mobile payment location	Use to attach PIN entry device.
13. Battery sensor (located under battery). Note: Pressing the battery sensor when the battery is removed disables the hot swap capability and causes the tablet to shut down.	Senses the presence of a battery. Located in the battery compartment under the battery. Inadvertently pressing this when the battery is removed disables the “hot swap” capability and causes the tablet to power off.



## Tablet 721 Features

**Figure 1-2 The Features of the Oracle MICROS Tablet 721 — Front and Side View**



**Figure 1-3 The Features of the Oracle MICROS Tablet 721 — Back View**



**Table 1-2 Input/Output Port on the Oracle MICROS Tablet 721**

Feature	Description
A. Barcode Scanner (Optional)	Captures and reads information contained in a bar code.

**Table 1-2 (Cont.) Input/Output Port on the Oracle MICROS Tablet 721**

Feature	Description
B. Magnetic Stripe Reader (MSR)	Reads the information encoded in the magnetic stripe of payment cards.
C. Headphone Jack	Use to connect a headphone, a microphone, or a headset.
D. USB Port	Use to connect peripherals such as storage devices, printers, and displays.
E. 12V DC Power Input	Use to connect a power supply to provide power to your tablet and charge the battery.
F. Camera	Use to take photographs.

**Table 1-3 Button Functions on the Oracle MICROS Tablet 721**

Feature	Description
1. Power Button	Turns the tablet on or off.
2. Scanner Trigger	Use to activate the barcode scanner.
3. Battery/Power LED	Indicates the power and battery status. <i>Battery LED Status</i> has more information on the behavior of the LED.
4. Battery Latch	Use to unlock and remove the battery.
5. Battery Sensor	Senses the presence of a battery. Located in the battery compartment under the battery. Inadvertently pressing this when the battery is removed disables the “hot swap” capability and causes the tablet to power off.

## Tablet 720 Features

Figure 1-4 The Features of the Oracle MICROS Tablet 720 — Front and Side View



Figure 1-5 The Features of the Oracle MICROS Tablet 720 — Back View



**Table 1-4 Input/Output Port on the Oracle MICROS Tablet 720**

Feature	Description
A. Barcode Scanner (Optional)	Captures and reads information contained in a bar code.
B. Magnetic Stripe Reader (MSR)	Reads the information encoded in the magnetic stripe of payment cards.
C. Headphone Jack	Use to connect a headphone, a microphone, or a headset.
D. USB 2.0 Port	Use to connect peripherals such as storage devices, printers, and displays.
E. 5V DC Power Input	Use to connect a power adapter to provide power to your tablet and charge the battery.

**Table 1-5 Button Functions on the Oracle MICROS Tablet 720**

Feature	Description
1. Power Button	Turns the tablet on or off.
2. Scanner Trigger	Use to activate the barcode scanner.
3. Battery/Power LED	Indicates the power and battery status. <i>Battery LED Status</i> has more information on the behavior of the LED.
4. Battery Latch	Use to unlock and remove the battery.
5. Battery Sensor	Senses the presence of a battery. Located in the battery compartment under the battery. Inadvertently pressing this when the battery is removed disables the “hot swap” capability and causes the tablet to power off.

## Technical Specifications

The following tables contains the technical specifications for the Oracle MICROS Tablet 720, Oracle MICROS Tablet 721, and Oracle MICROS Tablet 721P.

**Table 1-6 Technical Specifications for the Oracle MICROS Tablet 720**

Feature	MICROS Tablet 720
Processor	Intel Atom Quad Core, 1.33GHz
RAM	2GB
Storage	64GB Flash
Operating System	Microsoft Windows Embedded 8.1 Industry Pro Microsoft Windows 10 IoT Enterprise 2016 LTSC
Display	7-inch LED-Backlight Screen with Capacitive Touch

**Table 1-6 (Cont.) Technical Specifications for the Oracle MICROS Tablet 720**

<b>Feature</b>	<b>MICROS Tablet 720</b>
Display Resolution	1280 x 800
WLAN	Wi-Fi 802.11a/b/g/n
Bluetooth	Bluetooth 4.0 LE
USB Port	USB 2.0 x 1
Headset Jack	1
DC In	1
AC/DC Adapter	Input: 100 – 240V AC; Output: 5V DC, 3A
Battery Pack	Replaceable rechargeable Li-ion battery, 3.6V, 8800mAh Backup/Bridge Battery: 240mAh
Enclosure	ABS + PC plastics
Dimensions (H x W x D)	5.24in x 8.26in x 0.93in 133mm x 210mm x 23.5mm
Temperature	Operation: 0 °C (32 °F) to 40 °C (104 °F) Storage: -20 °C (-4 °F) to 60 °C (140 °F)
Humidity	0% to 90% Non-Condensing
Weight	1.31 lbs (0.59 kg)
Magnetic Stripe Reader (MSR)	Triple Track Readers (ISO TK1, 2 & 3), JIS & AAMVA Compliant
Barcode Scanner	Optional; 1D/2D Barcode Scanner
NFC/RFID	Optional; Supports ISO/IEC 14443 A Reader/Writer Mode @ 13.56MHz

**Table 1-7 Technical Specifications for the Oracle MICROS Tablet 721 and 721P**

<b>Feature</b>	<b>MICROS Tablet 721/721P</b>
Processor	Intel Atom Quad Core, 1.44GHz
RAM	4GB
Storage	64GB Flash
Operating System	Microsoft Windows 10 IoT Enterprise 2016 LTSC
Display	7-inch LED-Backlight Screen with Capacitive Touch
Display Resolution	1280 x 800
WLAN	Wi-Fi 802.11a/b/g/n/ac
Bluetooth	Dual Mode Bluetooth 4.2, BLE
USB Port	USB x 1
Headset Jack	1
DC In	1
AC/DC Adapter	Input: 100 – 240V AC; Output: 12V DC, 5A

**Table 1-7 (Cont.) Technical Specifications for the Oracle MICROS Tablet 721 and 721P**

Feature	MICROS Tablet 721/721P
Battery Pack	Replaceable rechargeable Li-ion battery, 3.6V, 8800mAh Backup/Bridge Battery: 240mAh
Enclosure	ABS + PC plastics
Dimensions (H x W x D)	Tablet 721: <ul style="list-style-type: none"> <li>5.24in x 8.75in x 0.7in (133mm x 210mm x 18mm)</li> </ul> Tablet 721P (without accessories): <ul style="list-style-type: none"> <li>5.41in x 8.49in x 1in (137.5mm x 215.6mm x 26.4mm)</li> </ul>
Temperature	Operation: 0 °C (32 °F) to 40 °C (104 °F) Storage: -20 °C (-4 °F) to 60 °C (140 °F)
Humidity	0% to 90% Non-Condensing
Weight	Tablet 720/721: 1.31 lbs (0.59 kg) Tablet 721P: Up to 2 lbs (0.91 kg)
Magnetic Stripe Reader (MSR)	Triple Track Readers (ISO TK1, 2 & 3), JIS & AAMVA Compliant
Barcode Scanner	Optional; 1D/2D Barcode Scanner
Camera	Optional; Resolution up to 2592x1944px, 68° FOV, 3.94in minimum focus distance, F2.8±5%
NFC/RFID	Optional; Supports ISO 14443A/B, ISO 15693, MIFARE Ultralight, and FeliCa A Reader/Writer Mode @ 13.56MHz

## Software Components

The Oracle MICROS Tablet 720 comes pre-installed with the Microsoft Windows Embedded 8.1 Industry Pro or Microsoft Windows 10 IoT Enterprise operating system. The Oracle MICROS Tablet 721 and Oracle MICROS 721P are pre-installed with the Microsoft Windows 10 IoT Enterprise operating system.

The Microsoft Windows Embedded 8.1 Industry Pro operating system offers the latest Windows 8.1 innovations in security, management, and user experience, as well as the flexibility and enhanced lockdown capabilities needed to power and secure POS-industry devices. Features include:

- Enhanced security technologies protect your device, data, and network.
- Lockdown features help control the device configuration for a consistent and secure user experience.
- BitLocker and Trusted Boot technologies ensure data protection, hard drive encryption, and protect against malware.
- Improved multi-touch capabilities and responsive controls create a more natural user experience.



- New power management and wireless technologies improve mobility and access.

The Microsoft Windows 10 IoT Enterprise operating system offers the latest Windows 10 Enterprise innovations to the POS industry as well as enterprise-grade security and reliability to ensure your devices and data are protected against modern security threats. Features include:

- Comprehensive infrastructure and management features provide flexibility, consistency, and advanced security.
- Built-in defenses, such as Secure Boot, BitLocker, Device Guard, and Credential Guard, protect your information from leaks or theft.
- Advanced lockdown capabilities, such as AppLocker, help create a dedicated device experience for business applications.
- Support for Universal Windows apps and Classic Windows applications create a flexible and all-inclusive workspace.
- Native-device interoperability provides manageability and a connected organization.

## Tablet Accessories

**Table 1-8 Oracle MICROS Tablet 700 Series Accessories**

Accessory	Description
High Capacity Battery Part Number: 7117485 	Allows for long use and quick swap without requiring the tablet to be docked. Can be charged separately using the 4-Bay Battery Charger or with the tablet using the Desktop Charging Cradle, 4-Bay Tablet Charger, External Power Adapter (Tablet 720), or the Power Supply (Tablet 721).
High Capacity Li-Ion Polymer Battery Part Number 7601701 	<p>Note: The Tablet 720 requires BIOS v0.01.25ORC or greater to support the new Lithium-Ion Polymer battery. Download the BIOS update (patch number 28178739) from <a href="https://support.oracle.com">https://support.oracle.com</a>.</p> <p>The High Capacity Li-Ion Polymer Battery allows for long use and quick swap without requiring the tablet to be docked. The battery can be charged separately using the 4-Bay Battery Charger or with the Oracle MICROS Tablet 700 Series tablets using the Desktop Charging Cradle, 4-Bay Tablet Charger, or external power adapter.</p>

**Table 1-8 (Cont.) Oracle MICROS Tablet 700 Series Accessories**

Accessory	Description
Power Supply Part Number: 7118431 with C13 power cord connection.	The Power Supply (12V) is used to charge a single Tablet 721/721P with the battery attached. Not for use with the Tablet 720.



External Power Adapter  
Part Number: 7117487

The External Power Adapter (5V) charges a single Tablet 720 with battery attached. Not for use with the Tablet 721/721P.



4-Bay Battery Charger  
Part Number: 7118826 with C13 power cord connection

Charges up to 4 batteries at a time.





**Table 1-8 (Cont.) Oracle MICROS Tablet 700 Series Accessories**

Accessory	Description
<p>4-Bay Tablet Charger Part Number: 7118827 with C13 power cord connection</p>	<p>Charges up to 4 tablets with batteries attached at the same time.</p>



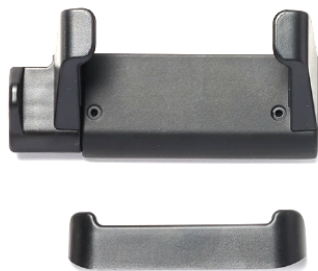
Desktop Charging Cradle  
Part Number: 7118828 with C13 power cord connection

Charges one tablet with battery attached and one spare battery at the same time.


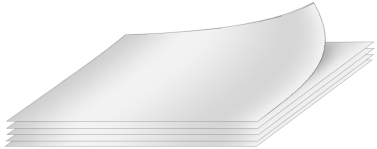


Payment Device Mount and hand straps for Oracle MICROS Tablet 721P  
Part Number: 7601705

The Payment Device Mount lets you mount a PIN entry device on the Tablet 721P.



**Table 1-8 (Cont.) Oracle MICROS Tablet 700 Series Accessories**

Accessory	Description
<p>Replacement hand straps and mounting brackets for Oracle MICROS Tablet 721 and Oracle MICROS Tablet 721P Part Number: 7601707</p>	<p>Includes “x-style” and “PED-style” hand straps, plus brackets, screws, and washers for replacing the hand straps on a Tablet 721/721P.</p>
	
<p>LCD screen protectors for Oracle MICROS Tablet 700 Series, pack of 5 Part Number: 7602035</p>	<p>The LCD screen protector helps defend your Tablet 700 Series screen against scratches and scuffs.</p>
	

# 2

## Setup and Configuration

This section contains instructions for setting up and configuring the Oracle MICROS Tablet 720 and the Oracle MICROS Tablet 721/721P.

### Performing an Initial Setup

1. Place the tablet face down on a smooth, flat surface.
2. **Tablet 721P only:** Remove the battery cover, and then remove the plastic tab from the interior bridge battery compartment.
3. Insert the battery into the battery compartment and gently press down until it clicks into place.
4. Connect the tablet to its power supply and fully charge.
5. Power on the tablet by pushing and quickly releasing the Power button. The display powers on in a few seconds.
6. Complete the Microsoft Windows setup by following the prompts. Consult your network administrator to properly complete the tablet's network and system configurations.
7. Ensure the tablet is connected to a secure wireless network.
8. Install the Client Application Loader (CAL) by double-tapping the **CALClient Install** icon and following the prompts. Upon successful completion, the tablet is connected to your application's CAL server.

### Inserting and Removing the Battery

1. To insert the battery, slide the battery into the battery compartment with the terminal slots aligned with the battery terminals, and then gently push into place.
2. To remove the battery, use the Battery Latch on the back of the tablet to unlock and release the battery.

### Charging the Tablet and Battery

The Tablet 720 and its battery can be charged using the following chargers:

- External Power Adapter
- Desktop Charging Cradle
- 4-Bay Tablet Charger
- 4-Bay Battery Charger

The Tablet 721/721P and its battery can be charged using the following chargers:

- Power Supply
  - Desktop Charging Cradle
  - 4-Bay Tablet Charger
  - 4-Bay Battery Charger
1. **Charge the tablet using the External Power Adapter (Tablet 720 only):**
    - a. Plug the charger into an electrical outlet.
    - b. Ensure the tablet battery is properly inserted into the Tablet 720.
    - c. Plug the charger into the DC Power Input port on the tablet.
  2. **Charge the tablet using the Power Supply (Tablet 721/721P only):**
    - a. Connect the C13 cable to the Power Supply, and then plug the Power Supply into an electrical outlet.
    - b. Ensure the tablet battery is properly inserted into the Tablet 721/721P.
    - c. Plug the Power Supply into the DC Power Input port on the tablet.
  3. **Charge the tablet using the Desktop Charging Cradle or the 4-Bay Tablet Charger:**
    - a. Connect the external power supply to the DC Input port on the Desktop Charging Cradle or the 4-Bay Tablet Charger.
    - b. Plug the external power supply into an electrical outlet.
    - c. Ensure the tablet battery is properly inserted into the Tablet 720 or Tablet 721/721P.
    - d. Place the tablet into the charging cradle.
    - e. If using the Desktop Charging Cradle and charging a spare battery, place the battery into the spare charging bay.
  4. **Charge the battery using the 4-Bay Battery Charger:**
    - a. Connect the external power supply to the DC Input port on the 4-Bay Battery Charger.
    - b. Plug the external power supply into an electrical outlet.
    - c. Remove the tablet battery from the Tablet 720 or Tablet 721/721P.
    - d. Place the battery into the charging bay.



**Note:**

Tablet 721P: The orange LED appears when the tablet is trickle charging. The white blinking LED indicates normal charging.

## Powering the Tablet On and Off

1. To power on, push and quickly release the Power button.  
The display powers on in a few seconds.

2. To place in standby mode and conserve power, push and quickly release the Power button.

The display is turned off, but the tablet remains on.

3. To take the tablet out of standby mode, quickly push the Power button.

The display powers on in a few seconds. The wireless connection may take several seconds to re-establish.

4. To power off for extended storage, use the Shut Down function provided in the operating system software.

5. To perform a hardware shutdown as means of recovery from tablet lockups, hold the Power button for four to six seconds.

Use precaution. This type of shutdown is only advisable for troubleshooting and not as normal operation.

## Barcode Scanner Configuration

The Barcode Scanner is an optional configuration of the Oracle MICROS Tablet 700 Series tablets. It comes pre-installed and is programmed for the most common terminal and communications settings.

If you need to change these settings, programming is accomplished by scanning the barcodes provided by Honeywell International Inc., the manufacturer of the barcode scanner engine. The *N36XX Decoded Engine User Guide* by Honeywell International Inc. provides these scan codes. It can be found on the Honeywell International Inc. website.

## Using the Barcode Scanner

The Barcode Scanner has a view finder that projects a bright red aiming beam corresponding to the scanner's field of view. It can read both 1D linear barcodes and 2D matrix symbols.

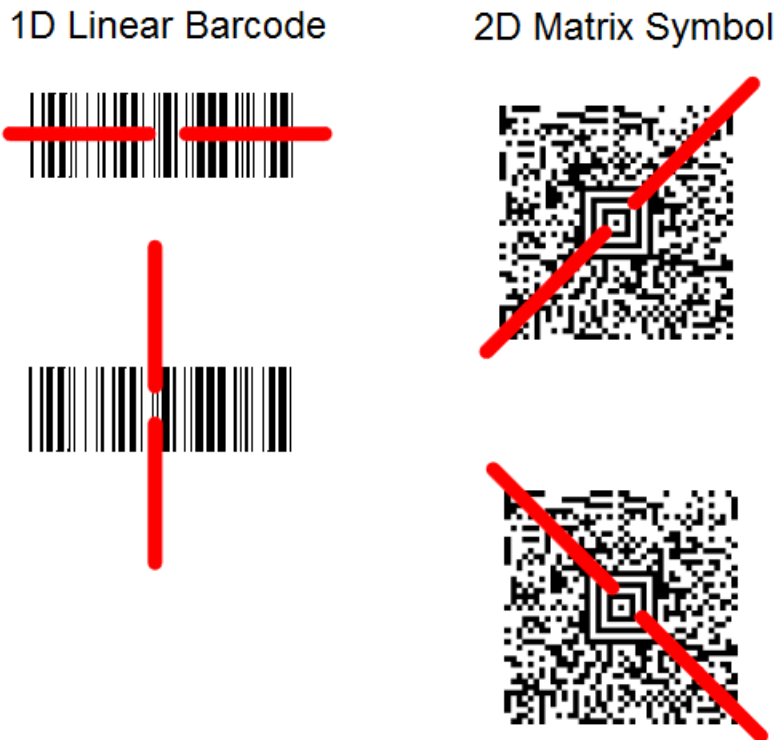
To scan single or multiple barcodes/symbols:

1. Hold the Barcode Scanner at an appropriate distance from the barcode/symbol.
2. Pull the Scanner Trigger, and then center the aiming beam on the barcode/symbol.

Tips for using the Barcode Scanner:

- For the best read, position the aiming beam centered over the barcode/symbol.
- For a good read, position the beam in any direction, such as horizontal, vertical, or diagonal.
- The aiming beam is smaller when the scanner is closer to the barcode/symbol and larger when it is farther from the barcode/scanner.
- If the barcode/symbol is laminated or highly reflective, it may be necessary to tilt the barcode/symbol to prevent unwanted reflection.

Figure 2-1 Barcode Scanner Field of View



## Configuring the Barcode Scanner for Use With Oracle Retail Xstore Applications

Oracle MICROS Tablet 700 Series tablets require additional configuration for use with Oracle Retail Xstore applications. Follow the steps below to configure your Oracle MICROS Tablet 700 Series device.

1. Set the scanner to USB HID mode by scanning the following code:



USB HID Bar Code Scanner

2. Open a Command Prompt with Admin rights, type `cd \Program Files\Honeywell\UPOS Suite\OPOS Suite\NULL_Driver nulldriverinstall /uninstall`, and then press **Enter**.
3. Open Windows Device Manager and verify the existence of **POS HID Barcode scanner** under **POS Barcode Scanner**.

# 3

## Battery Performance

This section contains details regarding the batteries for the Oracle MICROS Tablet 700 Series.

### LED Status and Behavior

The following table describes the behavior and status of the tablet's LED when connected and disconnected from the power supply.

**Table 3-1 LED Status and Behavior of the Oracle MICROS Tablet Battery**

LED	Power Supply	Status
Off	Disconnected	Battery is not charging.
Off	Connected	Battery is not charging; check power supply connection.
On	Connected	Battery is fully charged.
Tablet 721P: On (orange color)	Connected	Battery is trickle charging.
Blinking, Slow (1 blink/second)	Connected	Battery is charging.
Blinking, Fast (4 blinks/second)	Connected	Charging error. The <i>Troubleshooting</i> sections contains a list of possible causes.
Blinking, Fast (4 blinks/second)	Disconnected	Battery is removed for hot swap. Install a new battery within 3 minutes to avoid power off.  Inadvertently pressing the Battery Sensor when the battery is removed disables the hot swap capability and causes the tablet to power off.

The following table describes the behavior and status of the 4-Bay Battery Charger LED when charging the tablet's battery.

**Table 3-2 LED Status and Behavior of the Oracle MICROS Tablet 4-Bay Battery Charger**

LED	Status
Off	Battery is not charging.
Yellow	Battery is charging.
Green	Battery is fully charged.

## Battery Life and Charging Times

The following table lists the charging and discharging data for the Oracle MICROS Tablet 700 Series. The charging data pertains to all power supplies and chargers designed for the tablet.

**Table 3-3 Battery Charge and Discharge Data**

State	Charge Status
Charging	Approximately 4 hours to reach 95% battery charge. Approximately 6 hours to reach 100% battery charge.
Discharging	Approximately 8 hours to fully discharge battery.

## Backup Battery

The Backup or Bridge Battery is a small 240mAh battery located underneath the main battery compartment. This battery provides enough power to perform a hot swap of the main battery without having to reboot the Tablet.

Run Time	Charge Time
Approximately 4 minutes from fully charged state Assumption: Tablet running a nominal background task.	Approximately 2 hours to full Assumption: Tablet is charging or the main battery is powering up the tablet.



# 4

## Wireless Networking

The Oracle MICROS Tablet 700 Series features the following networking technology:

**Oracle MICROS Tablet 721/721P:** Embedded 802.11a/b/g/n/ac WLAN adapter and Dual Mode Bluetooth 4.2 BLE network technology.


**Oracle MICROS Tablet 720:** Embedded 802.11a/b/g/n WLAN adapter and Bluetooth 4.0 low energy (LE) network technology.

### Connecting the Oracle MICROS Tablet 721/721P to a Wireless Network

If WEP/WPA/WPA2 is enabled, the SSID and WEP/WPA/WPA2 parameters and the access points must match. Consult your network administrator for proper configuration.

The *Oracle MICROS Hardware Wireless Networking Best Practices Guide* has additional information for configuring your wireless network.

To connect the Tablet 721/721P to a wireless network:


1. Tap the **Wireless Networks**  icon in the System Tray.
2. Select the wireless access point from the list of available networks.
3. If you want the device to automatically connect to this wireless network, select **Connect automatically**.
4. If required, enter the network's password.
5. Tap **Connect**.

### Connecting the Oracle MICROS Tablet 720 to a Wireless Network

If WEP/WPA/WPA2 is enabled, the SSID and WEP/WPA/WPA2 parameters and the access points must match. Consult your network administrator for proper configuration.

The *Oracle MICROS Hardware Wireless Networking Best Practices Guide* has additional information for configuring your wireless network.

To connect the Tablet 720 to a wireless network:

1. Tap the **Wireless Networks**  icon in the System Tray.
2. Select the wireless access point from the list of available networks.
3. If you want the device to automatically connect to this wireless network, select **Connect automatically**.
4. If required, enter the network's password.

5. Tap **Connect**.

## Wireless Signal Performance and Settings

Ideal signal strength for optimum performance varies based on many factors, such as background noise in the environment, what applications are being run, and the amount of clients on the network.

Table 4–1 contains details on the optimal roaming performance for the Oracle MICROS Tablet 720. The optimal signal performance varies based on the network.

The Oracle MICROS Tablet 721/721P features an updated Intel wireless adapter that includes additional advanced settings. Table 4–2 lists information about the Oracle MICROS Tablet 721 advanced wireless settings.

**Table 4-1 Wireless Signal Performance for the Oracle MICROS Tablet 720**

Roaming Tendency	Default (-75dBm)	Optimal Bandwidth (-65dBm)	Optimal Distance (-85dBm)
Aggressive (AP + 10dBm)	Maximum performance for highest achievable connectivity.	Minimum performance for basic connectivity.	Minimum performance for reliable connectivity.
Auto (AP + 15)		Minimum performance for basic connectivity.	
Conservative (AP + 30dBm)		Minimum performance for basic connectivity.	
Moderate (AP + 20dBm)		Minimum performance for basic connectivity.	

**Table 4-2 Advanced Wireless Settings for the Oracle MICROS Tablet 721/721P**

Property	Default Parameters	Feature Affected
802.11 n Channel Width for 2.4GHz	Auto	Throughput/channel width
802.11 n Channel Width for 5.2GHz	Auto	Throughput/channel width
ARP offload for WoWLAN	Enabled	Wake-On-WLAN
Fat Channel Intolerant	Disabled	Channel width
GTK Rekeying for WoWLAN	Enabled	Wake-On-WLAN
HT Mode	VHT Mode	Throughput/data rate
MIMO Power Save Mode	Auto SMPS	Power usage
Mixed Mode Protection	RTS/CTS Enabled	Throughput/data rate
NS offload for WoWLAN	Enabled	Wake-On-WLAN
Packet Coalescing	Enabled	Power usage
Preferred Band	No pref.	Band selection


**Table 4-2 (Cont.) Advanced Wireless Settings for the Oracle MICROS Tablet 721/721P**

Property	Default Parameters	Feature Affected
Roaming Aggressiveness	Medium	Connectivity/roaming
Sleep on WoWLAN disconnect	Disabled	Wake-on-Wireless LAN
Throughput Booster	Disabled	Throughput/data rate
Transmit Power	Highest	Connectivity
U-APSD Support	Disabled	Connectivity
Wake on Magic Packet	Enabled	Wake-On-WLAN
Wake on Pattern Match	Enabled	Wake-On-WLAN
Wireless Mode	802.11a/b/g	Band selection

Refer to the Intel website for detailed technical information about the AC-8265 wireless adapter.

## Configuring Bluetooth

To configure Bluetooth on the Tablet 720 and Tablet 721/721P:

1. From the Start Menu, tap **Settings**.
2. Tap **Devices**, and then tap **Bluetooth**.
3. Tap **On/Off** and ensure Bluetooth is turned on. The **Bluetooth**  icon is shown in the System Tray when Bluetooth is turned on.
4. Select the Bluetooth device from the list of available devices.

# 5

## Tablet 721/721P BIOS Configuration

This section describes how to enter the Tablet 721/721P BIOS System Configuration Utility and how to configure the system BIOS on the Tablet 721/721P.

### Starting the Tablet 721/721P BIOS System Configuration Utility

To configure the BIOS on the Tablet 721/721P, start the BIOS System Configuration Utility using the following steps:

1. Connect a USB keyboard to the tablet.
2. Power on or restart the tablet.
3. Press **Esc** immediately after pressing the power button and before the BIOS splash screen. You can press **Esc** repeatedly until the Configuration Utility starts.

If the tablet boots into the operating system without starting the utility, restart the tablet and try again.

### Configuring Tablet 721/721P System Security Settings

On the Security tab, configure the settings as described in the following table:

**Table 5-1 BIOS Security Settings**

Setting	Description of Option
Secure Boot Configuration	Disabled by default. To enable, set the <b>Supervisor Password</b> .
Enforce Secure Boot	<b>Enable</b> or <b>Disable</b> the UEFI secure boot firmware validation process.
Restore Secure Boot to Factory Settings	Reset secure boot variables to the factory default.
Erase all Secure Boot Settings	Delete the protection key, change the platform to setup mode, and disable secure boot.
Set Supervisor Password	Set or clear the supervisor password. After setting a supervisor password, the option to set user passwords will appear. Setting user passwords allows the creation of users with limited access.
TPM Availability	<b>Enable</b> or <b>Disable</b> Trusted Platform Module support. TPM is disabled by default.

## Setting the Tablet 721/721P BIOS Supervisor Password

Setting the supervisor password is an important step to secure the Tablet 721/721P. After setting a supervisor password, the option to set user passwords will appear. Setting user passwords allows the creation of users with limited access.

1. Connect a USB keyboard to the tablet, and then power on or restart the tablet.
2. Press **Esc** immediately after pressing the power button and before the BIOS splash screen. You can press **Esc** repeatedly until the Configuration Utility starts.
3. On the BIOS main screen, use the keyboard arrow keys to select the **SCU** icon, and then press **Enter**.
4. Navigate to the **Security** tab, select **Set Supervisor Password**, and then press **Enter**.
5. On the Set Supervisor Password dialog, enter and confirm a password.
6. Exit and save the changes.

## Configuring the Tablet 721/721P Boot Priority for Devices

On the Boot Manager screen, use the arrow keys to reorder the priority list for boot devices. The BIOS reads the devices from top to bottom in determining the method for booting into the operating system.

For example, if you want the tablet to boot from a DVD whenever a user inserts a disc and the HDD installation when there is no operating system disc, make sure to place the DVD device, such as USB DVD, higher on the list than the HDD with the operating system installation, such as ATA HDD0.

## Exiting the Tablet 721/721P BIOS Configuration Utility

On the Exit tab, select one of the following options:

- **Exit Saving Changes:** Save the current configuration settings, exit the configuration utility, and boot into the operating system.
- **Save Change Without Exit:** Save changes without exiting BIOS.
- **Exit Discarding Changes:** Discard the current configuration settings, exit the configuration utility, and boot into the operating system.
- **Load Optimal Defaults:** Load the optimal default settings.
- **Load Custom Defaults:** Load the custom default settings.
- **Save Custom Defaults:** Save the current configuration as a custom default setting.
- **Discard Changes:** Discard the current configuration settings without exiting the configuration utility. This resets the configurations to the last saved state.

# 6

## Equipment Dimensions

This section contains dimensions for the Oracle MICROS Tablet 700 Series tablets and accessories.

### Tablet 721P Dimensions

Figure 6-1 Oracle MICROS Tablet 721P Dimensions



# Tablet 721 Dimensions

Figure 6-2 Oracle MICROS Tablet 721 Dimensions



# Tablet 720 Dimensions

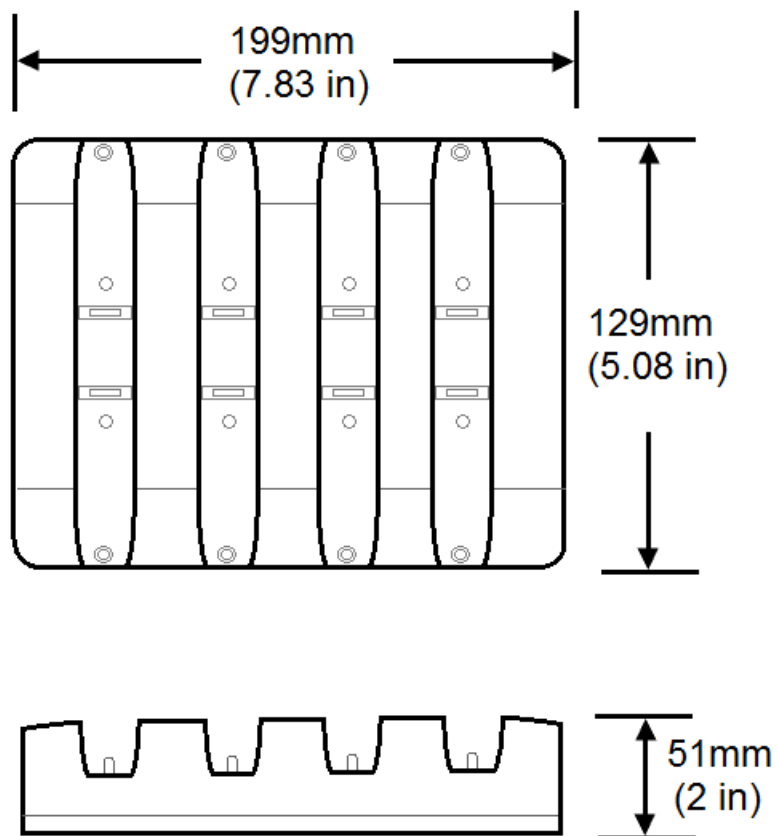
Figure 6-3 Oracle MICROS Tablet 720 Dimensions





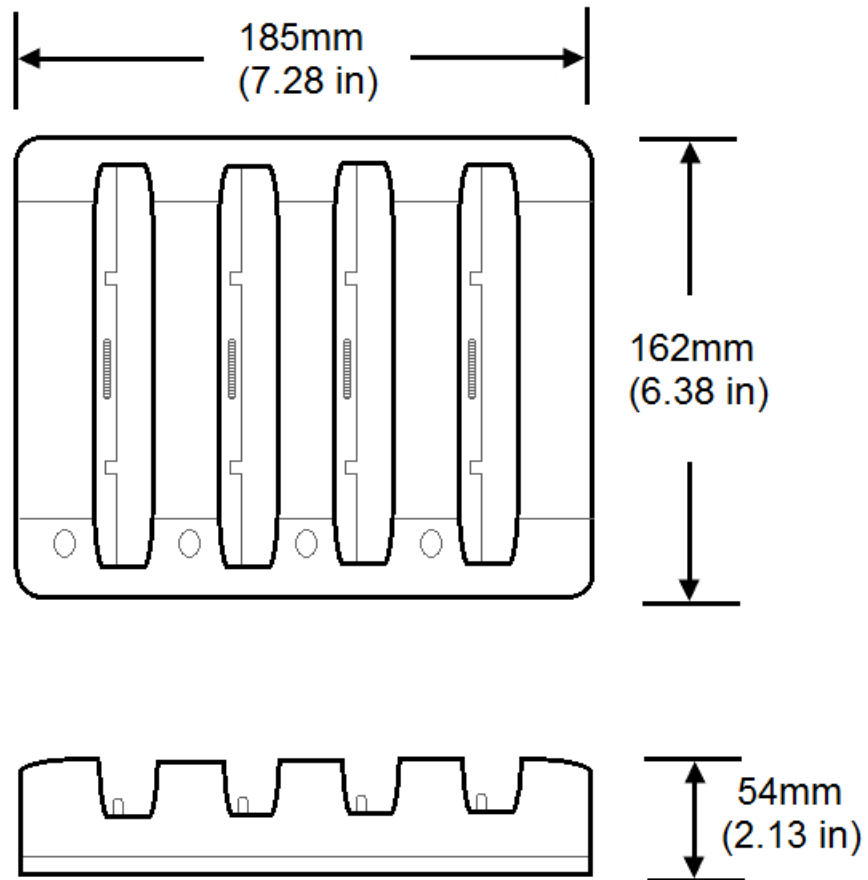
## 4-Bay Tablet Charger Dimensions

Figure 6-4 Oracle MICROS Tablet 720 4-Bay Tablet Charger Dimensions



## 4-Bay Battery Charger Dimensions

Figure 6-5 Oracle MICROS Tablet 720 4-Bay Battery Charger Dimensions



# 7

## Troubleshooting

This section contains general troubleshooting tasks related to the Oracle MICROS Tablet 700 Series.

### Basic Troubleshooting

The following table contains descriptions and solutions for common problems encountered with the Oracle MICROS Tablet 700 Series.

**Table 7-1 Oracle MICROS Tablet 700 Series Basic Troubleshooting**

Problem	Possible Causes	Solution
Tablet will not power up.	Battery is fully discharged. Battery is in a state of failure. Tablet is in a state of failure.	Charge the battery. Replace battery with a fully charged and operational battery. If this does not work, order a replacement tablet.
The back of the tablet gets warm when charging.	Applications running while charging. Tablet not in sleep mode while charging.	Ensure the power settings allow the tablet to sleep while charging. This prevents warm casework and reduces the time required to fully charge the battery.
Battery will not charge.	Battery failure.	Order a replacement battery.

### Troubleshooting the Barcode Scanner

Use the OPOS Validation Utility to ensure the Barcode Scanner is working correctly.

1. For the Tablet 720 running Microsoft Windows 8.1, go to the Apps list on the Start Menu, and then tap **OPOS Validation Utility**.  
For the Tablet 720 and the Tablet 721/721P running Microsoft Windows 10, go to the Apps list on the Start Menu, tap **Honeywell**, and then tap **OPOS Validation Utility**.
2. In the **Scanner** section, select **Honeywell** from the **Device Name** drop-down list.
3. Tap the **Begin Test** button.
4. Scan a barcode.
5. If data is observed and collected, then the Barcode Scanner is working correctly.
6. Tap the **End Test** button, and then exit the utility.

## Troubleshooting the MSR

Use the MSR OPOS Test Program utility to ensure the MSR is working correctly. Note: By default, this procedure tests the first two MSR tracks. To test the third track, refer to Step 5 below.

1. (Tablet 720 only) For Microsoft Windows 8.1, go to the Apps list from the Start Menu, and then tap **MSR OPOS Test Program.exe**.  
(Tablet 720 and Tablet 721/721P) For Microsoft Windows 10, go to the Apps list on the Start Menu, tap **MSROPOSDEMO**, and then tap **MSR OPOS Test Program.exe**.
2. For **MSR Properties**, select **IDTECH\_SECUREMAG\_USBHID - USB HID** from the drop-down list.
3. Tap the **Open** button.
4. Tap the **Claim** button.
5. By default, the MSR test utility tests only tracks 1 and 2. To include track 3 in the test procedure, select the **Track Control** tab, and then change the default **TracksToRead** to **MSR\_TR\_1\_2\_3**.
6. Select the **Control** tab, and then select **DeviceEnabled**.
7. Select the **Track Data** tab.
8. Swipe a test card through the MSR.
9. If data is observed and collected, then the MSR is working correctly.
10. Exit the utility.

## Tablet 720 System Recovery

Performing a system recovery removes all data and the current operating system, and then restores the tablet to its out-of-box state.

### Tablet 720 System Recovery Process

Before starting the system recovery process for the Tablet 720, you'll need the following:

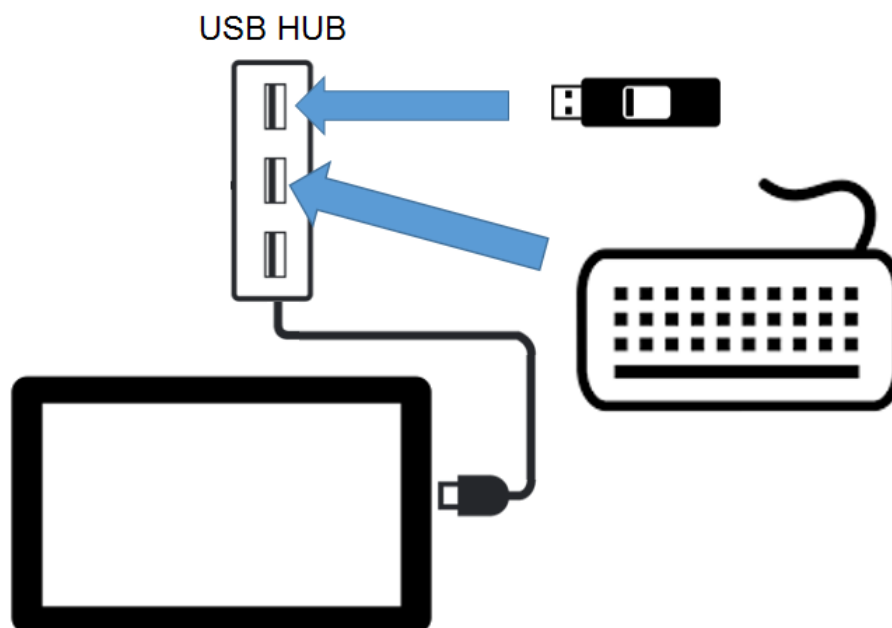
- USB Flash Drive with 8GB or more capacity
- USB Hub with at least 2 USB ports
- USB Keyboard
- Computer with Internet access

To perform a system recovery:

1. Ensure your tablet is fully charged or plugged into an outlet.
2. Login to My Oracle Support, download the system recovery file, and then create the recovery media:
  - a. Click the **Patches & Updates** tab, and then search for the Oracle MICROS Tablet 720 product and applicable operating system.

- b. From the list of results, select and download the system recovery (.iso) file to the computer.
    - c. Create a bootable USB flash drive using a third party utility that supports .iso files and helps format and create bootable USB flash drives.
  3. Connect the USB Hub to the Tablet 720.
  4. Connect a keyboard to the USB Hub.
  5. Insert the bootable USB flash drive into the USB Hub.
  6. Power on the tablet, and then immediately press the ESC button on the keyboard to enter the BIOS.
  7. Use the arrow keys on the keyboard to navigate the BIOS, select **Boot Manager**, and then select the bootable USB flash drive.  
The system recovery process begins.
  8. When complete, select **Y** to power off or **N** to reboot.  
The tablet automatically shuts down after 3 minutes.

Figure 7-1 Oracle MICROS Tablet 720 Series System Recovery Process



## Tablet 721/721P System Recovery

Performing a system recovery removes all data and the current operating system, and then restores the tablet to its out-of-box state. The Tablet 721/721P recovery process can take up to 15 minutes.

**Do not power off the tablet during the recovery process.** If the tablet loses power during the recovery process, the operating system will become corrupt and you must perform the

following procedure: [Tablet 721/721P - Restore OS After Power Loss During System Recovery](#)

To perform a system recovery on the Tablet 721/721P:

1. Ensure the tablet is fully charged or plugged into a power outlet.
2. Restart the tablet.
3. On the Boot Options dialog box, tap **OS Restore**.
4. On the OS Restore dialog box, tap **Yes** or allow the process to automatically continue. The recovery process begins.
5. On the OS Restore Finished dialog box, tap **Reboot** or allow the OS to automatically reboot to its out-of-box state.
6. Configure the OS as needed, and then install any required Windows updates.

## Tablet 721/721P - Restore OS After Power Loss During System Recovery

If the tablet loses power during the recovery process, the operating system will become corrupt and you must perform a series of steps to restore the operating system and tablet.

Before starting the OS restore process for the Tablet 721/721P, you'll need the following:

- USB Keyboard

To perform an OS restore:

1. Ensure your tablet is fully charged or plugged into a power outlet.
2. Plug a USB keyboard into the tablet, and then power on the tablet.
3. When the Recovery screen appears, press the Windows key on the USB keyboard to begin the recovery process.
4. On the OS Restore dialog box, tap **Yes** or allow the process to automatically continue. The recovery process begins.
5. On the OS Restore Finished dialog box, tap **Reboot** or allow the OS to automatically reboot to its out-of-box state.
6. Configure the OS as needed, and then install any required Windows updates.

## Replacing the Bridge Battery in the MICROS Tablet 720

Follow the steps below to replace the bridge battery in the MICROS Tablet 720.

### Prerequisites

- #1 Phillips head screwdriver
- Tweezer or needle nose pliers

### Procedure

1. Place the tablet face down on a rubberized or cloth surface to prevent scratches.

2. Slide the battery release latch until the main battery detaches from the tablet body. Set the main battery aside.

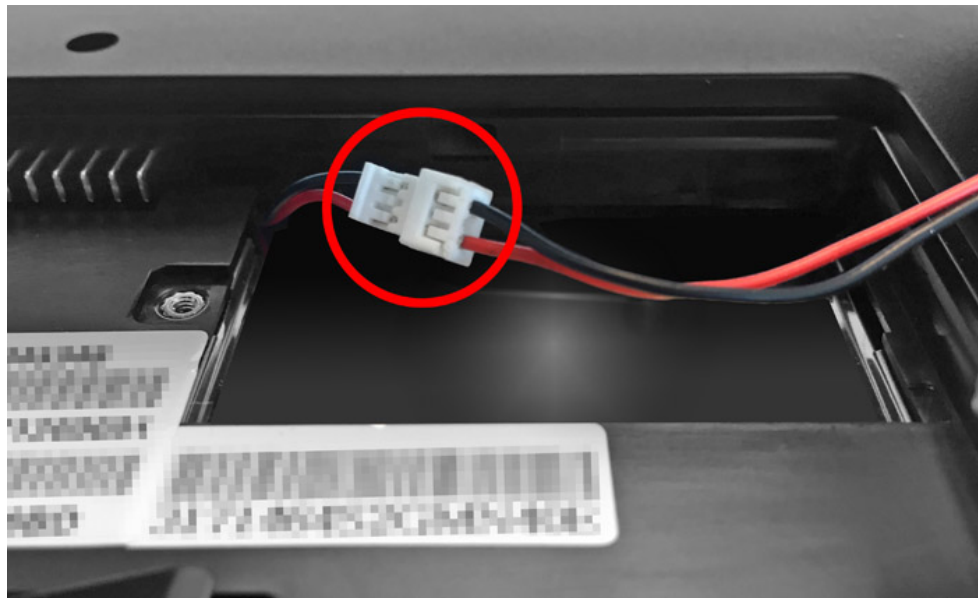
**Figure 7-2 Removing the MICROS Tablet 720 Main Battery**



3. Remove the bridge battery cover using a #1 Phillips screwdriver. For some tablets, you may need to peel back the license decal first.

**Figure 7-3 Removing the Bridge Battery Cover**

4. Carefully remove the battery from the compartment until you can access the connector cable. Use your fingers or a gripping tool to carefully separate the connector. Make sure you hold and pull the plastic connectors and not the wires. After disconnecting the battery, set it aside.

**Figure 7-4 Battery Connector Cable**

5. Connect the replacement battery. Tuck the excess battery wire into the casework and place the battery in the battery compartment.



**Figure 7-5 The Bridge Battery in the Battery Compartment**



6. Reinstall the battery cover and hand-tighten the screw.
7. (Optional) Attach the CBR sticker inside the battery bay. The CBR sticker helps identify tablets whose bridge batteries have been replaced.
8. Reinstall the main battery.

# 8

## Care and Handling

Use the following precautions when operating the Oracle MICROS Tablet 700 Series tablets:

- Always exercise care when operating and handling the tablet.
- Use a cleaner and cloth intended for use on LCD screens (ammonia free) to clean the display screen.
- Do not apply excessive pressure to the display screen.
- Avoid prolonged exposure of the display panel to any strong heat source.
- Wherever possible, the tablet should face away from direct light to reduce glare.
- Do not use any power supply other than the one recommended for use with each tablet.
- Never attempt to disassemble the tablet, as this will void any warranty.

The *Oracle MICROS Hardware Site Preparation Guide* contains additional environmental and placement considerations.

# 9

## Regulatory and Compliance

This section contains regulatory and compliance information specific to the Federal Communication Commission (FCC).

### FCC Compliance

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

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

This Class [B] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

### FCC Interference

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 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 with an Oracle MICROS consultant or experienced technician for assistance.