

# TELLERSCAN® TS250 User Manual



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## **ABOUT THE TELLERSCAN TS250**

The TellerScan TS250 is an easy-to-use, high-volume check scanner that automatically scans the front and/or back side of checks and reads the Magnetic Ink Character Recognition (MICR) code line. The images and data are then transmitted through a Universal Serial Bus (USB) interface to the PC. The TS250 has an automatic feeder that handles up to 100 items, features a 150-item exit pocket, and an ID card scan slot.

The TS250 is rated at up to 120 documents per minute (DPM) scanning speed using the DCC API, or up to 150 DPM using SecureLink 2.0 API. Speeds can vary based on the length of the documents being scanned, the application settings, and the PC performance or configuration.

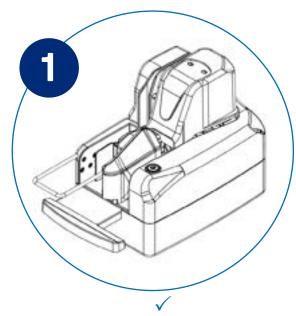
The TS250 features a smart button that is used for powering the unit on/off, pausing scanning, clearing errors, starting/stopping the cleaning mode, which displays the scanner's status through a built-in LED.

## **TellerScan TS250 System Requirements**

Minimum	Recommended
2.4 GHz dual-core or faster processor 2 GB RAM or more	2.8 GHz dual-core or faster processor 4 GB RAM or more
2 GB free disk space	10 GB free disk space
Windows 10	Windows 11
USB 2.0 port	USB 2.0 port
DCC API 23.xx or newer	DCC API 23.xx or newer



## TELLERSCAN TS250 INCLUDED EQUIPMENT



TellerScan TS250 Check Scanner



24.0V / 100V-240V 50/60Hz voltage sensing, external power supply and cord

Digital Check part number: 82275802 (Field Orderable Part Number 82275943-000)



**USB 2.0 cable (10 ft)**Digital Check part number: CA0049



Ink cartridge – Digital Check part number: MS0083

**NOTE:** Ink cartridges are included only with inkjet-equipped models



## **TELLERSCAN TS250 INSTALLATION**

## **Unboxing the TS250**



Remove the power supply box and paperwork and set to the side.



Pull all the remaining contents out of the box together.



Lay the box as shown above.

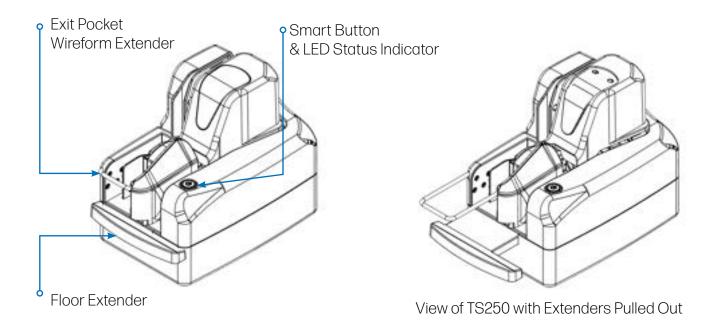


Remove the top plastic insert to access the scanner. Grab the scanner from the rolled bag and from the bottom base and remove the tape and bag. (Blue Arrows)

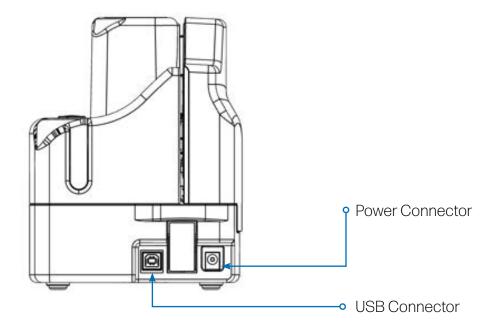


## **TELLERSCAN TS250 FEATURES**

### External View of the TellerScan TS250



### Rear View of the TellerScan TS250





## TELLERSCAN TS250 INITIAL SETUP

#### **New User Notice**

**PLEASE NOTE:** Do not connect the USB cable from the scanner to your PC before installing the drivers or the scanning application / software. Digital Check does not provide scanning software. Please contact your bank or other solution provider for further assistance with installing the driver or getting the scanning software set up or installed.

Digital Check only provides an optional driver installation utility and testing software. See the Testing the Scanner section for additional information.

#### Cable Connections and Scanner Placement

**Note:** Do not connect the USB cable from the scanner to your PC before installing the drivers or the scanning application / software.

- When handling the TS250, grip it with two hands on the front and back of the scanner.
- Place the unit on a flat surface near the PC and away from direct light sources such as spotlights or desk lamps. Place the scanner in a position that is at least 6 inches away from any power supply, other electronic devices, pneumatic tubes at the teller window, etc. to avoid magnetic interference with the MICR read head.
- Connect the power cord to the power supply, and then plug the connector into the rear power connection port on the scanner.
- Connect the USB cable by plugging it into the rear USB connection port.





## INSTALLING THE INK CARTRIDGE

**Note:** This step only applies to TellerScan TS250s that have the optional inkjet configuration. Follow these instructions when installing the ink cartridge for the first time, or when replacing an empty cartridge.

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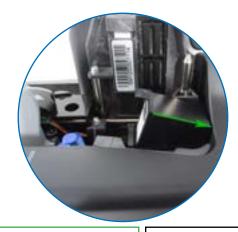
**Step 1:** Remove the center cover by lifting the cover off the scanner.





- Step 2: Open the ink cartridge pouch and remove the protective tape covering the ink nozzles. Be careful not to touch the ink nozzle with your fingers or allow it to come in contact with anything else.
- Step 3: Insert the nozzle end of the cartridge into the platform while keeping the end of the cartridge tilted slightly upward. Then, push down on the rear of the cartridge until it clicks or snaps securely into position.

**Important:** The top of the cartridge should appear level or flat when it is fully seated.



Insert the ink cartridge at a slight angle

Nozzle end at a slight angle



Push down on the cartridge to fully seat

Correctly Inserted



**Step 4:** Place the center cover back onto the scanner.

**Note:** If the scanner must be transported by common carrier from one place to another, or will experience extended periods of inactivity, it is advisable to remove the ink cartridge from the scanner and seal it in an airtight bag. If the cartridge has not been used for an extended period, it might be necessary to clean the inkjet nozzles by gently blotting them with a towel dampened with water.



## **TESTING THE SCANNER**

### Installing the Optional USB Driver

**PLEASE NOTE**: Do not connect the USB cable from the scanner to your PC before installing the drivers or the scanning application / software. Digital Check does not provide scanning software. Please contact your bank or other solution provider for further assistance with installing the driver or getting the scanning software set up or installed.

Digital Check provides only an optional driver installation utility and testing software that can be used for troubleshooting, verifying the connection to the PC and to test the various scanner functions.

**Note**: The USB driver and test software for the TS250 need to be acquired from Digital Check support. Please call support at: **(1) 847-446-2285** or email: **support@digitalcheck.com**.

Once the USB driver is installed, use the following steps to complete the installation.

- **Step 1**: Install the SPVA Driver provided by your bank in their install package. Follow the on-screen steps to complete the installation.
- Step 2: Connect the scanner to the PC using the USB cable and plug in the power supply to the scanner and electrical outlet.
- Step 3: Windows should now detect a new hardware device. The scanner is ready to be used with a scanning application or Digital Check test software.

#### ScanLite2

The Digital Check demo and testing application, ScanLite2, is a basic utility that allows the user to scan and view images, test the various scanner functions, verify the sensor status, and more.

Please visit our website at https://www.digitalcheck.com/drivers/ to download a version of ScanLite2.

**Note**: ScanLite2 does not save any image or MICR data to the PC. Once the scanned item disappears from the screen or the utility is shut down, the data is removed / cleared.



## LED STATUS INDICATOR

## **LED Status Indicator** and Smart Button Operation





Scanner is not powered on. Press the Smart Button once to turn on. To turn off the scanner, press and hold the Smart Button.





Slow Red OR Purple Blinking LED: • or •

Scanner is not connected to computer. Check and reinsert both ends of the USB cable connecting to the PC and into the scanner and verify that the PC is turned on.





Slow Blinking Blue LED: 

O

Scanner is in standby mode. This is the default state when an application is not controlling the scanner or has not yet acquired the scanner.







Blinking Blue LED:

A scanning application has successfully acquired the scanner and is ready to be used.



Solid Purple LED:

Scanning is in progress.







Blinking Purple LED:

Cleaning is required, and a scanning application has successfully acquired the

A Digital Check cleaning card is needed to clean the scanner. See the Cleaning the TS250 section for additional information on how to clean the scanner.

Note: Press the Smart Button 3 times within 3 seconds to start the scanner's cleaning mode.







Flashing Red/Purple LED:



Cleaning is required, and the scanner is in standby mode. See the Cleaning the TS250 section for additional information on how to clean the scanner.







Flashing Purple LED:

The TS250 is in its cleaning mode. After running a cleaning card through the scanner, wait for the drying timer to complete. Press the Smart Button once to exit the cleaning mode at any time.



## LOADING ITEMS INTO THE SCANNER

The TS250's automatic feeder can handle up to 100 items at a time. Please follow the steps below to ensure proper feeding.

**Step 1:** Slide out the wireform and floor extender tray to expand the length to accommodate larger or business-size checks. Remove all rubber bands, staples, paper clips, etc. Straighten any bent corners or excessively wrinkled documents.

**Step 2:** Align / jog the items to prepare them for scanning. The leading and bottom edges of items should be aligned.

**Step 3:** Place the items by sliding them into the entry pocket with the front of the item facing out and away from the scanner. Slide the items forward until they reach the line indicated on the scanner cover.

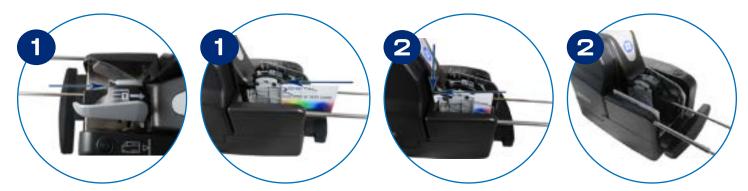


## **USING THE ID CARD SCANNER**

**Step 1:** Fully extend the exit pocket wireform and slide the ID card in between the black inner wall and grey pressure wall.

**Step 2:** ID cards should be inserted with the front toward the outside of the scanner. Insert the ID card into the slot and slide toward the CIS cameras until it is gripped by the scanner, or around the area where the arrows intersect.

The ID card will exit into the scanner exit tray after it is scanned.

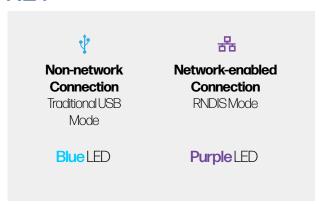




## SETTING THE CONNECTIVITY MODE

If your bank has provided you connection instructions, please follow their directions. Otherwise, use the instructions below to reach your desired connectivity state:

### **KEY**

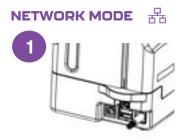








Boot up the Scanner.



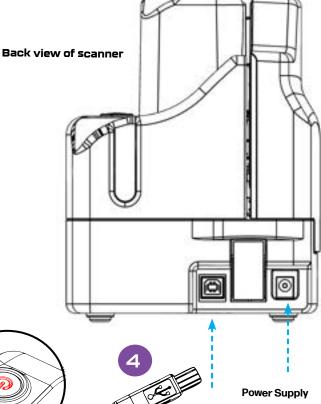
Plug in power supply only.



Boot up the Scanner.



Wait for the indicator light on the Smart Button to turn red.



Connect the USB cable for an RNDIS network connection then re-boot the scanner.

**USB** Cord



## **ACCESSING THE TS250 INTERNALS**

## **Removing the External Covers**

The TS250 has three external covers which can be removed or opened to provide access to the document path and other internal components for cleaning/maintenance.

## **Top Center Cover**

Lift the cover off the scanner.



## **Right Side Cover**

Reach to the back of the scanner and swing the right-side cover open.





### Front CIS Exit Cover Door

Swing the front Contact Image Sensor (CIS) door open.





## TELLERSCAN TS250 ROUTINE MAINTENANCE

## TellerScan TS250 Maintenance Overview

Over time, ink, dirt, and dust particles will collect on the scanner rollers and in the document track, and it is necessary to clean these areas to ensure reliable performance.

The Smart Button LED on the scanner will light up **violet/purple** when the typical cleaning interval is reached. Use a Digital Check cleaning card to clean the scanner rollers.

The TS250 features hinged covers for easy access and cleaning of the document track.

See the Cleaning Process section for additional information. Inspect the quality of the captured images on a regular basis. If the image is affected by lines, streaks, or smudges etc., the image sensor glass should be cleaned.

## Inspect the TS250 Document Track

In addition to routine drive roller cleaning, a periodic inspection of the entire document track area is also recommended. Remove any staples, paper clips, debris etc. that might have accumulated during use.

Use a can of compressed air to blow out the document track on a regular basis. Starting from the center of the path by the ink cartridge platform, blow the dust out toward the entry and exit pockets.

## Cleaning the TS250 Image Sensor

See the <u>Front CIS Exit Cover</u> section for instructions on how to access the image sensors.

To clean the image sensors, use a Digital Check cleaning swab or a clean, lint-free cloth dampened with isopropyl alcohol or other mild glass cleaning solution to clean the image sensor glass.

Avoid using paper towels or napkins that leave dust particles on the glass. Be careful not to scratch the glass when cleaning or accessing the image sensors.



Buy Online: PN:IS0037



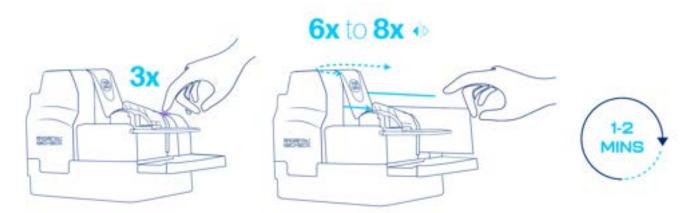
## USING THE TS250 CLEANING MODE AND A SCANNER CLEANING CARD

Use Digital Check scanner cleaning cards (PN: IS0033 - available at www.store.digitalcheck.com) for regular cleaning maintenance.

**Note:** To maintain optimal performance, it is recommended to use a cleaning card after every 10,000 items scanned. This process takes less than five minutes to complete. It is advised to work out a schedule that allows regular cleanings to be performed. The scanner will automatically let you know when it is time to be cleaned when the LED is slowly flashing in **violet/purple**. This happens after 10,000 documents have been scanned.



\*Required: PN:IS0033



- Step 1: Press the Smart Button three times within three seconds to start the scanner's cleaning mode. A rapidly flashing violet/purple light indicates cleaning mode has started.
- Step 2: Slide the cleaning card forward until it reaches the line indicated on the scanner cover. The scanner will begin the automated cleaning process.
- Step 3: The scanner will automatically scrub the drive rollers and the internal track with the cleaning card. The scanner will scrub the drive rollers and the track back and forth on only the first pass through. The next 5+ passes will not have the scrubbing motion and the cleaning card will feed straight through to the exit. You can continue to feed the cleaning card up to 30 seconds after the first pass through. Once all the passes have been completed, the LED will go back to a slow blinking blue LED. Remove the cleaning card and discard. Most importantly, the scanner's internal timer will be reset back to zero and will not activate for self-cleaning until another 10,000 scans have been completed.

ASPs or Authorized Service Providers should run the cleaning cycle every time the scanner comes in for service. This will ensure the scanner will not go into cleaning mode shortly after it's put back into circulation at the customer site.

Step 4: Allow a minute or two for the track and rollers to dry before operating the scanner again.

## ROTATING AND REPLACING THE SEPARATOR PAD

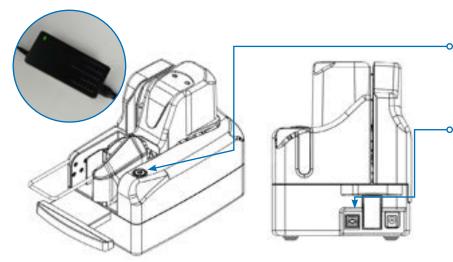
**Note:** The separator pad is user-replaceable. If the pad is worn on one surface, it can be rotated to an unworn side. If all sides of the pad are worn, it can be replaced. This is typically only needed for scanners that have been in service for longer periods of time, or for teller windows and higher-volume remote deposit settings.

- 1
- **Step 1:** Remove the top center cover to provide access to the separator assembly. See the Accessing the TellerScan TS250 section for additional information.
- Step 2: Pull the tab on the top of the separator assembly and lift it up to remove.
- Step 3: Rotate the pad to an unworn side. If all three sides of the separator ring are worn, replace it with a new ring or discriminator pad.
- Step 4: Insert the separator assembly back into the scanner, push down completely to lock into place, and place the top center cover back on the scanner.



## TELLERSCAN TS250 TROUBLESHOOTING





## Connectivity

#### Status LED is not lit: ()

Check for a green light on the power supply. Reset all power connectors. Press the Smart Button on the scanner to turn on.

#### Status LED is solid red:

The USB cable is not connected to the scanner or not connected to the PC.

#### Status LED is slowly blinking blue:

Scanner is in standby mode waiting to be acquired by the application. If the application is unable to acquire the scanner, check the status of the USB driver.

## **Document Feeding Issues**

The TS250 features an auto feeder and does not require any user adjustments. If feeding problems occur, check the documents for bent or folded edges, and debris in the scanner document track, specifically in the CIS camera area. Ensure that all items have been properly aligned and inserted correctly. If feeding problems are still experienced, try cleaning the drive rollers. See the Cleaning the TS250 section for additional information. It might also be necessary to rotate the separator assembly and retest.

## **Clearing Jams**

If a jam occurs, the paper path must be cleared. To do this, try to advance the jammed document by pressing the **"Eject" button in the scanning application**, if available. If not available, you can **press and hold the power button for more than 1 second and less than 6 seconds**, then release the button. The track will start and eject the stopped document, then stop. If the document does not exit the track, grab the document with both hands and carefully wiggle the document back and forth while lifting at a 45-degree angle. See the Accessing the TellerScan TS250 section for additional information on how to open and access the scanner.





## **Image Quality**

If either streaking or fading appears on the images, the image sensor glass might require cleaning. See the Cleaning the TS250 Image Sensors section for additional information.

#### **MICR Errors**

- 1) Confirm that the document has known working MICR ink/toner. If MICR errors are still occurring, verify that the TS250 power supply or other electronic devices or power supplies six or more inches away from the scanner. Next, inspect the track around the MICR assembly for debris, particularly metal objects.
- 2) Drive-up teller pneumatic tubes and static buildup can also cause MICR errors; verify that the scanner is at least 6 inches away from these types of devices as well.



## TELLERSCAN TS250 FREQUENTLY ASKED QUESTIONS

## What is the Typical Cleaning Interval?

The recommended cleaning interval for the TS250 is approximately every 10,000 item scans. See the Cleaning the TS250 section for additional information.

## What is the LED Status Light Sequence?

LED Color	LED State	Scanner State
RED	SOLID	USB cable not connected
RED/PURPLE	SLOWLY BLINKING	USB cable not connected or cleaning is required
BLUE	SLOWLY BLINKING	USB cable is connected. Waiting for application to connect.
PURPLE	SLOWLY BLINKING	USB cable is connected application not connected and cleaning is required
BLUE	BLINKING	Application has connected, scanner is idle.
PURPLE	BLINKING	Application has connected or cleaning is required
BLUE/PURPLE	SLOWLY BLINKING	Application has connected or low ink
<b>BLUE/PURPLE</b>	BLINKING	Application has connected or out of ink
BLUE	SOLID	Scanner is ready to scan or actively scanning
PURPLE	SOLID	Scanner is ready to scan or actively scanning and cleaning is required
RED	BLINKING	Scanner error
RED	SLOWLY BLINKING	Application generated error
PURPLE	RAPID BLINKING	In cleaning mode
BLUE	RAPID BLINKING	Clearing a jam
RED/BLUE	RAPID BLINKING	Serious scanner error

#### How to Avoid MICR Read Head Interference?

Keep the TS250 power supply and others, small desk fans, pneumatic tubes at teller windows, or other motorized devices 6-12 inches away from the scanner to keep them from interfering with the (MICR) magnetic read head.

## How Long Does the Ink Cartridge Last?

Once opened, the practical life of the ink cartridge is 6-12 months depending on usage and environment. However, the rated character yield on the ink cartridge is between 5-7 million characters. **Do not shake or drop the cartridge**; this can cause printing to fail. Digital Check recommends keeping a spare cartridge available.

## What is the Entry Tray Capacity?

The entry tray can accept up to 100 standard checks in good condition at a time.

## What is the Exit Pocket Capacity?

Up to 150 standard checks in good condition at a time can be stacked in the exit pocket.

### Where are ID Cards Inserted into the Scanner?

ID cards are loaded into the scanner through the front ID card slot located in the exit hopper of the scanner. See the ID Card Scanner section for further information.





## TELLERSCAN TS250 SPECIFICATIONS

#### **Unit Size:**

Height: 6.99" (17.8 cm) Width: 5.93" (13.7 cm) Length: 8.66" (22.5 cm) Weight: 4.7 lbs. (2.1 kg)

#### **Document Capacity:**

Entry Pocket (Check Feeder): Up to 100 items Exit Pocket: Up to 150 items

#### **Paper Size:**

Document Height: 2.0" - 6.0" (50.8 - 152.4 mm)
Image Capture Height: Up to 4.25 (108 mm)
Document Length: 2.9" - 9.25" (73.7 - 235 mm)
Document Weight: 16 - 28 lb. bond (60 - 105 gsm)
Document Thickness: 0.0032" - 0.0058" (0.081 - 0.147 mm)
Front ID Input: ID cards and items up to 3.375" x 2.25" (85.60 x 53.98 mm)
ID Cards must conform to ISO/IEC 7810 standard (ID-1 Size and NON-Embossed)

**(Optional) Endorsement:** Programmable, single-line inkjet printer with user-replaceable cartridge

#### **In-Line MICR Recognition:**

(Magnetic Ink Character Recognition) for E13B (North America) and CMC7 (Europe) Optical Character Recognition to enhance MICR Read, further enhanced using DCC's Best Read® API function

**Throughput:** Up to 120 documents per minute with DCC API or up to 150 DPM with SecureLink 2.0 API

Standard Interface: Standard USB 2.0

Scanning Method: Concurrent Two-Sided Duplex

(2 Scan Modules)

Scan Module: Contact Image Sensor (CIS) Resolution: 600 dpi (2592 Pixel Linear Array)

**Light Source:** Tri-Color LEDs (Optional Front Ultraviolet Camera)

#### **Image Resolution Optical:**

600 x 600 dpi - 8-bit grayscale 600 x 600 dpi - 24-bit color

## Image Resolution by Software Scaling:

240 x 240 (Scan at 300 dpi and scaling down to 240) 200 x 200 (Scan at 300 dpi and scaling down to 200) 120 x 120 (Scan at 300 dpi and scaling down to 120) 100 x 100 (Scan at 300 dpi and scaling down to 100)

#### **Supported Compression:**

JPEG (24-bit color, 8-bit grayscale) BMP (24-bit color, 4-or-8-bit grayscale) TIFF Group 4 B/W

#### **DCC API Requirements:**

DCC API 23.xx or newer

#### **Supported Operating Systems:**

Windows 11, Windows 10 (32/64 bit) macOS and Linux (Contact Digital Check Technical Support for specific versions supported)

#### **Electrical:**

Power consumption: 25 Watts, standby power: 3 Watts Input Voltage: 100 to 240 VAC, 50/60 Hz Separate Standard Power Supply: Auto sensing for voltage

**Product Warranty:** 1 year, pursuant to Digital Check Corp. limited product warranty

#### **Environmental:**

Operating Temperature: 60° - 90° F (15° - 32° C) Operating Humidity: 35 - 85% non-condensing

#### **Certifications:**

Safety: UL, cUL, CE FCC: Class B Industry Canada: Class B EMC: IEC CE Efficiency: DOE VI – Power Supply RoHS Compliant



## **FCC STATEMENTS**

#### FCC - Class B

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.

## Industry Canada - Class B

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Department of Communications.







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