Introduction

Purpose

This manual provides instructions for programming the Honeywell® MS3780 Fusion Scanner for use with Gilbarco® equipment.

IMPORTANT INFORMATION

This scanner does not support the Passport Age Verification feature. If you want to utilize Age Verification, you must refer to *MDE-5557 Honeywell Xenon™ Scanner Setup/Service Instructions*. The Honeywell Xenon Scanner is the only 2D scanner tested and approved by Gilbarco.

Table of Contents

Parts List

The following parts are included in the Honeywell Fusion Scanner Kit (PA02710403):

Item	Description	Part Number	Quantity
1	Scanner, Hand-held	Q12651-21	1
2	Gender Mender	Q13180-35B	1
3	Connector, Jack Screw (Female)	Q10437-02	1
4	Cable, Work Area, 6 feet	Q13850-06	1

Connections Diagrams

Figure 1: G-SITE™ System Connections Diagram

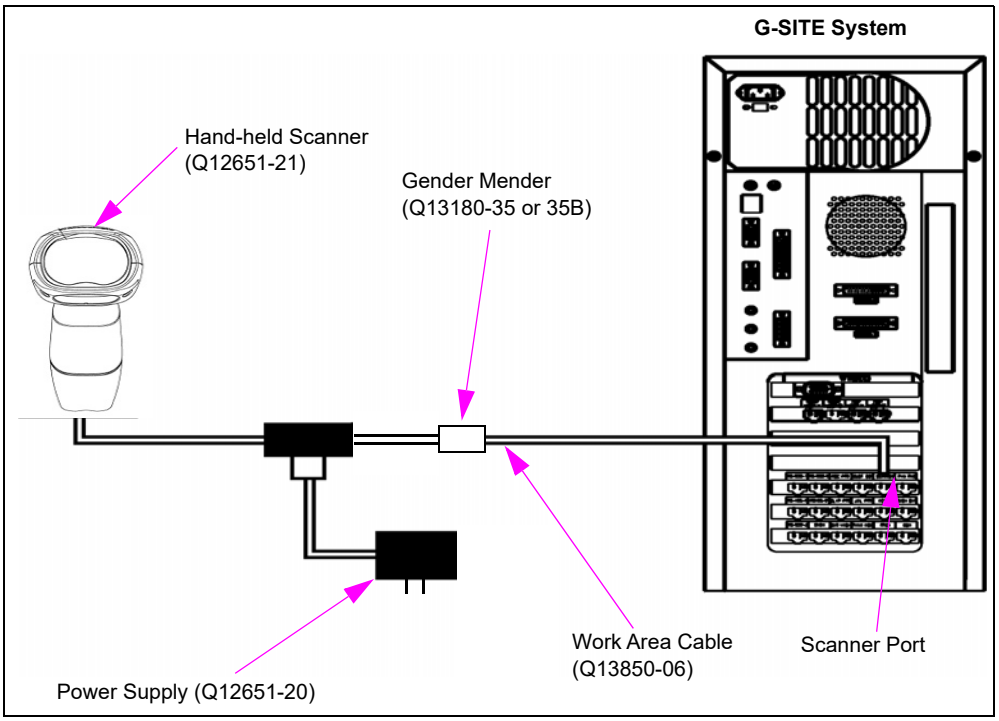
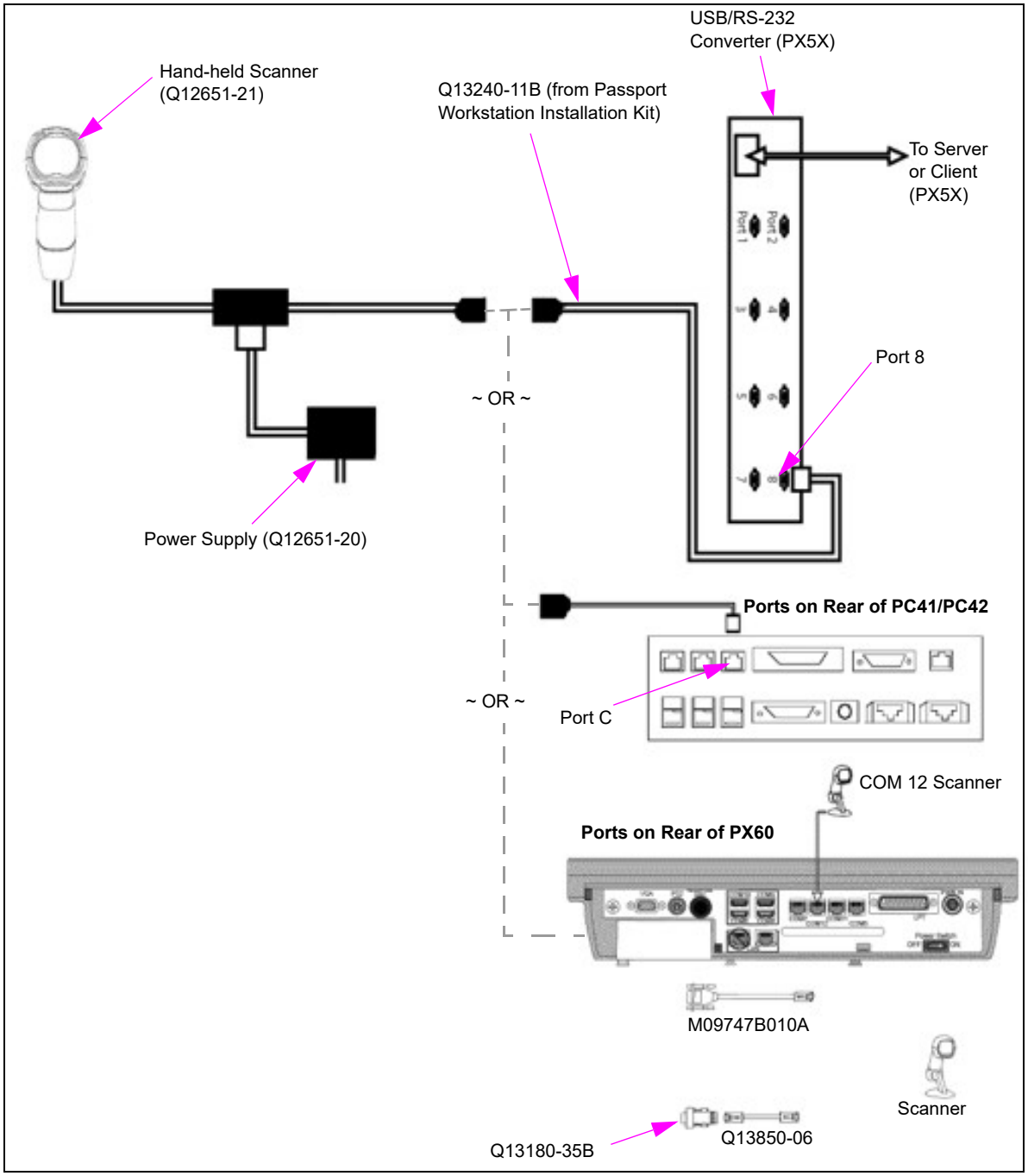


Figure 2: Passport™ System Connections Diagram



Related Documents

Document Number	Document Title	GOLDSM Library
MDE-5557	Honeywell Xenon Scanner Setup/Service Instructions	POS Peripheral Devices

Abbreviations and Acronyms

Term	Description
ACK	Acknowledgement
BOS	Back Office System
COM	Communications
CTS	Clear to Send
EAN	European Article Numbering
GOLD	Gilbarco Online Documentation
I/O	Input/Output
IBM®	International Business Machines
LED	Light Emitting Diode
LF	Line Feed
MOC	Major Oil Company
MWS	Manager Workstation
NAK	Negative Acknowledgement
NOF	Not Found
OSHA	Occupational Safety and Health Administration
PLC	Programmable Logic Controller
PLU	Price Look Up
POS	Point of Sale
RAM	Random Access Memory
ROM	Read Only Memory
RTS	Request to Send
UPC	Universal Product Code
USB	Universal Serial Bus
VLD	Visible Laser Diode

Important Safety Information

Notes: 1) Save this Important Safety Information section in a readily accessible location.

2) Although DEF is non-flammable, diesel is flammable. Therefore, for DEF cabinets that are attached to diesel dispensers, follow all the notes in this section that pertain to flammable fuels.

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining or servicing this product. Before performing any task on this product, read this safety information and the applicable sections in this manual, where additional hazards and safety precautions for your task will be found. Fire, explosion, electrical shock or pressure release could occur and cause death or serious injury, if these safe service procedures are not followed.

Preliminary Precautions
You are working in a potentially dangerous environment of flammable fuels, vapors, and high voltage or pressures. Only trained or authorized individuals knowledgeable in the related procedures should install, inspect, maintain or service this equipment.

Emergency Total Electrical Shut-Off
The first and most important information you must know is how to stop all fuel flow to the pump/dispenser and island. Locate the switch or circuit breakers that shut off all power to all fueling equipment, dispensing devices, and Submerged Turbine Pumps (STPs).

⚠ WARNING

The EMERGENCY STOP, ALL STOP, and PUMP STOP buttons at the cashier's station WILL NOT shut off electrical power to the pump/dispenser. This means that even if you activate these stops, fuel may continue to flow uncontrolled.

You must use the TOTAL ELECTRICAL SHUT-OFF in the case of an emergency and not the console's ALL STOP and PUMP STOP or similar keys.

Total Electrical Shut-Off Before Access
Any procedure that requires access to electrical components or the electronics of the dispenser requires total electrical shut off of that unit. Understand the function and location of this switch or circuit breaker before inspecting, installing, maintaining, or servicing Gasboy equipment.

Evacuating, Barricading and Shutting Off
Any procedure that requires access to the pump/dispenser or STPs requires the following actions:

- An evacuation of all unauthorized persons and vehicles from the work area
- Use of safety tape, cones or barricades at the affected unit(s)
- A total electrical shut-off of the affected unit(s)

Read the Manual
Read, understand and follow this manual and any other labels or related materials supplied with this equipment. If you do not understand a procedure, call a the Gilbarco Technical Assistance Center (TAC) at 1-800-743-7501. It is imperative to your safety and the safety of others to understand the procedures before beginning work.

Follow the Regulations
Applicable information is available in National Fire Protection Association (NFPA) 30A; *Code for Motor Fuel Dispensing Facilities and Repair Garages*, NFPA 70; *National Electrical Code (NEC)*, Occupational Safety and Health Administration (OSHA) regulations and federal, state, and local codes. All these regulations must be followed. Failure to install, inspect, maintain or service this equipment in accordance with these codes, regulations and standards may lead to legal citations with penalties or affect the safe use and operation of the equipment.

Replacement Parts
Use only genuine Gasboy replacement parts and retrofit kits on your pump/dispenser. Using parts other than genuine Gasboy replacement parts could create a safety hazard and violate local regulations.

Safety Symbols and Warning Words

This section provides important information about warning symbols and boxes.

Alert Symbol

This safety alert symbol is used in this manual and on warning labels to alert you to a precaution which must be followed to prevent potential personal safety hazards. Obey safety directives that follow this symbol to avoid possible injury or death.

Signal Words
These signal words used in this manual and on warning labels tell you the seriousness of particular safety hazards. The precautions below must be followed to prevent death, injury or damage to the equipment:

DANGER: Alerts you to a hazard or unsafe practice which will result in death or serious injury.

WARNING: Alerts you to a hazard or unsafe practice that could result in death or serious injury.

CAUTION with Alert symbol: Designates a hazard or unsafe practice which may result in minor injury.

CAUTION without Alert symbol: Designates a hazard or unsafe practice which may result in property or equipment damage.

Working With Fuels and Electrical Energy

Prevent Explosions and Fires
Fuels and their vapors will explode or burn, if ignited. Spilled or leaking fuels cause vapors. Even filling customer tanks will cause potentially dangerous vapors in the vicinity of the dispenser or island.

DEF is non-flammable. Therefore, explosion and fire safety warnings do not apply to DEF fluid lines.No Open Fire.


Open flames from matches, lighters, welding torches or other sources can ignite fuels and their vapors.

No Sparks - No Smoking

Sparks from starting vehicles, starting or using power tools, burning cigarettes, cigars or pipes can also ignite fuels and their vapors. Static electricity, including an electrostatic charge on your body, can cause a spark sufficient to ignite fuel vapors. Every time you get out of a vehicle, touch the metal of your vehicle, to discharge any electrostatic charge before you approach the dispenser island.

Working Alone

It is highly recommended that someone who is capable of rendering first aid be present during servicing. Familiarize yourself with Cardiopulmonary Resuscitation (CPR) methods, if you work with or around high voltages. This information is available from the American Red Cross. Always advise the station personnel about where you will be working, and caution them not to activate power while you are working on the equipment. Use the OSHA Lockout/Tagout procedures. If you are not familiar with this requirement, refer to this information in the service manual and OSHA documentation.

Working With Electricity Safely

Ensure that you use safe and established practices in working with electrical devices. Poorly wired devices may cause a fire, explosion or electrical shock. Ensure that grounding connections are properly made. Take care that sealing devices and compounds are in place. Ensure that you do not pinch wires when replacing covers. Follow OSHA Lockout/Tagout requirements. Station employees and service contractors need to understand and comply with this program completely to ensure safety while the equipment is down.

Hazardous Materials

Some materials present inside electronic enclosures may present a health hazard if not handled correctly. Ensure that you clean hands after handling equipment. Do not place any equipment in the
mouth

⚠ WARNING

The pump/dispenser contains a chemical known to the State of California to cause cancer.

⚠ WARNING

The pump/dispenser contains a chemical known to the State of California to cause birth defects or other reproductive harm.


Gilbarco Veeder-Root encourages the recycling of our products. Some products contain electronics, batteries, or other materials that may require special management practices depending on your location. Please refer to your local, state, or country regulations for these requirements.

In an Emergency

Inform Emergency Personnel

Compile the following information and inform emergency personnel:

- Location of accident (for example, address, front/back of building, and so on)
- Nature of accident (for example, possible heart attack, run over by car, burns, and so on)
- Age of victim (for example, baby, teenager, middle-age, elderly)
- Whether or not victim has received first aid (for example, stopped bleeding by pressure, and so on)
- Whether or not a victim has vomited (for example, if swallowed or inhaled something, and so on)

⚠ WARNING


Gasoline/DEF ingested may cause unconsciousness and burns to internal organs. Do not induce vomiting. Keep airway open. Oxygen may be needed at scene. Seek medical advice immediately.

⚠ WARNING

DEF generates ammonia gas at higher temperatures. When opening enclosed panels, allow the unit to air out to avoid breathing vapors. If respiratory difficulties develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention.

⚠ WARNING


Gasoline inhaled may cause unconsciousness and burns to lips, mouth and lungs.
Keep airway open.
Seek medical advice immediately.

⚠ WARNING


Gasoline/DEF spilled in eyes may cause burns to eye tissue.
Irrigate eyes with water for approximately 15 minutes.Seek medical advice immediately.

⚠ WARNING


Gasoline/DEF spilled on skin may cause burns.
Wash area thoroughly with clear water.
Seek medical advice immediately.

⚠ WARNING

DEF is mildly corrosive. Avoid contact with eyes, skin, and clothing. Ensure that eyewash stations and safety showers are close to the work location. Seek medical advice/recommended treatment if DEF spills into eyes.

IMPORTANT: Oxygen may be needed at scene if gasoline has been ingested or inhaled. Seek medical advice immediately.

Lockout/Tagout

Lockout/Tagout covers servicing and maintenance of machines and equipment in which the unexpected energization or start-up of the machine(s) or equipment or release of stored energy could cause injury to employees or personnel. Lockout/Tagout applies to all mechanical, hydraulic, chemical, or other energy, but does not cover electrical hazards. Subpart S of 29 CFR Part 1910 - Electrical Hazards, 29 CFR Part 1910.333 contains specific Lockout/Tagout provision for electrical hazards.

Programming Information

Important Programming Notes

- To program the Honeywell MS3780 Fusion Scanner, scan the barcodes found in this manual from "Sheet 1" on page 20 through "Sheet 19" on page 38.

CAUTION

If the scanner is connected to a Passport system, do not scan "Sheet 11" on page 30 (2400 baud rate) or "Sheet 16" on page 35 (Convert UPC-A to EAN-13). Scanning "Sheet 13" on page 32 with scanner connected to a Passport system will cause scanner communication failure. "Sheet 18" on page 37 is for the G-SITE systems only.

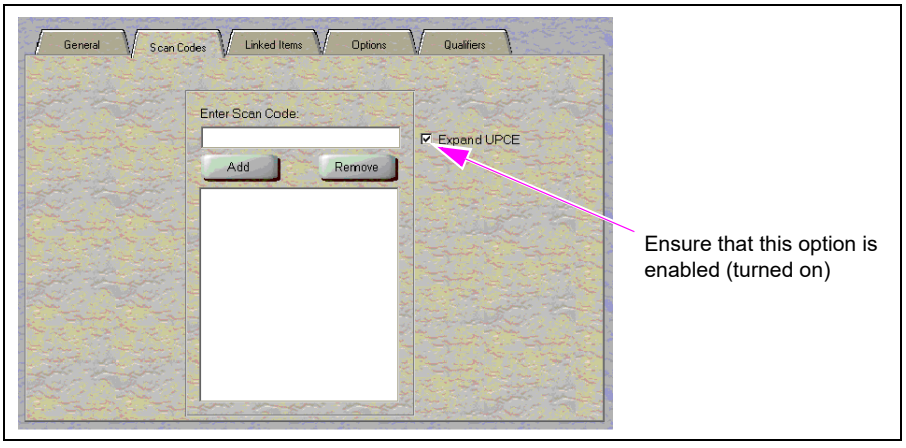
CAUTION

If the G-SITE system does not interface with a Back Office System (BOS) that requires Expanded Universal Product Code (UPC) recognition, do not scan "Sheet 15" on page 34 (Expand UPC-E to 12 digits). Scanning "Sheet 16" on page 35 when the G-SITE system does not interface with a BOS will cause the G-SITE system to lose all scanning ability.

CAUTION

If the G-SITE system does not interface with an Envoy® BOS, do not scan "Sheet 16" on page 35 (Convert UPC-A to EAN-13). Scanning "Sheet 16" on page 35 when the G-SITE system does not interface with an Envoy BOS will cause the G-SITE system to lose all scanning ability.

- Expanded UPC recognition may not be available on all systems, or may require selecting a specific option. Use the following guidelines:

Point of Sale (POS) System	Guidelines
G-SITE	The fusion scanner can be programmed for either Expanded 11-digit UPC recognition and/or Convert UPC-A to EAN-13 recognition, if supported/required by Back Office software. • If the Back Office software is not in use, do not enable Expanded UPC recognition or Convert UPC-A to EAN-13 recognition. • If Envoy Back Office software is in use, the Expanded 11-digit UPC recognition and Convert UPC-A to EAN-13 recognition are required. • If the Back Office software other than Envoy is in use, check with the Major Oil Company (MOC) Help Desk or Back Office software vendor to determine if Expanded UPC recognition and/or Convert UPC-A to EAN-13 recognition is supported/required.
Passport	To use Expanded UPC recognition, from **Manager Workstation > Pricing > Items** select **Expand UPCE** option. 

Programming the Scanner

To program the scanner, proceed as follows:

1 Ensure that the scanner is connected to the G-SITE or Passport system.

2 For the G-SITE systems, determine if the Back Office Pricebook software accepts/requires a 11-digit Expanded UPC recognition and/or Convert UPC-A to EAN-13 recognition.
Notes: 1) If Expanded UPC recognition is not required, do not scan "Sheet 16" on page 35; if Convert UPC-A to EAN-13 recognition is not required, do not scan "Sheet 16" on page 35.

2) Envoy BOS requires Expanded UPC and Convert UPC-A to EAN-13 when interfacing with G-SITE systems.

3 Scan the barcodes on "Sheet 1" on page 20 to "Sheet 18" on page 37 in order (if the scanner is connected to a Passport system, skip "Sheet 11" on page 30). After you scan "Sheet 1" on page 20 to enter the configuration mode, the scanner will beep three times and the Light Emitting Diode (LED) will flash.

Sheet	Function	Sheet	Function
1	Enter/Exit Configuration Mode	11*	2400 Baud Rate
2	Recall Defaults	12	1 Stop Bit
3	Disable Code 128	13****	Enable UPC Prefix ID
4	Disable Code 93	14	Disable LF Suffix
5	Disable Codabar	15**	Expand UPC-E to 12 Digits
6	• Disable Interleaved 2 of 5 (ITF) • Enable Interleaved 2 of 5 (ITF)	16***	Convert UPC-A to EAN-13
7	Disable Code 39	17	No Power Save Mode
8	Transmit UPC-A Check Digit	18	Disable CodeGate Out of Stand, Primary Pattern Active
9	Transmit UPC-E Check Digit	19	Enter/Exit Configuration Mode
10	Even Parity		

* *Do not use if the scanner is connected to a Passport system. The Passport system requires default 9600 baud rate.*
** *Use only if Expanded UPC recognition is supported/required.*
*** *Use only if Convert UPC-A to EAN-13 recognition is supported/required. Not required for Passport systems.*
**** Do not use if the scanner is connected to a Passport System running V20.04 or later.

4 If Expanded UPC recognition is required by the Back Office software, scan "Sheet 15" on page 34.

5 If Convert UPC-A to EAN-13 recognition is required by the Back Office software, scan "Sheet 16" on page 35.
Note: This option is required for G-SITE systems that interface with Envoy BOS. This option is not required for Passport systems.

6 Scan "Sheet 18" on page 37 to exit the configuration mode. The scanner will beep three times.

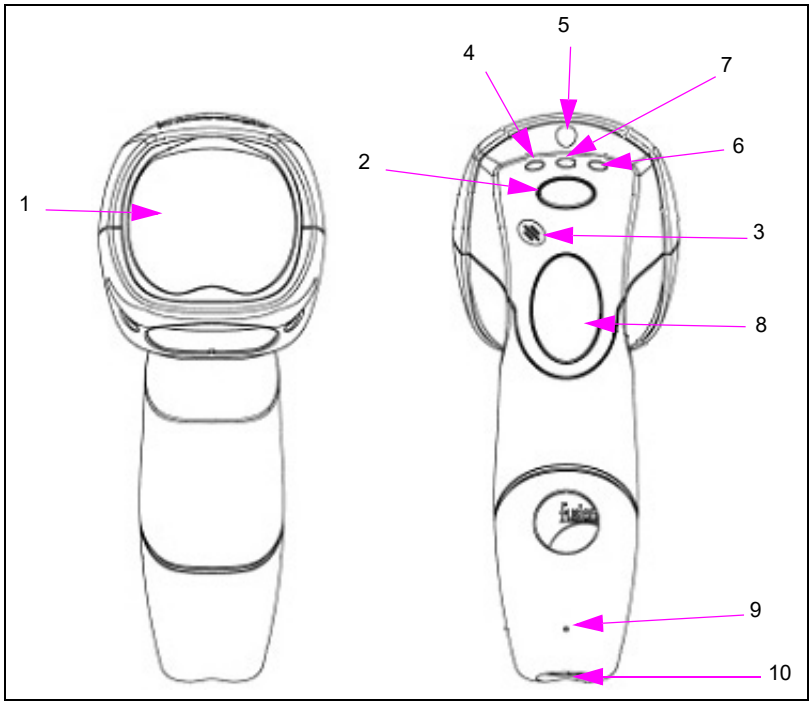
7 For G-SITE systems, cycle the console power before testing the scanner to ensure proper operation.
~ OR ~
For Passport systems, stop and restart the Passport application using the System Maintenance toolbar to ensure proper operation.

Fusion Scanner

The Honeywell MS3780 Fusion Scanner is a hand-held, omnidirectional barcode scanner with single-line scanning capabilities. The omnidirection mode is useful for general barcode reading. The single-line scanning mode is useful when scanning menus (sheets with multiple barcodes) or programming the scanner. To switch between modes, refer to "Changing Scan Pattern Modes" on page 10.

Scanner Components

Figure 3: Scanner Components



Item #	Description
1	Red Output Window, Laser Aperture
2	Mode Select Button (see page 10)
3	Beeper (see page 11)
4	Blue LED, Single-line Mode/Menu Reading (see page 12)
5	White LED (see page 12)
Item #	**Description**
6	Blue LED All Scan Lines on/Omnidirectional Reading (see page 12)
7	Amber LED, CodeGate® (see page 12)
8	CodeGate Button
9	Pin Hole for Cable Release
10	10-pin RJ-45, Female Socket

Scan Pattern Mode Select Button

There are two configurable scan pattern modes available with the fusion scanner:

- The primary scan pattern mode is the default scan pattern that is active when the scanner starts. By default, the primary scan pattern is set to all-scan-lines for omnidirectional reading.
- The secondary scan pattern mode is activated by pressing the scan pattern mode button (see Figure 4). By default, the secondary scan pattern is set to single-line mode for menu reading.

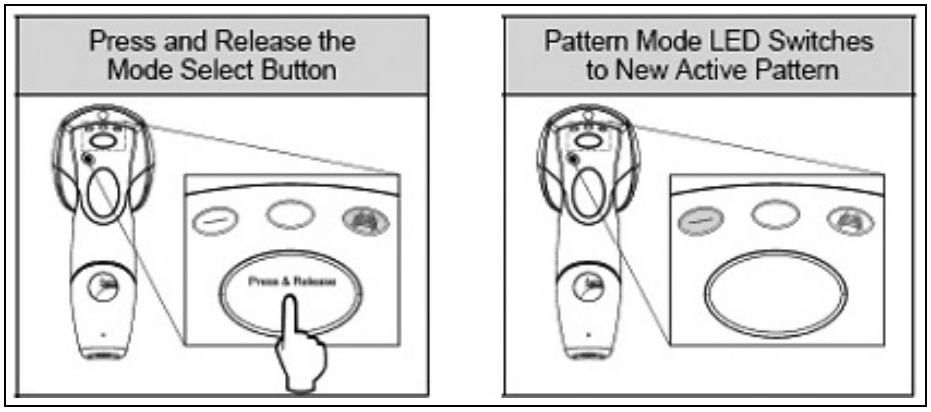
Note: For information on changing the default scan pattern settings, refer to the MetroSelect® Configuration Guide.

Changing Scan Pattern Modes

To change scan pattern modes, proceed as follows:

1 Press and release the mode select button, to activate the secondary scan pattern.

Figure 4: Changing Scan Pattern Modes



Note: Activating a pattern mode when the scanner is out of its stand does not change the in-stand pattern mode. When the scanner is returned to the stand, it will automatically revert to the most recent scan pattern selected during an in-stand operation.

2 Press and release the mode select button again, to reactivate the primary scan pattern.

Audible Indicators

When the fusion scanner is in operation, it can provide audible feedback. These sounds indicate the status of the scanner. Eight settings are available for the tone of the beep (normal, six alternate tones, and no tone). For instructions to change the tone of the beeper, refer to the "MetroSelect Configuration Guide (00-02407)".

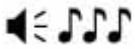
One Beep

When the scanner first receives power, the white LED will flash, one blue LED will turn on and the scanner will emit a beep (the white LED will remain on for the entire duration of the beep). The scanner is now ready to scan.

When the scanner successfully reads a barcode, the white LED will flash and the scanner will emit one beep (if configured to do so). If the scanner does not emit one beep and the white light does not flash, it indicates that the barcode has not been successfully read.

Razzberry Tone

This is a failure indicator. Refer to "Failure Mode Indicators" on page 13.

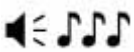


Three Beeps - during operation

When you place the scanner in configuration mode, the white and blue LEDs flash when the scanner emits three beeps. The white and blue LEDs continue to flash until the unit exits the configuration mode. When the scanner exits the configuration mode, it will emit three beeps and the white LED will stop flashing.

When configured, three beeps can also indicate a communications timeout during normal scanning mode.

When you use one-code-programming, the scanner emits three beeps; the current selected tone, followed by a short pause, then a high tone and a low tone. This indicates that the single code configuration has successfully configured the scanner.



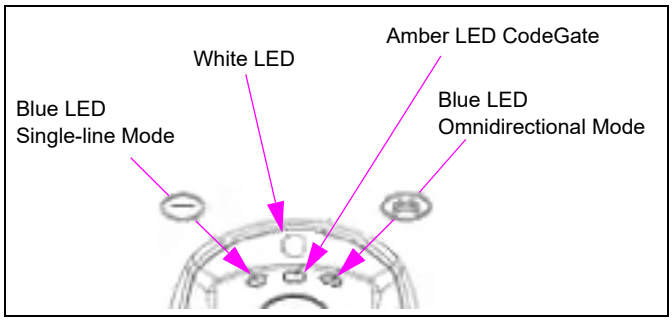
Three Beeps - on power up

This is a failure indicator. Refer to "Failure Mode Indicators" on page 13.

Visual Indicators

There are four LEDs located on the top of the fusion scanner. When the scanner is on, the flashing or constant illumination of the LEDs indicates the status of the current scan and the scanner.

Figure 5: LED Indicators



No LEDs

The LEDs will not be illuminated for the following reasons:

- If the scanner is not receiving power from the host or transformer.
- When all lasers are turned off for some reason.

Steady Blue Single-line LED

Indicates that the laser is active and the scanner is in the single-line mode. The blue LED will remain illuminated until the laser is deactivated.

Steady Blue Omni LED

Indicates that the laser is active and the scanner is in the omnidirections mode. The blue LED will remain illuminated until the laser is deactivated.

Steady Blue Single-line or Omni LED and a Single White LED Flash

When the scanner successfully reads a barcode, the white LED will flash and the scanner will beep once. If the white LED does not flash or the scanner does not beep, it indicates that the barcode has not been successfully read.

Steady White and Blue Single-line or Omni LED

After a successful scan, the scanner transmits the data to the host device. In some communication modes the host must inform the scanner when the data is ready to be received. If the host is not ready to accept the information, the scanner's white LED will remain on until the data can be transmitted.

Alternate Flashing of Both Blue LEDs and the White LED

This indicates that the scanner is in the program mode. A razzberry tone indicates that an invalid barcode has been scanned in this mode.

Steady Amber LED

Indicates that the CodeGate is not active (in-stand default).

Failure Mode Indicators

Both Blue LEDs Flashing with One Emitted Razzberry Tone

This indicates that the scanner has experienced a laser subsystem failure and must be replaced.

Both Blue LEDs and the White LED Are Flashing with Two Emitted Razzberry Tones

This indicates that the scanner has experienced a motor failure and must be replaced.

Continuous Razzberry Tone with Both LEDs off - on Power up

A continuous razzberry tone on power up indicates that there has been an electronic failure and must be replaced.

Three Beeps - on Power up

This indicates that the non-volatile memory that holds the scanner configuration has failed and must be replaced.

Troubleshooting Guide

The following guide is for reference purposes only. Contact a Honeywell representative at 1-800-ID-METRO or 1-800-436-3876 to preserve the limited warranty terms.

Symptoms	Possible Cause(s)	Solution
All Interfaces		
The unit has no LEDs, beeper or motor spin.	No power is being supplied to the scanner.	Check the transformer, outlet, and power strip. Ensure that the cable is plugged into the scanner.
The unit has no LEDs and/or beeper.	No power is being supplied to the scanner from the host.	Some host systems cannot supply enough current to power the Fusion Scanner. Use the power supply included with the scanner.
There are multiple scans upon presentation of code.	The same symbol timeout is set too short.	Adjust the same symbol timeout for a longer time increment.
The unit powers up but does not beep.	The beeper is disabled.	Enable the beeper.
	No tone is selected.	Select a tone.
The unit powers up but does not scan and/or beep.	The unit is trying to scan a particular symbology that is not enabled.	UPC/EAN, Code 39, Interleaved 2 to 5, Code 93, Code 128, and Codabar are enabled by default. Verify if the type of barcode being read has been selected.
	The scanner has been configured for a character length lock, or a minimum length, and barcode being scanned does not satisfy the configured criteria.	Verify if the barcode that is being scanned falls into the criteria. *Note: Typical of non-UPC/EAN codes. The scanner defaults to a minimum of 4-character barcode.*
The unit scans a barcode, but locks up after the first scan (the white LED stays on).	The scanner is configured to support some form of host handshaking but is not receiving the signal.	If the scanner is setup to support ACK/NAK, RTS/CTS, XON/XOFF or D/E, verify if the host cable and host are supporting the handshaking properly.
The unit scans but the data transmitted to the host is incorrect.	The scanner's data format does not match the host system requirements.	Verify if the scanner's data format matches the format required by the host. Ensure that the scanner is connected to the proper host port.
Scanner beeps at some barcodes and NOT for others of the same barcode symbology.	The print quality of the barcode is suspect.	The type of printer and/or the printer settings could be the problem. Check the print mode or change the printer settings. For example, change to econo mode or high speed.
	The aspect ratio of the barcode is out of tolerance.	
	The barcode may have been printed incorrectly.	Check if it is a check digit, character, or border problem.
	The scanner is not configured correctly for the type of barcode.	Check if check digits are set properly.
	The minimum symbol length setting does not work with the barcode.	Check if the correct minimum symbol length is set.
During power up, the unit beeps three times.	There is a non-volatile Random Access Memory (RAM) failure.	Replace the scanner.
During power up, the unit razzes continuously.	There is a RAM or Read Only Memory (ROM) failure.	Replace the scanner.
During power up, the unit razzes once and the blue LED flashes.	There is a Visible Laser Diode (VLD) failure.	Replace the scanner.
During power up, the unit razzes twice and both LEDs flash.	There is a scanner motor failure.	Replace the scanner.
RS-232 Only		
The unit powers up and scans correctly, but does not communicate properly to the host.	The COM at the host is not working or is not configured properly.	Check to ensure that the baud rate and parity of the scanner and the communication port match and that the program is looking for RS-232 data.
	The cable is not connected to the proper COM port.	
	The COM port is not operating properly.	
The host is receiving data but it does not appear to be correct.	The scanner and host may not be configured for the same interface.	Check if the scanner and the host are configured for the same interface.
Characters are being dropped.	The inter-character delay needs to be added to the transmitted output.	Add some inter-character delay to the transmitted output by using the "MetroSelect Configuration Guide (MLPN 00-02407)".

Maintenance

To clean the glass on the scanner, use a household glass cleaner and a soft cloth.

Scanner Tests

Test 1

Scan an item with the data cable not connected to the G-SITE or Passport system. The test is successful if the scanner beeps and the green LED flashes.

Test 2

POS System	Procedure	Scanner Fails Test If:
G-SITE	Scan an item with the data cable connected to the G-SITE console I/O board scanner port (first enter the PLU/PLC data into the console in the program/manager mode).	• The scanner does not beep and the green LED does not flash. • The scanner beeps and the green LED flashes, but the G-SITE system does not respond or displays a UPC/PLU Scan Error.
Passport	Scan an item with the data cable connected to port 8 (PX5X) of the USB/RS-232 converter or port C (PC41/PC42) of the IBM tailgate board (first enter the PLU/PLC data into the system using **Manager Workstation > Pricing > Item**).	• The scanner does not beep and the green LED does not flash. • The scanner beeps and the green LED flashes, but the Passport system does not respond or displays the message, “Item (barcode number) not found” in a red error box.

Phone Questions

1. Is the red light on? If not, wave your hand in front of the red lens to turn the scanner on.
2. Has the scanner worked in the past?
3. Is the scanner glass clean? If not, have the cashier clean the glass and scan the item again.
4. Did the cashier try to scan another item? If not, have the cashier scan another item.
5. Did the scanner beep or blink (green LED) when the item was scanned?
6. When the item was scanned, did the messages “UPC NOT FOUND (for G-SITE systems)” or “Scanned Item Not Found (for Passport systems)” appear on the console screen? If it did, the UPC number is not programmed in the system. Have the manager program the UPC number and update.
7. Has the Item Information programming been checked to ensure that the item’s status is valid?
8. Before the scanner stopped working, did the cashier have to scan an item several times before the scanner detected an item? If the message “UPC/PLU Scan Error” appears, expect a hardware problem.

Site Visit

Passport System

PX5X Passport System

When a service call is required, take the following equipment to the site with you:

- New Scanner
- Serial Cable
- USB/RS-232 Converter

To service the scanner, proceed as follows:

1 Review "Phone Questions". If the scanner does not work, proceed to step 2.

2 Perform "Test 1" on page 15 on the existing scanner. If the scanner fails the test, replace the scanner. If the scanner passes the test, proceed to step 3.

3 Perform "Test 2" on page 15 on the existing scanner. If the scanner fails the test, proceed to step 4.

4 Stop the Passport application software by using the System Maintenance toolbar. Restart the Passport application software by using System Maintenance. Retest the scanner by performing the "Scanner Tests" on page 15. If the scanner fails, proceed to step 5 on page 16.

5 Place the new scanner on the counter. Perform the "Scanner Tests" on page 15. If the new scanner passes the tests, install the new scanner on the counter. If the new scanner fails the tests, proceed to step 6.

6 Replace the serial cable. Perform the "Scanner Tests" on page 15 with the existing scanner. If the scanner fails the test, proceed to step 7.

7 Replace the USB/RS-232 converter. Perform the "Scanner Tests" on page 15 with the existing scanner. If the scanner fails the tests, repeat steps 1 on page 16 to 7 on page 16.

PC41/PC42 Passport System

When a service call is required, take the following equipment to the site with you:

- New Scanner
- RJ-45 to RS-232 Cable
- IBM Tailgate Board

To service the scanner, proceed as follows:

1 Review "Phone Questions" on page 15. If the scanner does not work, proceed to step 2.

2 Perform "Test 1" on page 15 on the existing scanner. If the scanner fails the test, replace the scanner. If the scanner passes the test, proceed to step 3.

3 Perform "Test 2" on page 15 on the existing scanner. If the scanner fails the test, proceed to step 4.

4 Stop the Passport application software by using the System Maintenance toolbar. Restart the Passport application software by using System Maintenance. Retest the scanner by performing the "Scanner Tests" on page 15. If the scanner fails, proceed to step 5.

5 Place the new scanner on the counter. Perform the "Scanner Tests" on page 15. If the new scanner passes the tests, install the new scanner on the counter. If the new scanner fails the tests, proceed to step 6.

6 Replace the RJ-45 to RS-232 cable. Perform the "Scanner Tests" on page 15 with the existing scanner. If the scanner fails the tests, proceed to step 7.

7 Replace the IBM tailgate board. Perform the "Scanner Tests" on page 15 with the existing scanner. If the scanner fails the tests, repeat steps 1 to 7.

G-SITE System

When a service call is required, take the following equipment to the site with you:

- New Scanner (Modular Cable and Gender Mender included)
- Console I/O Board
- Console I/O Strip Board

To service the scanner, proceed as follows:

1 Review "Phone Questions" on page 15. If the scanner does not work, proceed to step 2.

2 Perform "Test 1" on page 15 on the existing scanner. If the scanner fails the test, replace the scanner. If the scanner passes the test, proceed to step 3.

3 Perform "Test 2" on page 15 on the existing scanner. If the scanner fails the test, proceed to step 4.

4 Place the new scanner on the counter. Perform the "Scanner Tests" on page 15. If the new scanner passes the tests, install the new scanner on the counter. If the new scanner fails the tests, proceed to step 5.

5 Use G-SITE diagnostics to test the scanner port on the console I/O strip board.

6 Replace the console I/O board. Perform the "Scanner Tests" on page 15 with the existing scanner. If the scanner fails the test, proceed to step 7.

7 Replace the console I/O strip board. Perform the "Scanner Tests" on page 15 with the existing scanner. If the scanner fails the tests, repeat steps 1 to 7.

Troubleshooting G-SITE Scanner Errors

The following information includes possible errors and solutions for scanners used with the G-SITE system.

Unknown Item, Enter Price or Clear

This error indicates that the scanner read the barcode for the scanned item and correctly transmitted the data to the G-SITE system, but the UPC was not found on the system.

To troubleshoot this error, proceed as follows:

1. Update stock data in the supervisor mode.
2. Check the programming in the G-SITE system or Back Office PC, and verify if the UPC is programmed correctly.
3. If UPCs are programmed from a Back Office PC package, resend data from the PC.
4. Update the G-SITE system in the supervisor mode, after resending data.

PLU Scan Error

This error indicates that the scanner read the barcode for the scanned item and transmitted the data to the G-SITE system, but not in the correct format.

To troubleshoot this error, proceed as follows:

1. Verify the correct cable configuration. Pin #3 to the console must be set to Receive Data (transmit data from scanner), and Pin #4 (for PC-Based G-SITE system) must be set to Signal Ground.
2. Verify if the cables are connected and seated properly.
3. Verify if the scanner programming options are set correctly.

Incorrect or No Tax Charged

This error indicates that the scanner read the barcode for the scanned item correctly, but an incorrect amount of tax or no tax was charged.

To troubleshoot this error, verify if the tax rate/table assignments are correct in the G-SITE system or Back Office PC.

Troubleshooting Passport Scanner Errors

The following information includes possible errors and solutions for scanners used with the Passport system.

Scan Item Not Found (NOF)

This message appears on the message bar, indicating that the scanner read the barcode for the scanned item and correctly transmitted the data to the Passport system, but the UPC was not found on the system.

To troubleshoot this error, proceed as follows:

1. Select **Pricing** > **Item** on the Manager Workstation (MWS).
2. Check programming in the Passport system or Back Office PC, and verify if the UPC is programmed correctly.
3. If UPCs are programmed from a Back Office PC Package, resend data from the PC.

Item (Barcode Number) Not Found, Enter Price Using Department

This message appears in a red error box, indicating that the scanner read the barcode for the scanned item and transmitted the data to the Passport system, but not in the correct format.

~ OR ~

There is no indication that anything has changed.

To troubleshoot this error, proceed as follows:

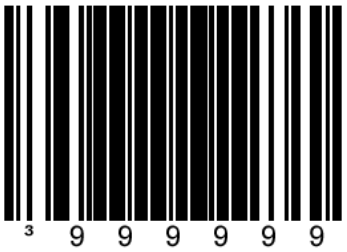
1. Verify the correct cable configuration. Pin #3 to the console must be set to Receive Data (transmit data from scanner), and Pin #5 must be set to Signal Ground.
2. Verify if cables are connected and seated properly.
3. Verify if the scanner programming options are set correctly.

Programming the Honeywell MS3780 Fusion Scanner

Barcode Sheets

Sheet 1

Enter/Exit Configuration Mode

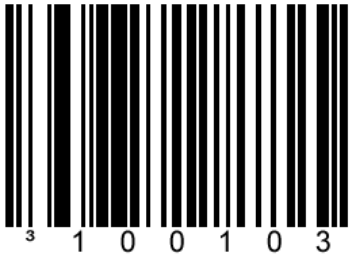


Sheet 2

Recall Defaults

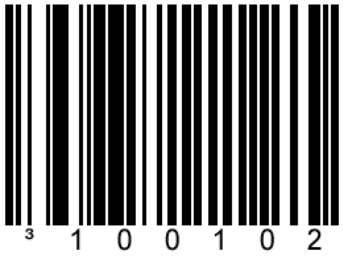
Sheet 3

Disable Code 128



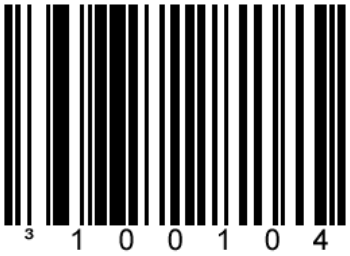
Sheet 4

Disable Code 93



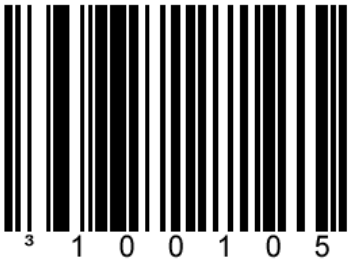
Sheet 5

Disable Codabar



Sheet 6

Disable Interleaved 2 of 5 (ITF)



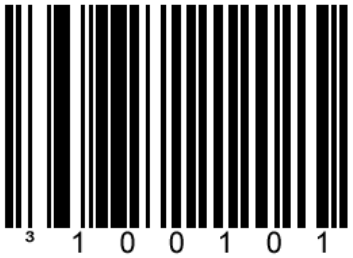
This is for all MOCs except 76®.

Enable Interleaved 2 of 5 (ITF)

This is for 76 **ONLY!**

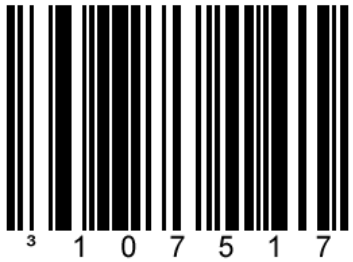
Sheet 7

Disable Code 39



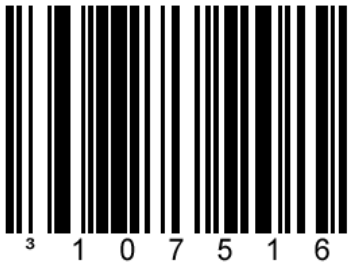
Sheet 8

Transmit UPC-A Check Digit



Sheet 9

Transmit UPC-E Check Digit



Sheet 10

Even Parity

Sheet 11

2400 Baud Rate

CAUTION

Do not scan this sheet if the scanner is connected to a Passport system. The Passport system uses default 9600 baud rate.

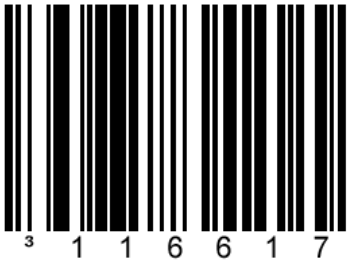
Scanning this sheet with a scanner connected to a Passport system will cause scanner communication failure.

Sheet 12

1 Stop Bit

Sheet 13

Enable UPC Prefix ID



When enabled, the scanner will transmit a Prefix ID before any UPC/EAN barcode.

Note: Do not use if the scanner is connected to a Passport System running V20.04 or later.

Sheet 14

Disable LF Suffix

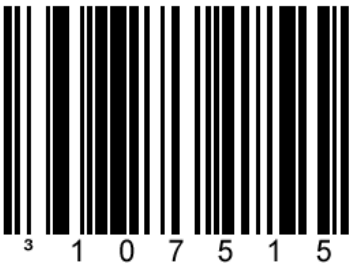
Disables the Line Feed Suffix. The scanner will not transmit line feed after each barcode.

Sheet 15

Expand UPC-E to 12 Digits

CAUTION

If Expanded UPC recognition is not supported, scanning this sheet will cause the system to lose all scanning ability.



Notes: 1) The only time this sheet must be scanned is if the Back Office software program supports expanded UPC recognition.

2) The Envoy BOS requires Expanded UPCs.

Sheet 16

Convert UPC-A to EAN-13

When this option is chosen, the scanner will Convert UPC-A recognition to EAN-13 recognition by transmitting a leading zero before the barcode.

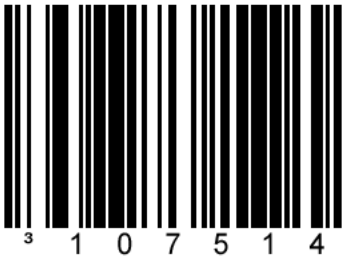
CAUTION

If Convert UPC-A to EAN-13 recognition is not supported, scanning this sheet will cause the G-SITE system to lose all scanning ability.

This option is required when you are interfacing Envoy BOSs with G-SITE POS systems. It is not required by Passport systems.

Notes: 1) Most sites must not scan this sheet.

2) For more information, refer to "Important Programming Notes" on page 7.



Sheet 17

No Power Save Mode

This option disables the power save mode on the scanner. If this sheet is not scanned, it may take an extended period of time for the scanner to “wake up” when an item is scanned.

Sheet 18

Disable CodeGate Out of Stand, Primary Pattern Active

Note: Scanning this sheet is OPTIONAL.

Scanning this sheet will **DISABLE** the CodeGate button when the MS3780 Fusion Scanner is removed from its stand. The operator will not be required to press the CodeGate button to scan an item. This will allow the MS3780 Fusion Scanner to operate like the MS6720 Hand-held and MS7120 Orbit Scanners.

DO NOT scan this sheet if you would like to press the CodeGate button when the scanner is out of its stand.

Sheet 19

Enter/Exit Configuration Mode

Scanning Items

After the scanner has been programmed and configured properly, scan the items as follows:

If the CodeGate button is **DISABLED** ("Sheet 18" on page 37 was scanned during the scanner setup), items will be scanned as follows:

With the scanner in or out of its stand, pass the item to be scanned within 11 inches of the scan window. The scanner will read the barcode of the item.

If the CodeGate button is **ENABLED** ("Sheet 18" on page 37 was NOT scanned during the scanner setup), items will be scanned as follows:

1. With the scanner in stand, pass the item to be scanned within 11 inches of the scan window. The scanner will read the barcode of the item (same as above).
2. With the scanner removed from the stand, point the scanner at the barcode of the item to be scanned.
3. Press **CodeGate** on the back of the scanner. The scanner reads the barcode of the item.

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