

MetroSelect[®]

Area Imaging Supplemental

Configuration Guide

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Imager Operation

Presentation and Trigger† Modes

There are four configurable modes for scanning: the presentation mode, the multi-try trigger mode, the continuous trigger mode, and the single-trigger mode. These modes can be configured separately for in-stand and out-of-stand imager operation‡.

In-Stand‡

* Presentation Mode
In-Stand



Multi-Try Trigger Mode
In-Stand



Continuous Trigger Mode
In-Stand



Single Trigger Mode
In-Stand



* Factory default configuration.

† The term trigger and button are synonymous.

‡ In-Stand and Out-of-Stand references are not applicable for all products.

Out-of-Stand[‡]

◆ Presentation Mode
Out-of-Stand



* Multi-Try Trigger Mode
Out-of-Stand



Continuous Trigger Mode
Out-of-Stand



Single Trigger Mode
Out-of-Stand



In-Stand/Out-of-Stand Mode Match

Set In-Stand Mode to Match
Out-of-Stand Mode



* Factory default configuration for the MS1690, MS1890, and the MS1633.

◆ Factory default configuration for the IS1650.

‡ In-Stand and Out-of-Stand references are not applicable for all products.

* Presentation Mode
Immediately After Button[†] Release[◇]



The imager immediately reverts to presentation mode when the button is released.[◇]

Presentation Mode
1 second After Button Release[◇]



The imager reverts to presentation mode 1 second after the button is released.[◇]

Presentation Mode
5 seconds After Button Release[◇]



The imager reverts to presentation mode when 5 seconds after the button is released.[◇]

* *Factory default configuration.*

† *The term trigger and button are synonymous.*

◇ *This feature is only supported in the MS7580 Genesis™.*

* Enable
Trigger Press Timeout
In Presentation Mode◇



Disable
Trigger Press Timeout
In Presentation Mode◇



* *Factory default configuration.*

◇ *This feature is only supported in the Focus® product series (i.e., IS1650, MS1890, MS1633, and the MS1690).*

Pass-Through Settings[◇]

* Enable
Pass-Through Scanning
In Presentation Mode[◇]



Disable
Pass-Through Settings
In Presentation Mode[◇]



Enable 300 milliseconds
Pass-Through Timeout^{◇⊙}



Enable 100 milliseconds
Pass-Through Timeout^{◇⊙}



* *Factory default configuration for the MS7580.*

† *The term trigger and button are synonymous.*

◇ *This feature is only supported in the MS7580 Genesis.*

⊙ *Contact a customer service representative for information on additional pass-through timeout values.*

Omnidirectional and/or Linear Imager Modes

The area imager can be configured to operate as an omnidirectional imager, or a linear imager, or a combination of both. Trigger[†] and presentation operations can be configured separately for omnidirectional and linear scan modes.

- When a unit is configured to operate as an omnidirectional imager, all 1D and 2D bar codes are scanned omnidirectionally. The only exceptions are Code 128 scanner configuration labels, which must be linearly aligned for successful scanning.

Note: The IS4900 area-imaging engines do not require linear alignment of Code 128 scanner configuration labels. The bar code should be placed near the center of the engine's field of view indicated by the targeting dot.

- When a unit is configured to operate as a linear imager, 1D bar codes must be linearly aligned for successful scanning. In linear configuration 2D bar codes cannot be scanned.
- When a unit is configured to operate as both a linear and omnidirectional imager, 1D bar codes have to be linearly aligned for successful scanning while 2D bar codes are scanned omnidirectionally.

By default, the Focus product series[◇] is configured for omnidirectional scanning for trigger and presentation operations. By default, the MS7580 is configured to omnidirectional scanning for presentation and pass-through operations and with 1D linear scanning/2D omnidirectional scanning for button[†] operations.

Enable Linear Only
in *Trigger Operations*



Disable Linear Only
in *Trigger Operations*



[†] The term *trigger* and *button* are synonymous.

[◇] The Focus product series includes the IS1650, MS1890, MS1633, and the MS1690.

Enable 1D Linear Only
in *Trigger Operations*



Disable 1D Linear Only
in *Trigger Operations*



Enable Linear Only
in *Presentation Operations*



Disable Linear Only
in *Presentation Operations*



Enable 1D Linear Only
in *Presentation Operations*



Disable 1D Linear Only
in *Presentation Operations*



Aiming and Illumination

Trigger and presentation operations can be configured separately to use the imager's linear illumination as an aiming instrument.

* Enable Aiming in
Trigger Operations



Disable Aiming in
Trigger Operations



* Enable Aiming in
Presentation Operations



Disable Aiming in
Presentation Operations



* Enable FirstFlash®



Disable FirstFlash®



* *Factory default configuration.*

* Enable Auto Gain



Disable Auto Gain



* Enable Illumination
Group 1



Disable Illumination
Group 1



* Enable Illumination
Group 2[◇]



Disable Illumination
Group 2[◇]



* *Factory default configuration.*

◇ *This feature is only supported in the Focus product series (i.e., IS1650, MS1890, MS1633, and the MS1690).*

Data Output

* Enable Data Output



Disable Data Output



* *Factory default configuration.*

Character Suppression

Enable the
Suppression of 1 Character



* Disable the
Suppression of 1 Character



To suppress 1 character:

1. Scan the *Enter/Exit Configuration Mode* bar code, on page 39.
2. Scan the *Enable the Suppression of 1 Character* bar code.
3. Scan the *Character 1* bar code (*below left*).
4. Scan the three code bytes that represent the character to be suppressed, on page 12.
5. Scan the *Enter/Exit Configuration Mode* bar code, on page 39.

Enable the
Suppression of 2 Characters



* Disable the
Suppression of 2 Characters



To suppress 2 characters:

1. Scan the *Enter/Exit Configuration Mode* bar code, on page 39.
2. Scan the *Enable the Suppression of 2 Character* bar code above.
3. Scan the *Character 1* bar code (*below left*).
4. Scan the three code bytes, on page 12, that represent the 1st character to be suppressed.
5. Scan the *Character 2* bar code (*below right*).
6. Scan the three code bytes, on page 12, that represent the 2nd character to be suppressed.
7. Scan the *Enter/Exit Configuration Mode* bar code, on page 39.

Character 1



Character 2



* *Factory default configuration.*

Code Bytes 0 – 9

Notes: For additional information on Code Bytes, refer to the *Code Bytes Usage* section of the MetroSelect Configuration Guide (PN 00-02544).



Code Byte 0



Code Byte 1



Code Byte 2



Code Byte 3



Code Byte 4



Code Byte 5



Code Byte 6



Code Byte 7



Code Byte 8



Code Byte 9

Same Symbol Timeouts

Retain Same Symbol
Timeout on Trigger



The same-symbol timeout
is not restarted when the
trigger is pulled.

* Reset Same Symbol
Timeout on Trigger



The same-symbol timeout is
restarted when the trigger is
pulled.

LED Options

* Normal
Blue LED Intensity[◇]



Low
Blue LED Intensity[◇]



* Normal
White LED Intensity[◇]



Low
White LED Intensity[◇]



* *Factory default configuration.*

[◇] *This feature is only supported in the MS7580 Genesis.*

Imager Operation – MS1633

Power Save Modes^{††}

Enable
Trigger Power-Save



When enabled, the MS1633 will enter sleep mode after the trigger is held for 10 seconds.

* Disable
Trigger Power-Save



Enable
IR Power-Save



When enabled, the MS1633 will enter sleep mode after the IR has been activated 5 times without a successful decode.

Disable
IR Power-Save



* *Factory default configuration.*

†† *These features are not for use with the MS1690, MS1890, or the IS1650.*

RangeGate® Mode††

Enable
RangeGate



When enabled, the MS1633 will store scanned bar codes into non-volatile memory if the wireless connection has been interrupted.

Disable
RangeGate



Note: RangeGate and Inventory Mode are mutually exclusive. If both are enabled, Inventory Mode takes priority.

RangeGate Delay = 1 sec.



The MS1633 will pause 1 sec. between transmitting individual bar codes in RangeGate mode.

RangeGate Delay = 500 ms



The MS1633 will pause 500 ms. between transmitting individual bar codes in RangeGate mode.

RangeGate Delay = 0 sec.



The MS1633 will not pause between transmitting individual bar codes in RangeGate mode.

†† These features are not for use with the MS1690, MS1890, or the IS1650.

Firmware Version and Address^{††}

Transmit the Firmware Version of the Imager with *Bluetooth*[®] Wireless Technology



Transmit the Address of the Imager with *Bluetooth* Wireless Technology



††

These features are not for use with the MS1690, MS1890 or the IS1650.

Inventory Mode††

In Inventory mode, there is a quantity field associated with each bar code. When an item's bar code is scanned, the MS1633 automatically stores the bar code data in its non-volatile memory with a quantity field set to 1. The quantity field can then be modified using the quantity bar codes on page 20. The bar code data is not automatically transmitted to the host. To transmit the stored data, the Transmit All Records bar code (below) must be scanned.

Enable
Inventory Mode



* Disable
Inventory Mode



Note: RangeGate and Inventory Mode are mutually exclusive.
If both are enabled, Inventory mode takes priority.

Transmit
Quantity Field



The item's bar code data will be stored and transmitted once with a user selectable numerical quantity added to the end of the data string. See page 19 for information on quantity input. If a quantity is not entered, the quantity will default to 1.

* Do Not Transmit
Quantity Field



The item's bar code data will be stored and transmitted as many times as the quantity indicates.

If a quantity is not entered, the quantity will default to 1.

Transmit All Records



Transmits all stored data records.

†† This feature is not for use with the MS1690, MS1890, or the IS1650.

The quantity bar codes on page 20 enable the user to enter a quantity for the last item scanned. The item's bar code data will be stored and transmitted as many times as the quantity indicates. If the *Transmit Quantity Field* feature (on page 18) has been enabled then the bar code data will be stored and transmitted once with a numerical quantity added to the end of the data string.

If a quantity is not entered, a value of 1 will be entered as the default. The quantity maximum value is 9999. Quantity digits are shifted from right to left so if a 5th digit is scanned the 1st digit scanned will be discarded and the 2nd, 3rd and 4th digits will be moved to the left to accommodate the new digit. For example, if the Quantity 5 bar code is scanned after the quantity has been set to 1234 then the 1 will be dropped and the quantity will become 2345.

Examples

To add a quantity of 5

1. Scan the item's bar code
2. Scan the **Quantity 5** bar code (on page 20)

To add a quantity of 1,500

1. Scan the item's bar code
2. Scan the **Quantity 1** bar code (on page 20)
3. Scan the **Quantity 5** bar code (on page 20)
4. Scan the **Quantity 0** bar code (on page 20)
5. Scan the **Quantity 0** bar code (on page 20)

To correct an incorrect quantity using the quantity codes, scan the Quantity 0 bar code to replace the incorrect digits then scan the correct Quantity bar codes located on page 20.

Example

To change a quantity of 103 to 10 using the quantity codes

1. Scan the **Quantity 0** bar code to change the quantity to 1030
2. Scan the **Quantity 0** bar code to change the quantity to 0300
3. Scan the **Quantity 1** bar code to change the quantity to 3001
4. Scan the **Quantity 0** bar code to change the quantity to 0010

The *Delete Last Record* bar code, on page 22, can also be used to delete the incorrect record and quantity. Just re-scan the bar code with the correct quantity after using the *Delete Last Record* bar code.

Quantity Codes^{††}

Quantity 0



Quantity 5



Quantity 1



Quantity 6



Quantity 2



Quantity 7



Quantity 3



Quantity 8



Quantity 4



Quantity 9



^{††} This feature is not for use with the MS1690, MS1890, or the IS1650.

Transmit
Entry Counter††



Optional field transmitted with the bar code data that is a count of the number of transmissions used to transmit the entire buffer.

* Do Not
Transmit Entry Counter



Transmit
Number of Records††



Will transmit the number of records and the number of bar codes currently stored as a 5-digit number separated by a space.

Transmit
Inventory Records LIFO††



Data is transmitted on a last-in, first-out basis.

* Transmit
Inventory Records FIFO



Data is transmitted on a first-in, first out basis.

†† These features are not for use with the MS1690, MS1890, or the IS1650.

Enable Inventory Beep††



When enabled MS1633 will beep after transmitting each inventory record.

* Disable Inventory Beep



Delete Last Record††



When scanned, this bar code will delete the last bar code stored.

Clear Inventory Records††



When scanned, this bar code will clear all stored bar code data in memory.

†† These features are not for use with the MS1690, MS1890, or the IS1650.

Code Types and Decode Rules

Data Matrix

Enable Normal Color
Data Matrix Decoding



Enable Inverse Color
Data Matrix Decoding



Enable Normal and Inverse
Color Data Matrix Decoding



* Disable
Data Matrix Decoder



Enable Rectangular
Data Matrix Symbol
Decoding



* Disable Rectangular
Data Matrix Symbol
Decoding



* Factory default configuration.

Enable Low-Contrast
Data Matrix Decoding[†]



Improves decoding[†] of
low-contrast Data
Matrix symbols.

* Disable Low-Contrast
Data Matrix Decoding



Enable Data Matrix
Non-Square Modules[†]



Improves decoding[†] of
Data Matrix symbols
when individual modules
in the symbol are non-
square.

* Disable Data Matrix
Non-Square Modules



Enable Data Matrix
Shifted Tiles[†]



Improves decoding[†] of Data
Matrix symbols when the
upper tiles in the symbol are
shifted in the symbol
relative to the bottom tiles.

* Disable Data Matrix
Shifted Tiles



* Factory default configuration

[†] Enabling these options will increase decoding time for all bar codes.

* Enable Data Matrix,
Normal Size



The following bar codes improve decoding of Data Matrix symbols when the length of a symbol size is small. To disable either of these options scan the *Enable Data Matrix Normal Size* bar code above.

Enable Data Matrix,
Small Size[†]



Enable Data Matrix
Very Small Size[†]



* *Factory default configuration.*

† *Enabling these options will increase decoding time for all bar codes.*

QR Code

Enable Normal
Video QR Code



Enable Inverse
Video QR Code



Enable
Normal and Inverse QR Code



* Disable QR Code



MaxiCode

Enable MaxiCode



* Disable MaxiCode



* Factory default configuration.

Aztec

Enable Normal
Video Aztec Decoding



* Disable Normal
Video Aztec Decoding



Enable Inverse
Video Aztec Decoding



* Disable Inverse
Video Aztec Decoding



* *Factory default configuration*

Enable Aztec Structure
Append Decoding



* Disable Aztec Structure
Append Decoding



When this feature is enabled, Aztec bar codes with a structured append header will be stored in the imager's memory buffer. The imager will transmit the concatenated message once every component of the structured append bar code has been read. Up to 16 components can be stored.

If this feature is disabled, Aztec bar codes with structured append header will be read as normal Aztec bar codes. However, in this case, the structured append header will be sent as part of the bar code data.

Notes: CodeSelect® and structured append features cannot be used concurrently. If both CodeSelect and structured append are enabled, CodeSelect feature will not work.

The *CodeSelect timeout* setting determines how much time will be allowed between individual components of the same bar code (similar to CodeSelect operation).

By default, the imager will emit an *intermediate beep* when each component is scanned. When only one scan buffer is enabled, the user will be required to release the trigger after reading each bar code component.

* Enable
Intermediate Beep



Disable
Intermediate Beep



Note: If the *intermediate beep* is disabled and the number of scan buffers is increased (compare buffers in MetroSet2) – all components of a structured append bar code can be read with a single trigger activation, and only one audible beep will be produced, as if a regular bar code was scanned.

* Factory default configuration.

Postal

Enable
Australia Post



* Disable
Australia Post



Enable Japan Post



* Disable Japan Post



Enable KIX Code



* Disable KIX Code



** Factory default configuration.*

Enable
PLANET Code



* Disable
PLANET Code



Enable
POSTNET Code



* Disable
POSTNET Post



Enable B & B'
Fielded POSTNET



* Disable B & B'
Fielded POSTNET



** Factory default configuration*

Enable
UPU Decoding



* Disable
UPU Decoding



Enable
Royal Mail 4 Code



* Disable
Royal Mail 4 Code



Enable
Zero-FCC Australia Post



* Disable
Zero-FCC Australia Post



* Factory default configuration.

Codablock Options

Enable
Codablock A



* Disable
Codablock A



Enable
Codablock F



* Disable
Codablock F



PDF Options

Enable
Transmit \ as \



* *Factory default configuration.*

RS232

Software Handshaking

Enable
JV Handshaking



Disable
JV Handshaking



An “JV” response from the host indicates reception of imager data.

Multifunctional USB/IBM[®] Interface[†]

Dual Interface Defaults[†]



[†] This feature is not for use with the MS1633.

Interfaces

Additional Interfaces[†]

Enable Beeper
ON/OFF Commands



Enables beeper on/off
commands with internal
USB and IBM interfaces.

* Disable Beeper
ON/OFF Commands



3rd Generation
IBM 46xx Defaults



First, scan the 3rd Generation IBM
46xx Default bar code. Then,
scan the IBM Reserved Code #2.

IBM Reserved Code #2



First, scan the 3rd Generation IBM
46xx Default bar code. Then, scan
the IBM Reserve code #2.

* *Factory Default Configuration*

† *These features are not for use with the MS1633.*

IBM 46xx-SIOC RS485 Interface

Send 30H for Last Block
Label Identifier 4680



Note: Feature is for PDF codes only.

* Send 00 for Last Block
Label Identifier 4680



Note: Feature is for PDF codes only.

IBM-OEM USB Interface

Send 30H for Last Block
Label Identifier USB



Note: Feature is for PDF codes only.

* Send 00 for Last Block
Label Identifier USB



Note: Feature is for PDF codes only.

Full Speed USB Keyboard Interface

Enable Full Speed USB
Keyboard Interface Defaults



* *Factory Default Configuration*

† *These features are not for use with the MS1633.*

MS7580 Genesis Specific

Load RS232
Configuration Settings[◇]



Load USB
Configuration Settings[◇]



Load Keyboard Wedge
Configuration Settings[◇]



Load RS485
Configuration Settings[◇]



Recall Configuration for
Currently Connected Interface[◇]



[◇] *This feature is only supported in the MS7580 Genesis.*

Apply Settings
to All Interfaces ◊



Apply Settings to
the Current Interface ◊



Apply Settings
to RS232 Interface ◊



Apply Settings
to USB Interface ◊



Apply Settings
to Keyboard Wedge ◊



Apply Settings
to RS485 Interface ◊



◊ This feature is only supported in the MS7580 Genesis.

Enter/Exit Configuration Mode

Enter Exit Configuration Mode





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