**Sequence Title**: x\_1\_Point

**Doc Version:** 2.00.5

**Published By:** Tim Reamsbottom

**Publish Date**: 31/03/2016

# Version History

*The version number corresponds with the program version number set in Automation Studio.*

|  |  |  |  |
| --- | --- | --- | --- |
| Publish Date | Version Number | Comments | Engineer Initials |
| 14/07/2015 | 2.00.1 | First standard release | TR |
| 24/08/2015 | 2.00.2 | Add destination check before release. | TR |
| 24/08/2015 | 2.00.3 | Add Buffer out position.. A fake bag register for outgoing sequences to check for data valid before enabling.. | TR |
| 31/03/2016 | 2.00.4 | Make transit bag optional | TR |
| 28/07/2016 | 2.00.5 | Bug fix destination not valid on empty bag | TR |
| 07/04/2018 | 2.00.6 | Allow point to move data out with transit bag | TR |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |

# Sequence Description

## Basic Sequence Description

|  |
| --- |
| This sequence is designed to integrate with other sequences when handling multiple buffers in, to a single device/buffer out.  The sequence can be configured in 3 ways.   1. Buffer bag data is copied into a transit position from the incoming buffer before the outgoing data position. When using request release the data must be copied from the transit position by the enabling sequence. 2. A fake bag is used to hold the selected bag data, This can the be passed to the next sequence as the bufferbag data. The next sequence is then responsible for moving the data. This sequence checks data has been copied from the “fake buffer” into the outBag position, and then checks it is cleared when the bag arrives. 3. With no transit bag. We can copy data directly from buffer position to bag out   This sequence cannot support a request interface to a incoming sequence, request release must be used by the incoming sequence in place of i\_bagAtBuffer[x]. |

## Sequence Steps

|  |  |
| --- | --- |
| Step | Description |
| 0 | Disabled |
| 1 | Reset points |
| 2 | Wait for bag at buffer |
| 3 | Release bag from buffer 1 |
| 4 | Release bag from buffer 2 |
| 5 | Release bag from buffer 3 |
| 6 | Release bag from buffer 4 |
| 7 | Release bag from buffer 5 |
| 8 | Release bag from buffer 6 |
| 9 | Release bag from buffer 7 |
| 10 | Release bag from buffer 8 |
| 11 | Etc……………. |
| 12 | Click here to enter text. |
| 13 | Click here to enter text. |
| 14 | Click here to enter text. |
| 15 | Click here to enter text. |
| 16 | Click here to enter text. |
| 17 | Click here to enter text. |
| 18 | Click here to enter text. |
| 19 | Click here to enter text. |
| 20 | Click here to enter text. |

# IO Description

## Standard IO Descriptions

|  |  |  |  |
| --- | --- | --- | --- |
| Standard Block number | Block Port | Input  Output | Description |
| 101 | 1 | X | SP1 – Bag at buffer 1 |
| 101 | 2 | X | SP1 – Bag at buffer 2 |
| 101 | 3 | X | Spare |
| 101 | 4 | X | SP1 – Bag released |
| 101 | 5 | Y | SP1 – Open buffer 1 |
| 101 | 6 | Y | SP1 – Open buffer 2 |
| 101 | 7 | Y | SP1 – Select buffer 1 |
| 101 | 8 | Y | SP1 – Select buffer 2 |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |
| No. | - | - | Click here to enter text. |

*Description must contain “–“after sequence identifier (i.e.SPN1 – ).*

# Manual Description

|  |
| --- |
| 1. Disabled   All controls functions are disabled.   1. Reset Points   All points change over to the reset position. The emergency stop condition is checked and then the sequence changes to step 2.   1. Wait for bag at buffer   A logical assessment is made of input buffer conditions, by checking the “bag at buffer” proximity switch and data for validity (if applicable), or the request release state of the buffer sequence.  When the receive line has space, or an enable release signal is received. The buffer that has been in a valid release state for the longest is selected to be released.  If data is being tracked it is now copied into the “transit” position before the sequence step changes to 2 + the selected buffer number.( i.e buffer 3 is selected go to step 2 + 3 = 5).    3>) Release bag from buffer x  This applies to all steps from 3 and above based on the selected buffer number.  The points are changed into the correct position for the selected buffer, the buffer stop is then opened, and the bag gravitates into its next position. The sequence then returns to step 1.  The bag arriving into its next position is detected in 2 ways depending on the type of the position:  If releasing into a buffer line, the line trip proximity switch is used to detect arrival, If releasing into another sequence the enable release signal changing to a false condition is used. |