

920i Dual Kiosk Truck In/Out

Software Application
Version 1.01

Operator's Manual



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1.0 Introduction

The 920i® Dual Kiosk Truck In/Out system (PN 156959) consists of a bidirectional single platform truck scale, an inbound truck kiosk, and an outbound truck kiosk. The Transaction database stores a record of each weighment. This database table may be uploaded and cleared using a PC software program called iNterchange (optional).



Note After a successful download the 920i needs to be power cycled.

2.0 Operation



Note

- The **Inbound** and **Outbound** Kiosks communicate with one another. A widget will display – “***Communication Failure***” or “Communication OK”. If communications are down a truck can still be processed but only on the **Outbound** Kiosk.
- The **Outbound** Kiosk contains all the transaction records (Trans).
- The **Outbound** Kiosk contains all the Inbound records (Truck).

2.1 Processing a Truck Without a Loop

1. System displays *Enter Scale* on both the **Inbound** and **Outbound** kiosk while showing **GREEN** on the traffic signal and Stop/Go Remotes.
2. Driver pulls the truck fully onto the scale and stops the truck next to a kiosk.
3. System will display *Enter Truck ID or Scan Tag* once the scale weight exceeds the **Threshold Weight** and the **Drive On Delay** has timed out. Both traffic signals will change to **RED**.



Note Both photo eye inputs must also be activated showing that the truck is clear of the photo eyes. This feature may be **DISABLED** in the setup Menu. If blocked the prompt goes away and displays – “Photo Eye Blocked”.

4. Driver enters the ID with the numeric keypad or scans the HID RF tag.
5. System queries the **Truck** database table with the entered ID/or scanned RF Tag and performs one of the following actions:

ID FOUND

- Captures the stable weight.
- Recalls the inbound stored weight and calculates the net weight.
- Prints an Outbound ticket on the kiosk that initiated the process.
- Adds a new record to the **Trans** database table.



Note When memory is full, the system automatically deletes the oldest 25% of data.

- Displays *Outbound Complete – Exit Scale*.
- Increments the **Ticket Number**.
- Deletes the inbound truck from the **Truck** database if **Stored Tare** is disabled. If enabled, system updates the inbound truck tare with the Inbound stored weight.
- Reprint option is available until the truck exits the scale.

ID NOT FOUND

- Captures the stable weight
- Adds a new record to the **Truck** database table.
- Prints an Inbound Ticket on the kiosk that initiated the process.
- Displays *Inbound Complete – Exit Scale*.
- Reprint option is available until the truck exits the scale.

6. Both traffic signals on the scale are changed to **GREEN** until the weight drops below **Threshold Weight**.

2.2 Processing a Truck with Loop Detectors

1. System displays **Waiting to Zero** on both the **Inbound** and **Outbound** kiosk while showing **RED** on the traffic signal and Stop/Go Remotes.
2. Driver pulls the truck onto the approach and parks on one of the loops.
3. System zeros the scale, displays **Enter Scale** on both the **Inbound** and **Outbound** kiosk, and shows **GREEN** on the traffic signal and Stop/Go Remotes.
4. Driver pulls the truck fully onto the scale and stops his truck next to a kiosk. If the driver does not exceed the **Threshold Weight** before the **Loop Enter Scale Time** the system goes back to STEP 1.
5. System displays **Enter Truck Id** or **Scan Tag** once the scale weight exceeds the **Threshold Weight** and the **Drive On Delay** has timed out. Both traffic signals will change to **RED**. Both photo eye inputs must also be activated showing that the truck is clear of the photo eyes. This feature may be disabled in the Setup Menu. If blocked, the prompt goes away and displays **Photo Eye Blocked**.
6. Driver enters his Id with the numeric keypad or scans his HID RF tag.
7. System queries the **Truck** database table with the entered ID/or scanned RF Tag and performs one of the following actions:

ID FOUND

- Captures the stable weight.
- Recalls the inbound stored weight and calculates the net weight.
- Prints an Outbound ticket on the kiosk that initiated the process.
- Adds a new record to the **Trans** database table.



Note When memory is full, the system automatically deletes the oldest 25% of data.

- Displays – “Outbound Complete – Exit Scale”.
- Increments the **Ticket Number**.
- Deletes the inbound truck from the **Truck** database if **Stored Tare** is disabled. If enabled system updates the inbound truck tare with the Inbound stored weight.
- Reprint option available until the truck exits the scale.

ID NOT FOUND

- Captures the stable weight.
 - Adds a new record to the **Truck** database table.
 - Prints an Inbound Ticket on the kiosk that initiated the process.
 - Displays **Inbound Complete – Exit Scale**.
 - Reprint option available until the truck exits the scale.
8. Both traffic signals on the scale are changed to **GREEN** until the weight drops below **Threshold Weight**.
 9. Both traffic signals on the scale are changed to **RED**.
 10. System delays for the **Loop Exit Delay** (ignoring the loop detectors) before it starts to monitor both the loop detectors.

3.0 Serial Communications

3.1 Inbound Kiosk

3.1.1 Weigh Ticket In (Auxfmt1) – Weigh In on Inbound

The ticket will be transmitted out Port 7 to an EU-T482. The format can be modified through the 920i front panel or using a PC application called *i-Rev*.

| |
|---------------------------------|
| Truck Id 21 |
| Gross Weight 5540 lb |
| 01:33PM 05/22/2012 |

Figure 3-1. Weigh In on Inbound Kiosk

3.1.2 Weigh Ticket Out (Auxfmt 2) – Weigh Out on Inbound

The ticket will be transmitted out Port 7 to an EU-T482. The format can be modified through the 920i front panel or using a PC application called *i-Rev*.

| |
|-----------------------------|
| Ticket 1 |
| Truck Id 21 |
| Gross Weight 8600 lb |
| Tare Weight 5540 lb |
| Net Weight 3060 lb |
| Inbound 01:33PM 05/22/2012 |
| Outbound 01:34PM 05/22/2012 |

Figure 3-2. Weigh Out on Inbound Kiosk

3.2 Outbound Kiosk

3.2.1 Weigh Ticket In (Auxfmt1) – Weigh In on Outbound

The ticket will be transmitted out Port 7 to an EU-T482. The format can be modified through the 920i front panel or using a PC application called *i-Rev*[™].

| |
|----------------------|
| Truck Id 21 |
| Gross Weight 5540 lb |
| 01:33PM 05/22/2012 |

Figure 3-3. Weigh In on Outbound Kiosk

3.2.2 Weigh Ticket Out (Auxfmt 2) – Weigh Out on Outbound

The ticket will be transmitted out Port 7 to an EU-T482. The format can be modified through the 920i front panel or using a PC application called *i-Rev*.

| |
|-----------------------------|
| Ticket 1 |
| Truck Id 21 |
| Gross Weight 8600 lb |
| Tare Weight 5540 lb |
| Net Weight 3060 lb |
| Inbound 01:33PM 05/22/2012 |
| Outbound 01:34PM 05/22/2012 |

Figure 3-4. Weigh Out on Outbound Kiosk

3.3 Ethernet Settings (if applicable)

| | UDS2100 00-20-4A-E6-4B-74 | | PC |
|--------------|---------------------------|--------------------------|---------------|
| IP | 192.168.1.1 | | 192.168.1.X |
| Subnet | 255.255.255.0 | | 255.255.255.0 |
| Gateway | 0.0.0.0 | | 0.0.0.0 |
| Local Port | 10001 | 10002 | |
| Remote Host | X.X.X.X | 0.0.0.0 | |
| Remote Port | 0 | 0 | |
| Connect Mode | C1 (With Any Character) | C1 (With Any Character) | |
| Flush Mode | Yes | No | |
| Pack Ctrl | Disabled | Disabled | |
| Dis Con | No (Hard Disconnect=Yes) | No (Hard Disconnect=Yes) | |
| Send Char | Default | Default | |

Table 3-1. Ethernet Settings (Test Settings)



Note

If a wireless card is being used, all of these parameters are needed, **PLUS** the SSID of the access point or router being used for wireless communication. Any security settings would also need to be set.

The database editor portion of *iRev* can also be used to perform database maintenance.

4.0 Modifying the Database Tables

A PC program called iNterchange can be used by the end-user to upload, export and clear the database tables. The exported file may be saved as a delimited text file, an Excel spreadsheet, or as a XML document. *i-Rev* is another option to do database maintenance.

4.1 Application Setup & Configuration

The Setup Menu softkey is password-protected and offers access to the following:

- Display Program Name & Version
- Display a weight widget

| Parameter | Default | Softkey | Description |
|---|--------------|-----------------|---|
| System Time and Date (BOTH KIOSKS) | Current | Time/Date | Time and date of 920i |
| System Password (BOTH KIOSKS) | "" | NA | Changing the password that is required for entry into the Setup menu. Setup the password to nothing will cause the system to not prompt for a password when the [Setup Menu] softkey is pressed. Stored to Setups Database. |
| Ticket Number (OUTBOUND KIOSK) | 1 | NA | Sequential number assigned to each outbound weighment. Stored to Setups Database. |
| Threshold Weight (OUTBOUND KIOSK) | 5000 lb | NA | Minimum amount of weight to change the traffic lights. Stored to Setups Database. |
| Drive On Delay (OUTBOUND KIOSK) | 15.0 seconds | NA | Time delay after the threshold is exceeded for lights turn red and system prompts. Stored to Setups Database. |
| Clear Trucks Database (OUTBOUND KIOSK) | - | Trucks Regs | Standard Truck Regs softkey. |
| Stored Tare (OUTBOUND KIOSK) | OFF | NA | Option to keep inbound records after outbound weighment (when set to Yes) or delete them. |
| Stop/Go Remote Display (OUTBOUND KIOSK) | ON | NA | Toggle on and off traffic light control. Streaming will still need to be configured in the 920i configuration. |
| Digital IO Testing (OUTBOUND KIOSK) | | Digital IO Test | Ability to turn on/off Green and Red Lights. |
| USB Upload/Download (BOTH KIOSKS) | - | USB Options | 920i standard USB softkey. Please reference the 920i Installation manual for more details (920i USB required). |
| Contrast Key (BOTH KIOSKS) | - | USB Options | 920i standard Contrast softkey. Please reference the 920i Installation manual for more details (920i USB required). |
| Clear Transactions (OUTBOUND KIOSK) | | USB Options | Ability to clear the Trans database. |

Table 4-1. Application Setup and Configuration Parameters

4.2 Database Table

4.2.1 Inbound Kiosk

This kiosk does not utilize a database.

4.2.2 Outbound Kiosk

Built In Truck Database



Note System only uses the Truck database for weight storage. None of the standard RLWS truck program is supported in this user program.

| Field | Type | Description |
|----------|----------|---|
| ID | String | Alphanumeric truck identifier – 16 characters |
| Pri_Wgt | Real | Inbound weight in primary units |
| Sec_Wgt | Real | Inbound weight in secondary units (Currently Not Used) |
| Ter_Wgt | Real | Inbound weight in tertiary units (Currently Not Used) |
| TimeDate | DateTime | Time and date of inbound weighment (Currently Not Used) |
| Scale | Byte | Scale number (Currently Not Used) |
| Keyed | Byte | Keyed Tare (Currently Not Used) |

Table 4-2. Truck (“Truck”) Database Table 1,000 Records

| Field | Type | Description |
|-------|----------|------------------------------|
| ID | Integer | ID |
| GWgt | Real | Gross Weight |
| TWgt | Real | Tare Weight |
| NWgt | Real | Net Weight |
| DT | DateTime | Date and Time of Transaction |

Table 4-3. Transactions (“Xaction”) Database Table 900 Records

| Field | Type | Description |
|---------|---------|---------------------|
| sType | String | Variable Type |
| sPrompt | String | Variable Name |
| iPos | Integer | Position in Display |
| iVal | Integer | Integer Value |
| rVal | Real | Real Value |
| sVal | String | String Value |

Table 4-4. Setup (“Setup”) Database Table 12 Records - ONLY TO BE EDITED BY RLWS

5.0 Hardware Setup

5.1 Inbound Kiosk

| Option Card Locations | |
|-----------------------|-------------------------------------|
| Slot | Type |
| 1 | Dual Channel Serial Card |
| 2 | 1 Meg Memory Card (not used) |
| 3 | Single Channel A/D Card (not used) |
| 4 | Dual Channel Serial Card (optional) |

Table 5-1. Option Card Locations

| Digital I/O | | | |
|-------------|-----|------|--------------------|
| Slot | Bit | Type | Function |
| 0 | 1-6 | Off | Currently Not Used |

Table 5-2. Digital I/O

| Serial Port | | | |
|-------------|-----------------|--|--------------|
| Port | Type | Description | Setup |
| 1 | Programmability | HID RF tag reader | 57600,8,E,2 |
| 2 | CMD | iRev or QWERTY or Ethernet UDS2100 | 115200,8,N,2 |
| 3 | Programmability | Numeric keypad | 9600,8,N,2 |
| 4 | CMD | Currently Not Used | 9600,8,N,2 |
| 5 | CMD | Epson EU-T432 printer | 9600,8,N,2 |
| 6 | CMD | Kiosk-to-Kiosk interface ECHO & RESPONSE OFF | 9600,8,N,2 |
| 11 | CMD | Optional Stop & Go Remote Display by default not set to streaming | 9600,8,N,2 |
| 12 | CMD | Optional Stop & Go Remote Display by default not set to streaming | 9600,8,N,2 |

Table 5-3. Serial Port

5.2 Outbound Kiosk

| Option Card Locations | |
|-----------------------|-------------------------------------|
| Slot | Type |
| 1 | Dual Channel Serial Card |
| 2 | 1 Meg Memory Card |
| 3 | Single Channel A/D Card |
| 4 | Dual Channel Serial Card (optional) |

Table 5-4. Option Card Locations

| Digital I/O | | | |
|-------------|-----|-----------------|----------------------|
| Slot | Bit | Type | Function |
| 0 | 1 | Output | Green Traffic Signal |
| 0 | 2 | Output | Red Traffic Signal |
| 0 | 3 | Programmability | Photo Eye 1 |
| 0 | 4 | Programmability | Photo Eye 1 |
| 0 | 5 | Programmability | Loop Detector 1 |
| 0 | 6 | Programmability | Loop Detector 2 |

Table 5-5. Digital I/O

| Serial Port | | | |
|-------------|-----------------|--|--------------|
| Port | Type | Description | Setup |
| 1 | Programmability | HID RF tag reader | 57600,8,E,2 |
| 2 | CMD | iRev or QWERTY or Ethernet UDS2100 | 115200,8,N,2 |
| 3 | Programmability | Numeric keypad | 9600,8,N,2 |
| 4 | CMD | Left blank for iQube2 (RS485) by default not configured | 9600,8,N,2 |
| 7 | CMD | Epson EU-T432 printer | 9600,8,N,2 |
| 8 | CMD | Kiosk-to-Kiosk interface ECHO & RESPONSE OFF | 9600,8,N,2 |
| 11 | CMD | Optional Stop & Go Remote Display by default not set to streaming | 9600,8,N,2 |
| 12 | CMD | Optional Stop & Go Remote Display by default not set to streaming | 9600,8,N,2 |

Table 5-6. Serial Port

6.0 Version Updates

| Version | Changes | Date | WO | Firmware |
|--|-----------------|------------|-----|----------|
| 1.00 | Initial Release | 10/24/2012 | XXX | 5.06 |
| Download: <input checked="" type="checkbox"/> SC = Standard Configuration <input checked="" type="checkbox"/> PF = Print Formats <input checked="" type="checkbox"/> SP = Setpoints <input checked="" type="checkbox"/> W = Widgets <input checked="" type="checkbox"/> DB = Database Tables <input checked="" type="checkbox"/> COD = Program | | | | |

Table 6-1. Version Updates

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