



## WIN-LC3000 | Silo Loadout System

NTEP Certified product designed to accurately control truck loading, print delivery tickets, store delivery data, and print operational reports.

### Operational Features .....

- For reverse weigh or weigh batcher configurations, each silo can have a separate scale.
- Supports silos with two-speed or “dribble” gates. Dribble gates can increase loading accuracy.
- User specified Smart Default data entry automatically enters the customer, job, and task descriptions as last used by the selected truck or as used on the last ticket. No other data fields need to be entered unless changes need to be made.
- Fast Copy feature allows rapid and accurate data entry when multiple trucks are hauling to the same job by copying all of the data from any user selected ticket to the current load.
- Pop-up ticket, truck, customer, job, and material/mix lists allow the operator to browse through the data on file, edit the data, add new, or delete unwanted entries directly from the loadout display form without interrupting the loadout process.
- Entering a misspelled truck, job, or customer opens the appropriate list, searches for the nearest spelling match, and allows the user to select from this list or enter a new item.
- Measurement units can be specified as English lb., tons, metric kg, metric mgms, or tonnes.
- The freefall compensation is adjusted on each drop. Individual freefall values are maintained for each silo. The target drop size is also adjusted to correct for previous drop errors. These dynamic adjustments insure accurate drops and prescribed loads.
- Time coded truck tares are entered into the truck file every time a new tare weight is obtained. On *truck scale* systems, the tare weight is automatically read and updated before each load. On *weigh batcher* or *reverse weigh* systems, the truck tare weight may be entered manually.
- Gob hopper timing on *reverse weigh* silos may be controlled externally or by the computer.
- Each silo can utilize an independent remote kiosk printer or silos can share a printer.
- Starved loads may be restarted from the same silo or from a different silo containing the same/different material.



### Silo Inventory .....

- Silo inventories are displayed in graphic and numerical form.
- *Truck Scale* and *Weigh Batcher Systems*—an external signal from most process blending systems can be used to increment an on-screen inventory that will be reduced by the amount weighed out of the silo. The resultant inventory value will give the operator a fair approximation of the actual amount of material in the silo.
- *Reverse Weigh Systems*—the actual measured silo weight is used for the current inventory.



**Tickets .....**

- Cash sale tickets can be generated for mix shipped. Each individual material has its own price which can be modified at the time of sale to include freight charges for different delivery zones. The sales tax rate may be changed at time of sale for areas with different tax rates.
- Hand generated tickets can be entered and will be included in the data base. Tickets generated in this manner will be clearly marked as such.
- Manually loaded truck tickets can be automatically generated.
- Correction tickets can be generated, stored, and/or printed as desired. The information on the original ticket is changed while change history is retained in a non-editable database. Change reports are readily available. The operator can not alter the stored database of information by any other method.
- Copies of previous tickets can be printed. Copies are clearly marked as such.
- The silo loadout identifies the measurement units selected in the weighing unit and prints the ticket in English and/or Metric units as specified by the operator.
- Full featured ticket printing using up to 5-part preprinted or plain paper forms.
- A printer buffer allows data to be entered while tickets are simultaneously printing.
- User selected speed printing minimizes printer wear and maximizes printer output.
- The number of ticket copies sent to in-house printer can be adjusted independently of (optional) outdoor printer.
- Tickets pertinent to the current job are displayed on-screen, while archived tickets stored in the database and are readily available for printing/reporting.

**Data Files .....**

- Ticket file retains the entire ticket record and is available for viewing or printing. Tickets may be archived, so that only current tickets needed remain online. Archived tickets may be recalled and included in reports.
- Truck file retains the latest truck loading parameters.
- Job file—Up to 100 characters for name/ID and 4 lines of 35 characters per job description.
- Customer file— Up to 100 characters for name/ID and 4 lines of 35 characters per customer description.
- Material file— Up to 100 characters for material descriptions with separate price for each material.
- Data files are maintained in accounting standard MS™ SQL SERVER DBMS format and are available to the user.

**Database Backup and Reports .....**

- A back-up of the entire database can be saved to the hard drive, to floppy diskettes, or delivered off-site by *optional* Internet or modem connection.
- Summary or detailed reports can include current and archived ticket data, can be sorted by truck, job, customer or material, and can be limited to a user specified range of dates.



- Reports can be printed to the printer or viewed on-screen.
- Custom reports are available.

#### **Hardware Components .....**

- Computer system—industrial grade, fanless PC.
- Programmable Controller—optionally isolated PLC plant interface. The operating temperature for the included PLC(s) is 32° to 131° F (0° to 55° C). The storage temperature for the PLC(s) is -4° to 158° F (-20° to 70° C).
- Video Display—low glare, flat screen, 1920x1080 LCD color monitor.
- Printer—IBM compatible, Okidata Model 320.
- Digitizer—stand alone, NTEP certified, Rice Lake Model 355 commercial grade weight indicators isolate the weighing and data processing functions for maximum reliability and ease of calibration. Meets NIST's Handbook 44 Class III/IIIL classifications. **Note: standard indicator is capable of driving (16) sixteen 700 ohm analog loadcells. Existing digital loadcells may be accommodated with manufacturer supplied indicator software modifications.**

#### **Optional Add-On Features for WIN-LC3000 Model .....**

- Custom reports and custom ticket formats.
- A bar code of key delivery data can optionally be printed on the tickets.
- File conversion utility program to convert older SYSTEMS' LC1000 and LC2000 Loadout system database.
- License plate photo capturing—prevents transaction denial.
- Ticket signature pad—for digital storage of driver signatures.
- Material temperature capturing at time of load—for project specific requirements.
- Loading traffic light director – fires appropriate lane light at the end of the load based on commands sent from the loadout computer.
- Remote printer options:
  - Small receipt printer for mounting in customer supplied enclosure.
  - Thermal printer mounted in weathertight enclosure with cooling fan.
  - Other Windows®-compatible printers can be utilized.
  - Different ticket formats can be used at each print location.
- Interface provided for most industry standard indicators/protocols. In the event one is not available, custom indicator drivers are available.

#### **SAFETY NOTICE & WARRANTY DISCLAIMER**

*All equipment is tested for proper operation before shipping from the factory. Although no difficulty is typically expected, SYSTEMS cannot guarantee and will not warrant that this product will function safely and as described, if equipment is replaced by others, if additional equipment or software is installed, or if this equipment is used for other purposes.*



**SYSTEMS**  
Equipment Corporation

#### WIN-LC3000 OPTIONAL ADD-ONS:

##### **WIN-LC3000.15 | License Plate Photo Capture**

*Provides proof of transaction by shooting a time- and date-stamped photo of truck license plate and storing it in the loadout system database.*

- Industrial 2-megapixel network bullet camera for outdoor surveillance.
- Auto-iris capability protects the lens from damage induced by direct sunlight.
- Furnished with removable IR-cut filter and IR illuminators for superior image quality, day and night.
- IP67-rated housing protects against rain and dust to ensure reliable operation in all weather conditions.
- Equipped with a mounting bracket that conceals all cables within the bracket to prevent vandalism.



##### **WIN-LC3000.25 | Signature Pad**

*Enhances transaction management by storing driver's digital signature for retrieval in the event of a transaction dispute.*

- 4-inch screen fits even the longest signatures.
- Backlight ensures that even in low light, pad is effortless to use.
- Built-in AES encryption, RSA signaling and signature biometrics keep every signature secure.
- Scratch-resistant surface.
- USB line driver hardware is included.
- Customer supplies CAT5 interconnection cable.







### **1292N | Material Temperature Capture (Shipped Loose)**

Non-contact infrared temperature measurement at time of load provides a tool to determine when burner temps should be adjusted to assure that asphalt is application-ready when it is delivered. Also provides documentation for state inspectors that mix meets project specific requirements.

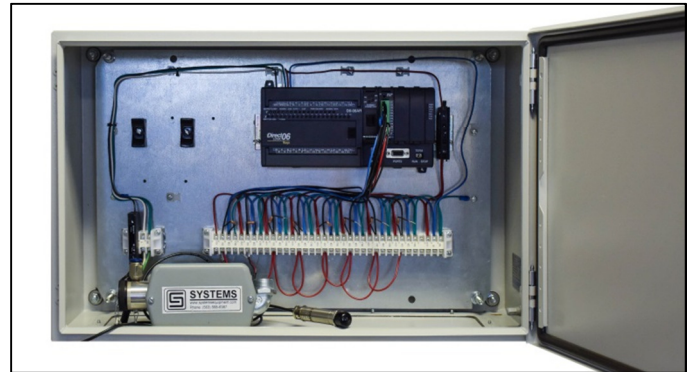


- Includes PLC, Analog Module, Ethernet Module, and one Temperature Probe Assembly for one silo.
- Infrared probe assembly measures approx. 4 1/2" h x 3" w x 3" d.
- Additional silo(s) require purchase of additional 1293 Infrared Temperature Probe(s)
- For each probe assembly, customer must supply necessary length of 2-conductor, 18 ga. Shielded Belden cable for a 4-20 mA signal.



### **1292 | Material Temperature Capture (With Enclosure for PLC and Modules)**

- Includes PLC, Analog Module, and Ethernet Module housed in 15" x 25" x 8-3/4" enclosure. Also includes a Temperature Probe Assembly for one silo.
- Infrared probe assembly measures approx. 4 1/2" h x 3" w x 3" d.
- Additional silo(s) require purchase of additional 1293 Infrared Temperature Probe(s)
- For each probe assembly, customer must supply necessary length of 2-conductor, 18 ga. Shielded Belden cable for a 4-20 mA signal.



### **1293 | Temperature Probe Assembly**

- Includes one Temperature Probe Assembly for one silo. One assembly is included with 1292 or 1292E. Additional assemblies must be purchased – one per silo – for systems of two silos or more.
- Infrared probe assembly measures approx. 4 1/2" h x 3" w x 3" d.
- For each probe assembly, customer must supply necessary length of 2-conductor, 18 ga. Shielded Belden cable for a 4-20 mA signal.

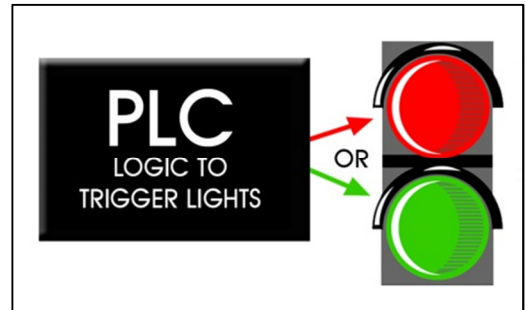




### **WIN-LC3000.50 | Loading Traffic Light Director**

*Helps ensure trucks will be correctly positioned beneath silo and have a clear signal when load is complete. Keeps traffic flow efficient and steady.*

- PLC that fires appropriate lane light at the end of the load based on commands sent from loadout computer.



### **Model WIN-LC3000.40 or LC3000.60 High-Intensity Scoreboard Display**

*Prominently displays weight and numeric data as trucks are loaded. Drivers can compare real-time displayed data against loadout print tickets to ensure load details are consistently recorded.*

- High-intensity display features either 4" or 6" bright red characters in double-row discrete LED for high visibility. Four annunciators for gross, net, lb, and kg.
- Hold displayed weight (demand input).
- Optional stand still mode; no updates while in motion.
- Durable weather-tight enclosure.
- Adjustable daylight/night intensity.
- Non-glare contrast filtered lens.
- Mirror function.





### LC-PRT/2 | Remote Receipt Printer

- One station, impact, dot matrix, point of sale style receipt printer.
- Example of printed ticket shown. Custom ticket available at additional cost.
- Drop-in and print paper loading.
- Print speed of 5.3 lines per second.
- 3" wide roll fed paper with "auto-cutter" feature at 1,200,000 cut life.
- Multiple copy capable using 1 original + 2 pressure sensitive copies.
- Easily replaceable ribbon cassette.
- 32° to 122°F operating temperature at 10-90% RH.
- 120 volt, 60 hertz AC adapter.
- Internal power supply.
- Transmit and receive non-powered RS-232 short haul modems allow separation distances of up to 4,000 ft.
- 18-4, twisted pair shielded interconnecting cable and optional quick disconnects are not included.
- Directly compatible with SYSTEMS' Model Loadout Systems.



### SAMPLE TICKET

```
=====
                SYSTEMS Paving
                903 Third Avenue SW
                Waukon, IA 52172

                COPY TICKET

08:26   10/26/12   #00993-1

Job Name: HWY 52
Project:

Product ID: TEST
Descript 1:
Descript 2:

Pit ID:   Operator Name
Truck ID: ANY

GROSS WT: 55,180 Lbs   25,029 Kgs
TARE WT:  15,840 Lbs   7,184 Kgs
NET WT:   39,340 Lbs  17,844 Kgs

TONS THIS LOAD: 19.67 SHORT TONS
                17.84 METRIC TONS

MIX TOTAL TODAY: 19.67 SHORT TONS
                17.84 METRIC TONS

MIX LOADS TODAY: 1

MIX TOTAL ACCUM: 19.67 SHORT TONS
                17.84 METRIC TONS

                Certified Scale
=====
```