VEHICLE SERVICE Dispensing Systems

Lincoln’s LFC Family of Fluid Inventory Control and Management Systems

Finally a complete offering of systems to meet the varying needs of vehicle service centers! Each system offers increased control over the authorization, management and recording of fluids used to service the growing fleets of private and commercial vehicles.

- **LFC 5000**
  - Ethernet network
  - With PC, tank monitoring and high-flow capabilities
- **LFC 5000**
  - 802.11b wireless network
  - With PC, tank monitoring and high-flow capabilities
- **LFC 5000**
  - Entry-level setup
  - Small shop with simple inventory control needs
- **LFC 2500**
  - Completely wireless
  - PC-enhanced ability to keypad authorization through electronic control meter
- **LFC 2000**
  - Completely wireless
  - Ticket printing dispense keypad authorization through electronic control meter

- Complete system source: controls, pumps, reels
- Choice of three unique systems to meet your specific control level management need
- The latest technology of wired and wireless communication protocol
- Supervisor and operator levels of security let you decide who can use, program and monitor the system
- Manage up to 32 fluids and 300 dispense locations with a single modular system
- PC interface packages offer enhanced set-up, control and reporting capabilities

More Patents on Lubrication Equipment Than Any Other Manufacturer
PROVIDING TOTAL LUBRICATION SOLUTIONS FOR VEHICLE SERVICE FACILITIES

- Professionals choose Lincoln for all their lubrication equipment requirements.
- Founded in 1910, Lincoln continues to be the worldwide leader in lubrication equipment.
- From simple to highly sophisticated installations, our solutions include all the necessary components.
- Lincoln has been awarded more patents than any other company in the vehicle service industry.
- Our products are found everywhere lubrication is needed to extend the life of a machine. Vehicle service, mining, industrial, wind power, railroad, construction, agriculture and over-the-road trucking applications all benefit from Lincoln products.
- This brochure depicts a sampling of our vast product line. Contact us for a specific bill of material designed for your maintenance facility.
THE BRAND THE PROS DEMAND
**LFC 5000 IS HIGH-END**

**Versatile and Dependable Fluid Inventory Control and Management System**

- Simultaneously control, dispense and monitor up to 300 locations using modular, “building block” system components
- Create reports by product, user, customer or location and monitor stock level with standard software package
- Assign degrees of system access and control with 3 distinct security code levels
- Enhanced set-up, control and report capability with PC software
- Assured dependability and reliability with components designed specifically to “live” in the shop floor environment
- Advanced system set-up allows for 200 different operators, and the capability to store unlimited transactions

**FIRST FLUID INVENTORY CONTROL SYSTEM TO USE MECHANICS’ PCS AS SYSTEM KEYPAD (VIRTUAL KEYPADS)**
The LFC 5000 wired system is based on an Ethernet network. Ethernet is the new standard that allows for easy, fast and 100% reliable communication which is key when the control system is interfaced with a dealer management system. Wire required for an Ethernet system can be purchased at just about any hardware store. The connections are easy; simply plug each keypad and dispense unit into each other with the Cat 5 Ethernet cable.

**Communications Network Options**

**LINCOLN PERSONAL NETWORK (LAN):**
- Incorporates an additional network card to the master PC
- The preferred installation method that isolates the Lincoln network from the site’s network

**COMBINED NETWORKS:**
- Requires bridging the Lincoln network to the sites network by plugging the Lincoln network cable into the nearest site LAN data port

**INTEGRATED LINCOLN NETWORK:**
- This option can be used when a site has available network data connections throughout the shop
- In this configuration each Dispense Unit is plugged into the facilities existing network data ports. Each keypad is plugged into the nearest Dispense Unit
An LFC 5000 system is always hard wired from the solenoid and pulse meter to the dispense unit. Wireless network capabilities are available for the dispense units and keypads. Lincoln uses WiFi as the wireless protocol (802.11b) which is the fastest and most mature protocol that easily integrates into a Local Area Network.

A wireless adaptor can be added to every dispense unit and physical keypad allowing them to communicate to a system’s wireless access point(s).
If your shop has a need for both high-flow and standard-flow components

Lincoln has all the components to control and monitor high-flow application with the LFC 5000. Use with Lincoln’s reliable PMV pumps and the heavy-capacity hose reels to create a system allowing ratings up to 15 GPM and 800 psi to service large vehicles quickly and efficiently.

**HEAVY-DUTY, HIGH-CAPACITY HOSE REELS FOR LIGHT-, MEDIUM-, AND HEAVY-VISCOSITY LUBRICANTS**

- Hose choices from 50’ to 75’ length by 1/2” - 3/4” diameter
- Dual needle roller bearings
- Ball bearing inlet swivel design
- Quick connects on delivery and connecting hoses
- Quarter-inch thick steel welded base and roller outlet arm

**FIRST FLUID INVENTORY CONTROL SYSTEM TO OFFER HIGH-FLOW CAPABILITY**

- 1” High Flow Pulse Meter Model 282925
- 3/4” High Flow Pulse Meter Model 284194
- 1” High Flow Solenoid Model 500065
**LFC 5000: MID-TIER**

Non-simultaneous dispense system that places a pulse meter at each tank and a solenoid at each reel. Setup allows trackability at the hose instead of at the tank.

![Service Bay Diagram](image)

**LFC 5000: ENTRY LEVEL**

Simple non-simultaneous dispense system that places the solenoid and pulse meter at the tank to track all fluids being dispensed from the tank.

![Service Bay Diagram](image)

**FIRST WINDOWS-BASED SYSTEM IN NORTH AMERICA**
LFC5000 INTERFACE OPTIONS

Interfacing with Dealer Management and Fleet Management systems

• Validate up to five unique fields that are configurable in the system setup
• Direct billing to accounting and inventory systems with
  – Five different rounding and pricing methods
  – Export more than 15 fields after each transaction

LFC5000 Can Easily Interface with Your Existing DMS

• Lincoln’s transaction to disk method allows a site to easily adapt their business solution software to validate and directly bill using the LFC5000

FIRST FLUID INVENTORY CONTROL SYSTEM TO INTERFACE WITH DEALER MANAGEMENT SOFTWARE IN THE UNITED STATES
THE LFC 2500 WIRELESS FLUID INVENTORY CONTROL AND MANAGEMENT SYSTEM

• Manage up to 16 fluids and 99 simultaneous dispense locations with a single system
• Easy to install: Attach the dispense valves to the hoses; plug the keypads into a standard 120 VAC outlet. There’s nothing else to connect!
• PC interface for enhanced capabilities and logical network setup
• Mount up to 12 dispense keypads directly in the bays to maximize productivity
• Multi-department communication and control
• Unlimited job stacking allows mechanic to select preloaded repair orders

• Assign special work order number for dedicated oil change bays allowing monitored after-hours fluid dispensing
• Set up the system to match your process—preauthorized or mechanic-controlled dispenses. Both setups manage and record all the dispensed information
• Totally wireless communication directly between keypads and dispense valves—no hard wiring required to install system
• Wide operating wireless band seeks open frequency that minimizes interference at each installation location
• Four standard AA batteries in the dispense valve last up to two years

FIRST WIRELESS RADIO-FREQUENCY FLUID INVENTORY CONTROL SYSTEM IN NORTH AMERICA
THE LFC 2000 WIRELESS FLUID INVENTORY CONTROL AND MANAGEMENT SYSTEM

- Totally wireless communication directly between keypad and dispense valve—no hard wiring required to install system
- Easy to install: Attach the dispense valves to the hoses; plug the keypad into a standard 120 VAC outlet. There’s nothing else to connect!
- Supervisor and operator levels of security let you decide who can use, program and monitor the system
- Manage up to eight fluids and 48 simultaneous dispense locations with a single system
- Built-in ticket printer delivers a written record for each transaction
- Two-way frequency hopping spread spectrum allows the system to seek open channels to minimize interference

FIRST FLUID INVENTORY CONTROL SYSTEM MANUFACTURER TO OFFER ON-SITE INSTALLATION AND START-UP ASSISTANCE
TANK MONITOR SYSTEM

For Dealerships, Fleet and Municipality Garages

- Differential pressure sensors to monitor fluid level in real time
- Float gauges to alarm for high-level alert
- Connects to the PC and/or LFC5000 via Cat 5 ethernet cables
- Plug-in connectors for power, sensors and network
- Can monitor up to five tanks per device. Can plug in 10 controllers for a total of 50 tanks in a system.

For Oil Distributors, Large Tank Farms and Manufacturing Facilities

- Outdoor rated control boxes
- Touch screen monitor capabilities
- Differential pressure sensors and high-level float gauges to measure fluids in real time
- Magnetostrictive probes for greater accuracy and ability sense water in tank
- Monitors up to 40 tanks
- Email alerts