

**Balcrank**®

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**FUSION  
MASTER KEYPAD  
Model 3110-013**



Thoroughly read and understand this manual before installing, operating or servicing this equipment.

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**OPERATION, INSTALLATION,  
MAINTENANCE AND REPAIR GUIDE**

# Disclaimer

The user/purchaser is expected to read and understand the information provided in this manual, follow any listed Safety Precautions and Instructions and keep this manual with the equipment for future reference.

The information in this manual has been carefully checked and is believed to be entirely reliable and consistent with the product described. However, no responsibility is assumed for inaccuracies, nor does Balcrank Products, Inc. assume any liability arising out of the application and use of the equipment described.

Should the equipment be used in a manner not specified by Balcrank Products, Inc., the protection provided by the equipment may be impaired.

## Questions or Service Assistance

If you have questions regarding the product or this document contact:

Balcrank Products, Inc.  
115 Reems Creek Rd.  
Weaverville, NC 28787

Telephone: (828) 645-4261  
(800) 747-5300

Fax: (828) 658-0840  
(800) 763-0840

On the Web: [www.balcrank.com](http://www.balcrank.com)  
or call your local Balcrank Products, Inc. representative.

## Product Identification Information

Record the product identification numbers from the nameplate here.

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Tag Number \_\_\_\_\_ (if applicable)

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## BEFORE YOU BEGIN

### Product Unpacking and Inspection

**NOTE:** *If damage to the shipping container is evident upon receipt, request the carrier to be present when the products are unpacked*

Upon receipt of the products, perform the following unpacking and inspection procedures:

Follow any instructions that may be marked on the exterior. Carefully open the shipping package. Remove all cushioning material surrounding the products and carefully lift the products from the package.

Retain the package and all packing material for possible use in reshipment or storage.

Visually inspect the products and applicable accessories for any physical damage such as scratches, loose or broken parts, or any other sign of damage that may have occurred during shipment.

**NOTE:** *If damage is found, request an inspection by the carrier's agent within 48 hours of delivery and file a claim with the carrier. A claim for equipment damage in transit is the sole responsibility of the purchaser.*

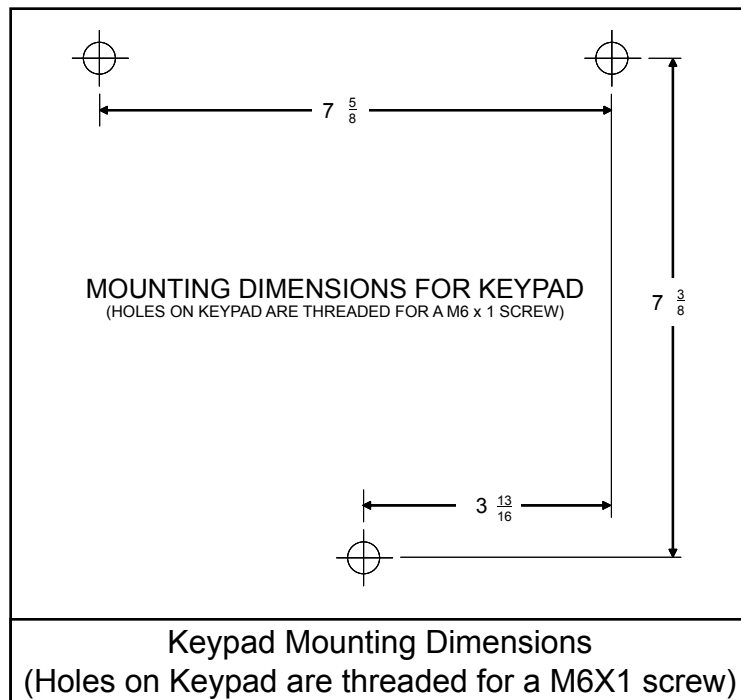
## MOUNTING MASTER KEYPAD

The Master Keypad should be mounted upright with the antenna pointing upward, near a 120VAC electrical outlet.

The Keypad should be mounted to a structurally sound wall using the three holes in the Keypad back plate. Mounting height should be 5 to 6 feet for consistent access.

Care should be taken to avoid mounting the keypad behind any steel objects that may block the RF signals from Hoses/Meters.

Care should be taken to avoid direct, significant, heat sources.



**NOTE:** Master Keypad should *not* be mounted within 20 feet of a Dispense Keypad.

### Specifications

Power Requirements: 120VAC 50/60Hz

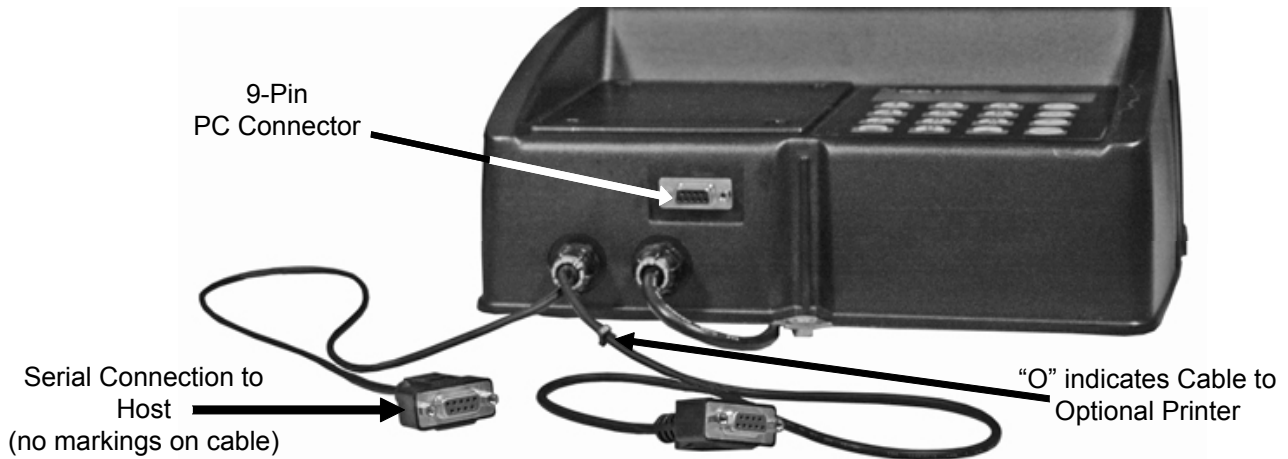
RF Communications: 2-way, 902-928MHz Frequency Hopping Spread Spectrum per FCC

Operating Temperature: 14° F to +140° F (-10° C to +60° C)

**FCC ID: GIF-RF KEYPAD  
FCC CERTIFIED, PART 15, SUB-PART C**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# MASTER KEYPAD CONNECTIONS



There are two nine-pin cables on the bottom of the Master Keypad.

The cable without any markings is the Serial Connection to the Host.

The cable marked with an “O” is for connection to an Optional Printer.

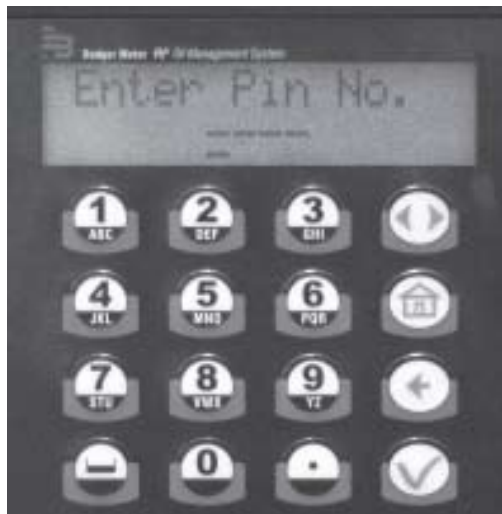
There is a nine pin connector on the bottom of the Master Keypad for connection to the PC. An AC cord is also attached here.

## Connections

<u>Master Keypad Plugs (9-pin) RS-232</u>	<u>Host or PC Plug (9-pin) RS-232</u>
Pin No. 2 (TXD) .....	Pin No. 3 (RXD)
Pin No. 3 (RXD).....	Pin No. 2 (TXD)
Pin No. 7 (GND) .....	Pin No. 7 (GND)

Maximum cable length:     at 1200 Baud = 492 feet (150m)  
   at 9600 Baud = 328 feet (100m)

## Description of Central Control Keypad Keys



Keypad Screen

Keypad Keys



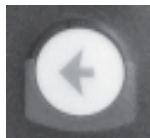
Master Keypad



Scroll Key: Used to select options on the active display



Home Key: Pressing this key returns the display to the default screen display



Backspace Key: Used to backspace when entering data



Enter Key: Used to enter data and move to the next screen



Space Key: Used to enter a space character when entering data



Alphanumeric Keys: Used to enter numbers and letters on the display.

Hold the key down until the desired letter is displayed (approximately three (3) seconds). Then release the key.

## SYSTEM CONFIGURATION

The PC is used to configure the system entities. The system configuration is then sent from the PC to the master keypad which then sends the system configuration to the keypads via RF communications.

The Master Keypad handles the communications management between the PC, Host, and the Dispense Keypads. There are no operator menus associated with the Master Keypad.

The Master keypad provides the date and time stamp for all transactions within the system. It is required that the date and time be set on the Master keypad for accurate tracking.

The Master keypad must also be configured for work order verification and dispense result archiving. The default setting for both functions is performed at the PC.

Work order verification can be done by the PC or host (DMS) system. There is also an optional setting to not verify work orders.

Dispense result archiving can be selected to be done at the PC. If the host protocol is used, the PC can be selected to not archive or can also be used to archive in parallel.

### Default Screen Display



The “Default” screen shows the system date, time, and software version number for information purposes only.

The screen display alternates between the “Default” screen (above) and the “Enter Pin No.” screen (below). The “Enter Pin No.” screen displays for four (4) seconds out of every five (5) seconds.



The “Enter Pin No.” screen is used by the Supervisor to access the system setup screens.

The Supervisor Pin Number is initially 0000 and must be changed from the PC.




## Setting the Time and Date


The Master Keypad provides the time and date stamp for each WO result.

The Time and Date must be set on the Master Keypad before the system can be used.




1. On the Master Keypad enter the Supervisor Pin No. (default 0000) and press the Check box .



2. The cursor will be on INI, press the Check box  to select.



Enter Time screen appears.



1. Enter the time of day in military time. Example: 10:52 for 10:52 a.m. and 13:03 for 1:03 p.m.
2. Press the Check box  to set the time.

Enter Date screen appears.





1. Enter the two (2) digit day of the month.
2. Use the Scroll key  to scroll to the current month.
3. When the current month is displayed, enter the four (4)-digit year.
4. Press the Check box  to set the date.

## CONFIGURATION of WORK ORDER VALIDATION


1. On the Master Keypad enter the Supervisor Pin ID (default 0000) and press Enter 



2. Use the Scroll  key to move the cursor to CNF.

3. Press Enter  to select the CNF menu.




4. Continue to press Enter  until the "WO Valid. Host" screen displays.

Use the Scroll  key to select NO.

Press the Check box .



5. Continue to press Enter  until the "WO Valid. PC" screen displays.

Use the Scroll key  to select YES or NO to have work orders validated from the PC.


Press the Check box .


Press the Home key  to return the display to the default screen.

## CONFIGURATION of DISPENSE RESULTS ARCHIVING


1. On the Master Keypad enter the Supervisor Pin ID (default 0000) and press Enter .




2. Use the Scroll  key to move the cursor to CNF.


3. Press Enter  to select the CNF menu.



4. Continue to press Enter  until the "WO archived" screen displays.

5. With the cursor on None, press Enter .



6. On the "Archive on PC?" screen, with the cursor on YES or NO to have work orders archived on the PC, press Enter .

This configures the Dispense Results Archiving and completes these instructions.

## Balcrank Lubrication Equipment Warranty Statement

All Balcrank equipment sold by authorized Balcrank distributors is warranted to their original customer to be free from defects in materials and workmanship for a period of one year from the date of sale to that customer. Selected Balcrank equipment carries warranty terms for a more extended period as defined in the Balcrank Lubrication Equipment & Accessories User Price List, wherein a "lifetime" warranty represents a warranty period of thirty years. Within the initial one-year warranty period, Balcrank will repair or replace all Balcrank equipment determined by Balcrank to have defective materials or workmanship. For equipment carrying more extended warranties, Balcrank will repair or replace the product including parts and labor during the first full year and will provide parts only for the remainder of the warranty period.

This warranty applies only to equipment installed and operated according to applicable Balcrank Service Bulletins and Installation Instructions.

Any equipment claimed to be defective must be returned, freight prepaid, to an Authorized Balcrank Service Center (ASC). Upon receiving candidate warranty equipment from a customer, ASC will: 1) diagnose to determine the warrantable condition of the equipment, 2) submit, prior to repair or replacement, a request to Balcrank for warranty authorization, then 3) in cooperation with Balcrank, proceed with repair locally or forward the equipment to Balcrank and obtain replacement. If the part(s) or equipment items are found defective upon inspection by Balcrank, they will be repaired or replaced, and then will be returned to the ASC. If Balcrank finds the claimed part(s) or equipment not to be defective, the ASC will receive written authorization from the original customer, and then repair them for a reasonable charge to the customer, which will include all applicable parts, labor, and return transportation costs.

Optionally, the customer may submit certain eligible products directly to Balcrank for warranty return by using Balcrank Lubrication Equipment Direct Service Warranty Procedure. Eligible products are defined in the Balcrank Lubrication Equipment & Accessories User Price List. Refer to the Balcrank web site [www.balcrank.com](http://www.balcrank.com) for a copy.

Any equipment returned to Balcrank must have the Warranty Service Claim number (WSC#) clearly marked on the outside of the carton. Balcrank's sole responsibility is for defects in material and workmanship, and Buyer's sole and exclusive remedy hereunder, shall be limited to repair or replacement of the defective part or equipment.

This warranty does not cover, nor shall Balcrank be liable for repair or replacement of parts or equipment resulting from general wear and tear through use, or damage or failure caused by improper installation, abuse, misapplication, abrasion, corrosion, insufficient or improper maintenance, negligence, accident, alteration, or substitution of non-Balcrank parts.

Furthermore, the Warranty for Lubrication Equipment and Accessories does not cover the following specific conditions:

- Failure or damage to equipment caused by dirt or debris in compressed air lines and fluid lines. This includes, but is not limited to, clogged inlet filters, strainers, or regulators; fluid meters; control handles; fluid tips; and valves.
- Failure of normal wear parts including but not limited to: o-rings, packings, seals and valves unless originally improperly installed by the factory.
- Products placed in applications for which their use was not intended. Examples include but are not limited to Lubricant pump being used to pump solvents, or placing equipment intended strictly for indoor use outdoors
- Damage to equipment resulting from operation above and beyond Balcrank's recommendations.
- Leaks at air and fluid fittings and connections.
- Damage caused by thermal expansion whenever adequate pressure relief was not included in the system.
- Loose suction tubes on pumps.
- Incorrect hose reel spring tension, requiring adjustment.

THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL BALCRANK BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, OR OTHER DAMAGES OF SIMILAR NATURE, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST PRODUCTION, PROPERTY DAMAGE, PERSONAL INJURY, WHETHER SUFFERED BY BUYER OR ANY THIRD PARTY, IRRESPECTIVE OF WHETHER CLAIMS OR ACTIONS, LEGAL OR EQUITABLE, FOR SUCH DAMAGES ARE BASED UPON CONTRACTS, WARRANTY, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE. ANY CLAIM OR ACTION FOR BREACH OF WARRANTY MUST BE BROUGHT WITHIN TWO (2) YEARS FROM THE DATE OF SALE TO THE ORIGINAL CUSTOMER.

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