

WeighVault™ Installation Instructions

Option PN 117358

WeighVault allows users to add, edit, and access IDs over a Ethernet or WLAN network connection. WeighVault surpasses the indicator's onboard ID limitation and eliminates front-panel entry of ID parameters. It also collects data as transactions occur, and provides detailed transaction and productivity reports which can be exported to Excel, Word, or PDF.

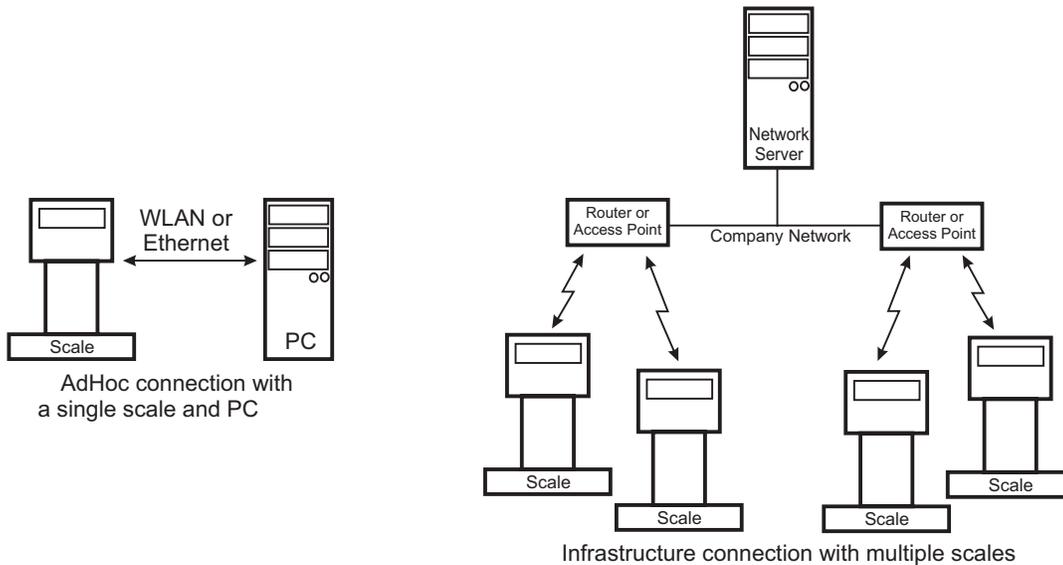


Figure 1. WeighVault possible connections

Requirements

For WeighVault to function, you must meet the following criteria:

- Indicator must be connected to a PC via a wired Ethernet or wireless network.
- The PC running the WeighVault Service must have a static IP address.
- Known IP address and subnet of the host PC; if connecting via WLAN, known network SSID and security settings (pass keys and phrases).
- Specific WeighVault settings must be configured in the indicator's menu.

Ethernet/WLAN Connection

The physical connection between the indicator and a network can be accomplished using:

- Internal Ethernet TCP/IP Interface Option, PN 72117
- Internal WLAN Interface Option, PN 108671
- External RS-232 to Ethernet/WLAN converter

Installing the Internal Ethernet or WLAN Options

NOTE: For detailed instructions, refer to the manuals supplied with the option kits. Perform the installation at an ESD-safe workstation.

1. Disconnect the indicator from its power source.
2. Remove the back cover from the indicator.
3. Remove the plug (if installed) from the larger cord grip to allow installation of the Ethernet WLAN antenna.
4. Remove the Ethernet or WLAN option card from its ESD bag.
5. If installing WLAN, carefully screw the included antenna onto the end of the white RF cable. In addition, set the WiPt/Xcvt switch to the Xcvt position, and place both CFG/LOOP jumpers in the CFG position.
6. Install the 2 plastic standoffs into the two holes on the indicator's CPU board located approximately 1.5 inches to the left of J5.

7. Carefully align the Ethernet / WLAN option card connector with the J5 COMM-OPTION connector on the indicator's CPU board. Press down to seat the card in the connector and the two standoffs.
8. If installing WLAN, position the antenna partway through the largest cord grip so it sticks out below the indicator. In washdown environments, we recommend the antenna joint not be exposed to the environment as the product may become trapped in the joint. In non-washdown applications, the joint should be exposed and positioned to follow the travel of the indicator's tilt direction.
9. If using wired Ethernet, run the Ethernet cable through the cord grip. The connector for the Ethernet cable will have to be installed to the cable after it is inserted through the cord grip. Plug the cable connector into the Ethernet option card.
10. Tighten the cord grip to prevent moisture from entering the indicator.
11. Hardware installation is complete. Do not install the indicator's cover until configuration is complete.
12. If using an external RS232 to Ethernet/WLAN converter, refer to the manufacturer's instructions and wire the converter's TX, RX and GND connections to either port 1 or 2 (J2 or J3) in the CW90/90X.

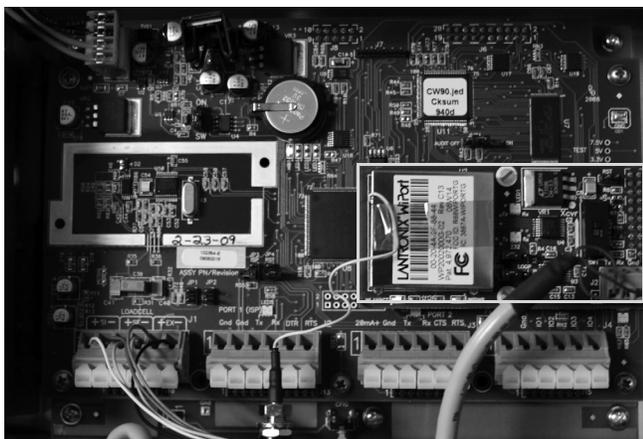


Figure 2. WLAN option card installed in CW-90/90X and RS-232 configuration cable connected

WeighVault service and editor installation

1. Insert the WeighVault DVD (PN 117358).
2. Click Install WeighVault Service for 32-bit or 64-bit, depending on your system type.
3. Follow the on-screen steps until you reach the Database Installer shown in Figure 3.

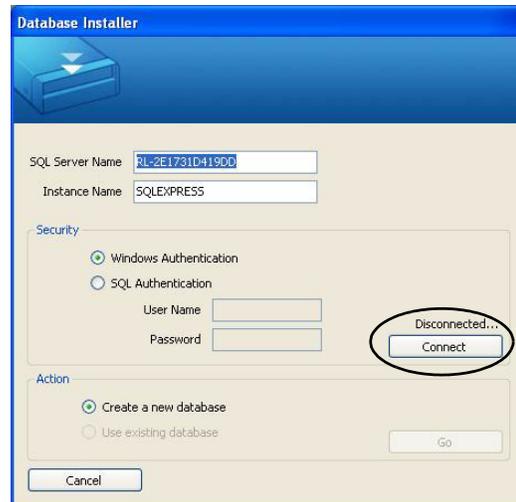


Figure 3. Database Installer screen (disconnected)

4. Click Connect.
5. When the status changes from *Disconnected* to *Connected*, click Go.

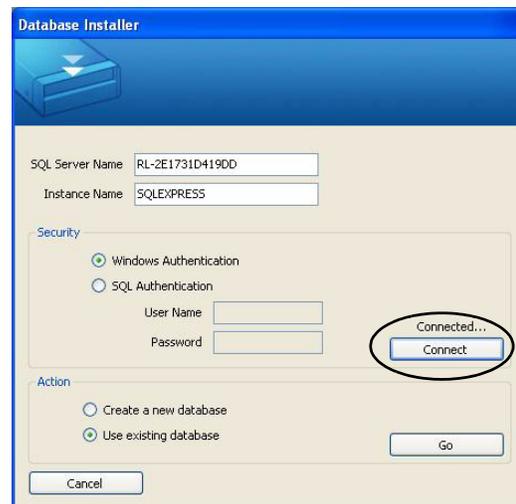


Figure 4. Database Installer screen (connected)

6. Upon successful installation, click Close.
7. Click Install WeighVault Editor for 32-bit or 64-bit, depending on your system.
8. Follow the steps until installation is complete; then, click Close.
9. Restart your PC.



Note

Computer must be restarted for the WeighVault service to load.

Configuring the CW-90/90X

1. From the SETUP menu, navigate to CONFIG » FEATUR » CHKWGH.
2. Set DATA » TYPE to VAULT.
3. Set DATA » PORT to PORT 2 for use with the Internal WLAN option, or PORT 3 for the wired Ethernet option. If using your own External converter, select the port you wired the converter to (PORT 1 or PORT 2).
4. Under the SERIAL menu, the TRIGGE parameter for the port selected must be set to something other than OFF. Choose a parameter based on when the data should be sent to WeighVault.
5. If using multiple CW-90/90X units on the same network, set UID (Unit ID) to a desired identification number. This number will be referenced in WeighVault to identify the unit.
6. Turn the CHKWGH » ID parameter to ON.

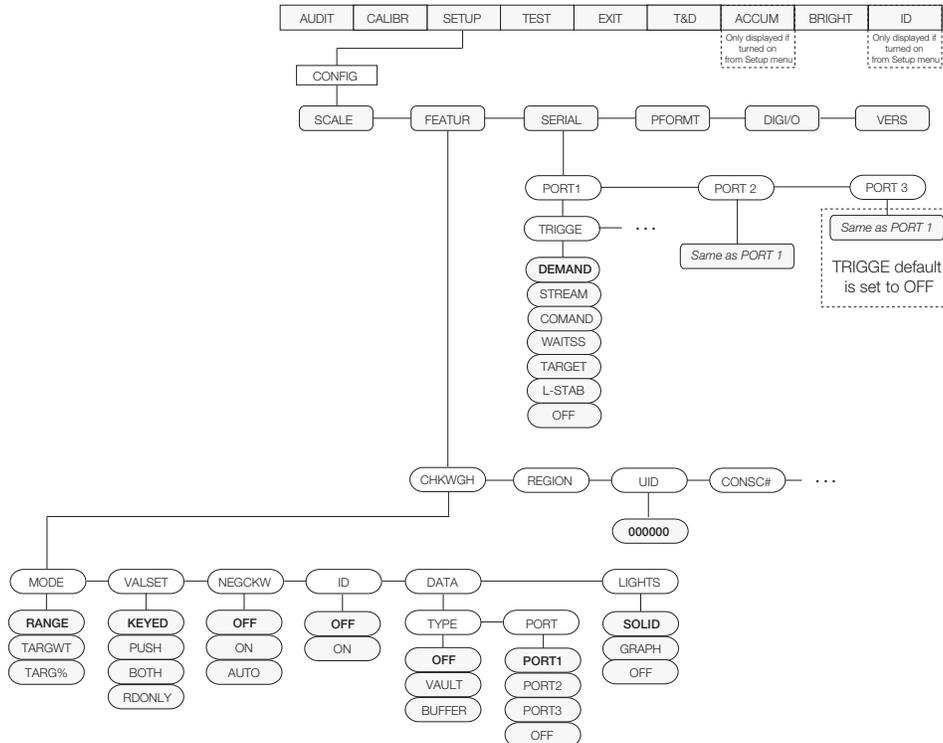


Figure 5. CW-90/90X menu

PC or Server configuration

Indicators communicate with the host PC through TCP Port #9090. In order for this communication to take place, the indicator's Ethernet or WLAN option card needs to know the IP address of the host PC. Therefore, the host will need a static (not dynamic) IP address.

If using a network server, ask your network administrator for the IP address of the server, and confirm the address is static. If using a PC, refer to the instructions supplied with the PC, or Windows, to help you set up the computer with a static IP address.

If your PC or network is running a firewall, it may be necessary to create an exception for TCP Port 9090.

Configuration Internal Ethernet or WLAN Option Cards

The Ethernet or WLAN option card will require specific configuration to work properly with WeighVault. Both option cards can be configured using a network-based Windows application called Device Installer, which is provided on the WeighVault DVD and the CD included with the option card. However, with the WLAN option card, an initial configuration is required via RS-232 before Device Installer can be used.



Configuration of the Ethernet or WLAN option card should be performed by someone familiar with general computer networking, and more specifically, familiar with the network the card is going to attach to. At minimum, you must know the IP address and subnet of the host PC, and if connecting via WLAN, the network SSID and security settings (pass keys and phrases). More detailed configuration instructions are available on the CD and in the manuals provided with the option cards.

Installing Device Installer on your PC

1. Insert the CD included with the Ethernet or WLAN option card and select Install Device Installer. Follow the onscreen instructions.

Initial Configuration of WLAN Option Card via RS-232

The first step required for using the WLAN option card is to configure its Network Type, IP address and subnet, and the SSID and network security settings. Because the card can not connect to the network until these settings are made, it must first be configured through an RS-232 connection and a simple terminal program, such as Hyperterminal, Procomm, or Putty.

1. Connect a PC's RS-232 port to J2 on the WLAN option card. If the PC is equipped with a 9-pin connection, connect pin 3 to J2-TX, pin 2 to J2-RX, and pin 5 to J2-Gnd.
2. Set both CFG/LOOP jumpers to CFG.
3. Using the instructions contained in the manual supplied with the WLAN Option card, set the following parameters:
 - Set the Network Mode to Wireless Only.
 - The IP address you want to assign to the Option Card (can be set with Device Installer). This address must be on the same subnet as the address for the host PC or server.
 - The IP Subnet Mask (can be set with Device Installer).
 - Network type: AdHoc or Infrastructure.
 - Network SSID, or name.
 - Channel Number (if AdHoc only).
 - All required security parameters (i.e., WEP, WPA, associated pass keys or phrases).
4. Save the settings.

The card should now be able to connect to the network. Take note of the *WLANACT* LED on the card. If it is on, or blinking, you do NOT have a connection. If it is off, the connection is successful. You may now use Device Installer to perform the remaining settings.

Ethernet and WLAN Option Card Configuration using Device Installer

1. Start the Device Installer program. Upon opening, the program will search the network for any Lantronix Ethernet or WLAN option cards available.
2. Once it finds your option card, you may select it and perform the following configuration using the Web Browser Configuration Tool:



Please refer to the manual included with the option card, along with the complete Lantronix User Guide provided on the CD, for detailed instructions for configuration of the option card.

- If using the Ethernet Option, you will need to assign the IP address and subnet first.
 - Make the following settings to Channel 1 (Channel 2 if WLAN):
 - Connect Mode to “Connect With Any Character.”
 - Remote Port to “9090.”
 - Remote Host to the IP address of the host PC or Server that is running the WeighVault service.
 - All other settings should remain default, aside from the initial WLAN settings set above.
3. Click OK, then click Apply Settings.

Configuring an External RS-232 to Ethernet or WLAN converter

Rice Lake Weighing System does not directly support third-party converters. If used, the converter must be set up using the manufacturer's instructions. You will need to match the RS-232 settings, as well as set the unit up to initiate a TCP connection to TCP Port 9090 on the WeighVault host any time data is presented by the *CW-90/90X* on the RS-232 side.

After a short period of LAN inactivity, the host will terminate the connection, so the converter will have to reinitiate the connection anytime the *CW-90/90X* requests an ID, or transmits weighment data.

Using WeighVault

The *CW-90/90X* WeighVault system should now be ready to use.

1. Start the WeighVault editor and add an ID to the database.
2. On the *CW-90/90X*, attempt to recall that ID by pressing the ID key, entering the ID number, and pressing Enter.
3. The *CW-90/90X* will scroll a message stating it is loading the ID.
4. If the connection to WeighVault is successful, the message will change to *Loading ID from PC*.

If the connection is not successful, it will respond with *No ID*, or it will load that ID from its local memory, if programmed.

Verify all settings in the *CW-90/90X*, option card, and host PC. Also verify a firewall in the system is not blocking access to port 9090 of the host, and that all wiring is correct.