# Counterpart WeighVault™ Installation Instructions Option PN 125546

WeighVault allows users to add, edit, and access IDs over a Ethernet or WLAN network connection. WeighVault surpasses the *Counterpart*'s 150 ID limitation and eliminates front-panel entry of ID parameters. It also collects data as transactions occur, and provides detailed reports which can be exported to Excel, Word, or PDF.



Infrastructure connection with multiple Counterparts



# **Pre-Installation Checklist**

# **Minimum System Requirements**

- 1.0 GHz Intel compatible processor
- 1 GB of RAM
- 850 MB hard drive space (32-bit) 2 GB hard drive space (64-bit)
- Microsoft Windows® XP SP3 (32-bit), Windows Vista<sup>™</sup> (32-bit or 64-bit) or newer 32-bit or 64-bit Windows operating system
- TCP/IP connections to the indicator

# **Recommended System Requirements**

- 1.0+ GHz Intel compatible processor
- 2 GB of RAM
- 4 GB of hard drive space
- Microsoft Windows® XP SP3 (32-bit), Windows Vista<sup>™</sup> (32-bit or 64-bit) or newer 32-bit or 64-bit Windows operating system
- TCP/IP connections to the indicator

# Network Requirements

- 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)
- Network policy must allow passwords of 10 characters

# **Other Requirements**

- Indicator must be connected to a PC via a wired Ethernet or wireless network.
- 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:

- Onboard Ethernet TCP/IP Interface
- Internal WLAN Interface Option, PN 125495



# Installation

#### **Setting up 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 option cover plate.
- 4. Remove the WLAN option card from its ESD bag.
- 5. If installing WLAN, carefully screw the included antenna onto the white RF cable on the cover plate. In addition, set the WiPt/Xcvr switch to the Xcvr 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 J14 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, the antenna is on the cover plate. 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. Hardware installation is complete. Do not install the indicator's cover until configuration is complete.

#### WeighVault service and editor installation

- 1. Insert the WeighVault DVD (PN 125546).
- 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 2.

)atabase Installe	r	
->		
2		
SQL Server Name	RL-2E1731D419DD	
Instance Name	SQLEXPRESS	
Security		
() Wir	dows Authentication	
O SQL	Authentication	
	User Name	
	Password	Disconnected
Action		Connect
Creat	e a new databace	
O Lise e	xisting database	
		Go
Cancel	]	

Figure 2. Database Installer screen (disconnected)

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

Database Installe	r -	
2		
SQL Server Name	RL-2E1731D419DD	
Instance Name	SQLEXPRESS	
Security		
💿 Wir	dows Authentication	
🔘 sqi	Authentication	
	User Name	Connected
	Password	Connect
Action		
🔿 Crea	e a new database	
💽 Use e	xisting database	60
-	_	
Cancel		

Figure 3. 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.



Computer must be restarted for the WeighVault service to load.



### **Configuring the Counterpart**

- 1. From the SETUP menu, navigate to CONFIG » ETHERNET.
- 2. Configure the ETHERNET menu's parameters as shown in Table 1.



Figure 4. Counterpart's ETHERNET menu

Parameter	Description	Selection
DHCP	Dynamic Host Control Protocol	OFF (consult with network administrator)
IP ADDRESS	Assigns an IP address to the <i>Counterpart</i>	Set to an available static IP address (consult with network administrator)
NET MASK	Sets a subnet mask, if necessary	255.255.255.0 (consult with network administrator)
DFLTGTWY	Sets the default gateway, if necessary	Consult with network administrator
DNSPRI	Primary DNS, if necessary	Consult with network administrator
DNSSEC	Secondary DNS, if necessary	Consult with network administrator
LC LMSTNM	LCL name	Consult with network administrator
PORT	Port number	Port 10001
REMOTE IP	Remote IP address	IP address of the server/computer running WeighVault
REMOTE PT	Remote port	5466
MAC	MAC address	Addres of Ethernet (not changeable)
VAULT	Enable WeighVault	Set to ONBOARD to use the <i>Counterpart</i> 's onboard Ethernet connection. Set to EXTERNAL to use the WLAN option card (if installed)

Table 1. ETHERNET menu parameters and selections



#### PC or Server configuration

Indicators communicate with the host PC through TCP Port #5466. 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 5466.

#### **Configuration WLAN Option Card**

The WLAN option card will require specific configuration to work properly with WeighVault. It 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 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 card.

#### **Installing Device Installer on your PC**

1. Insert the CD included with the 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 WLAN Option Card Configuration using Device Installer

- 1. Start the Device Installer program. Upon opening, the program will search the network for any Lantronix 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:

Note

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 Ethernet, 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 "5466."
  - 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 on every page, 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 5466 on the WeighVault host any time data is presented by the *Counterpart* 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 *Counterpart* requests an ID, or transmits weighment data.

#### **Using WeighVault**

The *Counterpart* WeighVault system should now be ready to use.

- 1. Start the WeighVault editor and add an ID to the database.
- 2. On the *Counterpart*, attempt to recall that ID by pressing the ID key, entering the ID number, and pressing Enter.
- 3. The *Counterpart* 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. Try to establish the connection again.

If the ID continues to fail to load, verify all settings in the *Counterpart*, option card, and host PC. Also verify a firewall in the system is not blocking access to port 5466 of the host, and that all wiring is correct.

