

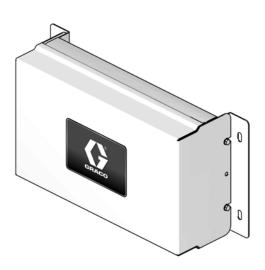
Advanced Web Interface Kit

332459B

Installation and setup instructions to allow communication between a PC and various Graco devices, via an ethernet. For professional use only. Not for use in explosive atmospheres or hazardous locations.



Kit 15V337, Advanced Web Interface (AWI) Kit 15V336, AWI Server Hub



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Related Manuals

Manual	Description	Use For
313386	ProMix 2KS/3KS Web Interfaces	All Installation, Setup, and Operation information for ProMix 2KS and ProMix 3KS AWI or Basic Web Interface. Manual 332459 is not needed for the ProMix family.
3A2040	Informer Instructions/Parts	Follow all instructions in 332459 first, then see Appendix B for specific Informer Settings and Operation information.
3A2614	ProControl 1KE Instructions/Parts	Follow all instructions in 332459 first, then see Appendix B for specific ProControl 1KE Settings and Operation information.
3A3170	ProMix PD2K Advanced Web Interface	Follow all instructions in 332459 first, then see this manual.

Warnings

The following warnings are for the setup, use, grounding, maintenance and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risks. When these symbols appear in the body of this manual refer back to these warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.





FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. To help prevent fire and explosion:



- · Use equipment only in a well-ventilated area.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).
- · Keep the work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.



- Ground all equipment in the work area. See Grounding instructions.
- · Use only grounded hoses.
- Hold the gun firmly to the side of a grounded pail when triggering into a pail. Do not use pail liners unless they are antistatic or conductive.



- Stop operation immediately if static sparking occurs or you feel a shock. Do not use the
 equipment until you identify and correct the problem.
- · Keep a working fire extinguisher in the work area.



ELECTRIC SHOCK HAZARD

This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.



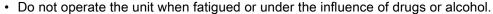
- Turn off and disconnect power at main switch before disconnecting any cables and before servicing or installing equipment.
- Connect only to a grounded power source.
- All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.





EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.





- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See **Technical Specifications** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See Technical Specifications in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS from distributor or retailer.
- Do not leave the work area while equipment is energized or under pressure.
- Turn off all equipment and follow the Pressure Relief Procedure when equipment is not in use.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.
- Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.
- Make sure all equipment is rated and approved for the environment in which you are using it.
- Use equipment only for its intended purpose. Call your distributor for information.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- · Do not kink or over bend hoses or use hoses to pull equipment.
- · Keep children and animals away from work area.
- · Comply with all applicable safety regulations.

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Installation

Overview

The Advanced Web Interface (AWI) is an accessory that works with many Graco devices and gateways. The AWI allows communication with a personal computer (PC) over an ethernet. With the AWI, users can view and change system setup parameters and create reports from a remote PC. This manual contains installation and setup information common to all devices. It includes sections on how to configure your computer, initialize the system, configure the main system settings, and set up your network.

Refer to this manual first, then look in your system manual for information specific to your system (for example, the Informer or the ProControl 1KE).

- For ProMix 2KS and ProMix 3KS, see manual 313386.
- For ProMix PD2K, see manual 3A3170.

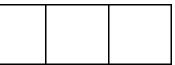
NOTE: Screen views in this manual are shown using Microsoft Windows 7.

Location

The AWI module may be installed in a local network of Graco devices, such as a network of ProControl 1KEs. It also may be installed in a Local Area Network (LAN).







To reduce the risk of fire or explosion, do not install equipment approved for non-hazardous location in a hazardous area.

Install the AWI near your system's control module, in a non-hazardous area.

Mounting

- 1. See Dimensions, page 26.
- Ensure that the wall and mounting hardware are strong enough to support the weight of the equipment, fluid, hoses, and stress caused during operation.
- Using the equipment as a template, mark the mounting holes on the wall at a convenient height for the operator so equipment is easily accessible for maintenance.

- 4. Drill mounting holes in the wall.
- 5. Install anchors as needed.
- Bolt equipment securely.

Electrical Requirements

Enclose all cables routed in the spray booth and high traffic areas in a conduit to prevent damage from paint, solvent, and traffic.

The unit operates with 90–250 VAC, 50/609 Hz input power, with a maximum of 7 A current draw. The power supply circuit must be protected with a 15 A maximum circuit breaker.

- A power supply cord compatible to your local power configuration is not included. Wire gauge size must be 8–14 AWG.
- The input power access port is 0.88 in. (22.4 mm) in diameter. A strain relief is provided which accepts a cord diameter of 0.1578–0.3564 in. (4–9 mm). If another cord size is used, a user-supplied, appropriate size strain relief must be installed.

Connections

Make electrical and communication connections to the AWI.

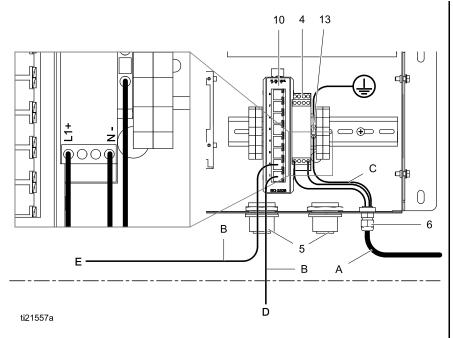






- To avoid electric shock, turn off the power before servicing.
- · Shut off the power at main circuit breaker.
- All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.

- Connect the AWI to power.
 - Connect the main power supply cord (A, not supplied) through the strain relief to terminals L1 (+) and N (-) on the power supply (4).
 - b. Connect the power cord ground wire (C) to the terminal block (13).
- Connect the AWI to another Graco device or gateway and to a PC.
 - a. Shut off power to the Graco device (D). Also shut off power at main circuit breaker.
 - Run a CAT5 cable through grommet from the ethernet port on the Graco device or gateway (D) and connect it to any port on the ethernet switch (10) in the AWI.
 - c. Run another CAT5 cable from any port on the ethernet switch (10) to the ethernet port on a PC (E).



Key — Conections and Installation Example

Supplied in AWI Module

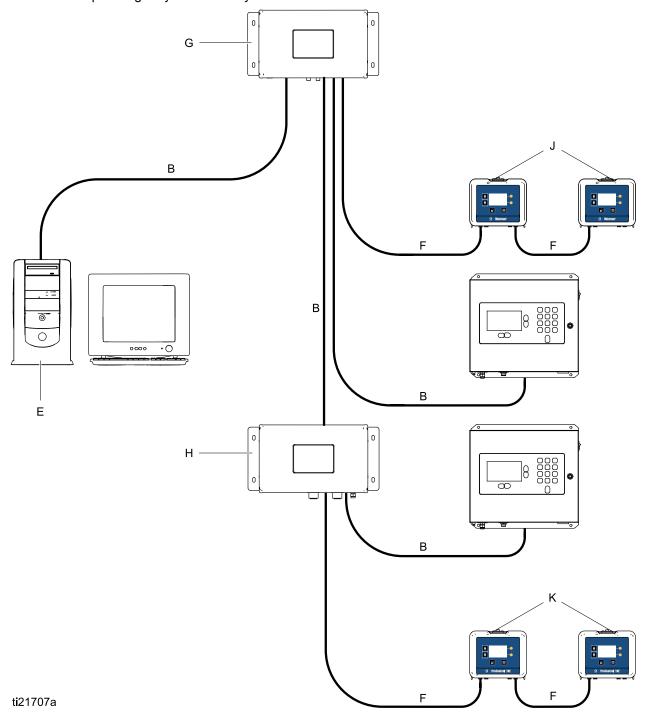
- 4 POWER SUPPLY, 24 Vdc
- 5 GROMMET, cable entry
- 6 CONNECTOR, strain relief
- 10 SWITCH, ethernet
- 13 BLOCK, terminal, ground
- G AWI Module

Accessories or User-Supplied Components

- A Power Cord, user supplied
- B Cable, CAT 5, user supplied
- C Ground wire from power cord
- D Graco device or gateway
- E Personal computer
- F Fiber optic cable
- H AWI Hub
- J Informer Module
- K ProControl 1KE Module

Installation Example

This sample installation is only a guide for setting up system communication. Contact your Graco distributor for assistance in planning a system to suit your needs.



Computer Configuration

Set Up an Automatic IP Address

The AWI requires an IP address obtained by your computer.

- Depending on your operating system, follow these steps to set your computer to obtain an IP address automatically.
 - · Windows XP
 - a. Click Start, then click Control Panel.
 - On the Control Panel window, double-click Network Connections.

NOTE: In the upper left corner of the Control Panel window, click Switch to Classic View to easily locate Network Connections.

- Right-click Local Area Connection, then click Properties.
- d. On the Local Area Connection Properties window, click Internet Protocol (TCP/IP), then click Properties.
- e. Select Obtain an IP address automatically and Obtain DNS server address automatically.
- f. Click **OK** to save the changes.
- Windows 7/Vista
- Click the Windows icon, then click Control Panel.
- b. Under Network and Internet, click View network status and tasks.

NOTE: If you have Large icons or Small Icons selected, in the upper right corner of the Control Panel window,, click Network and Sharing Center instead.

- c. Click Change adapter settings.
- d. For Windows Vista, click Manage network connections.
- e. Right-click **Local Area Connection**, then click **Properties**.
- f. On the Local Area Connection Properties window, click Internet Protocol Version 4 (TCP/IPv4), then click Properties.
- g. Select Obtain an IP address automatically and Obtain DNS server address automatically.
- h. Click **OK** to save the changes.
- Windows 8

- a. Press the Windows key on your keyboard to show the Start window, then click Desktop.
- In the bottom right corner of the Desktop window, right-click the Network icon, then click Open Network and Sharing Center.
- c. Click Change adapter settings.
- d. On the Ethernet Properties window, select Internet Protocol Version 4 (TCP/IPv4). Then click Properties.
- e. Select Obtain an IP address automatically and Obtain DNS server address automatically.
- f. Click **OK** to save the changes.
- Macintosh OS
- a. Click the Apple icon, then click System Preferences.
- On the System Preferences window, click Network.
- On the Network window, in the Show field, select Built-In Ethernet.
- d. On the TCP/IP tab, in the Configure IPv4 field, select Using DHCP.
- e. Click Apply Now.
- 2. Close your control panel and continue with system initialization.

Set Up an IP Address Manually

If the automatic configuration does not work or cannot be used with your system, the IP address required by the AWI can be set up manually.

- Complete the information in Set Up an Automatic IP Address, page 8.
- 2. Click **Use the Following IP Address**. Complete the following fields:

Field	Input
IP Address	192.168.178.xxx (210–224)
Gateway	192.168.178.200
Netmask	255.255.255.0

- 3. Select Use the Following DNS Server Addresses.
- 4. Type **192.168.178.200** in the **DNS** field.

System Configuration

System Initialization

NOTE: System initialization must be performed by an administrator. This process is required only when the system is first started.

NOTE: Do not connect the system to a LAN unless it is configured properly. By default, the system has DHCP and DNS servers enabled.

- Verify that the wireless connection is turned off (disabled).
- Open a browser. Recommended browsers are Chrome 15 or above, Firefox 16 or above, or Internet Explorer 9 or above.
- 3. Turn off any proxy server configurations.
- 4. Type http://gracoawi or http://192.168.178.200 in the browser address bar and press Enter.
- On the System Initialization Step 1 window, click Next.



6. On the **System Initialization Step 2** window, complete all fields and click **Next**.



7. On the **System Initialization Step 3** window, click **Finish**.



8. On the **Login** window, type the login name and password you entered in Step 5 and click **Sign in** to access the **Network** window.

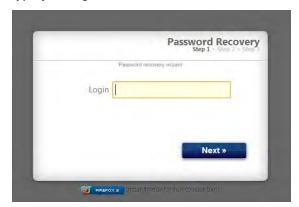


Password Recovery

1. If you type the wrong password, sign in is blocked. Click the block icon 10 to initiate the password recovery sequence.



2. Type your login name, then click Next.



3. Type the answer to your secret question, then click **Next**.

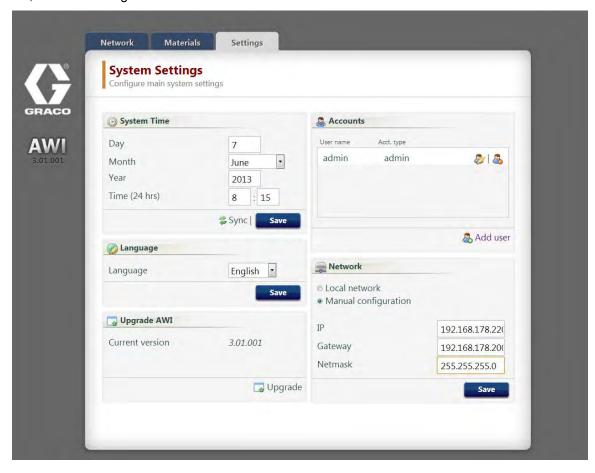


 The system prompts you for a new password. Enter the new password twice, then click **Next.** The system returns to the **Login** window.



System Settings

Use the **Settings** tab to configure the main system settings such as time, language, upgrading AWI, accounts, and networking.



System Time

Follow these steps to set the correct time and synchronize time settings.

 Edit the information in each field as required. Click Save.



 Click Sync to synchronize the AWI time settings with the time settings on all connected Graco devices. On the Sync screen, verify the current time. If it is correct, click Sync. If it is incorrect, click Cancel to return to the Settings tab to make corrections.



Language

Follow these steps to set the desired language of the screen text.

 Click the arrow to select the desired language from the pull down menu. Options are English (default), Chinese (Simplified), Dutch, French, German, Italian, Japanese (Kanji), Korean, and Spanish.



2. Click Save.

Upgrade AWI

Follow these steps to upgrade to the latest AWI software version.

Before using this screen, download the latest version of AWI software to your computer. Contact your Graco distributor for information.

- 1. Click Upgrade.
- 2. On the **Upgrade** popup, click on **Choose File**.



3. Locate the file you downloaded to your computer. Highlight the filename. Click **Upgrade**.

NOTE: This process may take up to 5 minutes. The system will indicate when the upgrade process is done. If the system times out after 5 minutes, power off the unit and then power it back on and log back in.

Accounts

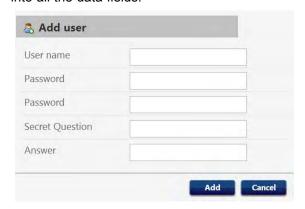
The first person who logs in is automatically designated as an administrator. Administrators can use this screen to add a user or edit user information.

Add New Account

1. To add a new account, click 各 Add User.



2. On the **Add user** popup window, enter information into all the data fields.



3. Click **Add**. A check mark appears in the top right corner when the save is complete.

Edit Existing Account

- To edit an existing account, click the Edit User icon .
- On the Edit user popup window, enter information into all the data fields.



NOTE: Do not change all users to the status of **User**. At least one person must have a status of **Admin** to add users and edit information.

3. Click **Save**. A check mark appears in the top right corner when the save is complete.

Delete Existing Account

To delete an existing account, click the **Delete User** icon $\stackrel{\triangle}{\sim}$.

NOTE: Users who do not have **Admin** status only see the **Edit account** section.



Network

Local Network Configuration

In a local network mode, the AWI module is configured for a closed network that includes a PC and Graco devices. In this mode, AWI is set to a static IP address (192.168.178.200). The system enables DHCP and DNS servers.

NOTE: Be sure there is no physical connection to another existing LAN in local network mode. It

will lead to a possible disturbance to the network operation.

- On the Settings tab, in the Network section, select Local network.
- Click Save.
- 3. On the confirmation window, click **Confirm**.

Manual Configuration

In manual configuration mode, the AWI module can be configured to operate on an existing local area network (LAN). In this mode, the AWI is assigned to a static IP address, gateway, and netmask chosen by the user. The system will disable DCHP and DNS servers. In addition, a virtual network interface will be enabled (IP aliasing, 192.168.178.200/255.255.255.0).

NOTE: If you change the addresses in this section, be certain that the new addresses work and be sure to write them down. These addresses provide access to the AWI program. If you change these addresses and cannot remember the new ones, you will not be able to access any AWI screens.

 To change to a manual network configuration, connect and configure the AWI in local network mode. See Connections, page 6 and Computer Configuration, page 8.

- 2. On the **Settings** tab, in the **Network** section, select **Manual configuration**.
- Enter the IP address, gateway, and netmask. Contact your IS system administrator for assistance.

NOTE: Make sure there is no other device on the network with a conflicting IP configuration.

- 4. Click Save.
- 5. When the confirmation page appears, click **Confirm**. Once the new settings are confirmed, the AWI disconnects the user computer.
- Reconnect the AWI and computer.
- Reconfigure the user computer to match the new LAN configuration. You can then login to the AWI using the newly assigned IP address.

Recover IP Settings

If you have lost your IP settings and can no longer access screens, you can force a network reset to configure the AWI to the default Local Network Configuration.



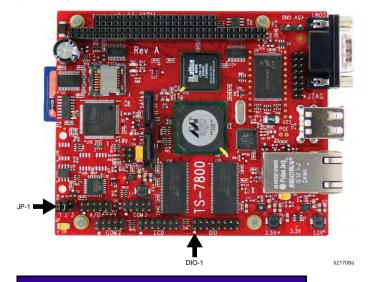




NOTICE

To avoid damage to the circuit board, wear a grounding strap (Part No. 112190), and ground appropriately.

- 1. Turn off power to the AWI unit.
- On the AWI computer board (TS-7800), remove the jumper from JP1. Put it on DIO pin pair 1 (noted by dot).



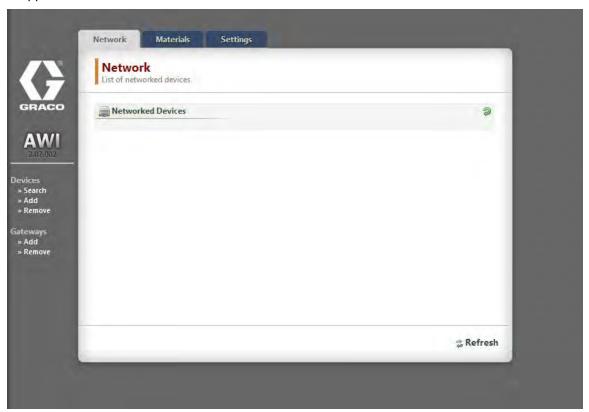
NOTICE

Be certain you move the jumper only to DIO pin pair 1. Other placement of the jumper damages the board.

- 3. Power up the AWI and wait one minute, then power it down again.
- Remove the jumper from DIO 1. Put it back on JP1.
- 5. Power up the unit. The system operates in the default Local Network Configuration.
- To login, type http://gracoawi or http://192.168.178.200 in the browser address bar and press Enter.
- On the Login window, log in with the login and password you set up. Your settings will be intact.

Network Tab

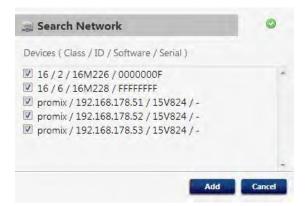
The first time you click the **Network** tab, no networked devices appear.



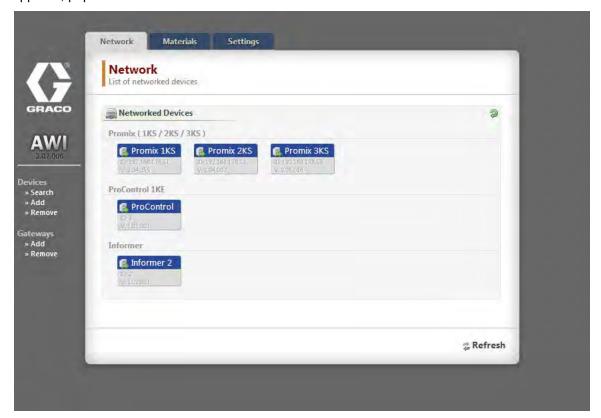
 Click Devices→ Search in the column at the far left of the screen. The system searches for Graco devices that already are connected to the AWI.

NOTE: The search may take several minutes.

- If the system did not locate any devices, an exclamation point appears in the upper right corner of the scree. Click Cancel. Add devices manually.
- If the system located devices on the network, a window appears with a listing. A check appears in the box for each device, indicating that the device will be added.

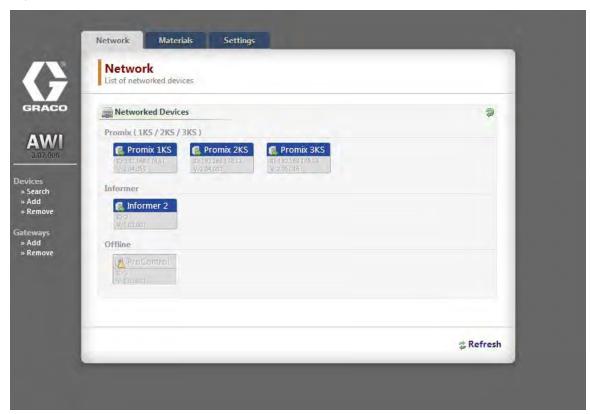


2. To configure the network, click **Add**. The **Network** tab appears, populated with devices.



NOTE: The located devices do not have names. See your system manual for directions on how to assign names, along with other setup information specific to each Graco device.

3. Verify that all device icons are blue, with the system name above. If a device is grayed out and says **Offline**, check the connection to that device, then click **Refresh**.



Add or Remove Gateways

The AWI module communicates with Graco devices through gateways installed in the system. The AWI Module comes with default gateways set. Use the **Gateways** section to add additional gateways through which the AWI will communicate with Graco devices. Add gateways before adding additional devices.

Remove a Gateway

To remove a gateway, click **Gateways→ Remove**. The popup window shows the gateways that already are installed. **TCP Local** is the default gateway installed for ProMix users. **Modbus TCP Local** is the default gateway installed for Informer/ProControl IKE users.

NOTE: To use the AWI Module, PD2K Automatic System users must have purchased and installed Communication Kits 24W829 and 24W462. PD2K Manual System users will need Kit 24T805.. See Graco ganuals 332459 and 3A3170 for further information.



NOTE: Do not remove these default gateways. If they are removed accidentally, restore them by entering information in the **Address** field in the Adding a Gateway section.

Add a Gateway

Add a gateway if you accidentally removed the default gateway, or if you want to extend your network by adding Modbus Gateway kits.

To add a gateway, click Gateways→ Add.



- From the Gateway Type list, select a gateway type.
 - If you are adding a ProMix, select tcp_local.
 - If you are adding an Informer, a ProControl 1KE, or a PD2K, select modbus_tcp_rtu.
- 3. In the **Name** field, type an identifying name (for example, **Factory1**, or **Line3**).
- In the Address field, type the IP address of the gateway that was established when you installed that gateway.

NOTE: if you are restoring the default gateway, the IP address is 192.168.178.205. Be sure to eliminate **http://**. Use the IP address only.

5. Click Add.

Add or Remove Devices

After gateways are set up, use the **Devices** section to add or remove Graco devices.

- Click Devices→ Add.
- From the Gateway list, select a gateway through which the AWI will communicate with Graco devices. For example, if you are adding a ProMix, select TCP Local. If you are adding an Informer or a ProControl 1KE, select Modbus TCP Local.
- 3. In the **Device name** field, type the name of the device (for example, **Informer2**).
- 4. Complete the **Device address, ProMix:** field.
 - For ProMix 2KS or ProMix 3KS, type the IP address that you set up on the EasyKey.
 - For Informer or ProControl 1KE, type the modbus addresses (1–247).

5. Click Add.

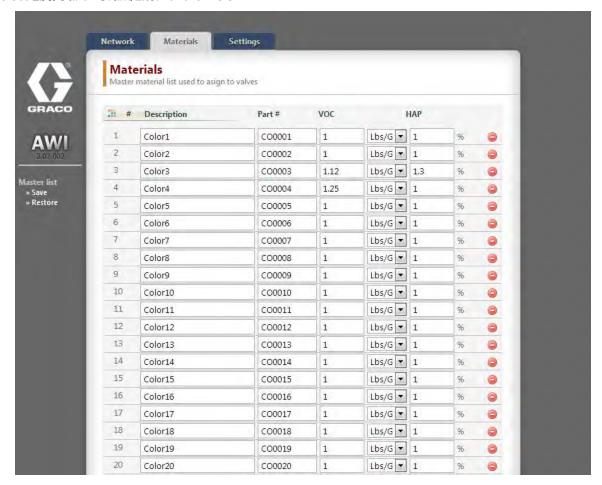
- If the addition was successful, a check mark appears briefly in the upper right corner of the screen. The **Network** tab appears with the new device listed.
- If the addition was unsuccessful, an exclamation point appears in the upper right corner of the screen. Do the following:
 - a. Click Cancel
 - b. On the Network tab, select Gateways→ Remove.
 - c. Verify that your gateway address is correct.

If it is not correct, click **Remove.** Add the gateway again, with the correct address. Then try adding your device again.

Materials Configuration

Use the **Materials** tab to enter information on Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) for each material being used in your system, for material reporting, if supported by your Graco device. This information, and the manufacturer's part number, are available on the MSDS sheet provided by the material manufacturer.

- 3. To delete a material, click the **Minus** button **.**
- Click Save to save your changes. A check mark
 appears when the save is complete.
- 1. Select **Lbs/Gal** or **Gram/Liter** for the VOC.



NOTE: When you have completed information in all the tabs, installation and general system configuration are complete.

For ProMix 2KS, ProMix 3KS, and ProMix PD2K, see Related Manuals, page 2. For other systems (for example, Informer or ProControl 1KE), see your system manual for operation and setup information specific to your system.

Replace the AWI Board





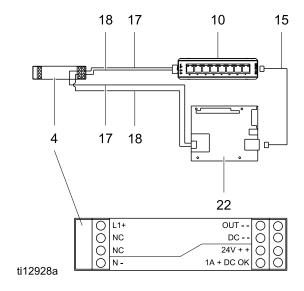
- To avoid electric shock, turn off the power before servicing.
- Turn off the power at the main circuit breaker.
- All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.

NOTICE

To avoid damage to the circuit board, wear a grounding strap (Part No. 112190) and ground appropriately.

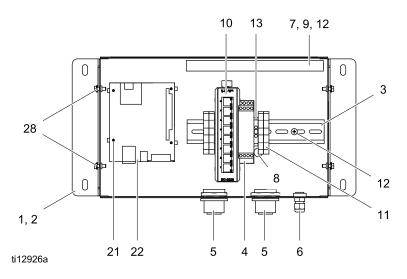
- 1. Turn off the power.
- 2. Turn off the power at the main circuit breaker.
- 3. Open the AWI module.

- 4. Disconnect the cable (15) and connector from the board (22).
- 5. Remove the screws and board (22).
- 6. Install the new board. Reconnect the cable (15) and wires (17, 18).



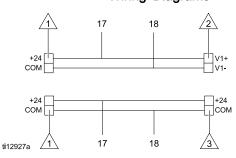
Parts

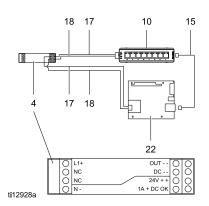
Kit 15V337 Advanced Web Interface Module



Wiring Diagrams







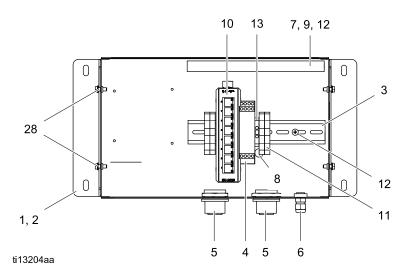
Ref.	Part	Description	Qty.
1	15V339	PANEL	1
2	15T752	COVER	1
3	 	DIN RAIL	1
4	120369	SUPPLY UNIT, power, 24Vdc	1
5	15V345	GROMMET, cable entry	2
6	111987	CONNECTOR, cord strain relief	1
7		WIREWAY	1
8▲	186620	LABEL, ground symbol	1
9	I	COVER, wireway	1
10	15V342	SWITCH, ethernet	1
11	120838	BLOCK, clamp end	2
12	103833	SCREW, #10 —32 UNF-2A	4

Ref.	Part	Description	Qty.
13	112443	BLOCK, terminal ground	1
15	121994	CABLE, CAT5	1
17		WIRE, copper, 16 ga; 9 in (230 mm)	1
18		WIRE, copper, 16 ga; 9 in (230 mm)	1
21	15V340	STANDOFF, board	4
22	258355	BOARD, server	1
25 ▲	15W776	LABEL, warning	1
28		SCREW, machine, serrated hex-head	4

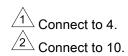
▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

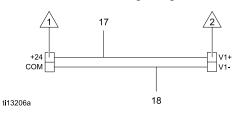
Items marked — — are not sold separately.

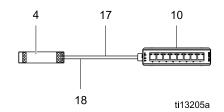
Kit 15V336 Advanced Web Interface Server Hub



Wiring Diagrams







Re- f.	Part	Description	Qty.
1	15V339		1
2	15T752	COVER	1
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5	15V345	GROMMET, cable entry	2
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7		WIREWAY	1
8▲	186620	LABEL, ground symbol	1
9		COVER, wireway	1
10	15V342	SWITCH, ethernet	1
11	120838	BLOCK, clamp end	2

Re- f.	Part	Description	Qty.
12	103833	SCREW, #10 —32 UNF-2A	4
13	112443	BLOCK, terminal ground	1
17		WIRE, copper, 18 in. (46 cm); not shown	2
18		WIRE, copper, 18 in. (46 cm); not shown	2
25 ▲	15W77 6	LABEL, warning	1
28		SCREW, machine, serrated hex-head	4

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

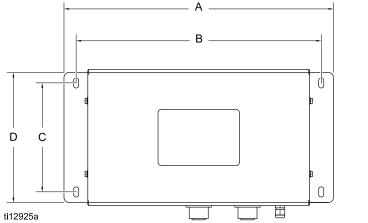
Items marked — — are not sold separately.

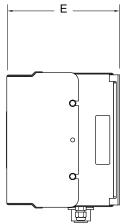
Accessories

Cables

- 121998, CAT 5, RJ45 Cable, 25 ft (7.6 m)
- 121999, CAT 5, RJ45 Cable, 50 ft (15 m)
- 15V842, CAT 5, RJ45 Cable, 100 ft (30 m)
- 15V843, CAT 5, RJ45 Cable, 200 ft (61 m)
- 16M172, Fiber Optic Cable, 50 ft (15 m)
- 16M173, Fiber Optic Cable, 100 ft (30 m)

Dimensions





KEY		
	in.	mm.
Α	16.57	420.9
В	15.07	382.8
С	5.31	134.9
D	8.71	221.2
E	6.45	163.8

Notes



Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

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Graco Information

For the latest information about Graco products, visit www.graco.com.

To place an order, contact your Graco Distributor or call to identify the nearest distributor.

Phone: 612-623-6921 or Toll Free: 1-800-328-0211 Fax: 612-378-3505

All written and visual data contained in this document reflects the latest product information available at the time of publication.

Graco reserves the right to make changes at any time without notice.

For patent information, see www.graco.com/patents.

Original Instructions. This manual contains English. MM 332459

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