Instructions

ProMix® PD2K Advanced Web Interface

Installation and program setup instructions to allow communication between a PC and the ProMix® PD2K Proportioner, via an Ethernet. For professional use only.

Not approved for use in explosive atmospheres or hazardous locations.

Kit 24T805, ProMix® PD2K Advanced Web Interface (AWI)

Kit 15V337, Advanced Web Interface (AWI)

Important Safety Instructions

Read all warnings and instructions in this manual and in your PD2K Proportioner manual. Save all instructions.
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Related Manuals

Component Manuals in English

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<td>ProMix PD2K Electronic Proportioner</td>
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<td>332459</td>
<td>Advanced Web Interface Kit</td>
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<td>3A3180</td>
<td>ProMix® PD2K Modbus TCP Installation Kit</td>
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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 symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, 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.

<table>
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<tr>
<td><strong>FIRE AND EXPLOSION HAZARD</strong></td>
</tr>
<tr>
<td>Flammable fumes, such as solvent and paint fumes, in the work area can ignite or explode. To help prevent fire and explosion:</td>
</tr>
<tr>
<td>• Use equipment only in a well-ventilated area.</td>
</tr>
<tr>
<td>• Eliminate all ignition sources such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).</td>
</tr>
<tr>
<td>• Keep the work area free of debris, including solvent, rags, and gasoline.</td>
</tr>
<tr>
<td>• Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.</td>
</tr>
<tr>
<td>• Ground all equipment in the work area. See Grounding instructions.</td>
</tr>
<tr>
<td>• Use only grounded hoses.</td>
</tr>
<tr>
<td>• 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.</td>
</tr>
<tr>
<td>• <strong>Stop operation immediately</strong> if static sparking occurs or you feel a shock. Do not use the equipment until you identify and correct the problem.</td>
</tr>
<tr>
<td>• Keep a working fire extinguisher in the work area.</td>
</tr>
</tbody>
</table>

| **EQUIPMENT MISUSE HAZARD** |
| Misuse can cause death or serious injury. |
| • Do not operate the unit when fatigued or under the influence of drugs or alcohol. |
| • 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 Safety Data Sheets (SDSs) from your distributor or retailer. |
| • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer’s replacement parts only. |
| • Do not alter or modify equipment. |
| • 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 the work area. |
| • Comply with all applicable safety regulations. |
Install the Advanced Web Interface (AWI) Module

Overview
The Graco Advanced Web Interface (AWI) Accessory allows communication between multiple ProMix PD2Ks and a PC over an Ethernet, enabling users to monitor the ProMix PD2K, view and change system setup parameters, and create reports.

Location
The AWI module may be installed in a local ProMix network or in a Local Area Network (LAN).

Mounting
1. Ensure that the wall and mounting hardware are strong enough to support the weight of the equipment, fluid, hoses, and stress caused during operation.
2. Using the equipment as a template, mark the mounting holes on the wall at a convenient height for the operator to ensure that the equipment is easily accessible for maintenance.
3. Drill mounting holes in the wall.
4. Install anchors as needed.
5. Bolt the equipment securely.

Install equipment in a non-hazardous location.
Connecting the AWI Module to the PD2K and PC

1. Shut off the ProMix PD2K power (0 position) and shut off the power at the main circuit breaker.

2. Install the Modbus TCP module, Kit 24T805. For instructions, see the ProMix PD2K Modbus TCP Installation Kit manual 3A3180.

3. Install the AWI module, Kit 15V337. For instructions, see the Advanced Web Interface Kit manual 332459.

4. Run a CAT5 cable from the Modbus TCP module and connect it to any port in the AWI module. Connect another CAT5 cable from the AWI module to the PC or LAN.

5. Power up the AWI module. For instructions, see the Connections section of the Advanced Web Interface Kit manual 332459.

NOTE: Multiple AWI server hubs can be connected to the AWI master module in the series.

**NOTICE**
To avoid damaging the circuit board when servicing, wear a grounding strap on your wrist and ground appropriately.
Install the Advanced Web Interface (AWI) Module

**Fig. 1: ProMix Network Typical Installation**
Install the Advanced Web Interface (AWI) Module

Fig. 2: Local Area Network (Manual) Typical Installation
Configuration

Setting Up PD2K

1. Follow the system configuration steps in the Advanced Web Interface Kit manual 332459.

2. Connect the Graco Modbus TCP gateway in a series with the PD2K system. For instructions, see the ProMix PD2K Modbus TCP Installation Kit manual 3A3180.

3. On the PD2K ADM, go to System Screen 4 (Gateway Setup) and configure your gateway. For more information, see System Screen 4 in the ProMix PD2K Electronic Proportioner manual 332562.
   a. Before setting the IP, subnet, gateway, or DNS information, clear the Enable check box.
   b. Set the network configurations.

   If your network contains PD2K and AWI only, use the following default settings:
   - IP: 192.168.178.5
   - Subnet: 255.255.255.0
   - Gateway: 192.168.178.200. The last number must be within a range of 200 and 210.

   If you are configuring AWI on your existing Local Area Network, use the settings for your network IP, subnet, and gateway. Contact your network administrator for these settings.
   c. After you update the settings on System Screen 4, verify that the Enable check box is selected.

NOTE: If you change the IP address on the PD2K system, make sure that you cycle power on the PD2K and AWI systems.
Setting Up AWI

Follow these steps to set up AWI for each PD2K.

1. Verify that you are using AWI version 3.02.009 or later.

2. Add a new gateway.
   a. On the **Network** tab, under **Gateway**, click **Add** to add a new gateway. For more information, see Add or Remove Gateways in the Advanced Web Interface Kit manual 332459.
   b. From the **Gateway Type** list, select **modbus_tcp_rtu**.
   c. In the **Gateway Name** field, type a name for the gateway (for example, PD2K Gateway).
d. In the **Gateway Address** field, type the IP address from System Screen 4 of the PD2K. See step 3 in the Setting Up PD2K section.

e. Click **Add**.

3. Add the PD2K device.
   a. On the **Network** tab, under **Devices**, click **Add**.

   b. From the **Gateway** list, select your gateway (for example, PD2K Gateway).
c. In the **Device Address** field, type 1.

d. Click **Add**. The newly added PD2K system appears on the **Network** window.

4. Click the device icon to navigate to the PD2K AWI.
Navigation Overview

Top Navigation
Tabs at the top of the screen provide quick access to various PD2K options.

- **Monitor** – Click this tab to access the real time PD2K system monitor, which is similar to the ADM run screen.
- **Setup** – Click this tab to access system configuration screens.
- **Materials** – Click this tab to access the material-valve assignment screen.
- **Reports** – Click this tab to generate reports on materials, jobs, and events.

Side Navigation

- Click **Network** to navigate back to the **Network** screen.
- Under the icon for the device, the system displays the device name, software version, and the IP address.
- Under **Configuration**, click **Save** or **Restore** to save or restore PD2K device configurations.
Monitor Screen

The **Monitor** screen displays real-time system information such as pump modes, flow rates, materials, and pressure.

For more information, see the Run Mode Screens section of the ProMix PD2K Electric Proportioner manual 332562.
Setup Screens

The setup screens allow you to configure general and advanced system information along with recipes and flush sequences. To change numerical configuration values, type the value and press ENTER. To change list values, select the item from the list.

System Configuration Screen

The system configuration screen allows you to configure system setup information such as tolerances, hose settings, and flow control. The system configuration screen appears as the default screen when you click the Setup tab.

For more information, see the sections for System Screens 1, 2, and 3 in the ProMix PD2K Electric Proportioner manual 332562.
Recipe Configuration Screen

The recipe configuration screen allows you to configure information for a recipe, such as color, flush, catalyst, pressure, ratio, and potlife time.

To access the recipe configuration screen, click the Setup tab and then click Recipe.

For more information, see the Recipe Screens section of the ProMix PD2K Electric Proportioner manual 332562.
Flush Sequence Configuration Screen

The flush sequence configuration screen allows you to configure information for a flush sequence, such as gun purge time, initial flush, final flush, wash cycles, and strokes per cycle.

To access the recipe configuration screen, click the Setup tab and then click Flush.

For more information, see the Flush Screen section of the ProMix PD2K Electric Proportioner manual 332562.
Advanced System Configuration Screen

The advanced system configuration screen allows you to configure data for display, units, and USB.

To access the recipe configuration screen, click the Setup tab and then click Advanced.

For more information, see the sections for Advanced System Screens 1, 2, 3, and 4 in the ProMix PD2K Electric Proportioner manual 332562.
System Material-Valve Assignment Screen

The material-valve assignment screen associates a PD2K valve to a material in master material list. This association is required for material reports.

To enter information for each material in your system, see the Materials Tab section in the Advanced Web Interface Kit manual 332459.
Reports

The AWI can pull material and job information from the system and combine this information into three reports: material-based reports, job-based reports, and event-based reports.

Material-Based Reports

Material-based reports contain information on material used within the system. Reports can be aggregated from multiple PD2K systems.

NOTE: If you changed any recipe configuration, click Update before creating the report.

Select the following report filters and then click Create.

- **Date Range**: Enter the date and time you want the report to start. The report runs from that date until the current date and time.
- **Materials**: Select the materials to include in the report.
- **Report**: Select VOCs and HAPs to include in the report. Select the report format (CSV or JSON).
- **Units**: Select the PD2K units to include in the report.
Operation

Material-based report columns include the following:

- Material ID
- Material name
- Material part number
- Sprayed amount (in CCs)

- Total amount (in CCs)
- Sprayed VOCs (in CCs)
- Total VOCs (in CCs)
- Sprayed HAPs (in CCs)
- Total HAPs (in CCs)

**NOTE:** If the date range is too large, the results are limited to the last 1000 jobs. Narrow the filters to view less information in the report.
Job-Based Reports

Job-based reports include logs of completed PD2K jobs.

Select the following report filters and then click Create.

- **Date Range**: Enter the date and time you want the report to start. The report runs from that date until the current date and time.
- **Report**: Select the report format (CSV or JSON).
- **Filter by**: Enter a user ID to include information for a specific user in the report.

Job-based report columns include the following:

- Date
- Time
- Job number
- Part number
- Recipe number
- Ratio
- Material A sprayed amount (in CCs)
- Material B sprayed amount (in CCs)
- Material A total amount (in CCs)
- Material B total amount (in CCs)
- Solvent total (in CCs)
- Error (Y if an error is present or N if an error is not present)

**NOTE**: If the date range is too large, the results are limited to the last 1000 jobs. Narrow the filters to view less information in the report.
**Event-Based Reports**

Event-based reports include logs of all the events in the system.

Select the following report filters and then click Create.

- **Date Range**: Enter the date and time you want the report to start. The report runs from that date until the current date and time.
- **Report**: Select the report format (CSV or JSON).
- **Filter by**:
  - Select the type of event (alarm, deviation, advisory, or record) to include in the report.
  - Enter an event code to include in the report. See the Events Screen section of the ProMix PD2K Electronic Proportioner operation manual 332562 for instructions to access a list of events.
  - Enter the job number to include in the report. Leave this field blank to include all jobs.

Event-based report columns include the following:

- Date
- Time
- Event code
- Event type
- Event action
- Event job

**NOTE**: If the date range is too large, the results are limited to the last 1000 jobs. Narrow the filters to view less information in the report.
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.

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