WATLOW®
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QUICK START GUIDE

F4T WITH INTUITION
D4T WITH INTUITION

F4T Process Controller

D4T Data Logger

Follow the steps in this quick start guide to set up your new Watlow F4T/D4T

F4T

F4T/D4T

D4T

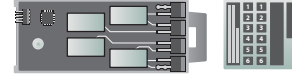## CONTENT ITEMS AND RECOMMENDED TOOLS
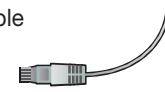
Hardware/Software

a. F4T/D4T

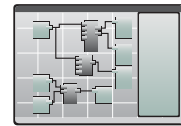**b.** Flex Module(s) (FM) and label stickers
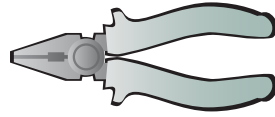
c. PC

d. Ethernet cable

e. Composer PC Software (install program found on the Watlow Support Tools DVD or website)
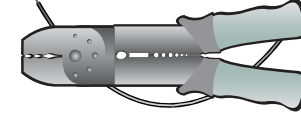
Tools

f. Medium size pliers

g. Small flathead screwdriver

h. Wire (14 to 26 AWG) and wire stripper

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1. INSTALL FLEX MODULES (FM)

Slot numbers

Installed FMs

Case plugs indicate empty slots

A.

B.

C.

D.

E.

F.

FM slot diagram

Note:
Take care to protect the glass touch screen.

Best Practice:
Complete the following procedure for one FM at a time working from slot 1 to 6.

1. Select a slot for the FM.

Note:
Communications modules (FMCA-XXXX-XXXX) work only in slot 6. Slot numbers are molded into the case and shown in the diagram on the label (image A).

Note:
If a terminal block overlaps the slot, remove it temporarily, loosening it with a small screwdriver (image B).
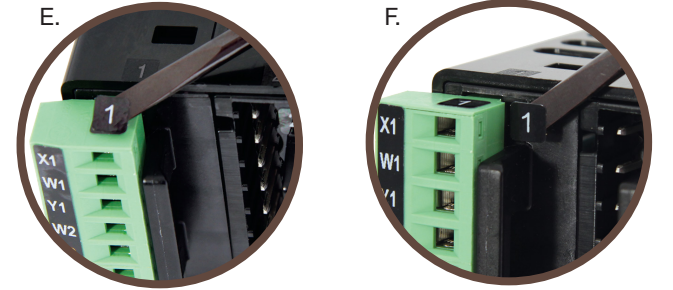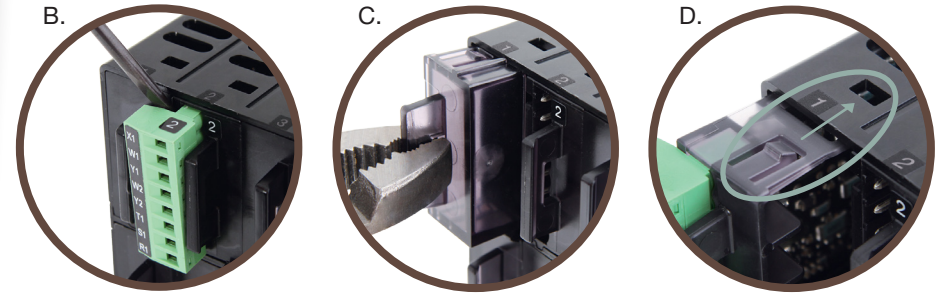
2. Using pliers, remove slot plug by pulling straight back (image C).

Note:
FM is right-side up when its locking tabs align with the mating holes (image D).

3. Slide FM in until it clicks firmly in place.

4. Using the stickers packaged with the FM, label the terminal block with its slot number (image E).

5. Apply a matching label to the FM (image F).

Option:
If mounting unit to equipment is desired at this stage see Step 6 before proceeding to Step 2.

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2. CONNECTIONS

1. Connect F4T/D4T to power source (image A).

F4T or D4T (digits 1, 2 and 3 of part number)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ (digits 4 through 15)

1, 2, 3 or 4:	120 to 240 VAC
5, 6, 7 or 8:	24 V (AC or DC)

A.

Caution:
Do not connect high voltage to a controller that requires low voltage.

2. Ethernet communication: Connect the F4T/D4T to the network your PC is on (image B).

B.

Note:
It is an option to connect the F4T/D4T via Ethernet directly to a PC. See the F4T/D4T Installation and Troubleshooting User's Guide chapter 3.

Optional:
To avoid open sensor error messages, temporarily jumper S1 and R1 terminals on all removable screw terminal blocks or see corresponding FM Quick Start Guide to connect sensors (image C).

C.

Warning:
See safety information in the "General Information" section of this document.

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3. INSTALL COMPOSER® SOFTWARE AND CONFIGURE A CONTROL LOOP

A.

B.

C.

D.

E.

F.

G.

H.

I.
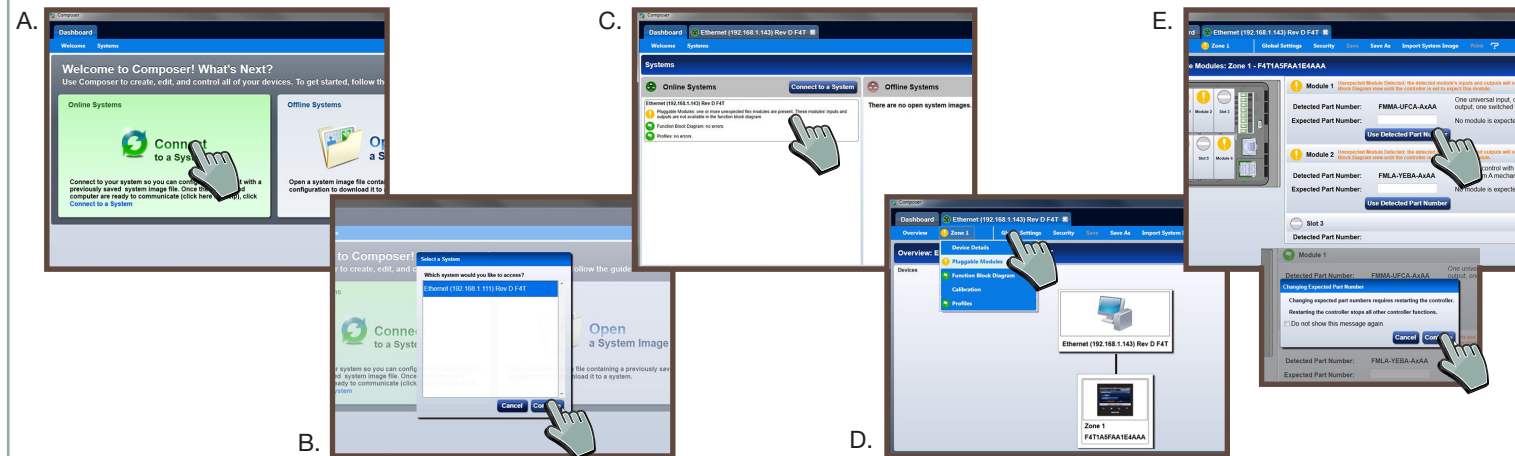
1. Install Composer PC software (install program from control tools DVD or website): run the setup program and follow on-screen instructions.

2. Run Composer and click "Connect to a System" (image A).

3. Select the system and click "Continue" (image B).

4. Double-click the system in the open systems list (image C).

5. From the "Zone 1" menu, choose Pluggable Modules (image D).

6. On the first module click "Use Detected Part Number" then click "Continue" (images E).

7. For each other module click "Use Detected Part Number"

8. Click "Finish" and then click "Go to Function Block Diagram".

9. Select "Auto hide this window by default" to dock the tutorial window.

10. To configure a control loop: drag a control loop from the library to the canvas. Drag a signal from an input block to the PV receiver on the control loop. Drag a signal from the HT transmitter on the control loop to the output block (images F-H).

Optional:
View the tutorial videos to learn how to set up a control loop (**F4T only**).

Note:
For sensors other than type J thermocouple, double-click the input block and set the sensor type in the Parameters window (image I).

Optional:
Use additional function blocks to configure more of your application or come back to this later.

4. PERSONALIZE THE F4T/D4T USER INTERFACE

A.

C.

E.

B.

D.

1. From the Zone 1 menu, choose Personalization (image A).

2. Select a layout option Top, Center or Bottom for the home pages (image B).

3. For Page 1 select the number of content blocks to display (image C).

4. For each block on the page choose the content to display (image D).

5. Repeat steps 3 and 4 for the other home pages as desired.

6. Setup the output view as desired by choosing items to display or set (image E).

7. Set the other available personalization options as desired.

5. SAVE AND IMPORT IMAGE FILES

A.

B.

C.

D.

Save image file:

1. Click "Save As" on the menu bar and designate a file name (image A).

Import an image file:

2. On the Dashboard view click "Connect to a System" (image B).

3. Right-click the system and choose "Import System Image" (image C).

4. Navigate to desired file and select (allow several minutes to load).

Alternate method to import an image file:

1. On any system view click "Import System Image" (image D.)

6. MOUNT & WIRE

1. Cutout panel (image A).

2. Remove green connectors that have already been wired.

3. Remove mounting collar from unit

4. Insert F4T/D4T through front panel cutout.

5. Slide on mounting collar (image B).

6. Wire remaining input and outputs as necessary.

A.

92.0 to 93.0 mm
(3.62 to 3.65 inches)

92.0 to 93.0 mm
(3.62 to 3.65 inches)

B.

Product Label Placed Here

Mounting Panel

Note:

For further mounting and wiring assistance refer to:

F4T Installation & Troubleshooting User Guide 0600-0092-0000

D4T Installation & Troubleshooting User Guide 0600-0107-0000

F4T Download available at http:www.watlow.com/F4T.cfm

D4T Download available at http:www.watlow.com/D4T.cfm

7. EXAMPLE F4T SYSTEM WIRING DIAGRAM

L1
Neutral

Limit Contactor

Limit Output

DA10-24C0-0000

F4T Controller

Slot 1   Slot 2

+ Control Output

Heater

Slot 1 - FMMA- UCAA-AAAA
Slot 2 - FMLA- LAJA-AAAA

8. FINISHED

You are now able to begin using the F4T/D4T. If you would like to see more in-depth information please visit the following website or on support tools/DVD:

http://www.watlow.com/F4T.cfm

http://www.watlow.com/D4T.cfm

Documentation:

0600-0092-0000	F4T Installation and troubleshooting user's guide
0600-0107-0000	D4T Installation and troubleshooting user's guide
0600-0093-0000	F4T Setup & Operations user's guide
0600-0106-0000	D4T Setup & Operations user's guide
0600-0095-0000	Quck Start Guide MODBUS® RTU Communications Flex Modules
0600-0096-0000	Quck Start Guide High Density Input/Output Flex Modules
0600-0097-0000	Quck Start Guide Mixed Input/Output Flex Modules
WIN-F4T-0615	F4T Specification Sheet
WIN-D4T-1016	D4T Specification Sheet
0601-0001-0000	Support tools/DVD

Technical Assistance

To get assistance from Watlow:
• Contact a local representative
• E-mail: wintechsupport@watlow.com
• Call: +1 (507) 494-5656 from 7 a.m. to 5 p.m. (CST)

GENERAL INFORMATION

Warning:

Use National Electric (NEC) or other country-specific standard wiring and safety practices when wiring and connecting this controller to a power source and to electrical sensors or peripheral devices. Failure to do so may result in damage to equipment and property, and/or injury or loss of life.

Avertissement:

Utilisez les pratiques de câblage et de sécurité de National Electric (NEC) ou les normes spécifiques au pays lors du câblage et de la connexion de ce régulateur à une source d'alimentation et aux capteurs électriques ou aux équipements périphériques. Tout manquement à cette règle pourrait provoquer des dégâts sur l'équipement et le matériel, et/ou des blessures personnelles ou des décès.

HOW TO REACH US