

**F4T** WITH INTUITION  
**F4T Process Controller**

**D4T** WITH INTUITION  
**D4T Data Logger**



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

For assistance contact Watlow®: [www.watlow.com](http://www.watlow.com)  
1-800-WATLOW2 (1-800-928-5692)  
wintechsupport@watlow.com

• <http://www.watlow.com/f4t> • <http://www.watlow.com/d4t>




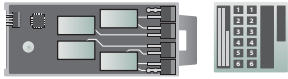


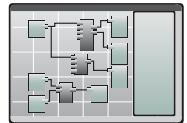
1440-3329 Rev A  
January, 2019

F4T

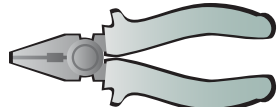

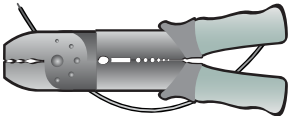
D4T

**CONTENT ITEMS AND RECOMMENDED TOOLS**

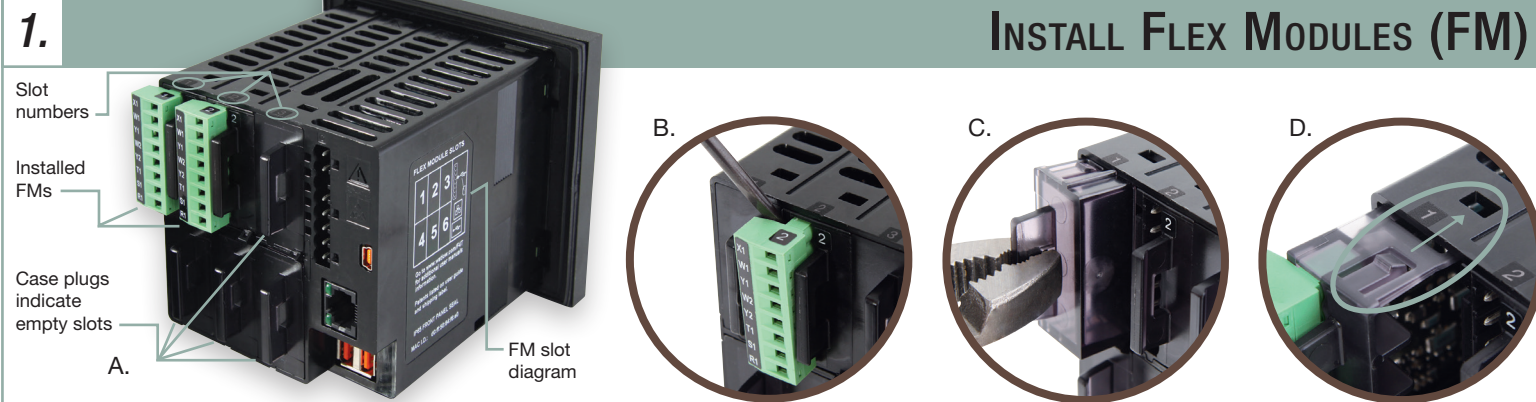
**Hardware/Software**

- a. F4T controller 
- b. Flex Module(s) (FM) and label stickers 
- c. PC 
- d. Ethernet cable 
- e. Composer PC software (install program from control tools DVD or website) 

**Tools**

- f. Medium size pliers 
- g. Small flathead screwdriver 
- h. Wire (14 to 26 AWG) and wire stripper 

**INSTALL FLEX MODULES (FM)**



To view video go to [www.watlow.com/F4T](http://www.watlow.com/F4T)  
F4T Tutorials: Module Installation

**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.

**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).

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

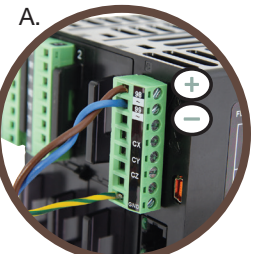
**Note:**  
FM is right-side up when its locking tabs align with the mating holes (image D).

- 2. Using pliers, remove slot plug by pulling straight back (image C).
- 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.

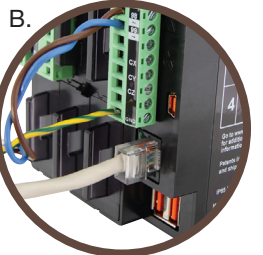
**2. CONNECTIONS**

- 1. Connect F4T/D4T to power source (image A).  
F4T or D4T (digits 1, 2 and 3 of part number) (digits 4 through 15)



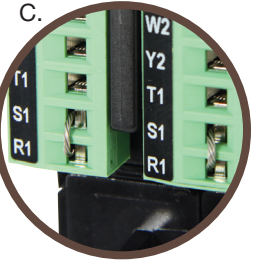
**Caution:**  
Do not connect high voltage to a controller that requires low voltage.

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



**Note:**  
Note it is an option to connect the F4T/D4T via Ethernet directly to the 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).



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

**3. INSTALL COMPOSER® SOFTWARE AND CONFIGURE A CONTROL LOOP**

- 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 the system (image A).
- 3. Double-click the system in the open systems list (image B).
- 4. From the "F4T (1)" or "D4T (1)" menu, choose Pluggable Modules (image C).
- 5. On the first module click "Use Detected Part Number" then click "Continue" (images D).
- 6. For each other module click "Use Detected Part Number"
- 7. Click "Finish" and then click "Go to Function Block Diagram".

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

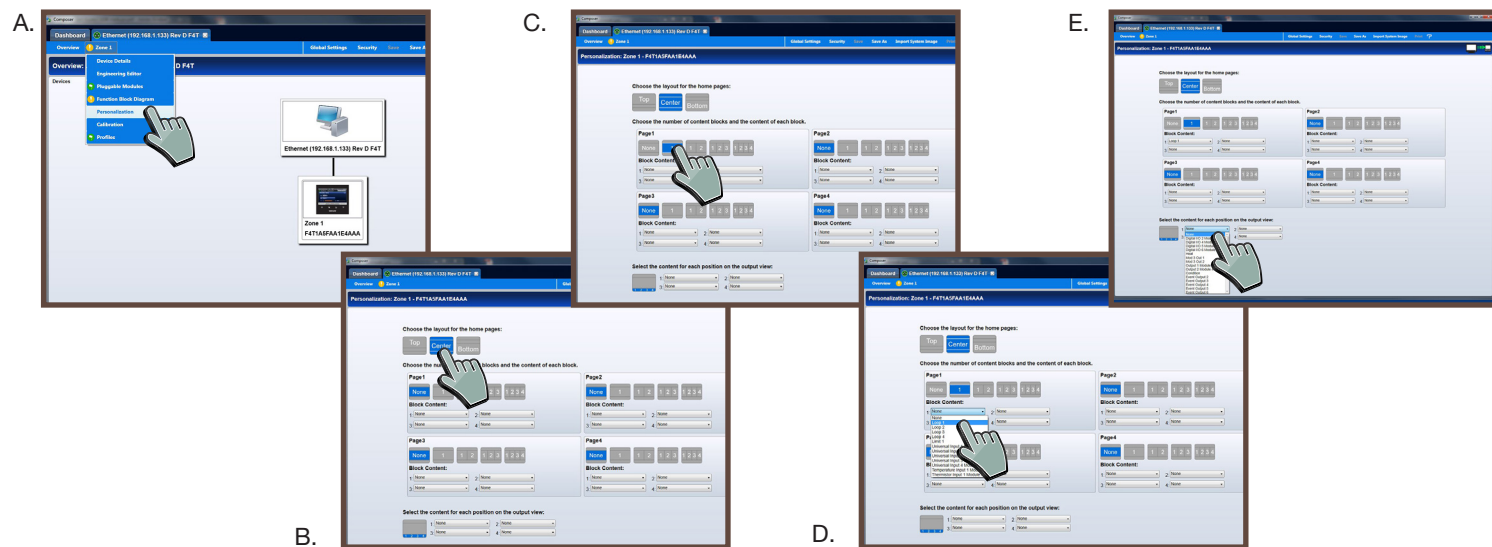
- 8. Select "Auto hide this window by default" to dock the tutorial window.
- 9. To configure a control loop: drag a control loop from the library to the canvas. Drag a signal from an input block to the PV receiver on the control loop. Drag a signal from the HT transmitter on the control loop to the output block (images E-G).

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

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

# 4.

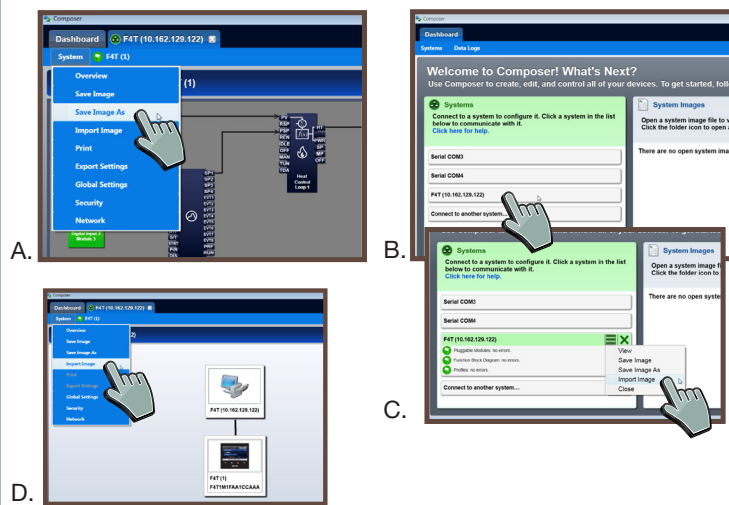
## PERSONALIZE THE F4T/D4T USER INTERFACE



- From the Zone 1 menu, choose Personalization (image A).
- Select a layout option Top, Center or Bottom for the home pages (image B).
- For Page 1 select the number of content blocks to display (image C).
- For each block on the page choose the content to display (image D).
- Repeat steps 3 and 4 for the other home pages as desired.
- Setup the output view as desired by choosing items to display or set (image E).
- Set the other available personalization options as desired.

# 5.

## SAVE AND IMPORT IMAGE FILES

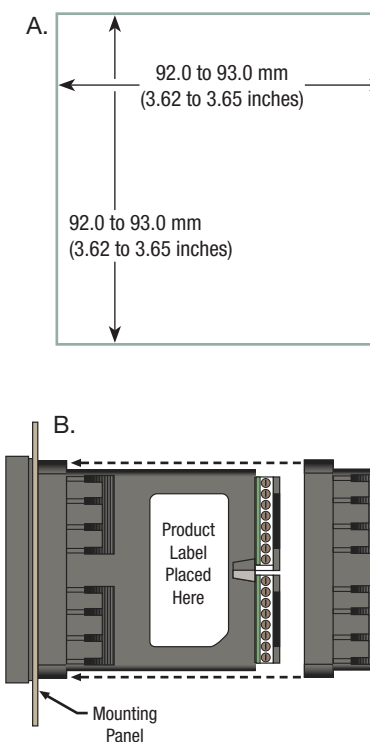


- Save image file:**
- From the System menu, choose Save Image As and designate a file name (image A).
  - On the Dashboard view click the system to connect (image B).
  - Click the menu icon and choose "Import Image" (image C).
  - Navigate to desired file and select (allow several minutes to load).
- Alternate method to import an image file:**
- On any system view from the System menu choose "Import Image" (image D).

# 6.

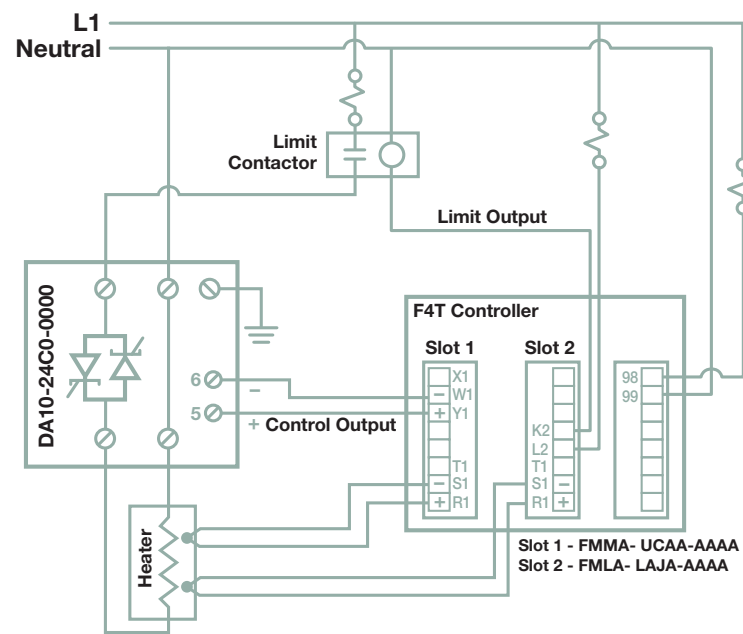
## MOUNT & WIRE

- Cutout panel (image A).
- Remove green connectors that have already been wired.
- Remove mounting collar from unit.
- Insert F4T/D4T controller through front panel cutout.
- Slide on mounting collar (image B).
- Wire remaining input and outputs as necessary.



**Note:**  
For further mounting and wiring assistance see More Support below.

## EXAMPLE SYSTEM WIRING DIAGRAM



## MORE SUPPORT

You are now able to begin using the F4T/D4T controller. 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>  
<http://www.watlow.com/d4T>

### Documentation

- |                       |   |
|-----------------------|---|
| <b>1720-6742</b>      | F4T Installation and troubleshooting user's guide         |
| <b>1656-9792</b>      | D4T Installation and troubleshooting user's guide         |
| <b>1680-2414</b>      | F4T Setup & Operations user's guide                       |
| <b>1247-5282</b>      | D4T Setup & Operations user's guide                       |
| <b>0600-0095-0000</b> | Quick Start Guide Modbus® RTU Communications Flex Modules |
| <b>0600-0096-0000</b> | Quick Start Guide High Density Input/Output Flex Modules  |
| <b>0600-0097-0000</b> | Quick Start Guide Mixed Input/Output Flex Modules         |
| <b>WIN-F4T-1118</b>   | F4T Specification Sheet                                   |
| <b>WIN-D4T-1118</b>   | D4T Specification Sheet                                   |
| <b>1085-8615</b>      | Support tools/DVD   |

### Technical Assistance

- To get assistance from Watlow:
- Contact a local representative
  - Email: [wintechsupport@watlow.com](mailto: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.

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