

COMPOSER® PC SOFTWARE

Frequently Asked Questions

What is the COMPOSER® software package?

• COMPOSER[®] with INTUITION[®] is Watlow's new software for configuring controllers. Use it to set up functions such as control loops and alarms and to link them to the inputs and outputs you want to use.

Which products does COMPOSER support?

• COMPOSER supports these products with the listed minimum versions of firmware or higher.

Product	Minimum Version		
F4T with INTUITION	2.0		
D4T with INTUITION	3		
EZ-ZONE PM	15		
EZ-ZONE RM: RMC, RME, RMS, RMH, RML	9		
EZ-ZONE RM: RMA	5		
EZ-ZONE RUI	6		

Which COMPOSER features support each product?

			EZ-ZONE			
Feature	F4T	D4T	RM	RUI	PM	ST
Connect via Ethernet	\checkmark	\checkmark				
Connect via 485			\checkmark	\checkmark	\checkmark	\checkmark
Function block diagram view	\checkmark	\checkmark	\checkmark		\checkmark	
System overview	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Device details	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Save and import system images	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Network setup	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
View image files offline*	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Personalization view	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Password security setup	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
Ramp and soak profile editing	\checkmark					
Calibration unity	\checkmark	\checkmark				
Pluggable modules view	\checkmark	\checkmark				

* Offline viewing of saved system images except profile.

Who should use COMPOSER?

- Anyone setting up an EZ-ZONE® PM or RM control system will find that using COMPOSER's function block diagram to configure control loops, alarms, logic, math and other features and to link these features to the system's physical inputs and outputs makes it easy to implement application solutions.
- Anyone setting up an F4T for an application for the first time uses COMPOSER's pluggable modules view to set which flex modules are used and COMPOSER's function block diagram view to configure how the F4T uses the flex modules' I/O with control loops, profiles and other controller functions.
- Anyone setting up a D4T for an application can use COMPOSER to set up data logging and trending and uses its function block diagram view to configure how the D4T uses I/O with alarms and other controller functions.
- Engineers and technicians analyzing performance or troubleshooting a system use COMPOSER's function block diagram to read input values, trace the flow of signals through the application and see outputs being set by the controller.
- Users who write and edit profiles in F4T controllers find COMPOSER's profile view simplifies these tasks and makes it possible to add profiles to a controller without getting in the way of operators. The profile view also makes it easy to back up profiles on a computer and copy them from one controller to another.
- Using the security configuration view, OEM engineers and lab managers can limit users' access to an F4T controller's configuration and set up password protection that applies to both the controller's user interface and COMPOSER software.
- Technicians use COMPOSER's calibration view to ensure the F4T's analog inputs and outputs are properly calibrated.





What languages does COMPOSER support?

• COMPOSER screens and help files support English, French, German, Italian, Japanese, Korean, Simplified Chinese and Spanish.

What does "Import a System Image" mean?

- A system image file contains the configuration information for a controller system.
- COMPOSER creates a system image file by saving the configuration of the control system in a file on the computer.
- When COMPOSER imports a system image, it configures the control system to match what was saved in the image file.
- For an F4T the image includes the pluggable module configuration, function block diagram configuration, parameter settings, security settings, global settings, home screen personalization and so on.
- For an EZ-ZONE RM system the function block diagram configuration, setup parameter settings and global settings for all the modules in the system are saved in one image file.
- For an EZ-ZONE PM the function block diagram configuration, setup parameter settings and global settings are saved in the image file.

Under what circumstances does COMPOSER display the message, "The online system has different features than the system in the image file" when I import an image file?

- This message is displayed and you are given a chance to cancel importing the image when one or both of these is true:
 - The image file has more or fewer devices than the online system has.
- One or more of the target devices has a different part number than the one at the corresponding address (zone number) in the image.

Can I edit a system image file?

• Using COMPOSER you can open and view the contents of system image files as if COMPOSER was connected to the system. However, not all views support this feature. As of version 3.2 you can view the settings that appear on the system overview, device details, pluggable modules, and function block diagram views. Support for displaying saved data on other views is planned for subsequent versions. Also note that information is displayed as read-only; it can be viewed but not changed.

What do the F4T security settings do?

- When you enable security, choose access levels and set passwords on the security configuration screen, these settings limit users' access to controller features via both the controller's user interface and COMPOSER.
- Different levels of access can be set for four user groups, including the access a user has without logging in and three groups that require passwords.
- For each feature users can be granted full access, read-only access or no access.
- Security settings are stored in the controller, not in COMPOSER, so the restrictions apply even when using the controller without COMPOSER or when using COMPOSER on a different computer.

How is COMPOSER's pluggable modules view used?

- Use the pluggable modules view to manage which flex module an F4T controller expects in each slot.
- The view displays the flex modules detected by the controller and indicates which flex modules the controller has been configured to expect. It also indicates any missing or mismatched modules.
- The pluggable modules view displays a description of each flex module to help you understand the capabilities the module provides to the controller.

Why can't I enter my flex module part number in the pluggable module view?

- A few modules can only be used in specific slots. The dual 10 amp SSR flex module (part number FMHA-KAAA-Axxx) takes up two slots; so it does not fit in slot three or slot six, and the slot to the right must be left empty. The Modbus® RTU 232/485 module (part number FMCA-2AAA-Axxx) only works in slot six.
- The pluggable modules view rejects part numbers that it does not recognize. Double-check the part number and try again. Also check for an update to COMPOSER that might include support for new flex modules.



What is the function block diagram view used for?

- The function block diagram graphically depicts how controllers are configured for an application.
- There is a function block on the diagram (or canvas) for each of the controller's inputs and outputs.
- Initially some function blocks for controller features such as control loops, cascade loops and alarms are in the library. These blocks and others including math, logic and variable blocks are used to add application-specific functionality to the controller.
- To configure the controller for a specific application, drag function blocks from the library to the canvas and connect them to each other and to input and output blocks as needed. For example, to control a heater according to the temperature measured by a sensor, drag a control loop from the library and connect it to the blocks for the sensor input and the output that drives the heater.

How can I connect a function block in one EZ-ZONE RM module to a block in another RM module?

• An EZ-ZONE RM system has a function block diagram for each module. You can connect signals between modules using the Signal From Other Device tool found in the Library. See the video in the Tutorials window to learn how.

Can I move the Signal From Other Device on the function block diagram?

• The graphic that represents the connection of a signal coming from another device's function block diagram is always placed to the left of the block that receives the signal. It gets its coordinates from that block and moves with that block. You cannot adjust its position on the canvas independently.

Can I connect to more than one EZ-ZONE PM and connect signals between them?

• COMPOSER will connect to all the EZ-ZONE controllers that are on the standard bus network connected to a serial communication port. However, because EZ-ZONE PM controllers do not support the high speed bus over which signals can be connected, it is not possible to connect function blocks in one PM to function blocks in other PM or in RM controllers.

Why is there no Function Block Diagram on the menu for my device?

- EZ-ZONE RM modules and PM controllers with lower than the minimum supported version of firmware are detected and displayed on the overview, but are not supported with a function block diagram view. It may be possible to upgrade your controller. Look for the latest firmware version on the Watlow website, and contact technical support if you have questions about upgrading your controller.
- There are some EZ-ZONE products that are detected and indicated as part of a system for which the Function Block Diagram view is not supported. Check the COMPOSER specification sheet.

Where did the Save, Import, Global Settings, etc. menus go?

• Because EZ-ZONE systems can include many devices and each device has its own menu on the system tab, as of version 3 the menu options that apply to the whole system including, Overview, Save Image As, Import Image and Global Settings were consolidated under the System menu.

How do I see more of the function block diagram at one time?

- The navigator window has a scale control; drag the slider to the left to zoom out and see more of the function block diagram.
- The navigator indicates the current view of the canvas with a black rectangle; drag the rectangle in the navigator window to adjust the view.
- Maximizing the COMPOSER window or using a larger and higher resolution computer monitor will allow you to see more of the canvas without zooming out.
- Unpinning the library, parameters, help and navigator windows collapses them to the right of the COMPOSER window, which increases the space for viewing the function block diagram.

How can I make the help, library, parameter or navigator window in the function block diagram view bigger?

- Drag the border of the window to the size you want.
- Drag one or more of these windows out of the COMPOSER window and set it to any size you want. This is especially useful if your computer is set up with a desktop extended over more than one monitor.

How do I set a parameter such as set point with COMPOSER?

• You can view and set the parameters used to configure a function block by double-clicking the block in the function block diagram. For example, to set the set point of a control loop, double-click the control loop block in the diagram and then in the parameters window find and edit the set point.



How do I view a value such as a temperature with COMPOSER's function block diagram?

• A connection that moves information between function blocks, such as a temperature measured by an analog input block and used as feedback by a control loop block, is shown as an arrow connecting the block that is the source of the information to the block that uses it. These arrows are referred to as signals. To view the value of a signal, hover the mouse pointer over the signal line or right-click the signal and choose Show/Hide Data. The signal's value or error status is shown at each end of the signal where it connects to function blocks.

Can I start working on an application with COMPOSER before I have all the controller hardware?

- For an F4T controller, you can start configuring it before you install any flex modules. You can set the controller to expect the flex modules you plan to use by entering their part numbers in the pluggable module view. The inputs and outputs from the expected modules appear in the function block diagram and can be connected to loops, alarms and other controller functions just as if they were present in the controller. However, the controller will not turn on any outputs until all the expected flex modules are detected by the controller.
- For an EZ-ZONE RM system only modules that are connected together and communicating with COMPOSER can be configured.

How can I personalize what is displayed on the F4T's user interface?

- On the device details view set the device name parameter. This is displayed at the top left of the controller's user interface.
- Use the function block diagram to set the name parameters for function blocks such as control loops, analog inputs and outputs. These names are used both in COMPOSER and the controller's user interface. For example, the name you set for a control loop is the name that shows up in the controller's home page when that loop is displayed and in COMPOSER's profile view when the loop is used in a profile.
- Use COMPOSER's personalization view to set up the controller's home pages, output view and the appearance of the buttons on the main, operations and settings menus.

How can I personalize my EZ-ZONE PM or EZ-ZONE RM home page menu?

• Use COMPOSER's personalization view to set up the controller's home page, set whether or not the zone and channel indicators are used, for which ports the communications indicator shows activity and how quickly the display scans through the paired home page items.

How do I download a profile I created with COMPOSER to an F4T?

- COMPOSER's profile view shows you the profiles that are in the controller. When you create a new profile with COMPOSER's profile view, it is created in the controller as you work. When you add or edit a step in COMPOSER, the changes are being made in the controller.
- In COMPOSER's profile view you can export a profile from a controller to a computer file and later import that profile in to another controller, or restore it to the original controller in the event it was changed or deleted.

What is a profile password?

- You can password protect an F4T profile if you want to prevent someone else from changing it.
- Users can view a password protected profile without knowing the password. The purpose of profile password protection is to give you confidence that the profile was not altered; not to keep the profile contents secret.
- Users can duplicate a password protected profile without knowing the password. The duplicate profile is not password protected and can be modified, so other users do not have to recreate protected profiles to make variations of them.
- When you export a password protected profile from the controller to a file on the computer, the password protection is included with the profile. When the profile is imported into a controller, it is still protected by the same password.

Does COMPOSER run on Windows® XP?

• COMPOSER does not install on Windows® XP. Because Microsoft® has ended long-term support for Windows® XP, there is no longer a resource for resolving technical issues. Furthermore, supporting Windows® XP would limit COMPOSER's feature growth by excluding the use of pending and future extensions to the .NET Framework, Microsoft®'s extensive library of functions upon which COMPOSER is based, because these extensions will not be supported by Windows® XP.