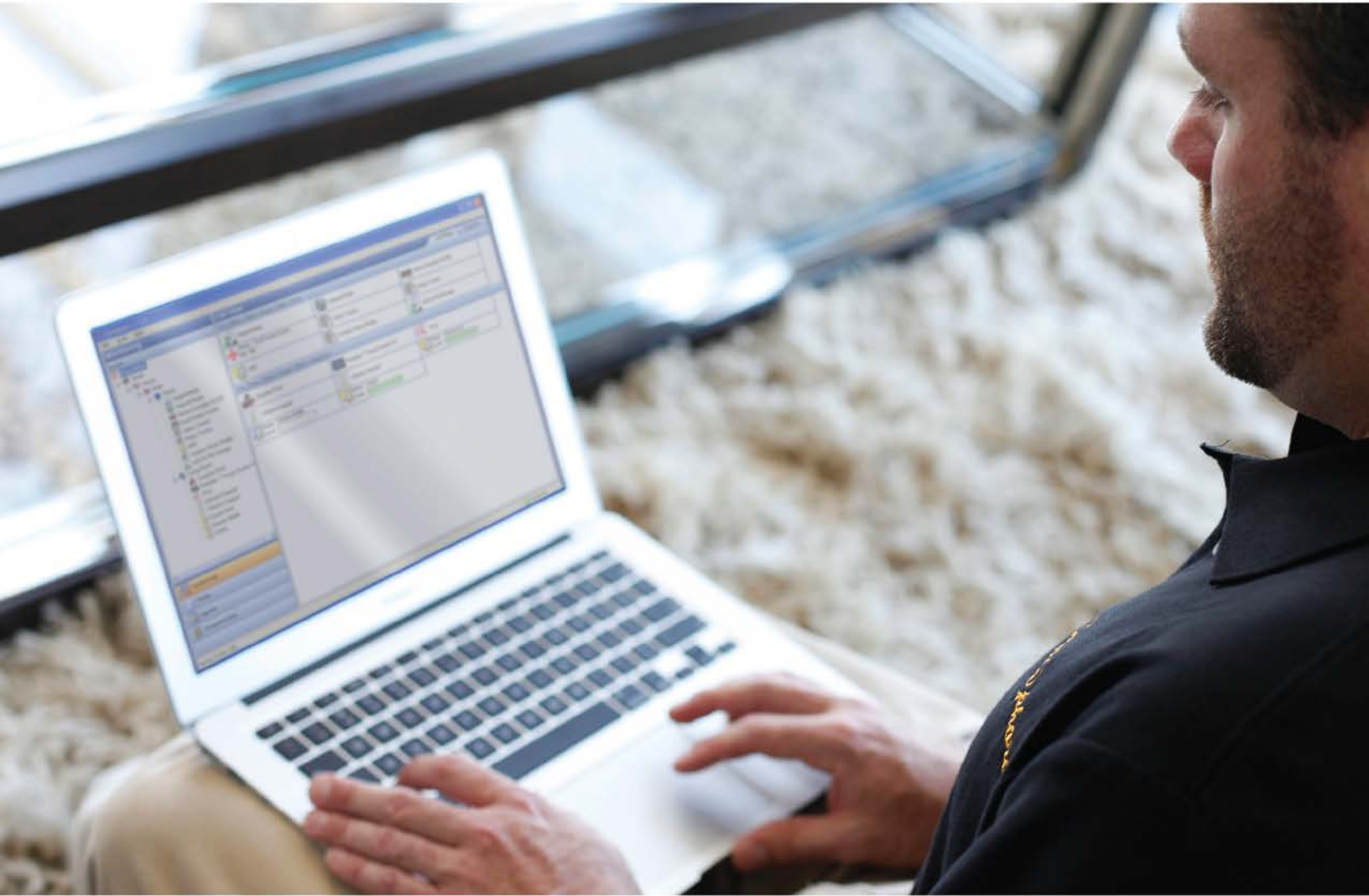# Composer HE Getting Started

Control4

Better. Together.™

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Spread

This product uses software developed by Spread Concepts LLC for use in the Spread toolkit. For more information about Spread see *http://www.spread.org*.

All Media Guide

© 2005-2008 All Media Guide, LLC provides music and video recognition technology that provides cover art and related text that enriches the Control4 user Navigators.

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Part number: 200-00169-N
Composer Home Edition Getting Started (OS 2.6.0, 9-5-2014 MS)

Contents

Introduction

Control4® Composer Home Edition (HE) is powerful software that lets you customize your Control4 system. This Windows-based program that has an intuitive drag-and-drop interface that gives you the opportunity to view and configure your devices, manage your media, and create simple home automation programs.

Your Control4 dealer has installed and configured your Control4 system using the professional version of Composer. Composer HE was created just for you.

This document provides you with a brief overview of how to run the software. For more detailed information, see the *Composer HE User Guide*.

In this document, you'll learn how to

- Install Composer HE
- Start and close Composer HE
- Connect to a Director
- Begin to use the Composer HE interface
- Review the views and menu options

What you can do in Composer HE

Using Composer HE, you can program your Control4 system to behave as you want it to by tying together your system's devices into a single, controllable environment.

Customize your system

Customize your system from a Windows PC on your home's local network or, if you have a Control4 4Sight subscription, from any Internet-connected Windows PC.

Monitor and control

From your Windows PC, monitor:

- Dimmers, switches, and keypads
- Wireless thermostat and security system
- Many other devices

Configure Control4 devices

- Set LED colors on lights and keypads
- Set the dimming speeds and default brightness of wireless dimmers
- Set your Control4 Wireless Thermostat schedule
- Program the buttons on your Control4 System Remote Control.

Manage your digital music and DVD collections

Scan your media libraries for new additions so they become available to your Control4 audio devices.

Configure your system using intelligent agents

- Tie together the audio source selection, volume control, and on/off state of multiple rooms so that they work as one.
- Configure the system to notify you when system events happen.
- Create an announcement that displays on system Navigators.
- Create and modify custom lighting scenes.
- Program events based on date, time of day, and sunrise/sunset. You can also create your own Wakeup scenes.
- Create custom programming scripts.
- Do much more. For more information, see "Agents" later in this guide.

Limitations

Although Composer HE lets you customize your Control4 system, some advanced tasks and configurations must be done by your Control4 dealer. Your dealer can also help you if you have difficulty using Composer HE.

If your system has been configured to connect to Control4's 4Sight service, your dealer can perform

many of these services over the phone and on the web without having to schedule a service call at your home.

Contact your Control4 dealer if you ever need to:

- create a new Control4 system or add/remove devices
- create or edit drivers for third-party products
- install updates to system software
- perform other tasks (such as complex programming) that are beyond the capabilities of you or the software

For more information...

You can find the following related in PDF or web help format at:
http://www.control4.com/customers/resources#documents.

- *Composer Home Edition User Guide*
- *Control4 System Quick Start Guide*
- *Control4 System User Guide*
- *Control4 System Remote Control SR-250 User Guide*
- *Composer Media Edition User Guide*
- Instructional videos

What's new?

Hardware and software support

New

- Cameras (enhanced support for third-party cameras, device control, MJPEG and H.264 support)

End-of-life products

- Media Player (C4-MP2-E)
- Wireless Fireplace Switch, 120VAC (C4-FS1-Z-N)
- Multi-Tuner V2 (C4-TUN2-E-B)
- XM Module for Multi-Tuner V2 (C4-XMOD)
- Dock for iPod (C4-IPDKTT1-E-B)

For more information, log in to the Control4 Dealer Portal, then click **Product Lifecycle** in the *Support* section.

New or updated sections

- What's new
- Content simplified and reorganized

Getting started

Important basics

Your Control4 dealer or Installer has installed and configured your Control4 system to your specifications based on your purchase agreement. While individual Control4 dealer policies may vary, most dealers will charge you for additional service calls unless you have a service contract.

One of the benefits of using Composer HE is that you can customize parts of the Control4 system yourself which can save you some money. Should you require your dealer's assistance, however, you must be prepared to pay for that assistance. Check with your dealer for details.

Caution! When using Composer HE, you are configuring your own Control4 system. While this gives you a great deal of capability, it also carries some risk for which you must be prepared to take responsibility. If you disable your system, your dealer may need to fix it for you, and this could cost you extra.

This section describes some of the basic principles when using Composer HE on your Control4 system. It is important to understand these principles and accept the risk and responsibilities that come with customizing your system yourself.

1 **Your system may become inoperable due to certain types of changes you can make using Composer HE**. It is possible that you could make your system inoperable using Composer HE. In most cases, you can recover your system using a backup project file. However, if you can't recover your system using a backup project file, contact your dealer for assistance. Your dealer can restore your system back to an operational condition.

2 **There is no 'Undo' capability, so back up your project frequently.** If you make a change you don't like, there is no way to easily "undo" that change. You can try to change the settings back to the way they were (if all changes were carefully documented), but the easiest way to restore your system is to load a backup copy of the project that you previously saved. Whenever you make changes to your project, we strongly recommend making a backup copy. To save your project file, use the Back Up option under the File menu. To save a backup copy, use Back Up As and specify an alternate filename (it's good practice to include the date in the backup filename.) When you load a backup file, however, remember that you'll lose any customization that's happened since the backup file was created.

3 **Changes you make in Composer HE are immediately applied to your system**. When you connect to Director and customize your system, the changes are effective immediately. Whether you're changing LED colors or dimmer ramp rates, performing complex programming, or creating agents, Director immediately modifies your system configuration.

4 **Programming can be associated with multiple events**. Control4 system programming lets you program your system to perform similar tasks in a variety of ways. For example, you can set the LED color as a device property, and you can change that property in programming too.

   Note: *Pay close attention to your programming changes so that you don't inadvertently change the behavior of your system in an undesirable way.*

5 **Project files can be backed up with and without the media database**. When you back up your project file, you can create the backup with or without the media database information. If you load a project file that doesn't have any media associated with it, you will lose the media database information that was associated with your current system. It's always a good practice to back up your project with your media when you exit Composer so if you ever need to restore your system, your media database will still be intact. You can also export the media database information and playlists separately for each media source on your Control4 system. If you import media database and playlists, the current media list for that media source and the current playlists will be cleared and replaced with the media database in the file you are importing.

   Tip: *If you forget to back up your media, you can always go back to a previous backup with the media loaded. This may, however, change your system configuration to the old configuration in that backed up project.*

6 **Backups with media and exported media lists only include the media database information**. Backups and exported media lists contain only the media database information used by the Control4 system, not the actual media files. To back up the media files, you should separately back up the media source files to a mass file storage location (USB drive, network file storage, or cloud storage) when you exit Composer HE.

Overview

The following illustration shows how a small home network might be set up. The laptop shows the Control4 Composer software installed on it. Your installer may have set up a network similar to this one.
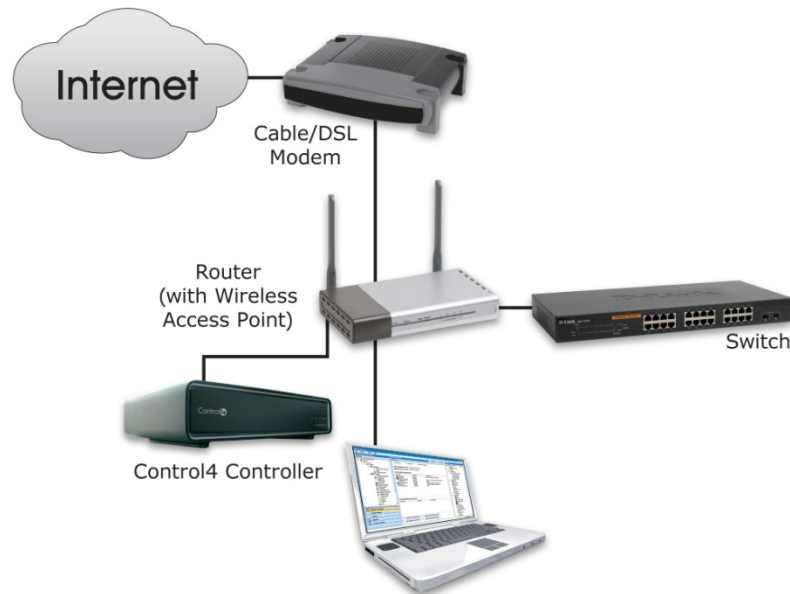
The *router* is the heart of your home computer network. It uses a *modem* to communicate with the Internet. The router provides wifi that wireless devices (such as laptops and smart phones) can use to connect to the network and the Internet. The *switch* provides additional wired connections to the home network.

The Control4 *controller* is the heart of the Control4 home automation network. Your Control4 network is attached to your home computer network. To change how your Control4 network works, you need to:

- Install the Composer HE software onto a computer that's connected to your home network.
- Run Composer HE and connect to the *director* software on the Control4 controller. After you've connected to the Control4 director, you can see the Control4 devices, settings, and programming that automates your home.

Note: *In this document, "controller" refers to any Control4 product that contains the Director software; for example, the HC-250 Controller, HC-800 Controller, or the Sony STR-DA2800ES with full Control4 Automation receiver.*

Installing Composer HE

System requirements

Computer software and hardware

- Microsoft.NET 4 (the Composer install is launched automatically from the Control4 website).
- Microsoft operating systems supported (Windows 8, 7, or Vista). Mac support when used with a Windows virtual machine such as Parallels or VMWare Fusion for Mac.
- 500 MHz or higher processor
- 256 MB RAM
- 90 MB available hard disk space
- Video card and monitor supporting a resolution of 1024x768 or higher
- Keyboard
- Mouse

Home computer network

- Wireless access point (WAP) or wireless router that supports 802.11 b/g/n (optional)
- TCP/IP-based (Ethernet) home network. This usually includes a network gateway, router or switch.
- A broadband Internet connection. During initial setup, a broadband Internet connection is required to update the Control4 system and retrieve the media's cover art. Also, a broadband Internet connection is required to support remote access to the system.

Control4 home automation network

- A Control4 controller (for example, a HC-800 controller).
- Control4 Composer Home Edition (Composer HE) software, version 2.6.0.
- A valid electronic license to run Composer HE.

Install the software

Tip: *Control4 recommends that you install Composer HE on a PC laptop. Laptops are very handy to move about the home or business as you set up your project and test your devices.*

To Install Composer HE:

1   Download and run the installation program from the URL provided to you by your Control4 dealer or installer. The Installation link contains the Composer HE software and this *Composer HE Getting Started* as online help (a PDF of this guide is available on the *Control4 website*). The *Composer HE User Guide* (the companion to this document) is available on the Control4 website in web help or PDF formats.

2   Select **Install Composer**.

3   Follow the on-screen instructions to continue installing.

4   When prompted by the Install program, select **continue anyway** to install the Remote Access Network Tunnel Adapter on your PC.

5   When the installation completes, click **Finish**. A *Composer HE* icon displays on your PC desktop if you selected to have it installed there.

Tip: *The Start menu (Programs > Control4 > Composer 2.6.0 > Composer Directories) has folders for the Drivers, Logs, and Projects in your system. For quick reference, you may want to refer to these folders from time to time.*

Note: *Before you can use Composer HE, you must create a customer.control4.com account and register your controller. Follow the instructions next.*

Starting Composer HE

Before starting Composer HE

Prerequisites

Before you start Control4 Composer HE, you or your installer need to:

- Create an account at *customer.control4.com* (see *Control4 System User Guide*).
- Register your controller to your project so it works with the system (see *Control4 System User Guide*).
- Set up Remote Access so your dealer can fix any problems remotely (see *Control4 System User Guide*).
- Set up 4Sight for remote access to the system (see *Control4 System User Guide*).
- Log into our account at *customer.control4.com* and make note of your Composer HE subscription code.

Note: *This setup may have already been done for you by your dealer. If you don't know whether this is true, check with your dealer either to obtain your account information (account name, email address, password, and registration code) or to verify whether this needs to be done.*
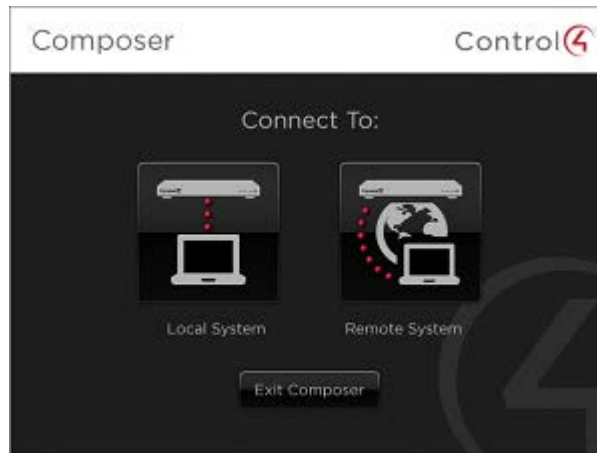
The first time you start Composer HE, the system prompts you for your MyControl4 4Sight account information and a Composer HE subscription code. 4Sight is a Control4 subscription Internet service. The 4Sight Internet connection works well when you're away from home and you want to receive email notifications or configure a device remotely using your smartphone, tablet, or PC.

To use a 4Sight Internet connection, email agent, and Anywhere Access services for one year, you may use the 1-year 4Sight subscription included with each copy of Composer HE. Thereafter, you may want to purchase an annual 4Sight subscription from your Control4 dealer so you can continue to enjoy its benefits.

Start Composer HE

To start Composer HE:

1   From the *Start* menu, click **All Programs**, **Control4**, **ComposerHE**. Composer HE starts and opens a window for connecting to a Director.

The first time you start Composer HE, however, an activation window opens first.

a   Enter the subscription code provided with your Composer HE software. You can also log in to your account at customer.control4.com and click **My Software** to see your subscription codes.

Your Composer HE subscription code will be four 4-character sets separated by dashes, such as **xxxx-xxxx-xxxx-xxxx**.

b   Enter the email address and password associated with your 4Sight account. The email address and password must be the what's associated with your 4Sight account at customer.control4.com.

c   Click **Activate**. The startup screen appears.

Each time you start Composer HE, you will connect to your Control4 system either locally (click **Local System**) or remotely (click **Remote System**). See "Startup Options" and "Connect to a Director" for more details.

2   On the Control4 system, the primary controller is the controller and Director that you connect to from your PC. Connect to Director via an IP address.

Note: *To connect to a Remote Director, first you must set up remote access. See "Connect to a Remote Director the first time" on page 15.*

Startup screen:

Startup options

Use the Control4 Composer HE software installed on your PC to start the Composer HE application.

Ensure that you've registered and activated your account before you start Composer HE for the first time. See "Before starting Composer HE" on page 11.

When starting Composer HE, you select the type of Composer connection you want (local or remote), and your controller's IP address.

The Composer Startup screen presents these connection options. See "Connect to a Director" for details.

- **Local System**—Select this option when working while connected to the home network (inside the firewall). You can modify the project, make connections, add media, and program the system.
- **Remote System**—Select this option when working remotely, but connected to a home network from the Internet (outside the firewall). You can change your Control4 system as if you were hooked up to the Local Network (second option). This requires Remote Access. See "Connect to a Remote Director the first time" on page 15.

Connect to a Director

Control4 controllers have embedded Director software within the controller. Director controls the communication of devices and allows the automation of your Control4 system. When you connect to a Director, you can define and customize your project for your system.

Composer HE lets you access, create, and update project configuration. When you want to change your project to reflect how you want your Control4 system to behave, you connect to a Director using either a local connection or a remote connection.

This section describes how to:

- Connect to a Local Director
- Connect to a Remote Director
- Grant access to a dealer for remote access

Prerequisites

- Ensure that you set up your account at *MyControl4*.
- Ensure that you have the correct setup, depending on how you want to connect. You can connect to Director two ways:
  - **Local System**. Your PC must be on the same IP-based local-area network as your Control4 system.
  - **Remote System**. Your Control4 system must be configured to use 4Sight Remote Access.

Note: *If a Composer HE license is associated with this product, a 'Renew Composer Registration' message may appear before you can connect to Director. If it does, type your email address, password, and then click* Renew.

Connect to a Local Director

**To connect to a Local Director:**

Connecting to a Director on the local network lets you configure current settings, download a new project, or back up an existing project to a file on the PC. Every Director has an associated network address.

When you start Composer and connect to a Local Director, you are making "live" changes to the hard drive on the controller; and every time you connect to that Director, you see your project's configuration.

1   Start **Composer**.
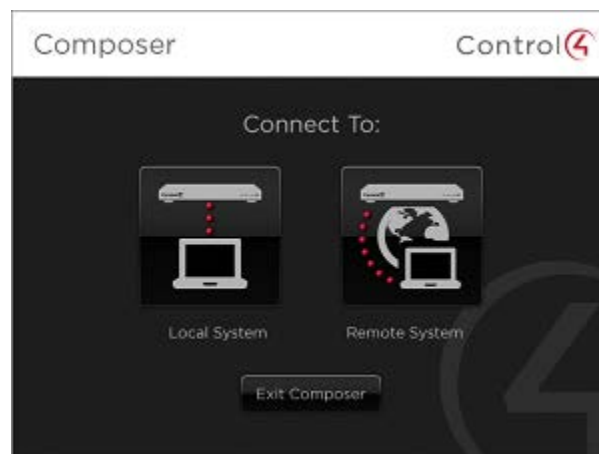
2   Click **Director on Local Network**. The Directors dialog appears when you connect
to a local Director.
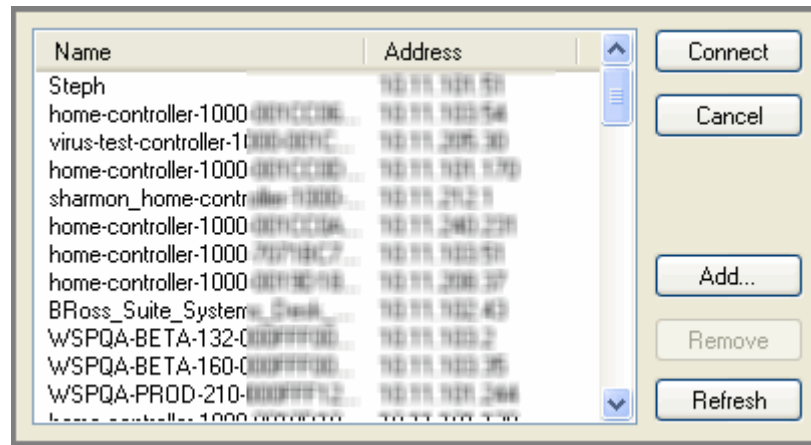
Options available on this page:

- **Connect**—Lets you connect to the Director that resides on the controller
connected to the local network. This shows the controller's name and IP
address.
- **Cancel**—Cancels and closes the Director dialog box.
- **Add**—Opens a dialog box that lets you add the Director's Address of the
controller to which you are trying to connect.
- **Remove**—Removes the controller from the Directors list. Select the controller
to remove. Click **Add** to add it to the list again.
- **Refresh**—Lets you update the Director list to display recently-added
Directors.

3   From the dialog's list, select the IP address of the primary controller to access,
and click **Connect**. The main page appears with the Monitoring and List view
panes.

Connect to a Remote Director the first time

If you've already connected to Director before, go to "Connecting to a Remote
Director" (see below) to connect remotely.

To connect to a Remote Director for the first time:

When you connect to a Remote Director, you are making "live" changes to a
controller remotely. Changes will be made over an Internet connection rather than
over a local network connection.

Note: *This type of connection is not available until the initial configuration is complete.
It requires either a temporary connection requested by Control4 Technical Support
and granted by you, or a constant connection to the system made available by
activating a 4Sight subscription.*

- **Temporary Connection**: If you are registered on *MyControl4*, your controller
registration is completed, and you have remote access. The system is accessible
for temporary remote access, and will be made available to Technical Support
personnel when you complete the Check In process.

- **Constant Connection**: If you've purchased a 4Sight Internet Services subscription and activated the subscription for your controller through MyControl4, then the system is always online and accessible for immediate remote access.

Note: *You may revoke access rights to Control4 Technical Support or your Control4 dealer using* customer.control4.com *at any time; this is not recommended, however, as it will interfere with needed regular updates.*

1   Start **Composer**.
2   Click **Remote System**.

3   After your system is configured for 4Sight Remote Access, you can connect to it using Composer HE from any Internet connection by entering your 4Sight Account Name, E-mail Address, and Password.
4   From the Director dialog that appears, select the Director's network address for the controller you are setting up, and click **Connect**. Choosing the Local Director is essential to Remote Access setup, as it defines to the system the controller you want to use to log in to the Remote Access service. This step is done at your home to give you remote access in your system. If necessary, click **Add** to add the address manually.
5   From the Tools menu, click **Account Services**.
6   If your system's current status displays as Registered, you can select the **Check In** option at the bottom of the screen to initiate a connection when requested by your Control4 dealer or Control4 Technical Support. The next time your system performs a routine check-in, a connection will be maintained until the Composer connection exits. If your system's current status displays as 'Unregistered,' complete the steps provided on the screen.

7   The following screen displays when you first start Composer HE.

Composer HE main screen:

Grant access to a Control4 dealer

To grant access to a Control4 dealer:

1   To grant your Control4 dealer access to your Control4 system, give the dealer access on your user list at *customer.control4.com*.

   Note: *Granting a dealer remote access rights to your account does not require that either you or the dealer reveals any confidential passwords.*

2   On the Internet, go to *customer.control4.com*, enter your email address and password, and then select **Submit**.

3   When you access your customer.control4.com screen for the first time, follow the on-screen prompts to enter your 4Sight Subscription Code, and then click **Activate**. The 4Sight Subscription Code is a series of digits. Find this code on the card you received when you purchased your Control4 4Sight Subscription.

4   When successfully activated, you will see an Account Subscription confirmation screen. The screen shows the information you used to activate your remote account. When you finish reviewing the confirmation screen, click **OK**.

5   If you are connected to Anywhere Access, click **Cancel** or **Close**.

6   In the My Account view with **Account Administration** selected (left pane), click the **Profile** link, and verify the **Dealer of Record** information.

7   With **Account Administration** still selected, click the **Users** link.

8   At the bottom of the page, check this option: **Allow your dealer (your dealer's name) to remotely access your system**.

9   To continue and connect remotely, see the next set of steps.

Connect to a Remote Director

To connect to a Remote Director:

1   Start Composer.

2   Click **Remote System**.

3   When your system is configured for 4Sight Remote Access, connect to it using
Composer HE from any Internet connection by entering your 4Sight Account
Name, E-mail Address, and Password after you connect to 4Sight.

4   When the 'Select Remote Account' dialog appears, select the account you want
to access, and click **Connect**. If the MyControl4 account name is not in the list:

    d   Click **Add** to add the account name and click **OK** on the dialog that appears.
This is the Account Name you created during registration at
customer.control4.com.

    e   When the 'Select Remote Account' box displays again, highlight your account,
and click **Connect**.

5   When the Connect <E-mail Address> dialog appears, enter your **E-mail Address**
and **Password**, and then click **Connect**. A screen appears indicating that your
account, email address, and password are being verified, which may take several
minutes to complete. When authenticated and connected through the
MyControl4 Remote Access Service, the list of Directors available for connection
displays.

6   Select the Director you want to connect to, and click **Connect**.

7   When the remote connection is established, Composer HE opens in the
Monitoring view. Composer HE functions normally as if you were connected to a
local Director, allowing you to configure, program, and troubleshoot your system.

Exiting Composer HE

To exit the Composer HE application click **File** > **Exit**. The software asks you if you
want to save a backup of the project file. Click **Backup** or **Backup As** to save the
project. Control4 recommends that you back up any changes you make to your
project.

Exploring the interface

The Control4 Composer HE interface and wizards are designed to help you

- monitor your Control4 system,
- maintain your media, and
- add or modify custom programs.

Composer HE main screen:

To take advantage of the Composer HE features, learn about the following options in Composer:

- Views
- Menu options

The Control4 Composer HE interface is divided into several panes (see above, for example, Monitoring and List view).

The menu bar (File, Tools and Help) appears at the top of the window.

The upper left portion of the screen displays a project tree and all views available (for example, Monitoring, Media, Agents, and Programming) in your system with the floors, rooms, and devices you will define depending on what you want to do. In the project tree, you can click to collapse or expand the floor, room, or device levels.

The lower left portion of the screen shows the view buttons (Monitoring, Media, Agents, and Programming). This is where you create automated tasks for your system.

Views

Composer HE has four main views (Monitoring, Media, Agents, and Programming). If you click on a view button, the appearance and functionality of the Composer interface changes to reflect the configuration options available for that view.

- **Monitoring**—Click to view the devices on your system, to access specific device controls, and to configure the properties of devices.
- **Media**—Click to manage your digital music, movies, and other collections from a disc player, DVD or CD player, etc. Add and scan stored or broadcast media.
- **Agents**—Click to configure an intelligent agent. Use agents in the system and in programming. Agents include: Wakeup, Scheduler, and more.
- **Programming**—Click to create and modify custom programming for your system. Program devices and agents on the system.

Tip: *Collapse the views by clicking and pulling down the dotted bar above the view buttons, giving you more room to view the project tree above.*

Note: *The project tree was created for you by your Control4 dealer or installer and reflect the floors, rooms, and devices in your home or business. If the project tree doesn't display, check with your Control4 dealer.*

Monitor and control lights, thermostat, etc. (Monitoring view)

The Monitoring view lets you view all of the devices and their current state for your system, rooms and devices.

This view

- displays a list all of the devices in a room,
- displays the current state of contact inputs or other devices, and
- lets you monitor and control the devices contained in the selected location of the project tree.

When selecting a site, building, floor, room, you can see all devices associated with each other in that area. If you select a device in the project tree, this view shows all devices that are in the same room.

To use the Monitoring view:

1   Click the **Monitoring** view in the Composer HE main window. Two pages in this view show the 'List View' screen, which gives you status information for all system devices at a glance: 'List View' and 'Properties'. If the Control4 system is controlling/monitoring device power, the device is shown as Red when off, and Green when powered on. The light level, temperature, security system status, and other details are shown on this screen also.
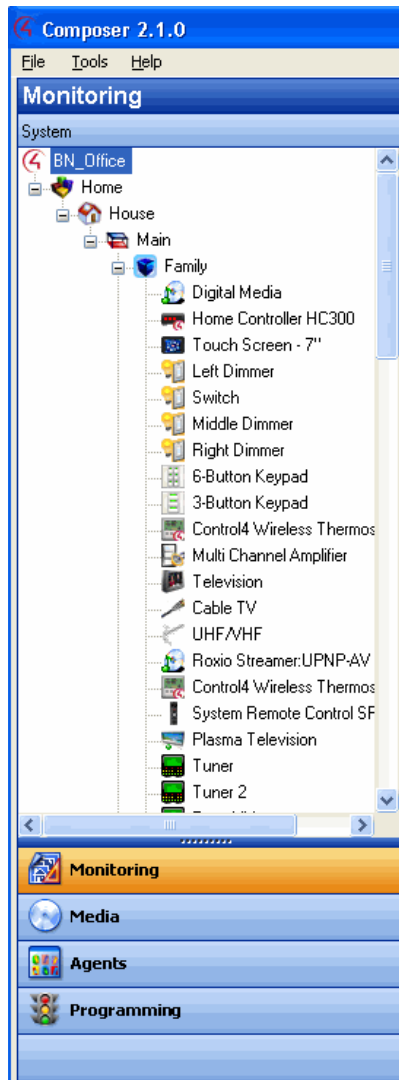
Monitoring view:

2   Double-click any **device** in 'List View' to display the controls associated with that device.

3   Click the **Properties** tab to access the 'Properties' pane for all system devices. Select the device you want to change from the project's tree view. For example:

   •   Configure the LED colors on your keypads.

   •   Configure the LED colors, ramp rates, and preset level for your dimmers.

   •   Configure/program the ABCD buttons on your System Remote Control for each AV device.

   •   Configure/program the thermostat and its schedule.

Project tree (left pane)

The Monitoring view displays the project tree, a hierarchical display of locations and devices. The project tree is where all of the device drivers for your devices reside in your project. Double-click on a device to access its device controls. Hover over a device for detailed device information.

Monitoring pane:

Device control window

Access a Device Control window for supported devices by selecting and then double-clicking the device in the project tree (Monitoring view). For example, if you select **Left Dimmer** in the project tree under Living Room, the following Device Control screen displays.

Device control:
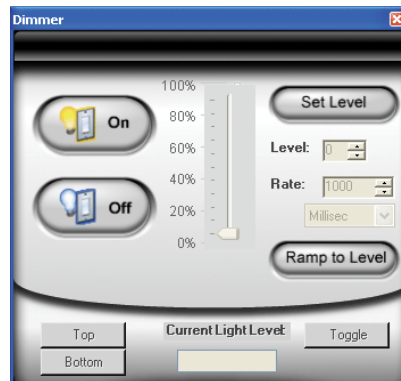
The Device Control screen:

* lets you test and control a device (after identifying connections) from Composer.
* provides you with a simple user interface for device control. For example, the device control for a dimmer lets you click a button on the screen to turn the dimmer on and off or change the light level. This is helpful for test purposes.
* lets you change the configuration parameters (temporarily) and control a device from Composer HE. Later, you can set the parameters permanently in the Properties pane or Programming view. For example, you can adjust the ramp rate of a dimmer to determine the desired ramp rate to set during programming

Manage digital music and DVD collections (Media view)

The Media view lets you:

* Add and scan your media selections to the system, including stored music and movie collections or broadcasts channels and stations. In the Media view, the left-side selections change the right-side views.
* View and select stored or broadcast media from the Navigators (including on-screen Navigator, System Remote Control, or touch screens that come in a variety of sizes).
* Set up playlists (playlists can be created at the Navigators). When you create or edit a playlist, you can pick albums or tracks to play.
* Search for cover art (when not loaded automatically) to enhance displays.

To manage your multimedia sources:

1   Click the **Media** view. The Media Source devices display.

Media view:
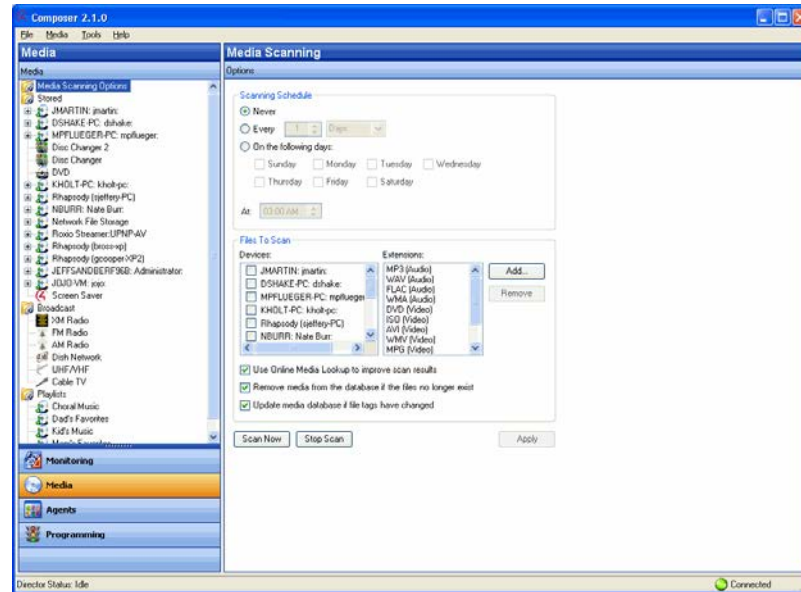
This list provides the media types for the Stored and Broadcast Media categories:

- **Stored Media**
  - CDs. Store CD cover art, albums, artist ratings, and genres (for example, Rock or Country).
  - DVD player or disc changer. Store DVD and CD (when DVD supports CD) selections by viewing cover art, titles, info, results, media, and disc list.
  - USB Driver or USB drive (CBM Flash Disk). Store a variety of media and access it from one of these USB-connected devices.
  - MP3, WMA, AAC, or FLAC on Digital Audio Player. Store MP3—HDD music cover art, albums, artist ratings, and genres (for example, Rock or Country).

- **Broadcast Media**
  - DIRECTV. View DIRECTV channel options, including station IDs, genres, ratings and music channels.
  - Dish Network. View Dish Network channel options, including station IDs, genres, ratings, and music channels.
  - Cable TV. View Cable TV channel options, including station IDs, genres, ratings, music channels.
  - UHF/VHF. View the UHF channel options, including station IDs, genres, ratings, and HDTV.
  - AM/FM/XM and Internet Radio. Scan AM, FM, Internet radio, and XM stations.

2   Select any source device to modify the media list for that device.

- Scan for new music on your network devices: configured USB-attached storage device or a configured network file store on any network-connected PC.
- Scan for a new DVD in a configured Sony disc changer.
- Search for media information using the media lookup service.

- Manually customize your MP3, WMA, MP4, FLAC, or AAC-formatted albums and songs.
- Manually add, edit, or delete DVD information.
- Search for the channel lineup on cable, satellite, or off-air programming service. Manually edit channel lineup.
- Create playlists.
- Export media lists for backup purposes or import media lists.
- Export playlists for backup purposes or import playlists.
- Set up Internet radio (your dealer can do this for you).

3   To add new MP3/WMA/MP4 files to your collection, copy the files to a configured storage location on your USB-attached storage device or a configured network storage device.

4   To add a new storage device, have your Control4 dealer add it to the Composer project and configure it for your use.

- The network address of the controller used for your MP3/WMA/MP4 files is \\<ipaddress>\media\audio where <ipaddress> is your controller's TCP/IP address (for example, 192.168.0.100). To copy MP3/WMA/MP4 files from your PC to the controller, open that directory in Windows Explorer and copy the files to a directory in that location.
- After you copy the files, use the **Media** view to select the storage device, and then select **Scan** to add them to your Media list.
- Customize, if necessary, the metadata for the newly-added media.

Use intelligent agents (Agents view)

Agents let you perform more complex programming by using functional modules. For example, the Scheduler agent lets you program an action using dates and times.

Agents view:
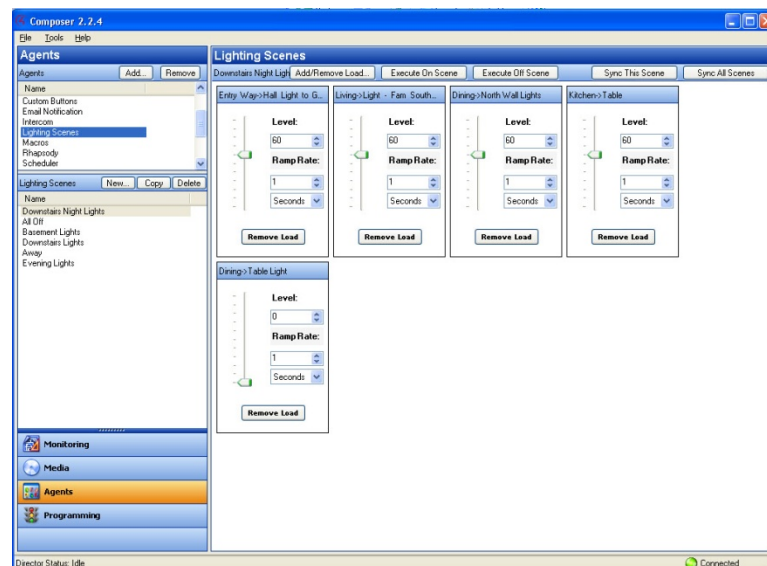
To use the Agents view:

1   Click the **Agents** view.

Configurable agents:

- **4Store**—Set up and manage 4Store logins, apps, themes, and storage.
- **Access**—Show or hide icons on your Navigators using a pass code.
- **Advanced Lighting Scenes**—Control lighting throughout your residence or business from any device—on-screen Navigators, touch screens, and tablets.
- **Announcements**—Create an announcement to display on the touch screens, Control4 apps, or on-screen Navigators.
- **Custom Buttons**—Shown on the Navigators. You can create up to four screens with six buttons each to show on the Navigators in specific rooms or in all rooms in the system. Use programming to link the Custom Button events to the actions you'd like to perform.
- **E-mail Notification**—Send email to any Internet mail address. Use Programming (requires a 4Sight subscription and remote access enabled on the controller) to send out the notification.

  Notes:

  Remote Access is required to use the E-mail Notification agent. Check with your dealer for details about using Remote Access.

  Avoid setting up email notifications for events that occur frequently (e.g., when a Motion Sensor detects motion). If the email notification trigger event occurs too often, it will cause the system to become sluggish.

- **Intercom**—Sets up the Intercom system for 5″ or 7″ In-Wall Touch Screens, the 7″ In-Wall Touch Screen with Camera, 7″ Portable Touch Screen with Camera, or the Door Stations.
- **Light Properties**—Used for Panelized Lighting. Check with your dealer for details.
- **Media Scenes**—Create and configure Media Scenes which are used to link rooms in your system for audio functionality. Activate and deactivate Media Scenes using the Agents or Programming views.
- **Rhapsody**—Set up Rhapsody and access the Rhapsody account (requires a Rhapsody account).
- **Scheduler**—Schedule events to which you can attach programming. Scheduled events can be based on specific time of day, day of week, and sunrise/sunset times.
- **Screen Saver**—Create a new screen saver to use on your touch screens and on-screen Navigators.
- **SNMP Configuration**—Manage Control4 home networks remotely. Check with your dealer for details.
- **Timer**—Create a timer to enable or disable devices at set times.
- **Variables**—Create variables to use in programming. You can create number variables (numeric), true/false variables (Boolean), and text variables (string).
- **Wakeup**—Incorporate your music selection, light level and ramp rate, and temperature control to wake you up.

See "Agents Types" in the *Composer HE User Guide* for a definition of each agent with examples.

- Options available on some agents:
  - **Add**—Lets you add agents to your system.

**Note:** *Your dealer will need to do this for you.*

- **Remove**—Lets you remove agents from your system.
- **New**—Lets you create a new instance to customize the highlighted agent in the Agents pane (left pane). For each specific instance of an agent, you provide a unique name and customize it for the specific need.
- **Copy**—(Lighting Scene only.) Lets you copy an existing instance of the highlighted Lighting Scene agent.
- **Delete**—Lets you remove an existing instance of the highlighted agent.
- **Agent Navigation pane**—Provides each agent a unique interface to set up agent information in a majority of cases for future programming in the Programming view.

See the *Composer HE User Guide* for more details.

Program the Control4 system (Programming view)

For the Control4 system to control its devices, you need to configure the behavior of those devices to occur automatically in the Control4 system. The Programming view lets you write a programming script using Composer's drag-and-drop or double-click functions.

Programming view:
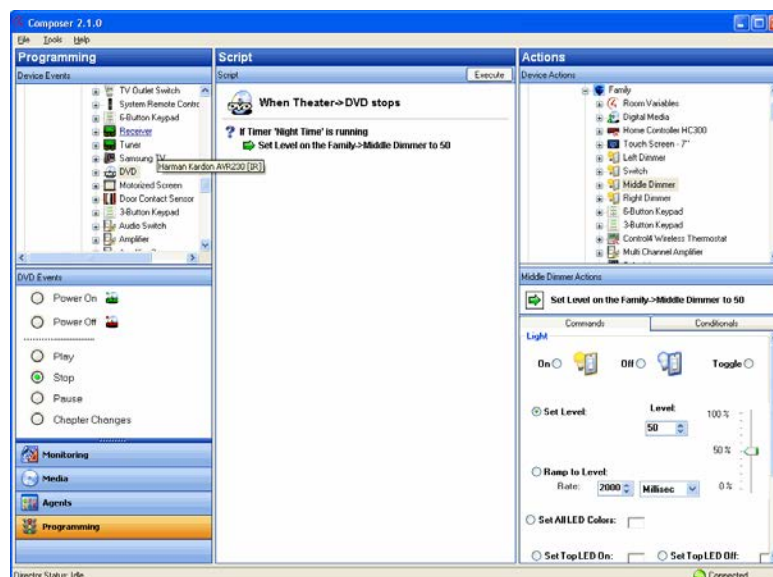
All programming is based on events and actions in a Control4 system. For example, if a door opens, it is an event. When an event occurs in the system, it can trigger programmed actions to take place. For example, when the bathroom door opens (event), you can program the bathroom light to turn on (action).

The Programming view consists of several panes:

- **Device Events** and **Project Tree** (top left pane)—Displays all devices that have associated events.
- **Events** (bottom left pane below the Events project tree)—Displays the available Events for the currently-selected device in the Events project tree. If there are no events for that device, none are displayed.

- **Script** (center pane)—Displays the Script that is associated with the currently-selected event from the Events pane. Drag and drop items to rearrange the order and nest items in the Script pane.
- **Device Actions** (top right pane)—Displays all available device options (in tree form) that have associated actions you can use to write your script.
- **Actions** (bottom right pane)—Displays the selection of the Command, Conditionals, and Loops tabs you can select to move to the Script pane. To add an action to the script, select the action, and then click or drag-and-drop the **green arrow** or **blue question mark** to add the script to the Script pane.

See the *Composer HE User Guide* for more details about how to create a script.

To use the Programming view:

1   Click the **Programming** view in Composer HE. Programming actions occur based on specific events in the system to make it easy to use and powerful.

Basics concepts for programming:

- **Devices**—Each device in the system is seen from two perspectives: (1) functions that occur on the device (event) and (2) functions that can be done to/using the device (action). The 'Device Events' pane on the left side of the Programming view shows the events for each selected device. The 'Device Actions' pane on the right side shows the actions for each selected device. Devices include not only the physical devices on the system, but also the logical devices, for example, rooms and agents.
- **Events**—When anything occurs on the system, it is an event. Most system events can have programming attached to them. Notice the specific events that occur on each device as you select devices. For example, the Control4 wireless dimmer has several events associated with it: Top Button Pushed, Top Button Released, Bottom Button Pushed, Bottom Button Released, and so on. The event is the fundamental trigger used in Control4 system programming.
- **Actions**—An action is a specific task that the system can perform. Actions are also device specific. For example, you can set the Control4 wireless dimmer to turn on/off, toggle, go to a specific dim level and ramping rate, use custom LED colors, or force the button press/release events to fire.
- **Commands**—A command is a specific action inserted into the programming script (to the 'Script' pane).
- **Conditionals**—Most devices can be evaluated on a conditional basis. For example, the conditionals that you can use on the Control4 wireless dimmer are: is the light on, is the light off, is the light level greater than, equal to, less than, or not equal to a specific level? The power of conditionals lay with your ability to use conditionals to create programming which starts with and evaluates current conditions, and then proceeds accordingly.
- **Script**—The script is the ordered set of conditionals and commands which you associate with a specific event. Scripts appear in the 'Script' pane as you add them. When an event occurs, the Control4 system executes the script associated with the event.
- **Variables**—You define variables when you create a Variables agent in the Agents view. There are three types of variables you can use in programming:
  - **Numeric**—Use Numeric Variables for counting up, counting down, or setting values based on a number.
  - **Boolean**—Use Boolean Variables to set and track true/false values. For example, when the Scheduler sunset event fires, you can set a user-defined Boolean variable called Night_Time to **true**. When the Scheduler sunrise event fires you can set Night_Time to **false**.

- **String**—A String Variable contains a text string. You can set and evaluate string variables in programming. For example, you can set a user-defined string variable called Selected_Playlist equal to "Exercise Music."
- **Room Variables**—In addition to the user-defined variables you can create, the system also has system variables attached to each room which you can use when you program your system. Room Variables are most commonly accessed as commands and conditionals from the Room device. However, a full set of Room Variables is also available for each room on the system.
- **Programming Control**—Use the Programming Control commands to delay or stop script execution.

Example: Below is an example that demonstrates some of these concepts. When you start playing a DVD in the Living room, if it's evening, you want to ramp the lights in the room gradually to 15%. When the DVD stops or pauses, the lights automatically ramp up to 50%. When the DVD plays again the dimmer level returns to 15%.

The following steps demonstrate how you'd create the programming for the previous example.

- There are three Events: DVD Play, DVD Stop, and DVD Pause.
- The only Conditional to check is **night time**.
- Actions are added to the Script pane by either double-clicking or dragging and dropping the Action's arrowhead or question mark into the Script pane.
- The Commands are dimmer ramp commands.
- You can drag and drop a Command arrow on top of a Conditional question mark to "nest" (or indent) the Command.

The following examples show Stop and Play commands (notice the subtle differences in the dimmer levels). Detailed information about how to program the system is in the *Composer HE User Guide*.

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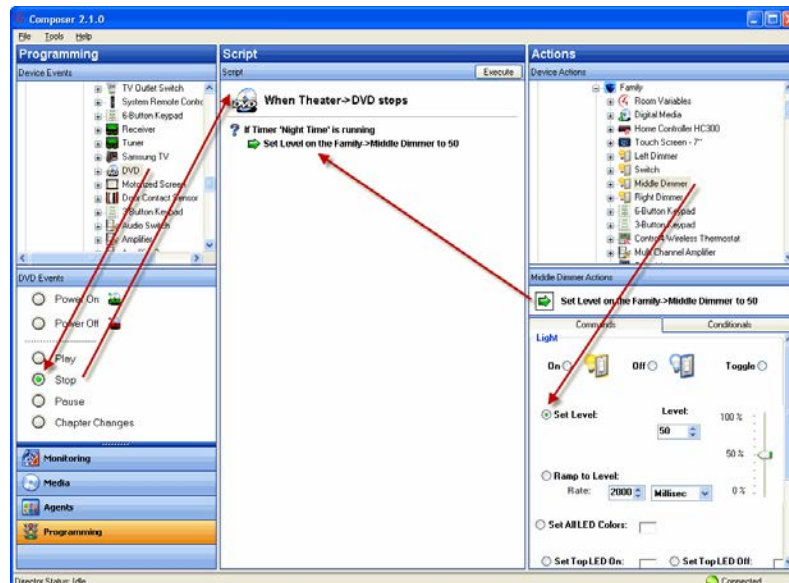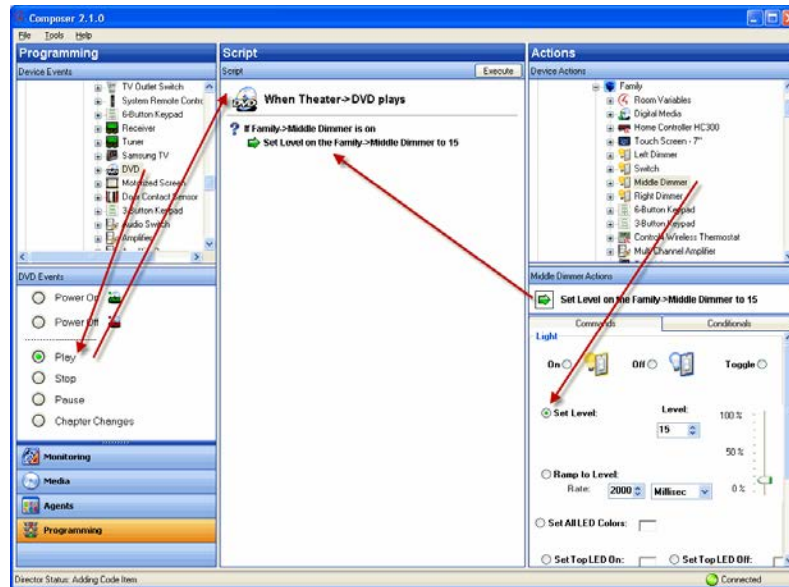
Menu options

Use the Composer HE menu bar to perform basic file tasks, view the network tools, and view the online help.

Menu options:
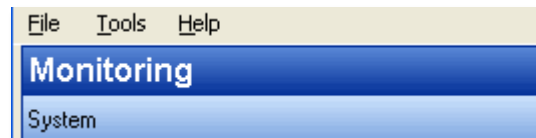
The menu bar provides the following menus:

- **File**—Perform typical file management tasks, load a project, connect to or disconnect from the Local Director, refresh the Navigators, back up the project, or exit Composer HE.
- **Tools**—View network status and account information.

  Note: *Updates are not supported in Composer HE.*

- **Help**—View the Composer *HE Getting Started* online help and Composer HE version information. Links to the *Composer HE User Guide* are provided in the online help.

File

The File menu lets you perform project file management tasks, load a backed up Composer HE project, connect to Director, refresh the Navigators (including the touch screens and on-screen Navigators), create a backup, or exit Composer HE. The file management options relate to the Composer HE project files you back up on your PC (they have a .c4p extension).

When you set up a Control4 system, you create live project configuration information on the controller that is backed up to a project file on your PC. This lists specific information about each system, including devices, connections, configuration, programming information, and media.

- **Load Project**—Loads a selected project into Composer HE. Composer HE prompts you for a backup before it clears the project configuration information, and replaces it with the selected project to load from your local drive.
- **Connect to Director**—Connects you to the selected Director residing on the controller if there is more than one Director in the network. Composer HE prompts you to back up your project before connecting another Director. When you connect, project configuration information from the controller appears on the Composer HE screen.
- **Disconnect from Director**—Disconnects you from Director. Composer HE prompts you to back up your project before disconnecting you from the currently-connected Director. This option is available when connected to Director.
- **Back Up**—Backs up the current project to your connected PC. The first time you back up, the software prompts you for a file name and to back up any media information (recommended). When you select this option, the current project becomes an option in the File > Load Project list.
- **Back Up As**—Backs up the current project, and prompts you to enter the name of the file. Composer HE prompts you to back up any media information (recommended). When you select this option, the current project becomes an option in the File > Load Project list.
- **Refresh**—Refreshes the Composer HE screen with the current project configuration information from Director.
- **Refresh Navigators**—Refreshes the Navigator screens with the current project configuration information from Director.

  Note: *Control4 for PC/Mac and tablets must be updated in the Control4 app. Control4 for iPhone, iPod touch, iPads, and Androids will update if online.*

- **Exit**—Exits Composer HE, and prompts you to back up the project before the software exits and returns you to the desktop.

Media

Note: *The Media menu appears only when you select the Media view.*

The following options are available:

- **Clear Media List**—Clears the media list associated with the highlighted device from the media database.
- **Export Media List**—Exports a media list for the selected device from your controller to your PC.
- **Import Media List**—Imports a media list from your PC to your controller.
- **Export Playlists**—Exports a playlist from your controller to your PC.
- **Import Playlists**—Imports a playlist from your PC to your controller.
- **Import DVD List from File**—Imports an Excel list of DVDs for disc changers.
- **New Playlist**—Creates a playlist of MP3, WMA, MP4, AAC, or FLAC files. The playlist is available from any touch screen or on-screen Navigator. Add albums, remove songs, re-order songs, etc.

  Note: *If you remove songs from a playlist, it does not remove them from the media database.*

- **Delete Playlist**—Removes a playlist.

- **Rename Playlist**—Renames a playlist.
- **Tag media files**—Converts media files so all media players can see the same tags.

Tools

The Tools menu lets you access some tools for checking device connection status:

- **System Diagnostics**—Assists you to gather system information and help determine if any issues encountered are configuration problems, performance issues, or potential defects. See "System Diagnostics" below.
- **Account Services**—Facilitates system registration which is required for software updates and to use the media services in the system. Account Services is also required in conjunction with a 4Sight account to enable the remote access web service (which allows secure access to your system via the Internet). See "Account Services" below.
- **Update Manager**—Check with your Control4 dealer or Installer for details about this option.

System diagnostics

Controller Performance tab—View controller performance information including CPU and memory usage.
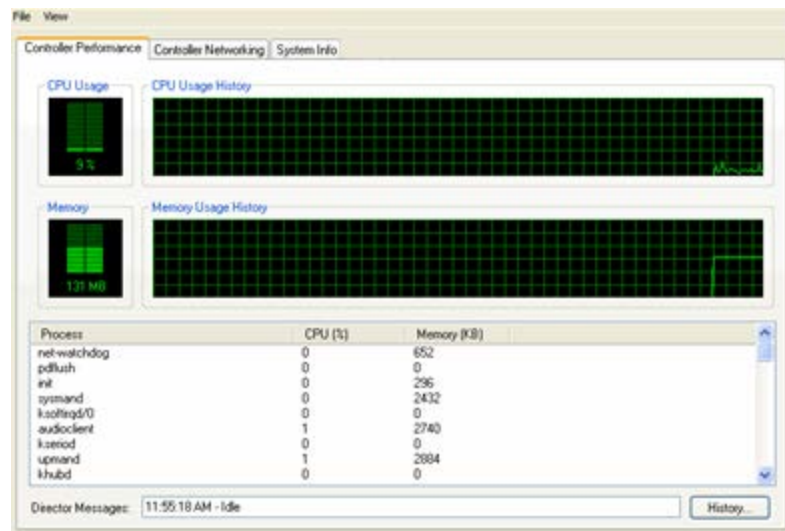
Controller Performance History button—View the history of CPU and memory performance. Click the **History** button on the lower right of the screen.
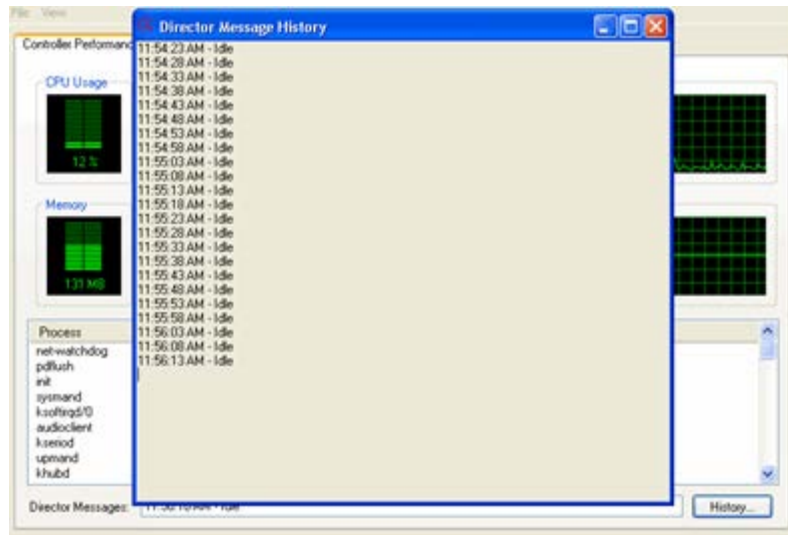
Controller Networking tab—View controller networking information, including the network type, connection status, MAC address, IP address, Subnet mask, Gateway, DHCP status, and DNS server information.
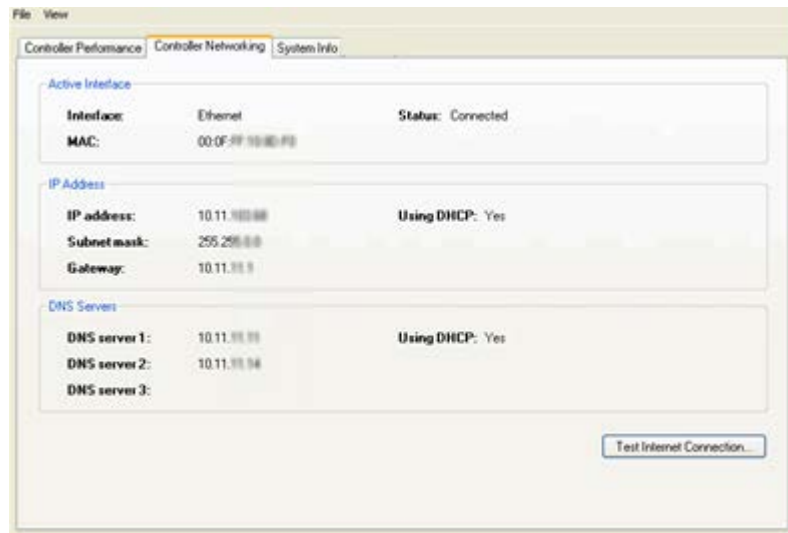
Test Internet Connection button—Click to test the current Internet connection.
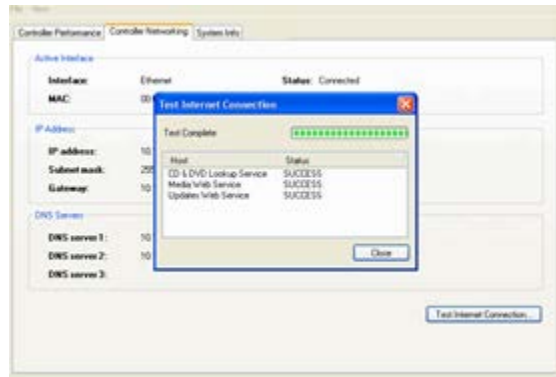
System Info tab—View System information. Click **Save To File** to save the displayed text to a file.
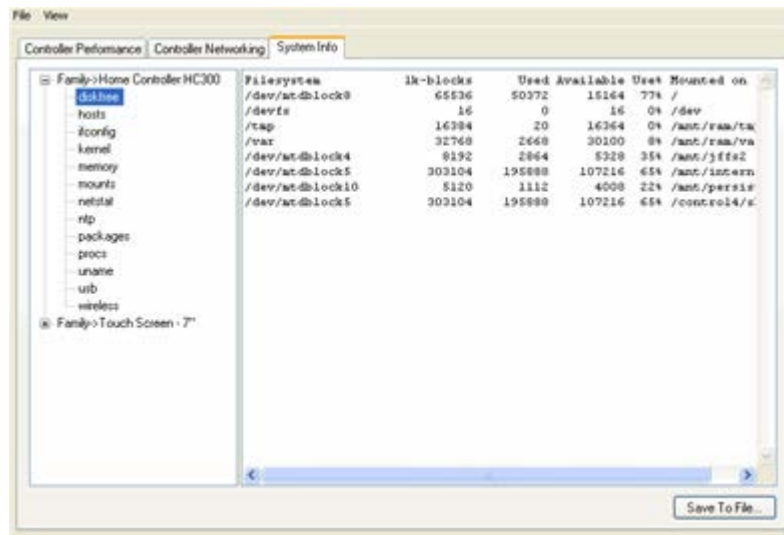
Account services

Set up a *MyControl4* account and register a controller. Check the current status and establish a service connection.

- Controller Registration (Register/Unregister)
- Current Status
- Service Connection (Check In)

Help

Use the help menu to access the online version of this *Composer HE Getting Started* document with Index, Glossary, and search options. Also, you can check the version of your Composer HE software and Director.

From the Help menu, you have the following options:

- **Contents**. Displays the Content tab of the Help system.

- **Index**. Displays the Index tab of the Help system.
- **About Composer**. Displays the Composer HE and Director versions.

Where to go from here

Refer to the *Composer HE User Guide* on the Control4 website (available as help or PDF). The user guide provides in-depth information about how to monitor and program your Control4 system. If you are using online help in Composer HE, links to the *Composer HE User Guide* are provided from the help topics.

Control4 strives to support Control4 dealers so they can support you. If you have questions or need assistance beyond what is provided in this *Composer HE Getting Started* or the *Composer HE User Guide*, please contact your Control4 dealer.

Glossary

4Sight: An Internet service that provides a connection to the home automation system any time and from any place worldwide.

4Store: The Control4 app store where you can buy applications for your system. The applications appear in the touch screens or on-screen Navigators under More > Settings.

AAC: Advanced Audio Coding—A successor to the MP3 format. A standard, lossy compression and encoding scheme for digital audio. Touts better sound quality.

agent: In Control4 programming, agents provide the ability to perform complex programming by using functional modules. There are various types of agents; for example, Announcements, E-mail Notifications, Scheduler, Advanced Lighting, and Wakeup.

Anywhere Access: In OS 2.4 and later, a feature of 4Sight that lets users access and manage their Control4 systems remotely from the web, smartphone, PC, MAC, or tablet.

action: An activity that occurs when an event prompts it to do so.

AV: Audio Video.

CD: (Compact Disc)—An optical disc that stores digital data. This format is compatible with Control4 products.

client: A software or hardware device that communicates to a server for feedback from the server via an application for the user.

Command: A 'do' statement; actions the Director communicates to a device.

Composer: The Control4 software used to design and define a Control4 home automation system.

Composer Pro: Composer Pro is used to set up and configure Control4 devices to communicate with each other in a home automation system. The dealer uses this software to create and configure the project for the customer.

conditional: An 'if' statement that asks true/false questions, which are acted upon in Composer programming.

connection: Devices that are bound or linked together in Composer so they can communicate with each other.

contact: Contacts are generally used to monitor the status of something (door, window, water sensor, etc.) and can be connected through a security panel or directly using a Control4 controller or Contact/Relay Extender. Contacts connected to a Control4 controller or Contact/Relay Extender can be configured either as NC (normally closed) or NO (normally open).

Control 4 app: An app that lets users manager their Control4 systems from an iPhone, iPad, iPod touch, PC, Mac, or tablet device.

Control4 system: A home automation system designed and developed by Control4.

controller: The main device that makes home automation possible. There may be multiple controllers within a Control4 system. The controller that runs Director is referred to as the primary controller. The other controllers in the system are secondary controllers.

device: A component that requires a device driver; code that is used to allow the Control4 system to work with that device. Device drivers are added to the project tree in Composer by the dealer.

device driver: Every device in the Control4 system needs a corresponding device driver to control that device.

DHCP: DHCP (Dynamic Host Configuration Protocol)—A protocol used between a network client and a DHCP server (usually a router or access point) that dynamically assigns IP addresses from a pre-defined list to clients on a network.

Director: Each Control4 controller (such as an HC-800 Controller) ships with pre-installed Director software (Linux based) embedded in the device. The Director communicates with Control4 products and third-party products to enable home automation and interaction of devices. Director runs the Control4 devices. Composer Pro is the software used to connect to and program a system Director that resides on a controller.

DriverWorks: The DriverWorks SDK is used to create two-way drivers for audio video (AV) and non-AV devices.

DVD: (Digital Versatile Disc)— A media format for video and data storage.

end point: The end point is the final point (device) on the defined path over which audio and/or video content is routed to a room. An example of this would be a TV or receiver.

Ethernet: Uses Ethernet category 5 (CAT5 or CAT5e) wiring to transfer data. Ethernet uses a star network topology that allows multiple points to communicate to a single point. The Speaker Point® uses Ethernet to communicate to the Control4 controller.

event: An action; used to trigger Composer programming when programming Control4 devices.

file format: A format used by applications to store/read files.

FLAC: Supported by Control4 since software release 1.8; this is a free, open source, lossless audio codec format that supports tagging, cover art and fast seeking. Audio is compressed with no loss in quality.

gateway: (router)—Provides a means of communicating between two separate networks.

home network: A network installed in the customer's home that provides an Ethernet or wireless connection so that Control4 devices can communicate with each other.

home automation system: The Control4 system—a line of home automation products that communicate with each other over Ethernet, WiFi, or ZigBee for a total home automation experience.

identify: Your Control4 dealer or installer will identify a device to the Control4 system after they add the device driver to the project tree. This ensures that the device can communicate with the Control4 controller and Director.

intercom: A two-way audio and/or video communication among supported Control4 devices.

IR: Infrared light—Some network devices can be controlled by a wireless remote control that uses pulses of infrared light to send commands to the device.

LCD: (Liquid Crystal Display) - A display used with some Control4 interfaces.

LCD Navigator: An LCD device used to control lighting, music, videos, etc., on an LCD screen.

LED: (Light Emitting Diode). Primarily used in dimmers, switches, and keypads, but LEDs are also used on other Control4 devices for status purposes.

Linux: An operating system used by several Control4 devices.

List Navigator: Menu options that are visible on a System Remote Control.

live connection: A term used in Composer Pro to indicate an actual connection to the network.

loop: A type of conditional in programming; a 'while' statement; for example, "while the sprinklers are on..."

media database: Media information is stored in the media database, which will permit users to view the media from the Navigators.

MP3: A music format that makes streaming audio available.

MP4: An audio and video format. Can also store images and subtitles.

Navigator: A Control4 Navigator used with the Control4 system to control lights, music, videos, etc. Navigator is software that the customer interacts with using a Control4 System Remote Control, on-screen Navigator (TV screen), or touch screen.

on-screen: Allows you to select the controller (e.g., HC-800 Controller) in the room that controls the source for the on-screen display.

playlist: A list of songs compiled in a list. The list can be compiled by songwriter, album, song type, or any combination of the above.

Power Over Ethernet (POE): Network cabling that provides Ethernet connectivity and device power over a single cable. Commonly used for Control4 devices.

primary controller: The main device that makes home automation possible. There may be multiple controllers within a Control4 system. The controller that runs Director is referred to as the primary controller.

programming: A machine-readable artificial language used to express computations that can be performed by a device.

project tree: A tree view in Composer where the project is layered by the larger branches (Home, Office, etc.) and then the lower branches (floor, rooms, etc.), and finally to the leaf level (drivers).

ramp rate: The rate that a dimmer ramps up its voltage.

relay: An electrical switch that opens and closes. A relay is controlled by another electrical circuit.

remote access: The ability to access a device from a remote location.

Remote Director: Connects you to the home network while working in Composer from a remote location.

retrofit: The ability to set up a home automation system in an existing structure or home. Compare this with new building construction.

RJ-45 jack: An eight-pin jack used to connect CAT5e network cables to Ethernet devices.

router: See gateway. Functions similar to an AP but with additional functionality for controlling the network; for example, coordinating traffic between different networks.

secondary controller: Other controllers in the system that do not run Director or are used as the primary controller.

serial-controlled device: Serial-controlled devices with an RS-232 interface and control protocol often have a higher level of controllability than IR-controlled devices. Examples of serial-controlled devices are projectors, multi-disc DVD changers, etc.

switch: An extension of a router that adds more Ethernet ports to support additional devices or clients on the local network.

system event: An action that causes another action; for example, if a projector turns on, it enables the other devices in the system that work with the projector.

System Remote Control: A Control4 System Remote Control is a universal solution that replaces remote controls from other manufacturers, and includes programmable buttons. This System Remote Control can access on-screen Navigators.

touch screen: A touch screen is a home automation system Navigator that controls the home's lighting, music, videos, and other devices on the home automation system.

UI (user interface): The preferred term is Navigator. The Control4 interface used with Control4 devices to control home automation, for example, touch screens, or on-screen Navigators, and devices that use Control4.

universal remote: Universal remote control. A third-party remote control that can be programmed to replace other remotes in the home so that only one remote is needed, replacing all others. A Control4 System Remote Control is a type of universal remote control.

USB: (Universal Serial Bus) - A connector format used with USB drives that connect to a USB port on Control4 devices.

Virtual Connection: A term used in Composer Pro to indicate a connection outside the network.

Virtual Director: A connection to a virtual controller only (a PC is the Director host rather than the controller). Projects created or edited here are benign until the saved project is loaded onto a controller.

WiFi: Uses bi-directional wireless technology to transfer data. WiFi (wireless fidelity) devices "connect" to each other by transmitting and receiving signals on a specific frequency of the radio band using a wireless access point. This technology uses the star network topology. WiFi uses high-bandwidth 802.11.

wired network: Uses Ethernet Category 5 or 6 (CAT5 or CAT6) wiring to send and receive data between devices connected to a network.

wireless access point: A router extension with an antenna that communicates with WiFi devices and clients in the home. A wireless hub that connects to a wired network and distributes a wireless signal throughout the structure.

wireless dimmer: A Control4 dimmer that uses the ZigBee. UL listed.

wireless switch: A Control4 switch that uses ZigBee. UL listed. Has an air gap to cut power.

WLAN: Wireless Local Area Network.

WMA: (Windows Media Audio)—Audio data compression technology developed at Microsoft; an audio file format that competes with MP3.

ZigBee: A wireless network that uses bi-directional wireless mesh network technology to transfer messages from one device to another. Unlike a star network topology where devices can only send messages to each other by sending them first to a single central device (which then delivers the message to the recipient device), a mesh network topology allows the devices to forward messages from one device to another, thereby extending the effective range of the network. Uses low bandwidth 802.15.4. Up to 250 devices are allowed per controller, but Control4 recommends a maximum of 125.

ZigBee Pro: The 1.1 version of ZigBee that provides improvements in standardization by: allowing more interoperability with other Control4 devices, support for home automation profiles, and improves the scalability of multiple ZigBee access points.

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