





1934 Lakeview Avenue, Dracut, MA 01826, USA Phone (978) 957-4ECU Fax (978) 957-8366

http://www.qtiusa.com

Trademarks, Version, Printing, and Copyright

Trademarks	
	Simplicity [™] All-In-One [™] , Simplicity [™] Voice, Simplicity [™] Switch, Smart Switch [™] , VMK [™] , QSP [™] , QVR [™] and QIC [™] are registered trademarks of Quartet Technology, Inc.
	Insteon® is a registered trademark of SmartLabs Inc.
	X-10 [®] is a registered trademark of X10 Ltd.
	Windows® is a registered trademark of Microsoft Corporation.
	Mac OS® is a registered trademark of Apple Inc.
Version	
	January, 2015 Version 2.0, Revision A North American Edition
Printing	Printed in the USA.
	Quartet Technology, Inc. (QTI) is concerned about the environment. To reduce waste and complete the recycling circle, we printed this manual and cover on stock that is recyclable. QTI has made every effort to look at environmental implications when deciding on packaging.
Copyright	
	Copyright [©] 2015 Quartet Technology, Inc.
	QIC Manual P/N: 5154
	This manual is copyrighted and all rights are reserved. This manual may not, in whole or in part, be copied, photocopied, translated, or reduced to any electronic medium or machine-readable form without prior consent, in writing, from Quartet Technology, Inc.
	The information in this manual is subject to change without notice and Quartet Technology, Inc. assumes no responsibility for any errors that may appear in this document.

Warranty Information

Warranty

In connection with Products sold and Software licensed by Quartet to the Buyer hereunder, Quartet makes the following warranties, and no others:

(1) Quartet warrants that the Products (excluding, where applicable, any batteries, microphones, therein contained, or any portion thereof comprised of Software, which is specifically warranted below) will be free of defects in materials and workmanship for a period of one year from the date of delivery to the Buyer. Quartet's sole responsibility under the aforesaid warranty shall be, at its election, the repair or replacement of defective materials and/or workmanship during the aforesaid period, provided that the Buyer has promptly reported such defect to Quartet and Quartet has found, upon inspection, that such Products are defective. The Buyer must obtain shipping instructions from Quartet prior to returning any Products under warranty. It is the Buyer's responsibility to return the defective Products to Quartet at the Buyer's expense. Ordinary transportation charges back to the Buyer shall be the responsibility of the Buyer, exclusive of duties, tariffs and transportation insurance. All replaced hardware or parts shall become Quartet's property.

(2) Quartet warrants that all unmodified Software will substantially conform, for a period of one year from the date of delivery to the Buyer, to Quartet's published specifications prevailing at the time of shipment. Receipt by Quartet of a written claim under this warranty and the return of the Software must occur within said period. Quartet does not warrant that the Software will be error free or that all errors will be remedied. Quartet's entire liability under this warranty shall be for Quartet to make reasonable efforts to remedy, in a manner deemed suitable to Quartet, any nonconformance reported in writing during the warranty period.

(3) EXCEPT FOR THE WARRANTIES SET FORTH IN THIS SUBSECTION, QUARTET HEREBY DISCLAIMS, TO THE MAXIMUM EXTENT ALLOWED BY LAW, ALL OTHER EXPRESS OR IMPLIED WARRANTIES IN RESPECT OF THE PRODUCTS OR THE SOFTWARE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE. THE EXPRESS WARRANTIES STATED ABOVE ARE IN LIEU OF ALL OBLIGATIONS AND LIABILITIES OF QUARTET FOR DAMAGES, INCLUDING, WITHOUT LIMITATION, INCIDENTAL CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS OR LOSS OR DESTRUCTION OF DATA), INDIRECT, SPECIAL OR EXEMPLARY DAMAGES THAT ARISE IN ANY WAY OUT OF ANY DEFECTS IN THE PRODUCTS OR SOFTWARE OR IN THEIR MATERIALS OR WORKMANSHIP

Manual Description

Audience	This manual is for users who wish to add Insteon capability to their Simplicity environmental control units.			
Purpose	The purpose of this manual is to provide:			
	 An introduction to the QIC 			
	• Features of the QIC			
	• Using the Quartet Configuration Utility			
	• Connecting the QIC to a Simplicity ECU			
	Instruction for operation			
Intended Lise				
	The intended function of the QIC is to provide legacy Quartet Simplicity ECUs a means for controlling Insteon compatible devices.			
Caution	The QIC is not intended for controlling life support equipment.			

hapter1: Introduction	
Overview	
Introduction	
Features	
Objectives	
Caution	
QIC COMPONENTS Components	
Descriptions	
System Unit Components QIC Right Side View	
QIC Right Side Components	
QIC Left Side View	
QIC Left Side Components	
Approvals	
Emissions	
Immunity	
SPECIFICATIONS CLEANING AND MAINTENANCE Cleaning	
Maintenance	
Accessories/Parts	
hapter 2: Setup QIC to Program	
Overview Introduction	
Objectives	

Chapter 3: Quartet Configuration Utility	
Overview	
Introduction	
Features	
Objectives	
Starting the program	
Connecting QIC to your computer	
Searching for the QIC	
QIC not found	
DEVICE MANAGEMENT	
Device Management Screen	
ECU Configuration	
Technology	
Description	
Insteon Information	
Example	
Buttons	
Test Buttons	
DIRECTORY VIEW	
Directory View Screen	
Example	
Buttons	
DIRECTORY BACKUP HISTORY	
Directory Backup History Screen	
Example	
Buttons	

Chapter 4: Connecting Components	
Overview	
Introduction	
Objectives	
CONNECTING SYSTEM COMPONENTS System Connection Overview	
Procedure	
Indicators	
Appendix A: Demo Mode	
Overview	
Introduction	
Features	
Objectives	
DEMO MODE	
Starting the Program	
Entering Demo Mode	
Appendix B: Tested Insteon Devices	
Overview	
Introduction	
Tested Devices	
Accessory Devices	
Appendix C: Examples	
Overview Introduction	
Objectives	
Examples	
FanLinc Module	
Directory View	
Thermostat	
Directory View	
2-Way Switch	
Installation of 3-Way, 4-Way, 5-Way, etc.	
Programming QIC for 3-Way, 4-Way, 5-Way, etc	

Appendix D: Thermostat Operation	
Overview	
Introduction	
Objectives	
THERMOSTAT COMMANDS	
Available Thermostat Commands	
Examples	

Overview

Introduction

Before you learn how to use your Quartet Insteon Controller (QIC), take a moment to review its components. This chapter describes each component and its function.

Cleaning procedures and maintenance requirements are also described.

Features

- Directly compatible with Simplicity ECU's
- Connects to a computer or laptop USB port for easy programming
- Stores all configuration data
- Link indicator
- Power indicator
- Operates Insteon type devices such as:
 - o Lamp, Appliance, I/O Link and Thermostats
- Backward compatible with all X-10 type modules.

Objectives

In this chapter you will learn about:

- QIC components
- System Unit Components
- Safety Symbols
- Regulatory Approvals
- Specifications
- Cleaning and maintenance
- Accessories and parts

Caution

The QIC is a high quality device. Care should be taken not to drop or otherwise subject it to extreme force.

QIC Components

Components

The following components comprise the QIC kit (QTI P/N: 9149):



Descriptions

Each component is described below:

Letter	Component	Function	QTI P/N
Α	QIC Controller	Converts Simplicity messages to Insteon signals	9120
В	QIC Power Supply	Supplies power for the QIC	9005
С	Insteon Modem	Transmits Insteon signals (not included)	N/A
D	Insteon Modem Cable	Connects the Insteon modem to the QIC	9296
Е	ECU Interface Cable	Connects the QIC to the Simplicity ECU	9954
F	Press on fasteners	Peel and stick fasteners (Place on back of QIC)	4363

System Unit Components

QIC Right Side View

Below is a picture of the right end panel on the QIC:



QIC Right Side Components

The following connections are on the right side of the QIC:

Letter	Component	Function
Α	Insteon modem connection	Transmits signals to the Insteon modem
В	Orange Link light	Orange LED will light when there is a link to the Insteon modem.
С	Green Power light	Green LED will light when there is power to the QIC
D	Power Input	Power connector. Connect the power supply here.

Continued on next page

System Unit Components (cont.)

QIC Left Side View

Below is a picture of the left end panel on the QIC:



QIC Left Side Components

The following connections are on the left side of the QIC:

Letter	Component	Function
Α	Simplicity ECU interface	Transmits and receives messages to/from the Simplicity ECU

Approvals

Safety Approvals

The power supply meets the following safety approvals:

- cUL/UL
- TUV
- SAA
- CE
- C-Tick
- Ecodesign ErP Directive 2009/125/EC

Emissions

The power supply meets the following emissions:

- FCC Class B
- EN55022 Class B
- AS/NZS 3548

Immunity

The power supply meets the following immunity standards:

- EN50082-1
- EN61000-4-4 (Level 4)
- EN61000-4-5 (Level 3)

Specifications

Acceptable Input Voltage	110-240VAC, 60Hz, Single Phase
Input Over Current Protection	Not to exceed 1.2A (RMS)
Output Voltage	+5V
Connector	2.5mm x 5.5mm Cylindrical Female, Center Positive
Max. Output Current	1A
Operating Temperature	32°F to 104°F (0 to 40°C)
Storage Temperature	5°F to 113°F (-15°C to 45°C)
Operating and Storage Relative Humidity	10% to 95%
Size (H x W x D)	1.17 x 1.77 x 2.82 (inches)
	29.79 x 45 x 71.7 (centimeters)
Weight	4.2oz (120g)

Notes:

This equipment is not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.

This equipment should be protected against ordinary ingress of water

Cleaning and Maintenance

Cleaning

You can clean the outside of the QIC with a slightly damp cloth, when necessary.

Use water only.

Maintenance

The QIC unit requires no special cleaning or daily maintenance.

You should annually check cables for safety and integrity. Contact your authorized Quartet distributor for necessary repairs or replacements.

Accessories/Parts

Replacement Parts

A complete line of replacement parts and accessories are available:

Accessory	QTI P/N	Description
QIC Controller	9120	Converts Simplicity signals to Insteon signals
QIC Power Supply	9005	Plug-in power supply for QIC
Insteon Modem	N/A	Insteon Modem #2413S
Insteon Modem Cable	9296	Insteon modem to the QIC cable
ECU Interface Cable	9954	QIC to the Simplicity ECU cable
QIC Operation Manual	5154	Operation Manual
USB-Serial Cable	9329	Allows PC USB port to communicate to the QIC
Null Modem Adapter	9330	Connects the USB-Serial converter to the QIC

Contact Quartet Technology or your authorized distributor for more information.

(This page left blank intentionally)

Overview

Introduction

Before you can program the QIC with the *Quartet Configuration Utility*, you must first connect it to your computer or laptop using a USB-Serial cable and Null Modem adapter.

Objectives

In this chapter you will learn about connecting the following items to your computer or laptop:

- QIC
- QIC Power Supply
- Insteon Modem
- USB-Serial cable
- Null Modem adapter

Note

If your QIC is already programmed, skip to Chapter 4.

Note

You will need this assembly every time you program the QIC. It is not used for ECU installations. DO NOT DISCARD!!

Setup QIC to Program (cont.)

1. Attach the Null Modem adapter to the USB-Serial cable as shown in the picture below.



2. Attach the completed assembly to the QIC.



- 3. Connect the components in the following order:
 - a) Plug in the Insteon modem to a powered outlet strip and attach it to the QIC as shown.
 (Make sure the modem has power before powering up the QIC.)
 - b) Connect the QIC power supply cord to the QIC.
 - c) Plug-in the QIC power supply.
 - d) Connect the USB-Serial cable into <u>any</u> USB port on your computer.

Note

The Green LED on the QIC should light to indicate power has been applied.

The Orange LED on the QIC should light to indicate it has found an Insteon modem attached.



Note

A blinking Orange LED indicates the QIC has not found the Insteon modem.

Check all connections and repeat step 3 again.

The Insteon modem *must* be powered up first before the QIC is powered up.

Chapter 3: Quartet Configuration Utility

Overview

Introduction

The QIC must be programmed to identify which <u>number</u> in the Light and/or Appliance menu(s) in the ECU will be identified with a particular Insteon device.

The Quartet Configuration Utility is used for this purpose.

Features

- Graphical User Interface (GUI).
- Standalone program. No software installation required.
- Works with Windows versions: XP, 7, 8, 8.1, 10
- Automatic detection and configuration of QIC.
- Linking of modules to modem is performed automatically.
- Validates if an Insteon device code is already entered.
- View devices by X-10 House Code/Unit Number.
- Remove devices from QIC.
- Show a directory of all devices entered.
- Backup multiple configurations of the QIC directory
- Erase the entire QIC directory.
- Restore a backed up directory.
- Export directory to a .csv file
- Test a device.
- Demo mode.

Objectives

In this chapter you will learn about:

• Using the *Quartet Configuration Utility*.

Quartet Configuration Utility (cont.)

Starting the program

The *Quartet Configuration Utility* does not require any installation. Obtain a copy of the program from Quartet and place it on your desktop. Start the program by double clicking on the following icon:



The start page appears:



Click on the enter button to begin.

Connecting QIC to your computer

After clicking "Enter" in the previous screen, you should see the following screen:



Note

Before continuing, check that everything is connected as described in Chapter 2.

Once everything is connected properly, click on the "Next" button.

Quartet Configuration Utility (cont.)

Searching for the QIC

The *Quartet Configuration Utility* will automatically search for the QIC and install itself. While this is being done, you will see the following screen:

	CONNECTING QIC TO YOUR COMPUTER	×
	Connecting QIC to your Computer	
	Searching for the QIC	
	O NEXT	
(Press F2	to Select Port Manually)	

Once the QIC is found, you will get a dialog box indicating what COM port the QIC was found on.



Click "OK" to continue. You have now successfully connected the QIC!

Note

Your COM port may be different then that shown above.

Quartet Configuration Utility (cont.)

QIC not found

<page-header><page-header><image><section-header>

If the QIC was not found, you will see the following screen:

Check all cables to make sure they are connected properly and try again by clicking on the "Next" button.

Contact Quartet if you continue to have problems connecting.

Note

Selecting the F2 will allow you to manually select a COM port.

It is highly recommended you allow the program to auto-detect the QIC.

Device Management

Device Management Screen

This screen is where all the configuration for the QIC will occur.

Ω	QIC DEVICE MANAGEMENT	- 🗆 🗡
	DEVICE MANAGEMENT	
ECU CONFIGURATION		
HOUSE CODE:	UNIT NUMBER:	
TECHNOLOGY	DESCRIPTION	
O X10 O INSTEON	PART NUMBER: LOCATION:	
INSTEON INFORMATION		
TYPE: DIMMABLE LIGHT SWITCHED LIGHT SENSORS & ACTU THERMOSTAT FAN	NG NG ATORS LIST:	+
	MODEM:	
SAVE	CLEAR	
QIC Owner's Manual	QUARTET TECHNOLOGY, INC.	Help

The screen is designed to be filled out from the "top" down. As items are entered, greyed out fields will become available (if applicable).

The form is divided into *four* main parts:

- 1. ECU Configuration
- 2. Technology
- 3. Description
- 4. Insteon Information

Let's take a look at each section.

ECU Configuration

This section contains two fields:

- House Code
- Unit Number

The House Code field has a drop down box. Select the House Code that corresponds to the ECU.

(Simplicity[™] ECUs are factory set to House Code "A" for the "Light" menu, and "B" for the "Appliance" menu. For more information, refer to the "Simplicity Installation Manual, Configuring the House Code" section.)

The Unit Number field has a drop down box. Select the Unit Number that you wish to associate a module to.

Technology

Select one of two fields to associate a technology to a House Code/Unit Number:

- X10 Select X10 if you will be using an X10 device.
- Insteon Select Insteon if you will be using an Insteon device. (Note: The Modem field will be populated automatically. It cannot be edited.)

Description

This section contains two fields:

- **Part Number** Enter the part number for the module being used.
- Location Enter a description of where that module is being used.

Note

The *Part Number* and *Location* fields are optional. However, it is <u>highly</u> recommended they be filled out since a final report of all devices and locations can be printed out for future reference.

Insteon Information

This section has two fields: Type and Address.

Type is <u>only</u> available when Insteon is selected as a technology.

Insteon divides their module into *Types*. Typically, modules will be one of five types:

- Dimmable Lighting Modules that are capable of dimming.
- *Switched Lighting* Modules that turn on/off only.
- Sensors and Actuators Modules that have low voltage outputs
- *Thermostat* Insteon compatible thermostats
- *Fan* Fan control modules

Address pertains to the Insteon address for each module.



Note

The Insteon address consists of six characters, made up of numbers and the letters A - F. In the picture above, the address is: 2E.C1.36

Example

Let's configure the QIC for the following:

•	House Code:	A
•	Unit Number:	1
•	Technology:	Insteon
•	Part Number:	2457D2 (Insteon Lamp Module)
•	Location:	Master Bedroom, lamp by window
•	Insteon Information:	Dimmable lighting
•	Address:	2E.C1.36.

The Device Management screen should look like this after you click "Save":

	QIC DEVICE MANAGEMENT - 🗆 🔜
	DEVICE MANAGEMENT
ECU CONFIGURATION	
HOUSE CODE: A	UNIT NUMBER: 1
TECHNOLOGY	DESCRIPTION
○ X10	PART NUMBER: 2457D2 LOCATION: Master Bedroom, lamp by window
TYPE: DIMMABLE LIGH SWITCHED LIGH SENSORS & ACT THERMOSTAT FAN	TING TING UATORS LIST: 2E.C1.36
COFF	* DOWN MODEM: 22.82.44
SAVE	CLEAR
QIC Owner's Manual	QUARTET TECHNOLOGY, INC. Help

Note

After selecting "Save", four new buttons will appear allowing you to test the device.

They are: "On", "Off", "Up", "Down"

Note

To edit an address, first select it from the List Box, then right click, then select Edit.

To *delete* an address, first select it from the List Box, then right click, then select Delete.

Device Management (cont.)

Buttons

There are four buttons on the Device Management form:

SAVE	Saves the current form to the QIC
CLEAR	Clears the currently displayed form data
DELETE	Deletes the information associated with the currently selected House Code/Unit Number from the QIC
	Displays the Directory View

Test Buttons

Once a device is saved, four test buttons will appear.

ON 😃	Turns on the currently displayed device.
🖕 OFF	Shuts off the currently display device.
♦ UP	Brightens the currently displayed device.
¥ DOWN	Dims the currently displayed device.

Note

The "Up" and "Down" keys will only appear for the following device types:

- Dimmable Lighting
- Thermostat
- Fan

Directory View

Directory View Screen

This screen presents a global look at all the items stored in the QIC.

From this screen, you can identify what House Code and Unit Number is associated with a particular module.

Example

QIC DIRECTORY VIEW DIRECTORY VIEW Help HOUSE CODE UNIT# TECH LOCATION PART NUMBER ADDRESS 1 TYPE INSTEON Master Bedroom, lamp by window 2457D2 2E.C1.36 DIMMABLE LIGHTING A 2 X10 Table fan, kitchen AM466 INSTEON Garage Door SENSORS & ACTUATORS 2450 30.E1.27 3 C EXPORT 曼 ВАСКИР HISTORY

Here is an example of a Directory View screen:

You'll notice there are three entries.

- 1. Entry A1 is an Insteon dimming module, located in the master bedroom. The part number is 2457D2 (LampLinc Module) and the Insteon address is 2E.C1.36.
- 2. Entry A2 is an X-10 module, located in the kitchen and used for a table fan. The part number is AM466039 (Appliance Module).
- 3. Entry A3 is an Insteon Sensor & Actuator, located in the garage. The part number is 2450 (I/O Link Module) and the Insteon address is 30.E1.27.

Directory View (cont.)

Buttons

There are four buttons on the Directory View form:

🥭 ERASE	Erases the currently displayed directory.
C EXPORT	Exports a .CSV file of the currently displayed directory.
ВАСКИР	Creates a backup of the currently displayed directory.
HISTORY	Displays the <i>Directory Backup History</i> screen. This screen displays all available backup copies.

Directory Backup History

Directory Backup History Screen

This screen presents a complete list of available backup copies that have been made.

A total of 10 backup copies can be made using the "Backup" key in the *Directory View* screen.

Example

Below is an example of a Directory Backup History screen:

NAME	DATE/TIME
Mr. Smith, January 25, 2015 (Initial install)	2/2/2015 3:01:45 PM

Buttons

There are three buttons on the Directory View form:



Chapter 4: Connecting Components

Overview

Introduction The QIC transmits and receives signals from the Simplicity^{ne} Environmental Control Unit (ECU) and translates them to Insteon commands. Before you can use the QIC, you must connect the system components. Objectives In this chapter, you learn how to: • Connect the QIC to a Simplicity ECU • Observe LED indicators Note The QIC needs be programmed first. See Chapters 2 and 3.

Connecting System Components

System Connection Overview

Below is a picture of the *complete* connection between QIC and a Simplicity ECU:



Procedure

Follow these steps, in order, to connect the QIC:

- 1. Attach the "*ECU Interface Cable*":
 - One end to the QIC controller.



• One end to the serial port on the Simplicity ECU.



- 2. Attach the "*Modem Interface Cable*":
 - One end to the QIC controller.



• One end to the Insteon modem



3. Plug the "*Insteon Modem*" into an AC wall outlet.



4. Plug the barrel connector on the "Power Supply" into the QIC.



5. Plug the "*Power Supply*" into an AC wall outlet.



Indicators

If everything is connected properly, the following indicators on the QIC should be illuminated:

- Green Power indicator
- Orange Link indicator

Note

The orange Link indicator will *blink* if the Insteon modem is not connected.

The orange Link indicator will stay on when the Insteon modem is detected.

If the orange Link indicator is blinking, recheck the "Modem Interface Cable" connection and <u>power cycle</u> the QIC controller by unplugging the QIC power supply, waiting 60 seconds, and then plugging the QIC power cord back in.

If the cable connection appears OK, be sure you are using an Insteon modem Model # 2413S.

(This page left blank intentionally)

Overview

Introduction

The *Quartet Configuration Utility* contains a "Demo Mode" that allows you to practice and become familiar with entering devices.

Features

- Complete control of all fields
- QIC does not need to be connected
- Simulate adding/deleting devices

Objectives

In this chapter you will learn about:

• Starting the *Quartet Configuration Utility* in Demo Mode.

Demo Mode

Starting the Program

The *Quartet Configuration Utility* does not require any installation. Obtain a copy of the program from Quartet and place it on your desktop. Start the program by clicking on the following icon:



The start page appears:



Click on the enter button to begin.

Demo Mode (cont.)

Entering Demo Mode

After clicking "Enter" in the previous screen, you should see the following screen:



Note

You do <u>not need</u> to have anything connected to use demo mode.

Press the F2 key on your keyboard. From the dropdown box, select "Demo Mode".

Click "Next" to continue.



Demo Mode (cont.)

Main Screen

The demo mode main screen will look like this:

ECU CON	IFIGURATION	DEVIC	DEMO MODE	EMENT	
HOUSE	E CODE:	• •	UNIT NUMBER:		
	logy O Insteon	DESCRIPTIO PART NUM	N BER:	LOCATION:	
INSTEON TYPE:	DIMMABLE LIGHT SWITCHED LIGHT SENSORS & ACTO THERMOSTAT FAN	FING TING JATORS	ADDRE	SS:	+
			MOD	EM:	
🖹 SA	VE	📕 CLEAR		DELETE	

Note

In demo mode, the Device Management screen will say "Demo Mode".

Note

In demo mode, all functions will behave exactly as described in Chapter 4.

The Backup and History keys are inactive in Demo Mode.

All devices that were saved will be deleted on program exit when in Demo Mode.

(This page left blank intentionally)

Appendix B: Tested Insteon Devices

Overview

	The following table lists tested Insteon devices.
Note	Quartet does not guarantee the compatibility of any Insteon device
	The QIC is a method of controlling Insteon Devices but Quartet is not responsible for the integrity of the modules as we do not manufacture them.

Tested Devices

These devices have been tested and found to work with the QIC controller.

MODULE	PART NUMBER	ТҮРЕ	Interface
Dimmable Lightin	na		
LampLinc Plug-In Lamp Dimmer Module (Dual-Band), 2-Pin	2457D2	Dimmable Lighting	Dual-Band
SwitchLinc Dimmer Wall Switch (Dual-Band)	2477D	Dimmable Lighting	Dual-Band
SwitchLinc Dimmer Wall Switch (Dual-Band), High Wattage	2477DH	Dimmable Lighting	Dual-Band
SwitchLinc 2-Wire Dimmer Wall Switch (RF Only)	2474DWH	Dimmable Lighting	RF Only
ToggleLinc Dimmer Wall Switch (Power-Line Only)	2466DW	Dimmable Lighting	Power-Line Only
LED Bulb (Dual-Band)	2672-222	Dimmable Lighting	Dual-Band
LED Bulb, Recessed Lights, PAR38 12W (Dual-Band)	2674-222	Dimmable Lighting	Dual-Band
In-LineLinc Dimmer (Dual Band)	2475DA1	Dimmable Lighting	Dual-Band
OutletLinc Dimmer (Dual-Band)	2472DWH	Dimmable	Dual-Band
Switched Lightin	ng	gg	
On/Off Module (Dual Band), 3-Pin	2635-222	Switched Lighting	Dual-Band
On/Off Outdoor Module (Dual Band), 3-Pin	2634-222	Switched Lighting	Dual-Band
SwitchLinc On/Off Wall Switch (Dual-Band)	2477S	Switched Lighting	Dual-Band
In-LineLinc Relay On/Off Switch (Dual Band)	2475SDB	Switched Lighting	Dual-Band
ToggleLinc Relay On/Off Wall Switch (Power-Line Only)	2466SW	Switched Lighting	Power-Line Only
Sensors & Actuat	ors		
I/O Linc Low Voltage, Contact Closure Interface, 1 In/1 Out (Power-Line Only)	2450	Sensors & Actuators	Power-Line Only
Smartenit EZIO2X4 2-Output/4-Input Relay Controller (Power-Line Only)	5010D	Sensors & Actuators	Power-Line Only
Thermostats			
INSTEON Thermostat (RF Only)	2441TH	Thermostat	RF Only
Venstar Thermostat	T1800	Thermostat	RF Only
Insteon Thermostat Adapter (RF Only)	2441V		
Fans		_	
FanLinc Ceiling Fan & Light Controller Fixture Module (Dual-Band)	2475F	Fan Dimmable Lighting	Dual-Band

Accessory Devices

These accessory devices are included here for reference. Depending on installation needs, some of these accessories may or may not be needed.

MODULE	PART NUMBER	ТҮРЕ	Interface
INSTEON Wireless Thermostat Controller	2441ZTH	Controls 2441TH Thermostat Wirelessly	RF Only
INSTEON Range Extender	2992-222	Bridges RF-only INSTEON devices with power line-only INSTEON devices	Dual-Band
FilterLinc 10-Amp Plug-In Noise Filter	1626-10	Filter	Plug-In
SignaLinc INSTEON Phase Coupler, Hardwired	2406H	Phase Coupler	Power-Line Only

(This page left blank intentionally)

Overview

Introduction

There are many types of Insteon devices that can be connected and controlled by the QIC.

The following sections will outline some common examples for Insteon devices.

Objectives

In this Appendix, you learn how to program the QIC for a:

- Fan
- Thermostat
- 3-Way and 4-Way wall switches

Note

The QIC needs be programmed first. See Chapters 3 and 4.

Examples

FanLinc Module

The FanLinc module (P/N: 2475F) is shown below. It actually contains two controls:

- Fan control
- Light Control

UGHT	FAN	
-	-	
-		
		1
-		
_		

Even though there are two controls, there is only <u>one</u> Insteon address.

So how do you enter this into the QIC?

First you'll enter the fan as shown below.

	QIC DEVICE MANAGEMENT –	×
ECU CONFIGURATION HOUSE CODE: A	UNIT NUMBER: 1	
TECHNOLOGY O X10 INSTEON	DESCRIPTION PART NUMBER: 2475F LOCATION: Kitchen overhead fan	
INSTEON INFORMATION TYPE: DIMMABLE LIGHT SWITCHED LIGHT SENSORS & ACTU THERMOSTAT FAN	ADDRESS: + ING IATORS LIST: 31.9C.89 VUP VDWN MODEM: Demo Mode	
SAVE	QUARTET TECHNOLOGY, INC.	- -

Continued on next page

Examples (cont.)

	QIC DEVICE MANAGEMENT -	
ECU CONFIGURATION		
HOUSE CODE: A	UNIT NUMBER: 2	
TECHNOLOGY O X10	DESCRIPTION PART NUMBER: 2475F LOCATION: Kitchen fan light	
INSTEON INFORMATION		
TYPE: DIMMABLE LIGHT SWITCHED LIGHT SENSORS & ACTU THERMOSTAT FAN	ADDRESS: +	
ØOFF	S DOWN MODEM: Demo Mode	
SAVE	CLEAR	CTORY
QIC Owner's Manual	QUARTET TECHNOLOGY, INC.	Help

Next, you'll enter the light as shown below.

Notice we used the same Insteon address for the same Insteon device.

Note

The Fan and Light control must have different *Unit Numbers*, however the *House Code* can either be the same or different.

In the example above, the Fan and Light use the same House Code.

Note

The "*Up*" and "*Down*" buttons will increase/decrease respectively the fan speed in increments of low, medium and high.

Directory View

The Directory View will show the fan and light as two separate Unit Numbers using the same Insteon address.

HOUSE CODE	LINIT#	тесн	LOCATION		ADDRESS 1	TYPE
A	1	INSTEON	Kitchen overhead fan	2475F	31.90.89	FAN
A	2	INSTEON	Kitchen fan light	2475F	31.9C.89	DIMMABLE LIGHTING

Examples (cont.)

Thermostat

The Insteon Thermostat (P/N: 2441TH), is shown below.

Thermostats will require the use of <u>all</u> the Unit Numbers in a House Code.



Enter the thermostat as shown below:

	QIC DEVICE MANAGEMENT - 🗆 🗙
ECU CONFIGURATION	DEVICE MANAGEMENT
HOUSE CODE: A	UNIT NUMBER: 1
TECHNOLOGY O X10	DESCRIPTION PART NUMBER: 2441TH LOCATION: Thermostat, Living Room
TYPE: DIMMABLE LIGHT SWITCHED LIGHT SENSORS & ACTI THERMOSTAT FAN	ING ADDRESS:
C ON	ODWN MODEM: Demo Mode
B SAVE	CLEAR DELETE DIRECTORY
QIC Owner's Manual	QUARTET TECHNOLOGY, INC. Help

Directory View

Let's look at the Device Directory:

HOUSE CODE	UNIT#	TECH	LOCATION	PART NUMBER	ADDRESS 1	TYPE
A	1	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	2	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	3	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	4	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	5	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
А	6	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	7	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	8	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	9	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	10	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
А	11	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	12	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	13	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
А	14	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	15	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	16	INSTEON	Thermostat, Living Room	2441TH	33.48.B2	THERMOSTAT
A	16	INSTEON	Thermostat, Living Room	24411H	33.48.B2	THERMOSTAT

You'll notice all the Unit Numbers for House Code "A" are completely used up.

Note

See Appendix D for available Thermostat commands using the ECU.

Examples (cont.)

2-Way Switch

The Insteon Dimming Wall Switch (P/N: 2477D), is shown below.



For a 2-Way installation, enter the wall switch as shown below:

	QIC DEVICE MANAGEMENT -	×		
ECU CONFIGURATION HOUSE CODE: A	DEVICE MANAGEMENT DEMO MODE			
TECHNOLOGY O X10 INSTEON	DESCRIPTION PART NUMBER: 2477D LOCATION: Hallway			
INSTEON INFORMATION TYPE: DIMMABLE LIGHTING SWITCHED LIGHTING SENSORS & ACTUATORS THERMOSTAT FAN OON IIST: OON IIST: OON IIST: OON IIST: DOWN IIST: DOWN IIST: OOFF DOWN MODEM: Demo Mode				
SAVE	CLEAR	TORY		
QIC Owner's Manual	QUARTET TECHNOLOGY, INC.	Help		

Installation of 3-Way, 4-Way, 5-Way, etc.

Every switch in a 3-Way or 4-Way or 5-Way, etc. installation will require a wall switch.

- Only one switch actually does the switching (Insteon calls this switch a *Responder*).
- The other switches simply act as slaves (Insteon calls these switches *Controllers*).
- *Controllers* inform the *Responder* to turn on the light.



Note

Refer to the Insteon Wall Switch Owner's Manual (Rev 7.0+) for full details on installation.

Examples (cont.)

Programming QIC for 3-Way, 4-Way, 5-Way, etc.

There are two steps to programming for multiple switches:

1. First, program <u>all</u> the Insteon address for <u>all</u> the switches used into the QIC as <u>one</u> list.

Example:

0	QIC DEVICE MANAGEMENT -	
ECU CONFIGURATION	DEVICE MANAGEMENT	
HOUSE CODE: A	UNIT NUMBER: 1	
TECHNOLOGY O X10 INSTEON	DESCRIPTION PART NUMBER: 2477D LOCATION: Hallway, 4-Way Switch	
INSTEON INFORMATION	ING ADDRESS: +	
SWITCHED LIGHT SENSORS & ACTU THERMOSTAT FAN	ING JATORS LIST: 30.89.58 21.2F.C5 44.2E.8A	
O OFF	OP MODEM: Demo Mode	
SAVE	CLEAR DELETE	ECTORY
QIC Owner's Manual	QUARTET TECHNOLOGY, INC.	Help

In this example we have a 4-way wall switch. Note all the Insteon address are entered. Address can be entered in any order.

In this example, the wall switch with Insteon address 30.B9.58 is the *Responder*. We will use this information in the next step.

- 2. Second, manually link each Controller to the Responder.
 - a) Start by pressing the set button on the first *Controller* for 3 seconds until you hear a "chirp" or see a LED flashing.
 - b) Press and hold the set button on the *Responder* (Insteon address 30.B9.58 in our example) for 3 seconds until you hear a "chirp" or see a LED flashing.
 - c) These two modules are now linked.
 - d) Repeat steps A and B for <u>all</u> Controllers.

Once all *Controllers* are linked to the *Responder*, they are <u>manually</u> capable of controlling the light.

(This page left blank intentionally)

Appendix D: Thermostat Operation

Overview

Introduction	Once an Insteon thermostat has been programmed, you can control it using voice or switch commands.
	For example, you could turn the heat up, or set the thermostat to cool.
Objectives	
	In this chapter, you learn about commands to operate an Insteon compatible thermostat using your ECU.
	• Increment the temperature
	• Decrement the temperature
	• Choose a specific temperature setting
	Select various thermostat modes
Note	When a thermostat is programmed into the ECU, it will consume the entire menu. For example, setting <i>House Code</i> B as a thermostat in the QIC controller will use all 16 <i>Unit Numbers</i> in the Appliance menu.

Thermostat Commands

Available Thermostat Commands

Once the thermostat is installed, the following commands are available:

Thermostat Commands	Function
"x" - Up	Increments the current temperature by 1
	(Where "x" is any number)
"x" - Down	Decrements the current temperature by 1
	(Where "x" is any number)
1 - TurnOn	Sets the temperature to 65 degrees
2 - TurnOn	Sets the temperature to 66 degrees
3 - TurnOn	Sets the temperature to 67 degrees
4 - TurnOn	Sets the temperature to 68 degrees
5 - TurnOn	Sets the temperature to 69 degrees
6 - TurnOn	Sets the temperature to 70 degrees
7 - TurnOn	Sets the temperature to 71 degrees
8 - TurnOn	Sets the temperature to 72 degrees
9 - TurnOn	Sets the temperature to 73 degrees
10 - TurnOn	Sets the temperature to 74 degrees
11 - TurnOn	Sets the temperature to 75 degrees
12 - TurnOn	Sets the temperature to 76 degrees
13 - TurnOn	Sets the temperature to 77 degrees
14 - TurnOn	Sets the temperature to 78 degrees
15 - TurnOn	Sets the temperature to 79 degrees
16 - TurnOn	Sets the temperature to 80 degrees
1 - Shutoff	Sets "Heat On" mode
2 - Shutoff	Sets "Cool Mode" mode
3 - Shutoff	Sets "Fan On" mode
4 - Shutoff	Sets "Fan Off" mode
5 - Shutoff	Sets " All Off' mode
6 - Shutoff	Sets " Auto" mode

Thermostat Command Examples

Examples

The following table list various commands that can be used.

Tasks:	Voice	Switch
Increment the temperature	Egbert Appliance ¹ One ² Up	Appliance ¹ One ¹ Up
Decrement the temperature	Egbert Appliance ¹ One ² Down	Appliance ¹ One ² Down
Set the temperature to 70 degrees	Egbert Appliance ¹ Six TurnOn	Appliance ¹ Six TurnOn
Set the thermostat to 'Cool Mode'	Egbert Appliance ¹ Two ShutOff	Appliance ¹ Two ShutOff

Notes

- 1. The examples above assume the thermostat was programmed in the Appliance Menu (House Code B).
- 2. You can use any number from 1 to 16 to increment or decrement the temperature.