C24 Installation and Activation

March 5, 2012

Agenda

- Brief overview of installation process for:
  - DSC Power Series 1864 + Gateway
- Live activation demo after this overview
- This overview assumes previous Life Safety installer training for the DSC PowerSeries security panel

Before You Begin

- Find the customer's Home Router (REQUIRED)
- Gather all products, tools and info near there
- Connect an Ethernet cable to available port on Home Router (ONE open port is required)

Ethernet to:

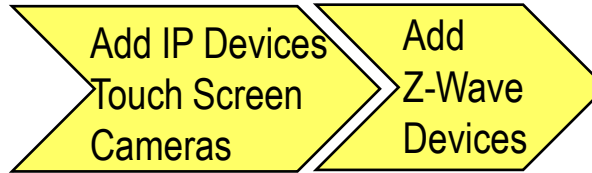Home Router

Broadband Modem

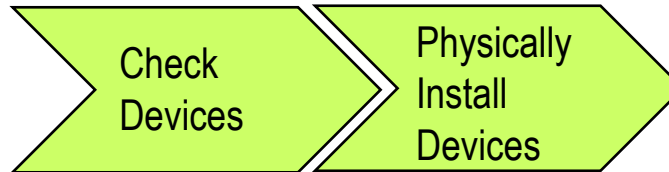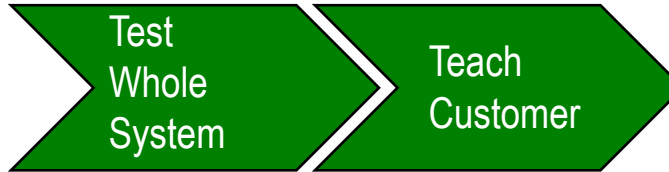# Installation Steps: SAAIT

1. Secure → Setup Security → Gateway to Network → Gateway to Panel → Components to Power

2. Activate → Activate Gateway → Create Site Owner

3. Add → Add IP Devices Touch Screen Cameras → Add Z-Wave Devices

4. Install → Check Devices → Physically Install Devices

5. Test → Test Whole System → Teach Customer

Secure

1. Secure

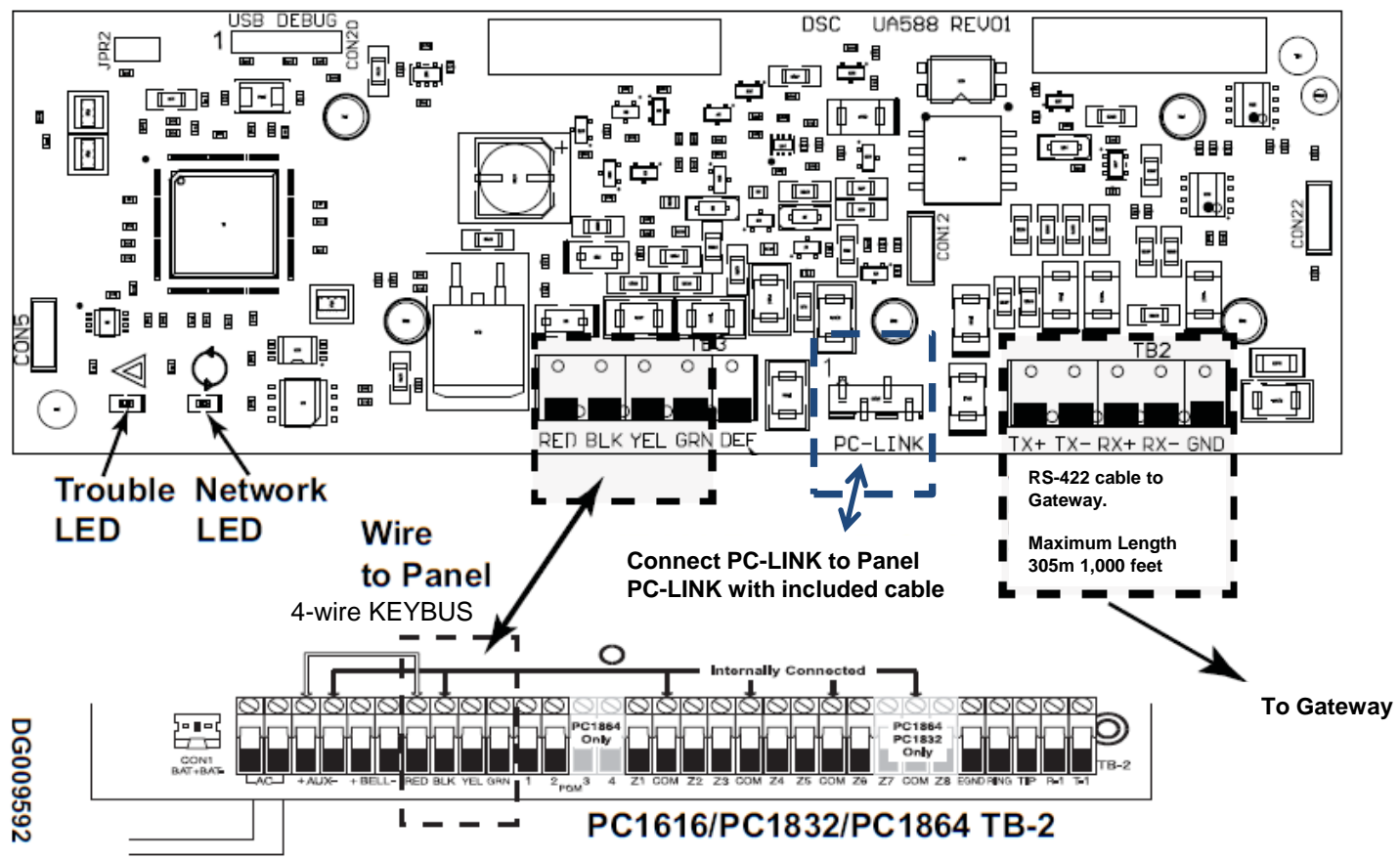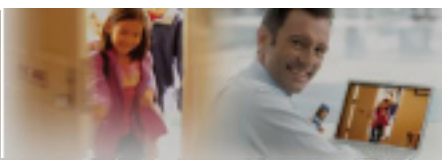| Setup Security | Gateway to Network | Gateway to Panel | Components to Power |

A. Physically prepare the PowerSeries for LifeSafety functionality (installation, battery, power, programming)

B. Connect Gateway to Network and Panel

C. Power Up and ensure proper connections/operations

Panel Wiring

Trouble LED

Network LED

Wire to Panel

4-wire KEYBUS

RED BLK YEL GRN DEF

Connect PC-LINK to Panel PC-LINK with included cable

PC-LINK

TX+ TX− RX+ RX− GND

RS-422 cable to Gateway.

Maximum Length 305m 1,000 feet

To Gateway

DSC UA588 REV01

USB DEBUG

PC1616/PC1832/PC1864 TB-2

DG009592

Note: IT-230 shown. Terminal strip is the same on all RS-422 modules

Gateway Hardware

- LEDs
- Ports/Connector
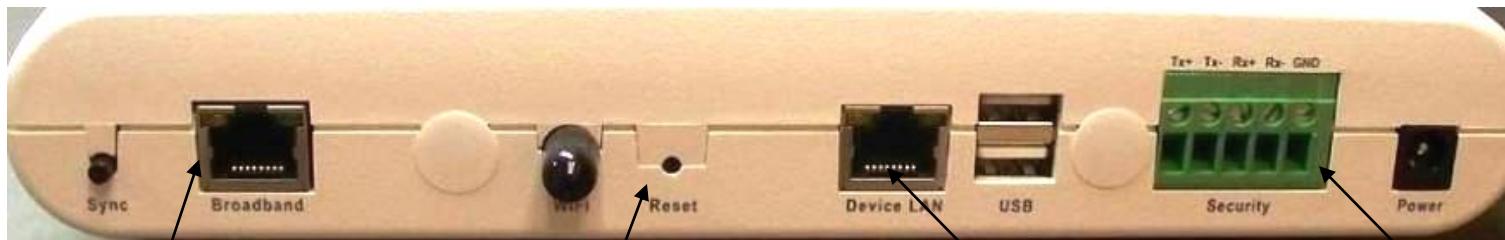
The Broadband port connects to an open port on Customer's Router.

Reset Button is used to factory default the Gateway.

LAN Port for adding Wi-Fi devices (Camera, Touchscreen)

RS-422 Connection from the Panel

# Gateway to Panel

- Security Connection- RS 422

Panel	Gateway
Tx-	Rx-
Tx+	Rx+
Rx-	Tx-
Rx+	Tx+

Required Programming

- **Section [382] turn option 5 ON**
  - This option enables communication between the panel and the RS-422 module
  - All programming has been defaulted and no additional programming is needed

- **Broadcast zone labels when using RFK5500 or PK5500 keypad**
  - After RS-422 is connected, send zone labels to module
  - Access keypad programming [*][8] [installer's code] [*] [998] [*] to perform broadcast
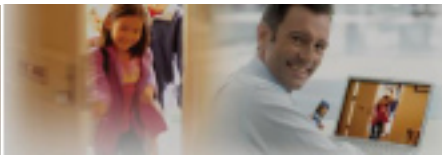
Panel Verification

- **Test Communication between Panel to RS-422 module**
  - Enter Section [851] and sub-section [672]
  - Multiple beeps heard if good communication
  - Long tone if bad communication

- **Diagnostics**
  - Ensure option 5 in section [382] is enabled
  - Check orientation of 4-pin PC-LINK connector
  - Check connection of 4-wire KEYBUS
  - Recalculate power consumption

Optional Programming

To access custom programming access section [851]

- [671] Lifestyle Event Toggle (Should be left at default)
  - Disable buffering of event groups
  - Buffer is used when RS-422 communication is lost
- [672]-[679] Lifestyle Zone Toggle Options
  - Disable status reporting of zones (Open/Close Zones)
- [681] Notification Event Toggle
  - Disable system event reporting (Troubles, Faults, etc.)
- [682]-[689] Notification Zone Toggle Options
  - Disable lifestyle reporting codes (Alarm reporting codes)

Activate

2. Activate

A. Activation process done through and upgrades the Gateway

B. Activating the Gateway using the Wizard

- Create a new Site Owner account or use one that has been setup using the Wizard

Activation Sign In

C24 interactive

Activate Service

Welcome

Username: [   ]
Password: [   ]

Sign In

C24 manager

Sign Out

Activate Service

Welcome

Click **Continue** to install a new system.

Continue

powered by **iControl**

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Site Creation

Select Site Type

Enter Activation Key

Gateway Registration

Note: The Restart Activation link will delete the site at the server

Panel Registration

Select Service Options

C24 interactive

Sign Out

Activate Service

| Select Service Options | Restart Activation |

Make selections for the service options below. Select None for any that do not apply.

Base Service Package: BB+Camera (Test Package)

Upgrade Group: - Select -
- Select -
None
DSC Latest Release (DSC Latest Release)

ontinue

Waiting for the Security Panel to come online

C24 interactive

Sign Out

Activate Service

| Waiting for Security Panel | Restart Activation |

Waiting for the Security Panel to come online.

This may take a minute...

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Owner Registration

Create New User or Select Existing

Registration Complete

C24 manager

Sign Out

Activate Service

Service Activated

Service for this site has been successfully activated. Click the button below to sign in to the web portal as an Installer user.

Once signed into the web portal, you can continue the installation. Refer to the Installation Guide for instructions.

Go to Portal

C24 manager

Sign In

Username: |_____|

Installer Username: |_____|

Installer Password: |_____|

Sign In

Switch to Customer Sign In Screen

Unauthorized use of this site is prohibited and may be subject to civil and criminal prosecution.

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Add

3. Add

Add IP Devices Touch Screen Cameras → Add Z-Wave Devices
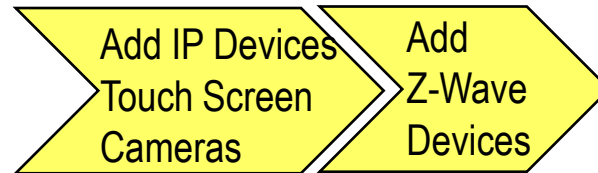
A. Begin using the Web Portal

B. Support to add all the Zone information using the Mange Zone wizard

C. Add Wi-Fi LifeStyle Devices using the Portal
   - Touch Screen
   - Video Cameras

D. Add Z-Wave LifeStyle Devices using the Portal
   - Thermostats, Lighting modules

Managing Devices

Adding a Camera

1. Connect an Ethernet cable from the LAN/Device port to the back of camera via the Y-cable
2. Power up the camera (12VDC 1A)
3. Wait for Power and Network LEDs to turn solid green
4. Follow the Manage Device Wizard

To Gateway LAN port

Y-Cable

Adding a Camera

Network LED
• On Green – LAN/Wireless connection established
• Off – No active connection on the LAN port or not associated to a gateway

Power LED
•On Green – Power On

Network

Power

Adding Z-Wave Devices

1. Power up the device within 15 ft of the Gateway

2. Follow the Manage Device Wizard

3. Note different devices may be 'triggered' differently. Be sure to refer to the device manual for 'triggering' the device enrollment.

Install

4. Install

Check Devices → Physically Install Devices
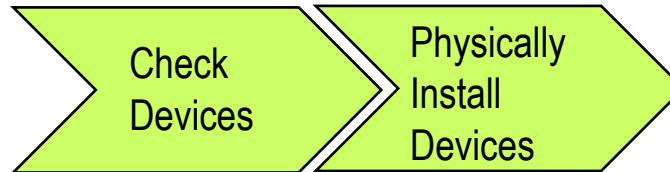
A. Confirm proper device operation via the Web Portal

B. Install LifeStyle devices in their proper location, paying attention to range limits

- Wi-Fi Devices < 50 feet from the Gateway
- Z-Wave Devices < 60 feet from nearest other Z-Wave device
- Be sure to Refresh Z-wave network through 'Diagnostics'

Test

5. Test

Test Whole System → Teach Customer

A. Check Web portal for sensor activities

B. Run Diagnostics

C. Set the System to active in the Web Portal

D. Review functionality with customer

Diagnostics

- Running Diagnostics will automatically scan all technologies and indicate any concerns/errors

Diagnostics

Site Diagnostics Tool

Overall	Cellular	Wi-Fi	IP Devices	Z-Wave™	Security

- 'Wi-Fi 'will indicate all wireless networks within range of the Gateway

Nearby Wireless Access Points		
SSID	**Channel**	**Strength**
jorgy	11	
Forbes	1	
home 59	2	
dlink	6	
linksys-Allstar	6	
home57	10	
NewfieNet	4	
Rescan		

Your Gateway is currently on channel **1**

This is the optimal channel; we recommend you do not change it.

Specify new channel: 1   Update
Channel changed successfully; new channel is now 1
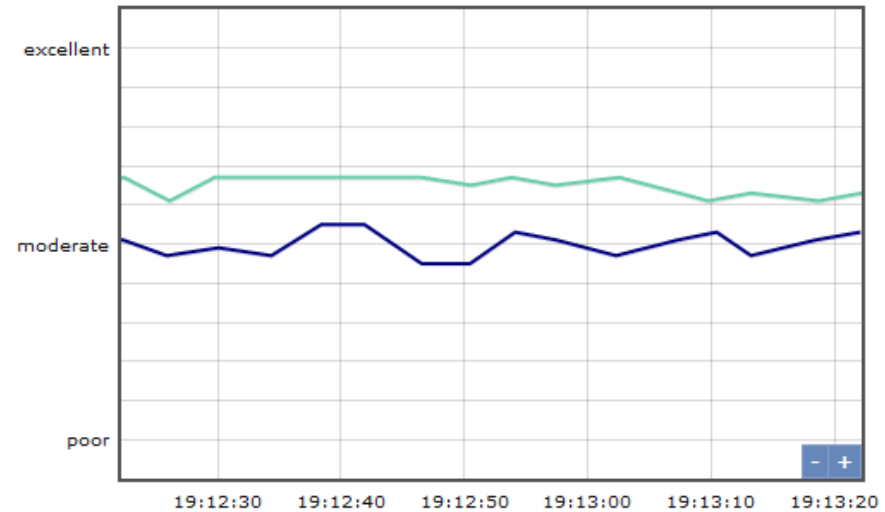
Diagnostics

- 'IP Devices' will indicate the signal strength of cameras and touchscreens

Diagnostics

Results			
Number of devices: 6	Redraw Graph	Rescan Z-Wave™	Relearn Mesh
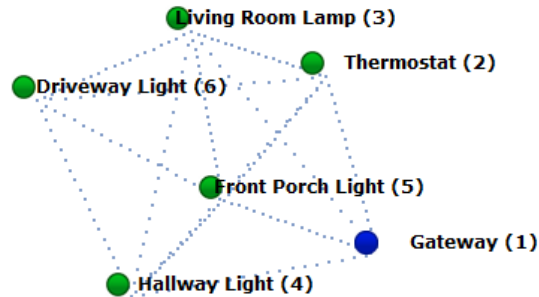
- 'Z-Wave' will display the Mesh Network topology
- Relearn Mesh will reset the entire network, recreating a new 'Mesh'
- Rescan Z-Wave will search for all connected devices

Z-Wave Connectivity Table						
	Gateway (1)	Thermostat (2)	Living Room Lamp (3)	Hallway Light (4)	Front Porch Light (5)	Driveway Light (6)
Gateway (1)	-	●	●	●	●	
Thermostat (2)	●	-	●	●	●	●
Living Room Lamp (3)	●	●	-	●	●	●
Hallway Light (4)	●	●	●	-	●	●
Front Porch Light (5)	●	●	●	●	-	●
Driveway Light (6)		●	●	●	●	-

Teach Customer

- Life Safety
  - Security Panel / Keypad
    - Sensors
    - Arm
    - Disarm
    - Emergency Buttons
    - Change/Program Acess Code
  - KeyFob
    - Arm/Disarm
    - Panic

Teach Customer

- Web Portal
  - Test from customer's computer, not yours!!
  - Verify customers welcome email
    - activate the login account
  - Bookmark URL
  - Tabs: Summary, History, System
    - Description one line or less
    - Add more users
  - Set up alert, automation, and schedule
  - Online web portal help

- Mobile Portal and Application
  - Check the kind of phone
  - Where to download the applications (iPhone, Android)
  - Or Mobile html (It's a "thin" version of web portal)

System Troubleshooting

Gateway Troubleshooting

Status LED Indications:

Flashing Power GREEN

- Gateway does not have an internet connection

GREEN DARK DARK GREEN

- Gateway is ready for activation

GREEN GREEN DARK GREEN

- Gateway is online and in a good state

GREEN GREEN DARK AMBER

- Gateway is online, one or more of the devices is offline

Gateway Offline

Only Power LED blinking Green

- Gateway is not communicating to the internet
- Connect the gateway to the home router, not to the cable modem/DSL router*
- Check the broadband connection; needs an IP. Use the installer laptop to verify internet connection

- Check the gateway Status page

- * DSL modem with a build-in router is fine. e.g. at&t 2WIRE. Always prepare a spare router as a test equipment.

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Gateway Status Page

- Connect a laptop to the Gateway Device/LAN port
- Type the following at an internet browser
  - https://192.168.107.1
- Enter the activation key

iControl Networks iHub
Serial Number: 006035036f1d
Software Version: 4.1.0-50
Hardware Version: HW=3.4, BL=ICONTROL_CFE 1.4, PL=4.1.0-50
Api link: /rest/icontrol/nw/006035036f1d

Communication Status
Registry
Registry: https://gatewayregistry.com/icsvr/GatewayIdService
Server
Status: Network Connection Error
Server: null
Server Response: java.io.FileNotFoundException: https://ihub-dsc1.icontrol.com/gw/GatewayService/006035036f1d/connectInfo: https://ihub-dsc1.icontrol.com/gw/GatewayService/006035036f1d/connectInfo
Network ID: null
Next Update: not scheduled
Last Update: not since last boot
Connection Status
Active Connection: Broadband
Broadband
MAC ID: 00:c0:02:5d:bf:ed
IP Address: 192.168.1.104
Subnet Mask: 255.255.255.0
Gateway: 192.168.1.1
Devices
MAC ID: 00:c0:02:5d:bf:ed
IP Address: 192.168.107.1
Subnet Mask: 255.255.255.0
Gateway:
Backup

Gateway Not Activating

Power and Devices LED Green

- Ready for Activation, Ensure correct Activation Key
- Factory reset the gateway and try again if unable to Activate

To Reset Gateway

- With unit powered down, use a paperclip to press and hold the reset button and apply power
- Wait until all front LEDs flash 3 times, then release the reset button
- Note: Factory reset a gateway will take ~5 minutes

Camera Troubleshooting

Camera Failed to Add

- Check the status of the LEDs, both must be solid
- Verify the Y-cable is plugged into the Gateway
  - Device/LAN port
- Factory Reset the Camera
  - Hold Reset Button for 15s

Reset Button

Not Ready

Ready

Wi-Fi Troubleshooting
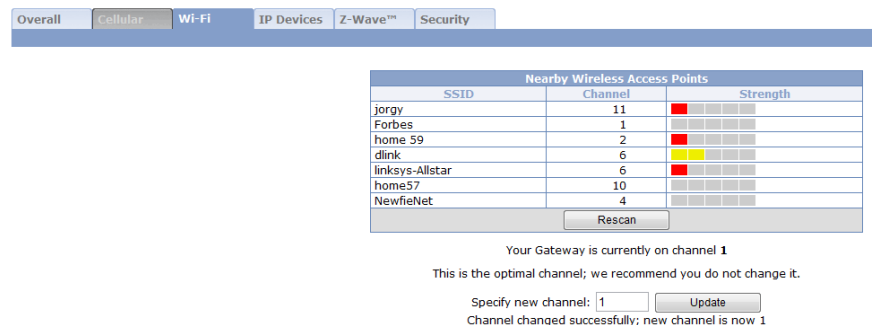
Wi-Fi Device not coming online

- Hardwire device to Gateway, verify device is operational
- Unplug the device, power cycle and move the device ~5 ft from the gateway, then move further away for possible Wi-fi range issue
- Check for 2.4 GHz Wi-Fi interference
- Use the 'Diagnostics' tool to check Wi-Fi signal strength
- Use the 'Diagnostics' tool to ensure no channel conflicts
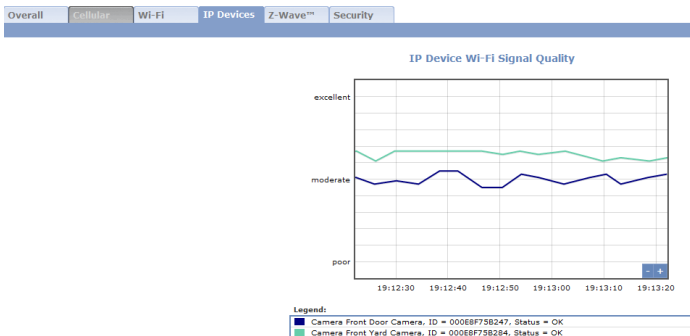
Z-Wave Troubleshooting

Z-Wave Device Failed to Add

- Ensure device is within a few feet of Gateway

- Reset device through web portal and try adding again

- Check for 900 MHz range interference: Cordless phone, baby monitoring system

e.g. Summer Infant Day & Night Handheld Color Video Monitor 1.8" Screen - switching the frequency from A to B should allow it to work with Z-Wave

Questions?