



**DEXTER**<sup>®</sup>  
**LAUNDRY**



# DexterLive Networking

# Table of Contents

## Section 1:

### Mapping and Cabling the Location

Considerations When Planning a Laundry .....	4
Location Kit & Part Numbers.....	5
Washer Kit & Part Numbers.....	6
Dryer Kit & Part Numbers.....	7

## Section 2:

### Connecting to DexterLive and Store Location

Creating an Account on DexterLive .....	9
Setting Up The Location.....	11

## Section 3:

### Connecting to the Internet and DexterLive

Setting up the Router to Internet Connection.....	13
Adding the Gateway Code.....	14
Cabling the Equipment .....	16
Ethernet Switch Placement.....	18
Adding Equipment to DexterLive.....	19

## Section 4:

### Troubleshooting Router Configurations

Logging into the RV340 Cisco Router.....	23
Restoring Cisco Router w/ Backup File.....	25
Setting Up a Static IP Address on the Router.....	26
Manual Cisco Router Setup Configuration.....	28
Cisco Router Sub-network Changes.....	33
Saving Changed Cisco Router Settings.....	35
Backup File for Cisco Router Settings.....	37
Transferring Ownership of a DexterLive Location.....	39

## Section 5:

### Troubleshooting

Updating Firmware.....	41
Troubleshooting DexterLive Connection.....	46

## Section 6:

### DexterPay

Setting Up DexterPay .....	50
DexterPay Decline Codes.....	58
Troubleshooting DexterPay.....	62

---

# Recommended Tools

## DexterLive Setup

Lap top or Desk top computer that has a physical Ethernet port

## Washers

- : 6324 Key
- : 5/16 Socket
- : Driver for Socket
- : Cordless Drill (Optional)

## Dryers

- : 6324 Key
- : T-10 Torx Driver
- : 5/16 Socket
- : Driver for Socket
- : Cordless Drill (Optional)

# **Section 1:** Mapping & Cabling the Location & Startup

# Considerations When Planning the Laundry

## Internet Connection

The DexterLive gateway and paired router are delivered factory set for DHCP enabled (Dynamic). The Location Kit in this setup only needs an open port on the internet provider's router. The minimum required internet speed depends on a variety of factors at the location.

**The average location would ideally have at least a 15 Megabit per second (Mbps) download speed and a 5 Mbps upload speed.** This allows DexterLive to function normally, and also allows us to download gateway system updates reliably and in a timely fashion. **If other systems at a location share the same internet connection as DexterLive, then additional bandwidth may be needed.** These may include Point of Sale systems, Entertainment systems, Card Readers or Customer (Guest) WiFi. Reference the minimum required bandwidth for any of these items according to the provider, and then add roughly 5 Mbps for DexterLive. Note that guest WiFi connections can use a very large amount of bandwidth.

DexterPay locations also need to have a low latency and packet loss in order to have a smooth experience. The lower the latency is, the better. **The bare minimum latency for a DexterPay location is 100ms.** A higher latency is unacceptable and may lead to errors. The packet loss should also be fairly low, around 10% or lower.

## Electrical Considerations

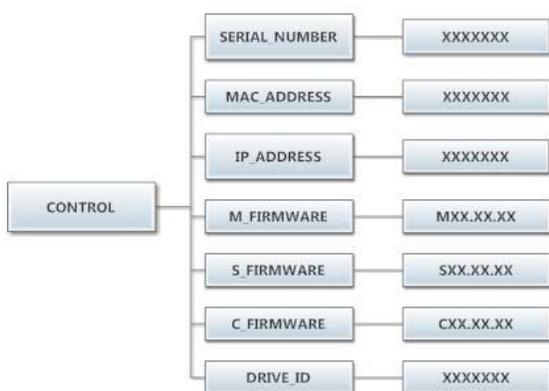
It is necessary to have 120VAC outlets located where the DexterLive Locations kit is to be placed as well as where the Ethernet switches need to be mounted. The Ethernet switches need to be located centrally in the washer and dryer groups.

Note: All machines will connect to the Ethernet switches and main trunk lines will connect the switches and then to the Cisco router and Gateway components.

**NOTE: We strongly recommend connecting the power connections for the Dexter supplied router and DexterLive gateway to a suitable surge protector and battery backup unit for power stability!**

## Firmware Levels

The installer needs to make sure the washer or dryer control is updated to the latest version of control software. This is done by entering the manual programming mode. Once in the programming mode the field that needs to be verified is the Control section, Main Firmware, Secondary firmware, and Communication firmware.



**If your firmware level 1.4 or below you will see "C\_Firmware" version 01.00.19. Your firmware will need to be manually updated before you can get updates directly from DexterLive. Go to page 41 and follow procedure 1.**

**If your firmware is at level 1.5 or higher, you will see "C\_Firmware" version 02.00.51. You can get automatic updates at this level. Go to page 42 and follow procedure 2.**

The most recent versions of the washer and dryer control firmware can be verified and downloaded at DexterLive.com. These are located under the "Programming" tab and should be downloaded to a USB drive. The (.bin) firmware files should be on the top level folder of the USB drive.

**NOTE: If you are using an alternate payment system connected to the serial port, the alternate system SHOULD NOT BE CONNECTED to the controls during the set up process for DexterLive.**

# DexterLive Location Kit

The **Location kit** (9732-308-002) consists of the paired and preprogrammed DexterLive Gateway and Cisco router, the power connectors for each of these, the USB device with the unique backup information for your location kit and (2) three foot Cat5e cables. Each Gateway and router have matching serial numbers and the Gateway module has a unique gateway code that allows access to DexterLive. This code cannot be duplicated. This set up system will only work in one location.

**NOTE: The Gateway and DexterLive router are a paired set. If the router settings are reset or if the two devices are separated, they will no longer communicate.**

**NOTE: We strongly recommend connecting the power connections for the Dexter supplied router and DexterLive gateway to a suitable surge protector and battery backup unit for power stability!**

9732-308-002



- |     |              |  |        |
|-----|--------------|--|--------|
| 1.) | 9150-052-002 | RV340 Cisco Router (Serial number required to order replacement) | Qty. 1 |
| 2.) | 9150-049-002 | DexterLive Gateway (Serial number required to order replacement) | Qty. 1 |
| 3.) | 9806-013-004 | 3' Cat5e Cable   | Qty. 2 |
| 4.) | 9150-045-003 | USB Stick With Router Backup file                                | Qty. 1 |

# DexterLive Location Washer Kits

The **Washer kit** (9732-309-001) consists of one Ethernet switch, (6) 12' Cat5e cables, (4) 20' Cat5e cables, (1) 40' Cat5e cable, (1) 75' Cat5e cable and (1) bracket.

This kit is designed to hook up ten washers. The switch has sixteen ports so if desired with additional cables up to fifteen machines can be connected to this switch reserving one port to connect to the system.



1.)	9150-051-001	Ethernet Switch	Qty. 1
2.)	9806-013-002	12' Cat5e Cable	Qty. 6
3.)	9806-013-003	20' Cat5e Cable	Qty. 4
4.)	9806-012-004	40' Cat5e Cable	Qty. 1
5.)	9806-012-005	75' Cat5e Cable	Qty. 1
*.)	9029-323-001	Bracket	Qty. 1

# DexterLive Location Dryer Kits

The **Dryer kit** (9732-310-001) consists of an Ethernet switch, (10) 30' CAT5e cables, (1) 40' Cat5e cable, (1) 75' Cat5e cable, (20) standoff twist locks, (20) 7/8 inch bushings, (10) network cable connectors and (1) bracket.

This kit is designed to hook up ten dryers. The switch has sixteen ports so if desired with additional cables up to fifteen machines can be connected to this switch reserving one port to connect to the system.



9732-310-001 DEXTERLIVE DRYER KIT		
DEXTER PART #	QTY	ITEM DESCRIPTION
9150-051-001	1	ETHERNET SWITCH
9806-013-005	10	30' (9.1 M) ETHERNET CABLE
9806-012-004	1	40' (12.2 M) ETHERNET CABLE
9806-012-005	1	75' (22.9 M) ETHERNET CABLE
9527-002-002	20	STANDOFF TWIST LOCKS
9053-067-002	20	BUSHINGS
9150-053-001	10	NETWORK CABLE CONNECTOR

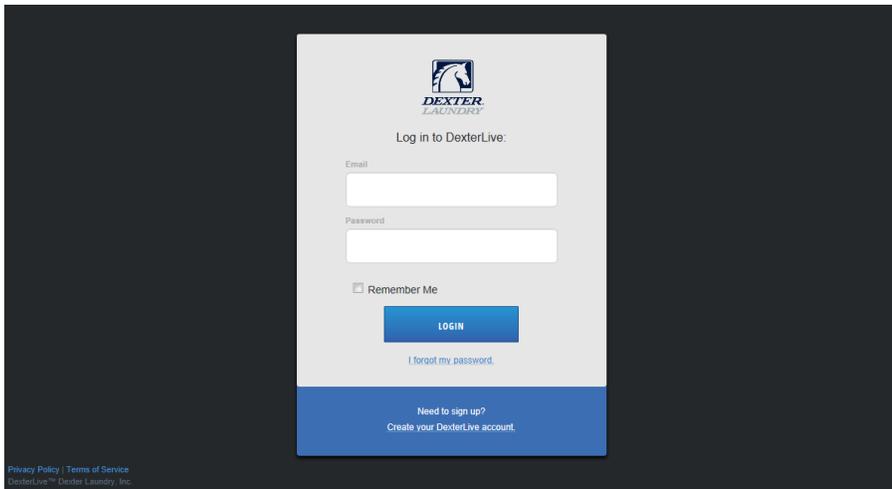
- |     |              |                     |         |
|-----|--------------|---------------------|---------|
| 1.) | 9150-051-001 | Ethernet Switch     | Qty. 1  |
| 2.) | 9806-013-005 | 30' Cat5e Cable     | Qty. 10 |
| 3.) | 9150-053-001 | Net Cable Connector | Qty. 10 |
| 4.) | 9806-012-004 | 40' Cat5e Cable     | Qty. 1  |
| 5.) | 9806-012-005 | 75' Cat5e Cable     | Qty. 1  |
| 6.) | 9527-002-002 | Standoff Twist Lock | Qty. 20 |
| 7.) | 9053-067-002 | 7/8 Bushings        | Qty. 20 |
| *)  | 9029-323-001 | Bracket             | Qty. 1  |

# **Section 2:**

## Connecting to DexterLive and Setting up the Store Location

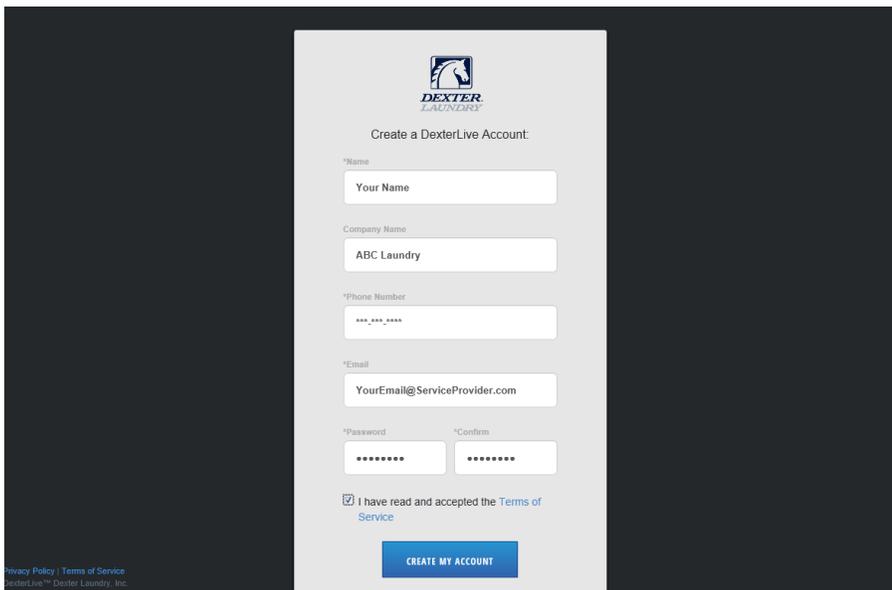
# Creating an Account on DexterLive

1. Log into DexterLive.com. On the right side of the screen, select "Create your DexterLive account."



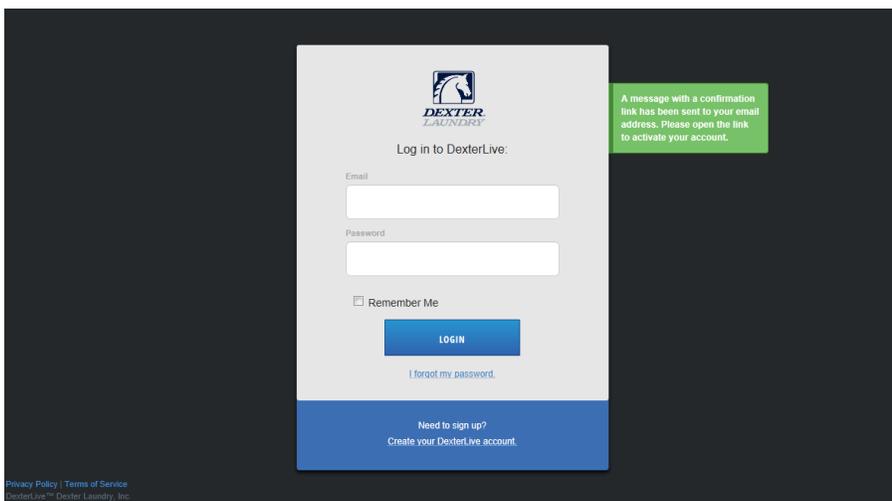
An account must be created to use the DexterLive features.

2. At the "Create a DexterLive Account" screen. Fill in the required fields and click on "Create My Account".



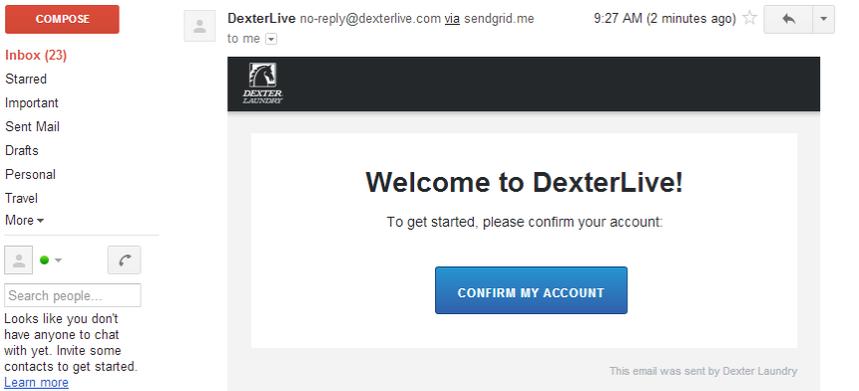
When creating a new user account make sure to fill in all fields marked with asterisks and check the "Terms of Service" box.

3. After selecting to "Create My Account", you will see the log in screen advising you to go to your e-mail and activate your account.



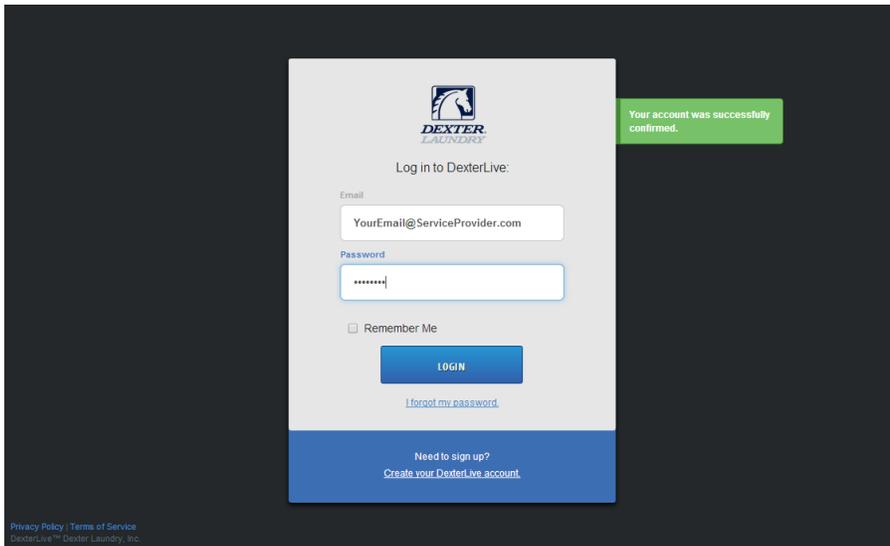
After creating your account you will need to use the e-mail link to gain first access. The account will not be active until you confirm your account.

4. Open the e-mail sent from DexterLive and select "CONFIRM MY ACCOUNT"



Selecting the "Confirm My Account" hyperlink will take you back to the DexterLive log in page.

5. At the "Log into DexterLive" screen, enter your e-mail/user name and password to access DexterLive.



Welcome to DexterLive. Proceed to the step to create your location information.

# Setting Up The Location

- To configure your location with DexterLive click "Add New Location" and fill in the details for this particular store location. Otherwise select the previously added location.

**NOTE: Some options are only available to the location owner which are automatically assigned to the account that sets up the location. During installation be sure to use the owner's account or follow the steps on page 39 to transfer ownership to the location owner after the setup is complete.**

The screenshot shows a web interface for adding a new location. At the top, it says "Welcome to DexterLive! Add a location to manage:". Below this are several input fields: "Location Name", "\*Address 1", "Address 2", "\*City", "\*State/Province" (with a dropdown menu showing "Alabama"), "\*Postal Code", "\*Country" (with a dropdown menu showing "United States"), "\*Time Zone" (with a dropdown menu showing "(GMT-06:00) Central Time (US & Canada)"), and "\*Location Type" (with a dropdown menu showing "Vended"). At the bottom of the form are two buttons: "ADD LOCATION" and "Cancel".

- Once the location is selected the Location tab will be active and the screen will display the "Location Overview" dashboard.

The screenshot shows the "DEXTER TEST LAB" dashboard. The top navigation bar includes "Locations" and "Ben Huff". A sidebar on the left lists "Dexter Test Lab 2211 West Grimes", "Equipment", "Promotions", "Users", and "Programming". The main content area has three tabs: "Location Overview" (active), "Location Settings", and "Networking Settings". Below the tabs, there are four cards: 1. A home icon representing the location "2211 West Grimes, Fairfield, IA" with a "Delete Location" button. 2. A group of people icon representing "9 Users". 3. A water drop icon representing "Washers" with "1 Washer". 4. A red icon representing "Dryers" with "2 Dryers".

# **Section 3:**

## Connecting Cisco Router and DexterLive Gateway to the Internet

# DexterLive Internet Setup

**FOLLOW THE REMAINING INSTRUCTIONS IN THE INSTALLATION GUIDE STEP BY STEP TO PREVENT MISTAKES OR BACKTRACKING!!**

**NOTE: The installer must have a Laptop/Desktop with an Ethernet port connection (Nic card) to test the system during installation. This cannot be done through a phone or tablet without an Ethernet port. DO NOT under any circumstance reset the provided DexterLive router back to the original factory settings. This will disable it from communicating with the DexterLive Gateway device.**

## Connecting to the internet using the standard DHCP settings

There are two different ways to connect to the internet, either DHCP Enabled (dynamic) or a static IP addressing. If using DHCP settings the location should be able to hard cable into the internet provider's router and be connected to the outside world. If using DHCP (recommended) follow the standard setup below.

**(If using a static IP setup, go to page 26 of this manual.)**

1. To test for an internet connection. **Start by disabling the wireless internet setting on your laptop.**
2. Connect the included Cat5 cable from your laptop ethernet networking port to an open port on the internet providers modem or router. Try browsing to several web pages to verify that there is indeed a connection to the internet.



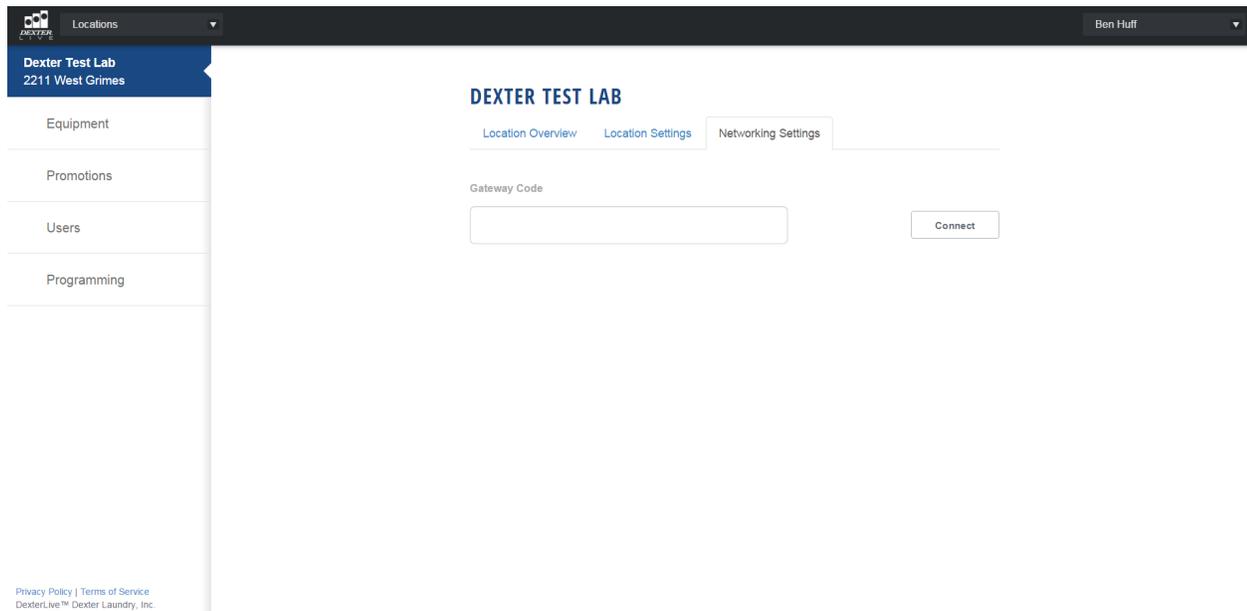
Figure 8

Cat5 cable connected to internet router

Cat5 to Laptop (Step 4)  
Cat 5 to Gateway (Step 6)

3. Once connection is verified, disconnect the Cat5 cable from the laptop and then connect the same Cat5 cable to the Dexter supplied Cisco Router at the **"WAN 1"** port (not the WAN 2 port) (Figure 8). Connect the Cisco Router to power at this time using the supplied cable.
4. Connect a separate Cat5 cable from the #1 LAN Ethernet port of the Dexter Cisco router to your laptop (Figure 8). Open your web browser and connect to several web sites to ensure you still have a connection to the internet. If you have connectivity continue to step 6. If you do not have connectivity the Subnet may need changed, if so proceed to step 5.
5. If you unable to achieve an internet connection we will first need to try to change the Subnet to enable an internet connection. (Refer to Section 4, procedure 5, on Page 33)
6. Once a connection has been established from the laptop through the Dexter Cisco router, the Gateway can then be connected by the same Cat5 cable used for the laptop to the Cisco router. The Gateway can then be powered on using the supplied power cord. **The Gateway should remain connectd to the internet for up to 2 hours to perform potential necessary updates before adding machines.**

7. Select the "Networking Settings" tab. This is where the Gateway code will be entered.



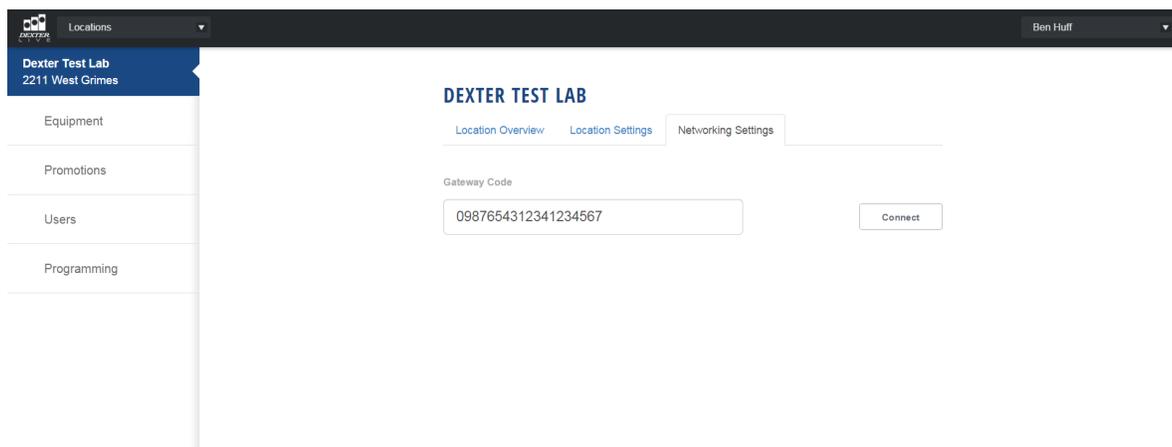
8. The Gateway code is found on the identification tag on the Gateway module.



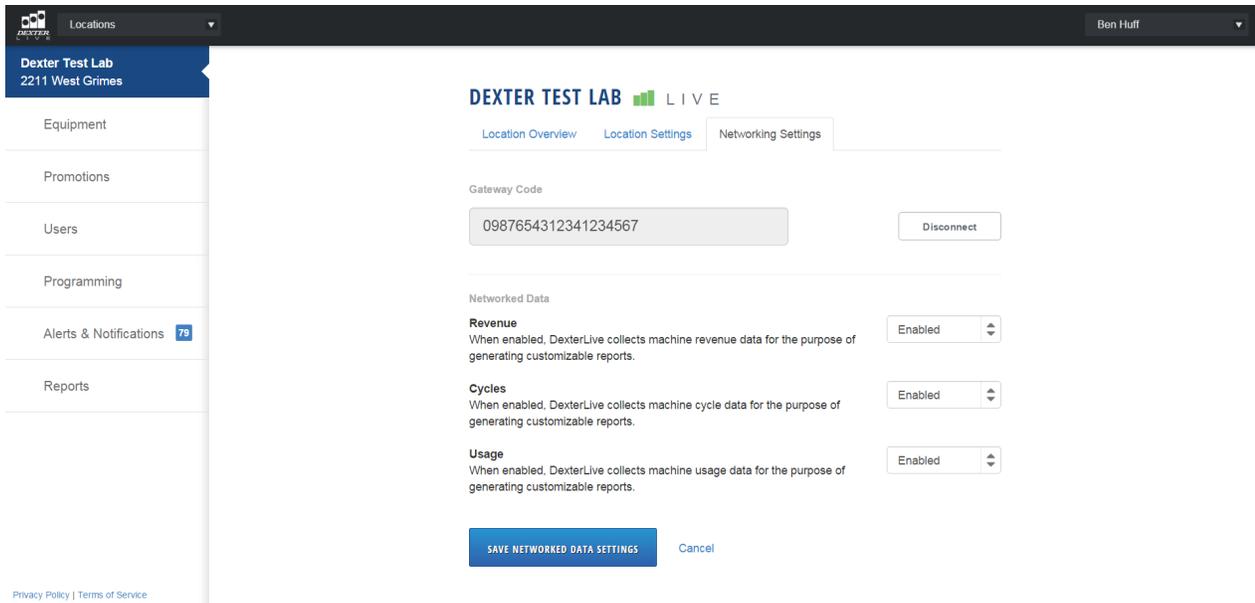
**Note: The Gateway Module and the Cisco Router are matched sets.** Verify that the serial numbers on the gateway and router are the same. This ensures that they are programmed to communicate to each other and to the DexterLive web site. The router is programmed "DHCP enabled". If the location requires that the router needs to be set for a static IP or set up to a different subnet, the information can be found in Section 4 Connecting Cisco Router Internet to the Internet.

9. Type in the Gateway Code into the field and then select "CONNECT".

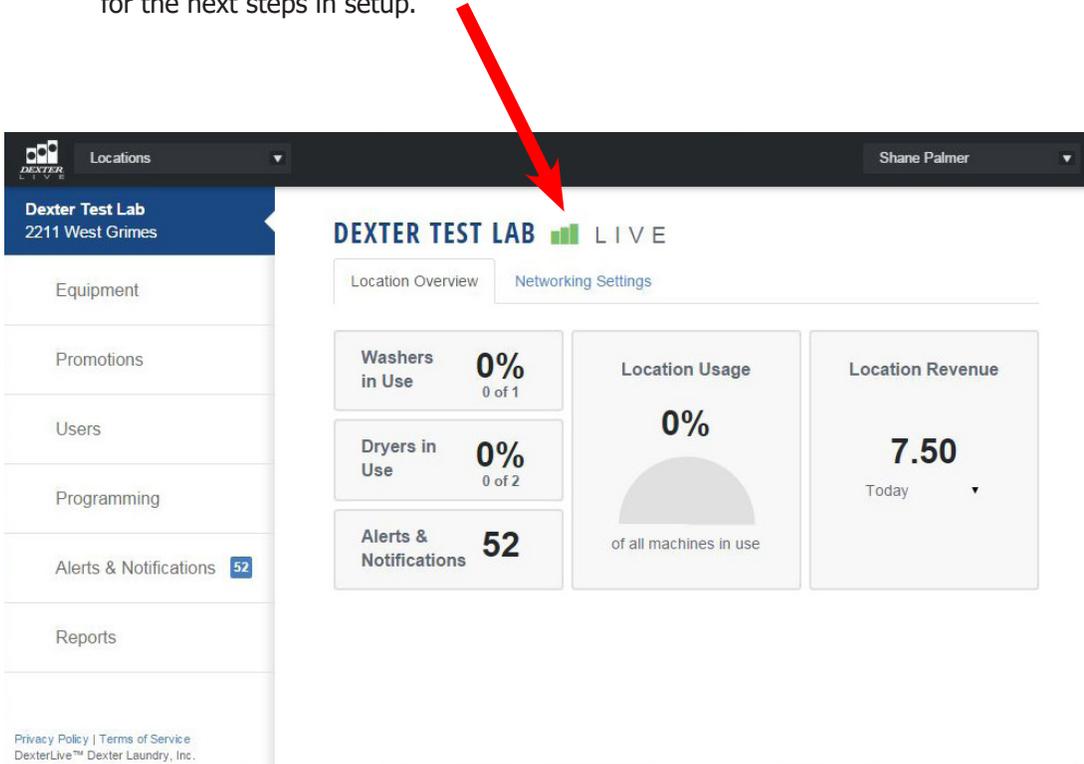
**Note: The Gateway code is Case Sensitive**



10. Once the system connects the "Alerts & Notifications", and "Reports" tabs in the left navigations pane, and the "Networked Data" fields will appear on the screen. Also notice the Live status will appear.



11. Selecting the "Location Overview" tab you will also notice the Dashboard changes. You should see the 3 green "connected" indicators to prove that the gateway is connected to the DexterLive Cloud and is ready for the next steps in setup.



12. Cables should **NOT** be connected to the machine controls at the start of the next section. You will run the cables and ethernet switches to the machines first and then will be advised at the proper time when to connect them **ONE AT A TIME** as you identify each in DexterLive.

# Installing Machine Cables

While installing the washers and dryers, the network cables need to be routed through the machines and the bulkheads properly to prevent electrical noise interference to the networking interface.

## Washers

13. Shut down power and remove the top of the washer. Under the clear plastic protector is the washer control board. Locate the networking connector and remove the plastic plug.

**The unshielded plastic end of the Cat5e cable from the Ethernet switch needs to be routed from the back of the machine to the front where it can be ran to the control. The unshielded connector should be inserted into the control and the shielded connector should be run to the Ethernet switch.**

14. Remove electrical connection cover on the rear of the washer
15. Run the cable through the lower left hole with a bushing (Figure 2).
16. Inside the cover area route the cable to the right and through the hole with the bushing (Figure 3)
17. Route the cable from the Ethernet switch to the front of the machine along the inside of the control trough where it can be connected to the control panel (Figure 4).

***NOTE: DO NOT connect the cables to the controls at this time!  
Each machine control will be connected ONE AT A TIME per later instructions.***

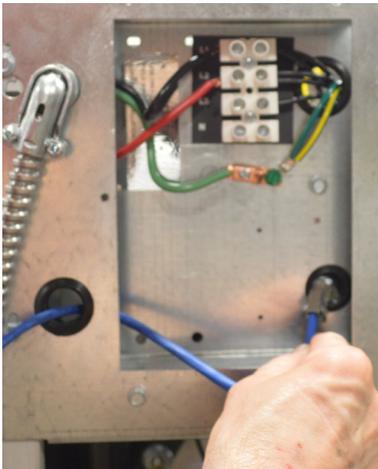


Figure 2

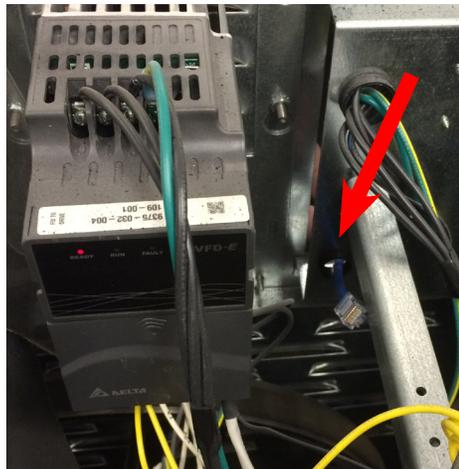


Figure 3

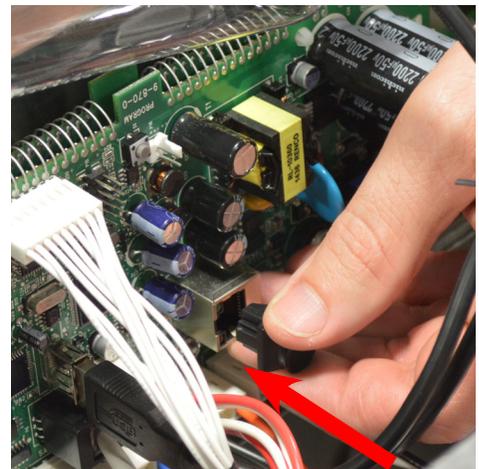


Figure 5

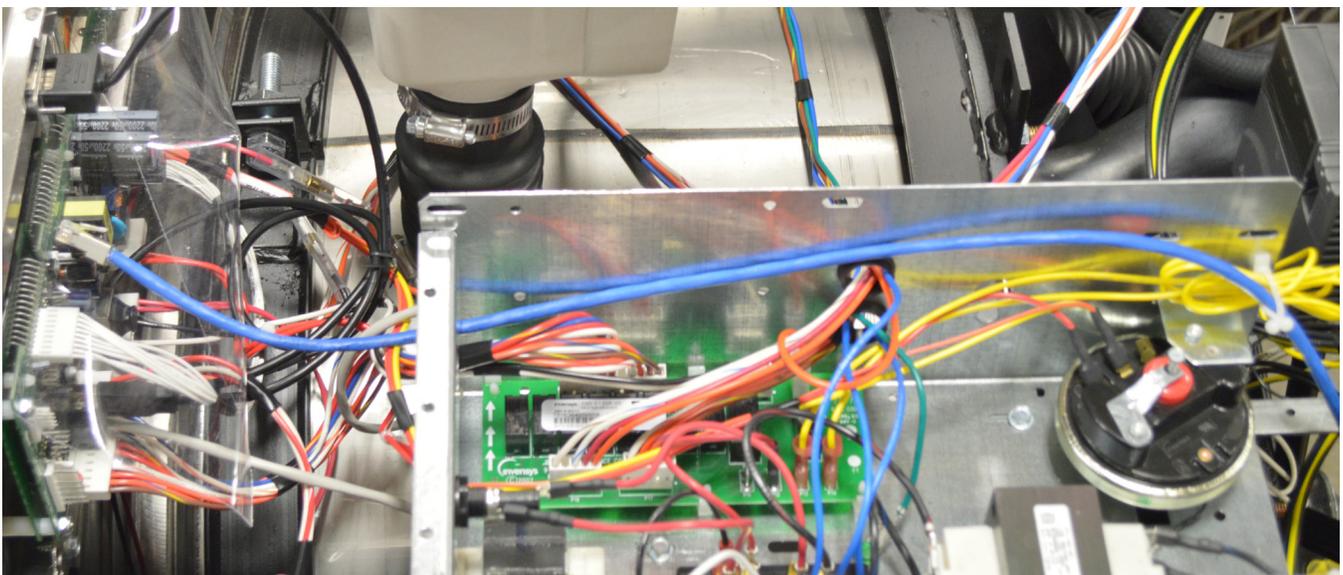


Figure 4

## Dryers

### Stack Dryers (6' cable preinstalled from the factory)

18. Once power to the dryer has been removed, the control trays for the dryers should be unlocked and pulled forward to reveal the connector on the front of the long board mounted to the base of the control (Figure 6). There should be a plastic plug in the connector which may already be removed. (Single pocket dryers also have the same style connector located on the control board.)

**NOTE: If the unshielded plastic end of the Cat5e cable from the rear of the machine to the front is already connected to the control, disconnect it until later when adding machines ONE AT A TIME.**

19. At the rear of the machine, remove the rear upper belt guard.
20. With belt guard removed, route cable up through guard (Figure 7)
21. Connect the female connector, (10 are included with the DexterLive dryer kit) to cable and connect the cable that will route to your Ethernet switch (Figure 8)

**NOTE: As long as the Cat5e connection at the controls are disconnected, the cables can be connected to the Ethernet Switch at this time. Each machine control will be connected ONE AT A TIME per later instructions.**

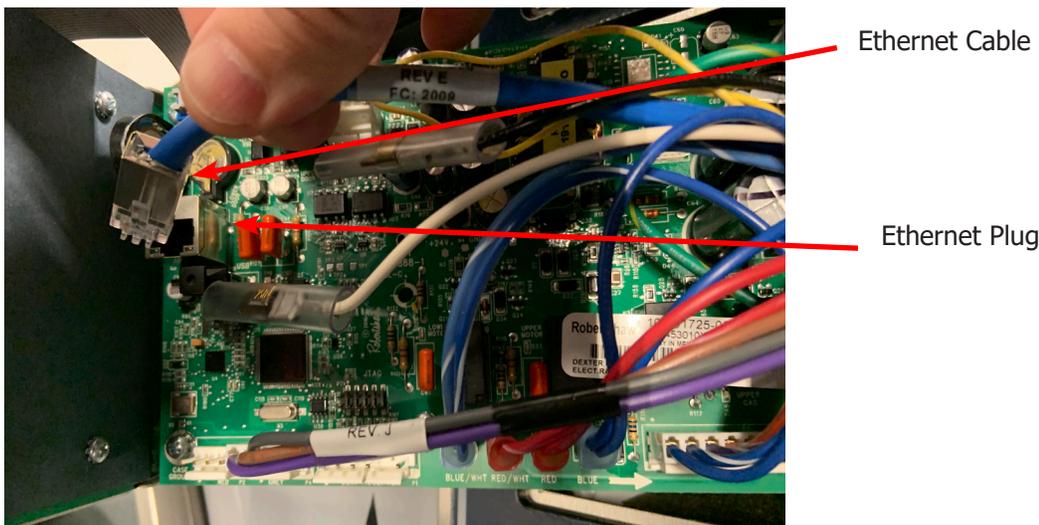


Figure 6

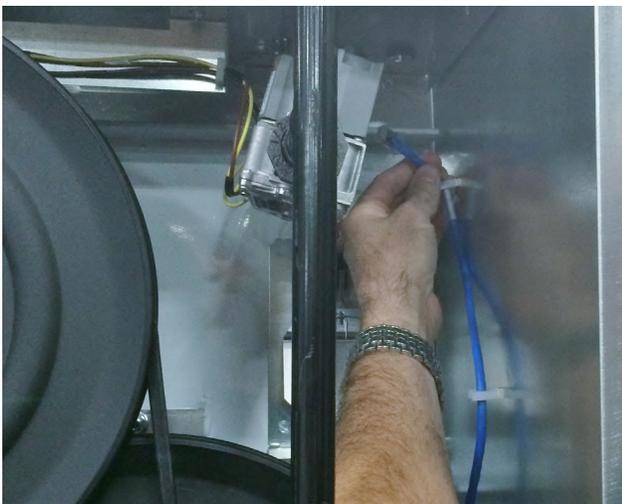


Figure 7

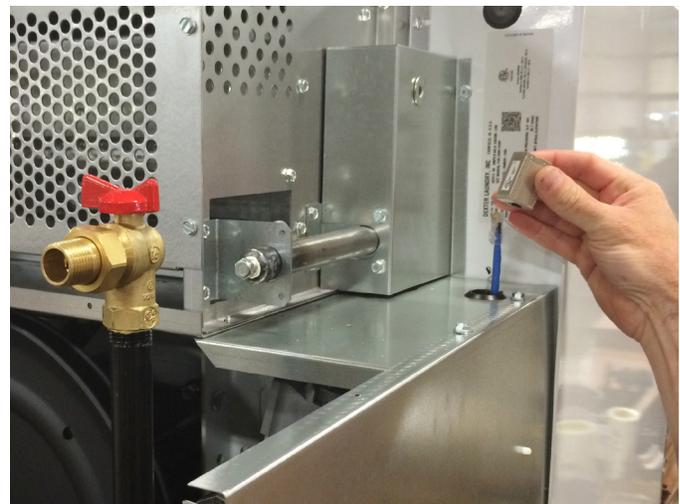


Figure 8

# DexterLive Ethernet Switch Cabling

22. The Ethernet switches need to be routed and placed in central locations behind the machines that will be connected to them. (see store layout example Figures 1 and 3)
23. Cables can be run to connect the Ethernet switches to other switches or directly to the provided Cisco router device on remaining ports 2, 3, or 4. (see Figure 2)

Caution needs to be taken when routing connecting Cat5e cables from each switch to the control room where the Gateway and Cisco router are located and connected to the incoming internet. Make sure not to route cables over light ballasts, dryer burner housings or any other source of heat damage or electrical noise.

**NOTE: The Ethernet switches should be powered down until the cable installation is complete**



Figure 1



Figure 2

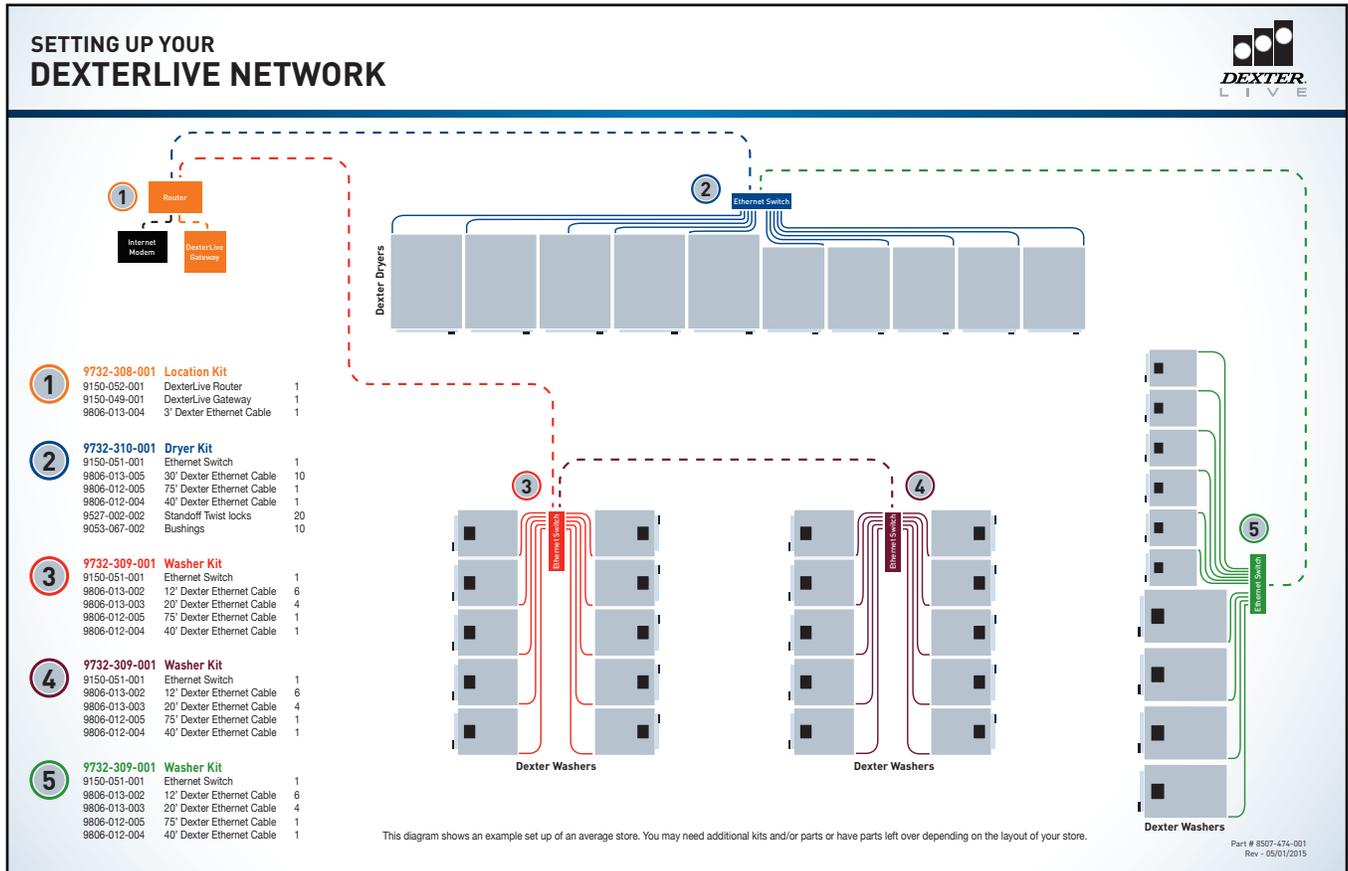


Figure 3

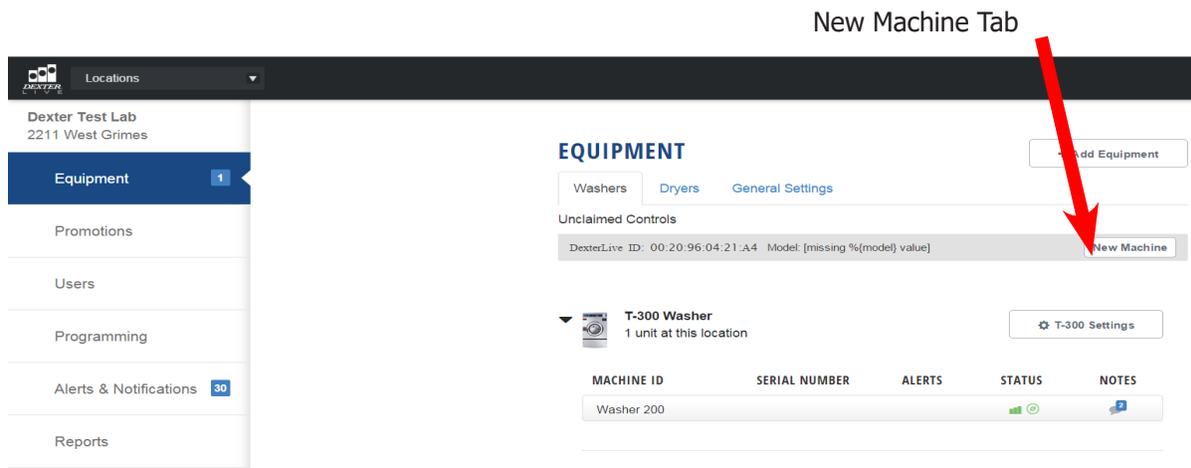
# Adding Equipment

**NOTE: If you are using an alternate payment system connected to the serial port of the Dexter Controls, the alternate system it SHOULD NOT BE CONNECTED to the controls during the setup process for DexterLive. Please discuss with your alternative payment provider if there could be potential conflicts between the payment system they offer and the DexterLive / DexterPay systems.**

24. Before connecting any of the machine controls, power up all of the Ethernet switches in your network. (It is assumed that the Gateway and Router have already been connected and have communication to the internet and to DexterLive)
25. Each machine control will be connected **ONE AT A TIME** with the Cat5e cable to the control and immediately added to the software using the laptop connected to the DexterLive location over the internet connection.

**NOTE: THE PROCESS OF CONNECTING A MACHINE CONTROL AND ADDING TO THE DEXTERLIVE EQUIPMENT LIST SHOULD BE COMPLETE BEFORE PROGRESSING TO ANY SUBSEQUENT MACHINES!!**

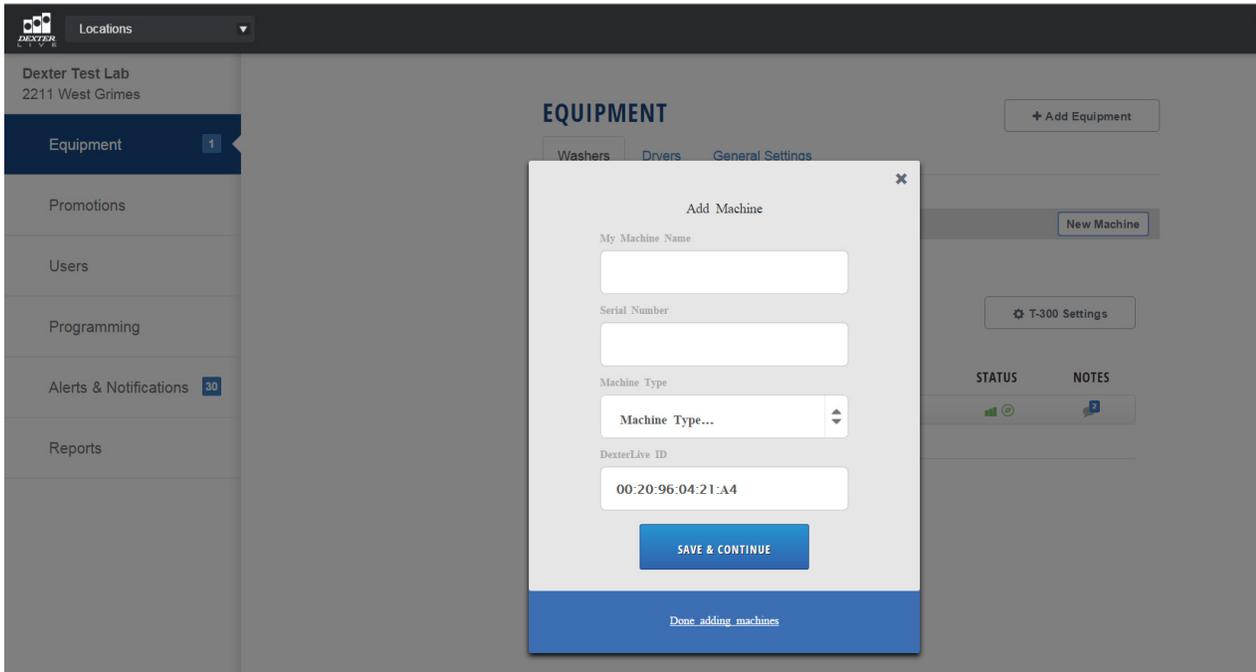
26. Connect the Cat5 unshielded end of the cable into the control with the shielded tip already connected into the powered up Ethernet switch. Wait 30-60 seconds.
27. Using DexterLive on the laptop, select the "Equipment" tab from the main menu and select either the Washers or Dryers tab. This tab should now show the "**Unclaimed Controls**" field. At this time you will may need to manually refresh your web browser and select the "New Machine" tab once the "Unclaimed Control" field appears. Click on this "New Machine" tab.



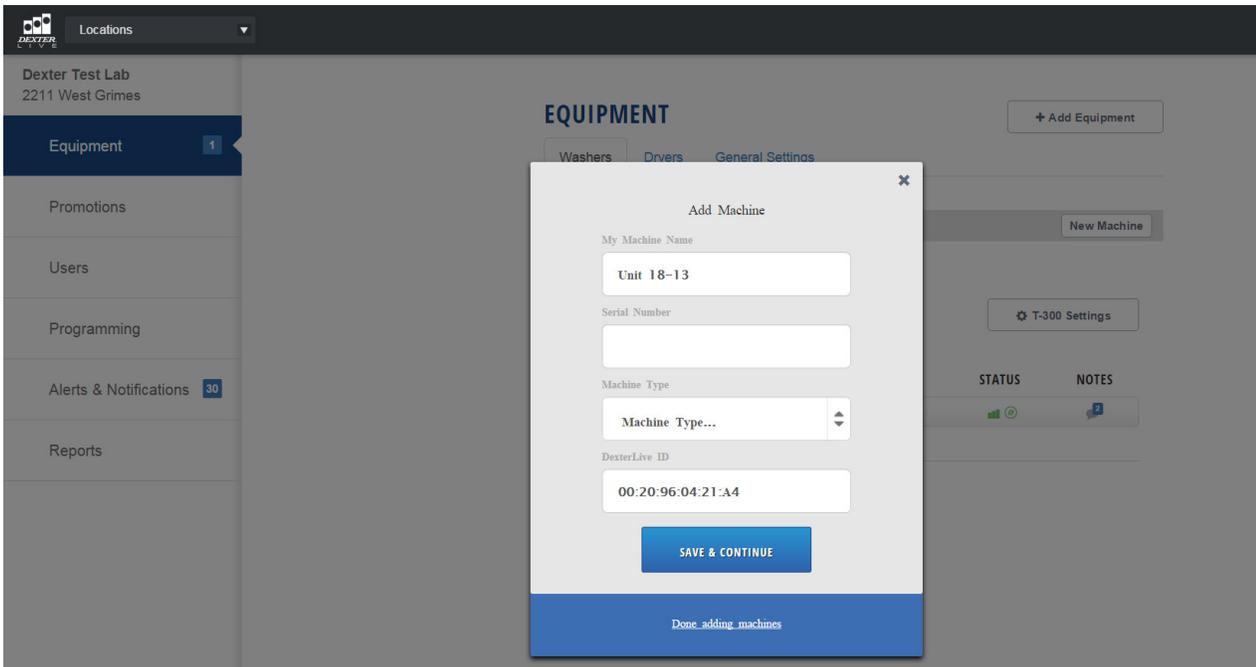
**NOTE: If the "Unclaimed Control" window does NOT appear.**

- A. First, if the process was not followed earlier to connect and wait for the Gateway firmware to update, you may need to wait now before machine controls will recognize. The recognition may take up to a couple of minutes, try to refresh your browser.
- B. Next, disconnect the cable from the control and perform a soft reset by powering up with the program switch. Now try reconnecting or replacing the cable.
- D. Try connecting another machine control to see if it is just this control that is not responding.
- C. Check all cable connections to verify that there is no damage and that there is communication back to the Ethernet switches as well as the Cisco Router.
- E. Using the laptop Connected to the Cisco router and the WiFi off, verify absolutely that there is a sufficient internet connection to the Cisco router and Gateway. Retest using the same process shown shown back in step #2.
- F. Next, with the laptop connected, go to the command prompt on your laptop. From the command prompt, type " ipconfig" and press Enter. You should show that you are connected to 192.168.40.1 (The Cisco router address). If it is showing 192.168.1.1 the Cisco Router has defaulted and will need reconfigured. **(Go to pgs. 23-25, Procedure #1 and 2)**

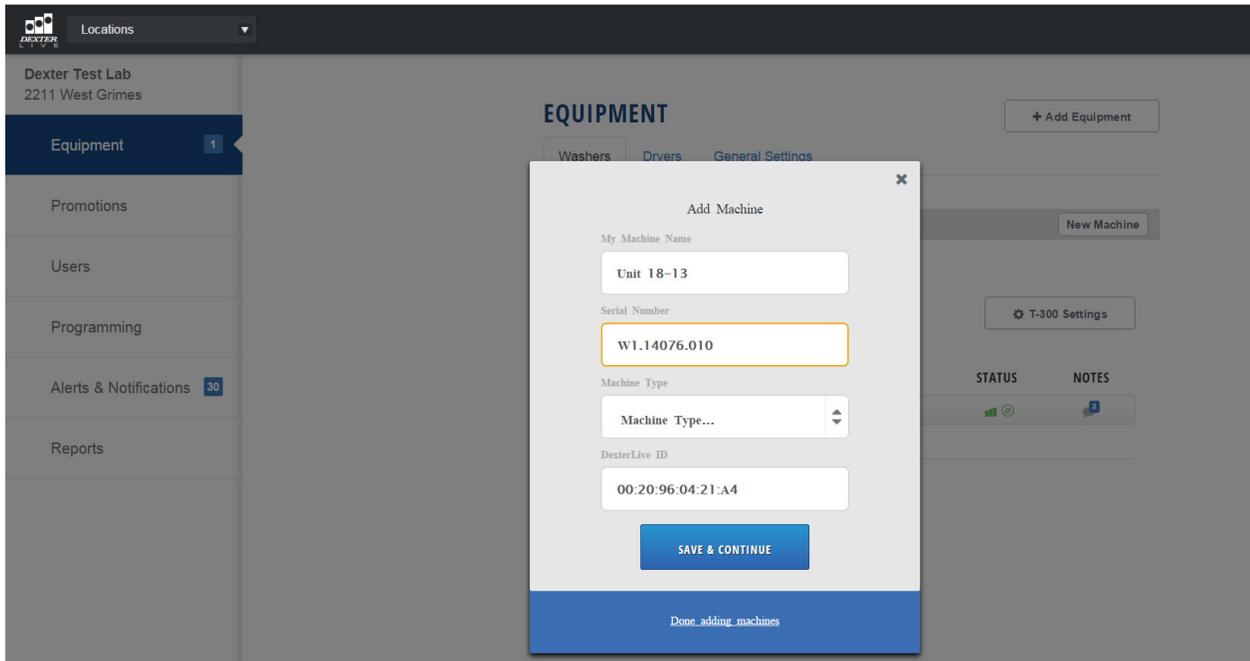
28. The "Add Machine" window will open with the "DexterLive ID" already populated. Using the information from your store layout the remaining fields can be completed: Machine Name, Serial Number, and Select Machine Type.



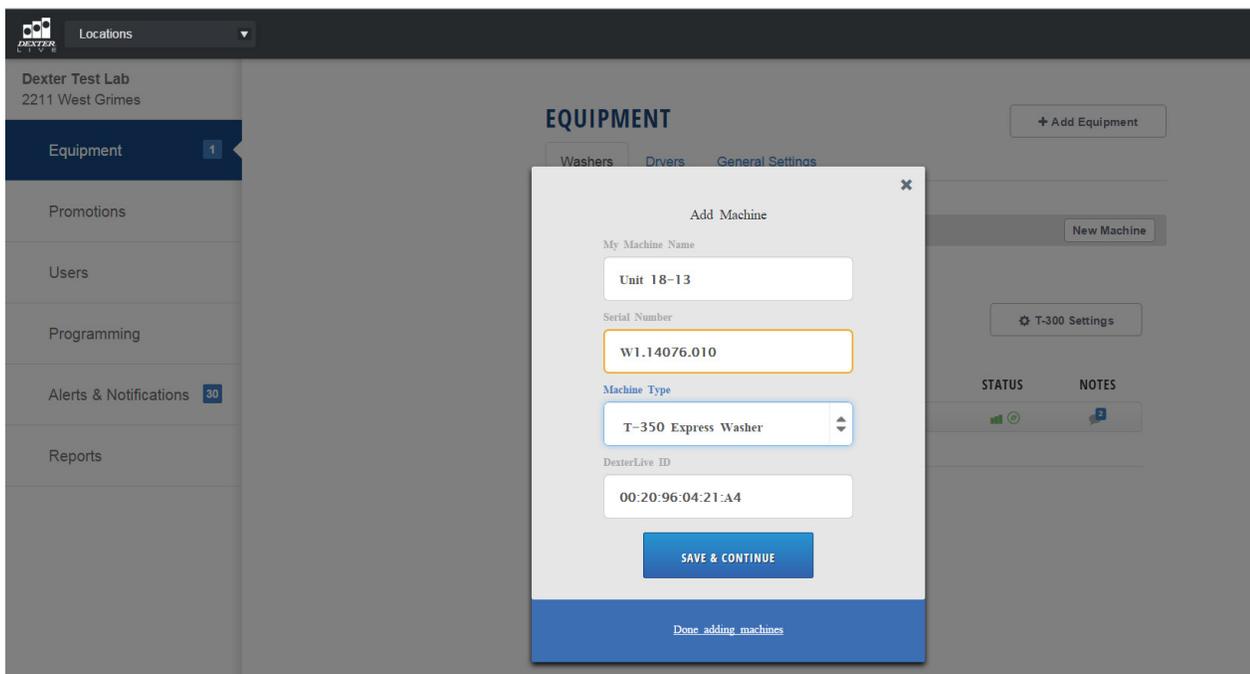
29. Add the machine name or number.



30. Add the serial number.



31. Add the machine type. **Note: It will accept any type so be sure to choose the correct one.**



32. Once all machine information is entered, select "Done adding machines". This will return you back to the equipment page and will show the machine in the equipment list with an active status symbol.

33. Continue the process of adding **ONE MACHINE AT A TIME** following steps 26 thru 32 until the location is completed.

# Section 4:

## Troubleshooting Cisco Router Configurations

- Procedure 1:** Steps for Logging into the RV340 Cisco Router (pg 23)
- Procedure 2:** Restoring the RV340 Cisco Router From a Backup File (pg 25)
- Procedure 3:** Steps for RV340 Cisco Router Static IP Setup (pg 26)
- Procedure 4:** Manual Setup for RV340 Cisco Router (pg 28)
- Procedure 5:** Steps for Changing the RV340 to a Different Sub-network (pg 33)
- Procedure 6:** Saving Changed Settings on the RV340 Cisco Router (pg 35)
- Procedure 7:** Saving the Settings on the RV340 Cisco Router as a Backup File (pg 37)
- Procedure 8:** Procedure for Transferring Ownership of the DexterLive Location (pg 39)

# Procedure 1: Logging into the Cisco Router

## This connection process will be done for all RV340 Cisco Router Configurations and Troubleshooting

1. Disable your wireless internet setting on your laptop. Start with the laptop disconnected from the RV340 Router.
2. On the back of the router is a power switch located next to the power port. Flip the switch to the "ON" position to turn on the router and wait 30 seconds.

3. On the front of the router are indicator lights. One of the indicator lights shows "PWR", the indicator light for device power. While this indicator light is flashing, the router is booting up. (Figure 1)
4. Once the "PWR" indicator light is solid green (not flashing), the device is powered up and booted. This can take a few minutes. Wait until the "PWR" indicator light is solid green before proceeding to the next step.

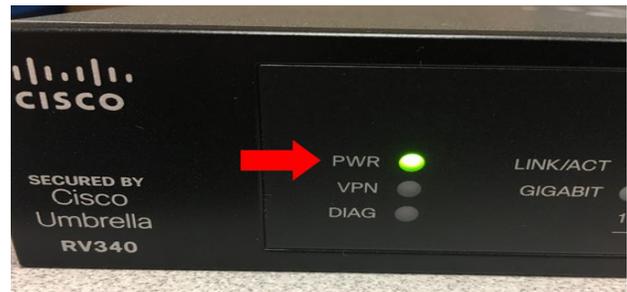


Figure 1

5. Once the "PWR" indicator light is solid green, the device is ready to be connected for programming.
6. On your laptop, disable the wireless internet. This will ensure the laptop is only connected to the RV340 Cisco Router.
7. Connect a CAT5 cable to your laptop and the other end to one of the 4 LAN ports on the RV340 Cisco Router. (Figure 2)



Figure 2

8. Once the laptop is connected to the router, the associated indicator light will be illuminated on the front of the router based on the port the laptop is connected to. In this example, LAN port 1 is being used. (Figure 3)

a.) The "LINK/ACT" LED will be solid green when the GE Link (Gigabit Ethernet Link) is on. It will be flashing when the GE is sending or receiving data.

b.) The "GIGABIT" LED will be solid Green when at 1000M speed and will be off when at non-1000M speed.



Figure 3

9. Open a web browser (Chrome is recommended) and in the URL address bar, enter 192.168.40.1 and press "Enter". 192.168.40.1 is the Device IP Address of the router and will direct you to a login screen that will allow you to configure the router's settings.

# Procedure 1: Logging into the Cisco Router (continued)

- When using a Chrome browser, the following message will appear. This is a common warning message when logging into routers. If this message occurs, select the "I understand the risk, but want to proceed" option to continue with router programming. (Figure 4)

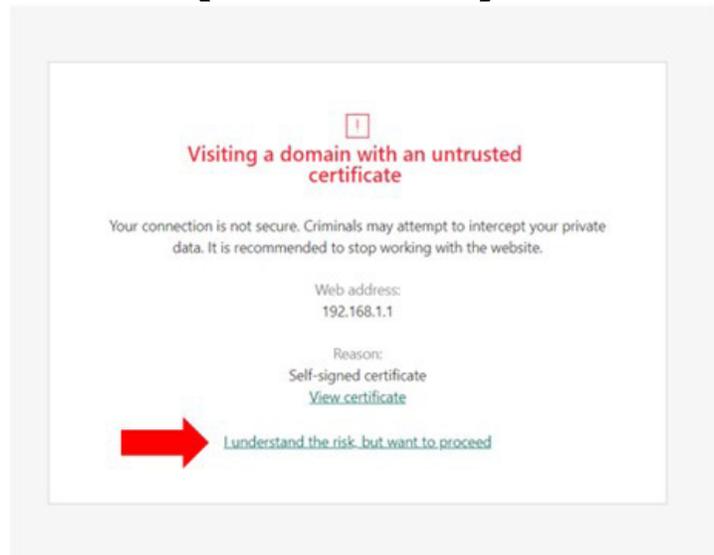


Figure 4

- You should end up at the following screen. (Figure 5)
- Here you will be prompted to enter the credentials to sign into the router.

Username: **cisco**

Password: **cisco**

Once entered, click "Login".

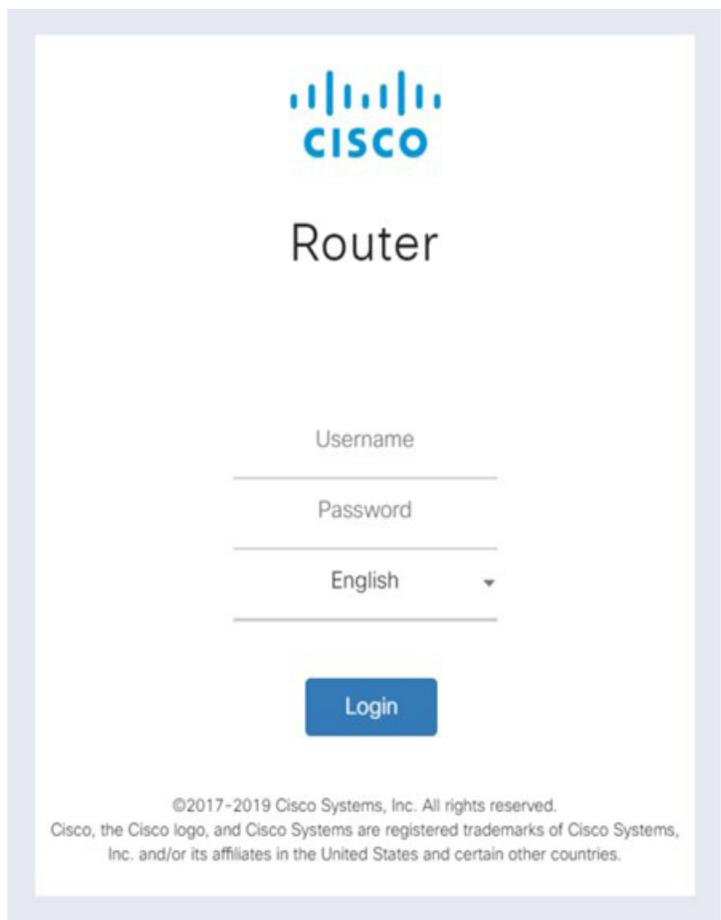
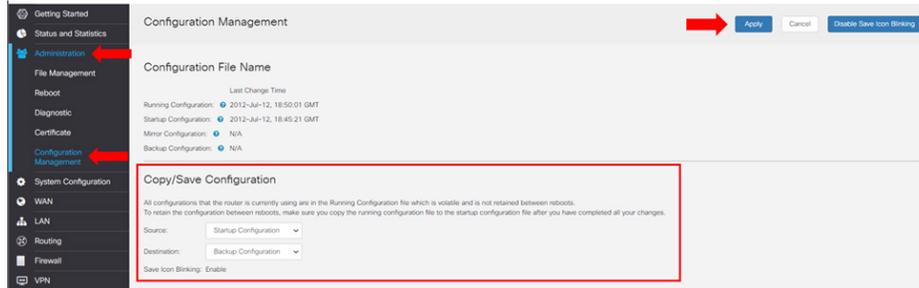


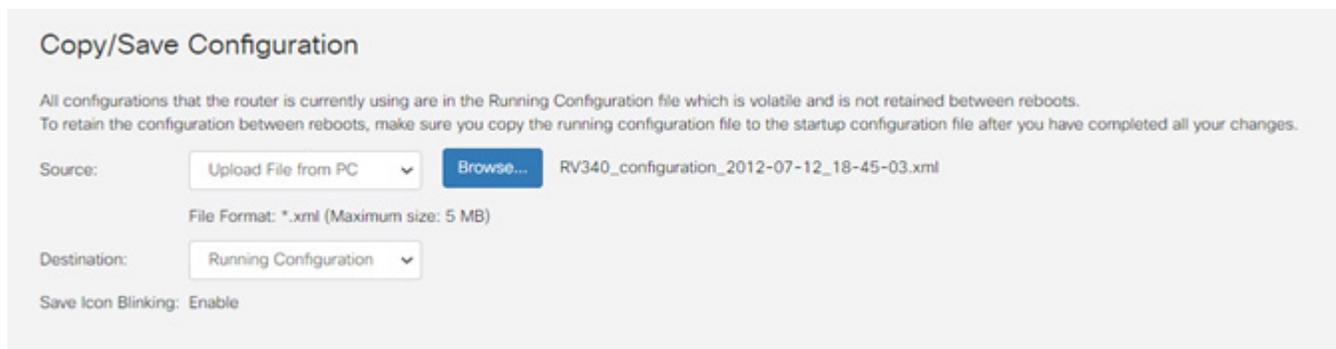
Figure 5

# Procedure 2: Restoring the RV340 Cisco Router From a Backup File (In case of router reset)

1. Follow the steps 1-12 outlined in Procedure 1 (page 23) to Log into the RV340 Cisco Router.
2. After successfully logging into the router, select "Administration" in the left navigation pane and then "Configuration Management".



3. At the bottom of the page is a Copy/Save Configuration section. Make sure that:
  - a. Source = Upload File from PC
  - b. Destination = Running Configuration
4. Select the "Browse" button located to the right of the "Source" field and locate the backup file.



5. Once the backup file has populated to the right of the Browse button, select "Apply" in the upper right-hand corner of the page.
6. You will see a message saying, "Loading data now, please wait..." 
7. Since the DexterLive backup file is programmed with a device IP address of 192.168.40.1, which is potentially on a different subnet than the subnet the router was previously on, such as when the router resets to factory defaults, perform the following:
  - a. Wait 2 minutes.
  - b. Disconnect the CAT5 cable from the laptop, wait 5 seconds and then reconnect to the laptop.
  - c. In the browser URL, enter "192.168.40.1" and select "Enter".
  - d. Log back into the router.

8.

**YOU MUST PERMANENTLY SAVE THE CHANGED SETTINGS ON THE RV340 CISCO ROUTER IN ORDER FOR THE CONFIGURATIONS TO BE RETAINED THROUGHOUT POWER CYCLES!! Go to Procedure 6 on page 35 of this manual for instructions of how to save these settings.**

# Procedure 3: Setting the Cisco Router for a Static IP address

For a Static IP addressing, the installer needs to obtain the following information from the internet provider:

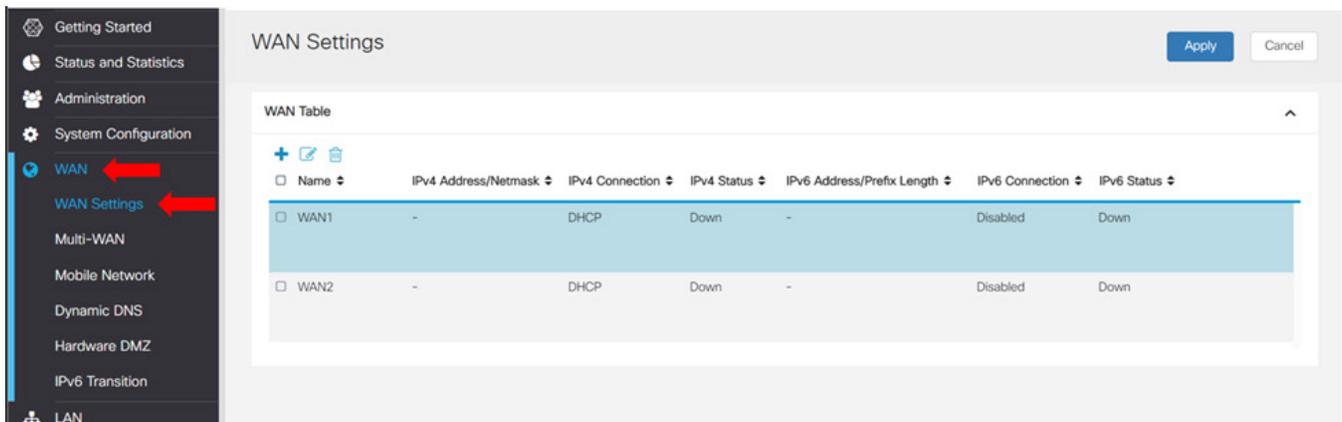
- The IP addresses available at the location.
- If there will be multiple IP addresses available or used for other connections (cameras, payment systems, in-house internet, ATMs).
- Which IP address should be used for the DexterLive Setup.
- The Subnet Mask, Default Gateway, and DNS Server to program into the Cisco Router.

IP Address for DexterLive: \_\_\_\_\_ Subnet Mask: \_\_\_\_\_

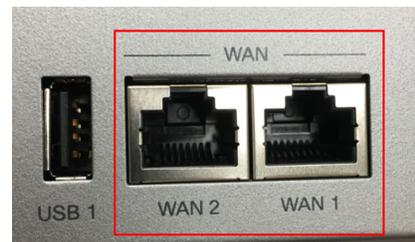
Default Gateway: \_\_\_\_\_ DNS Server: \_\_\_\_\_

## Process for static IP Settings

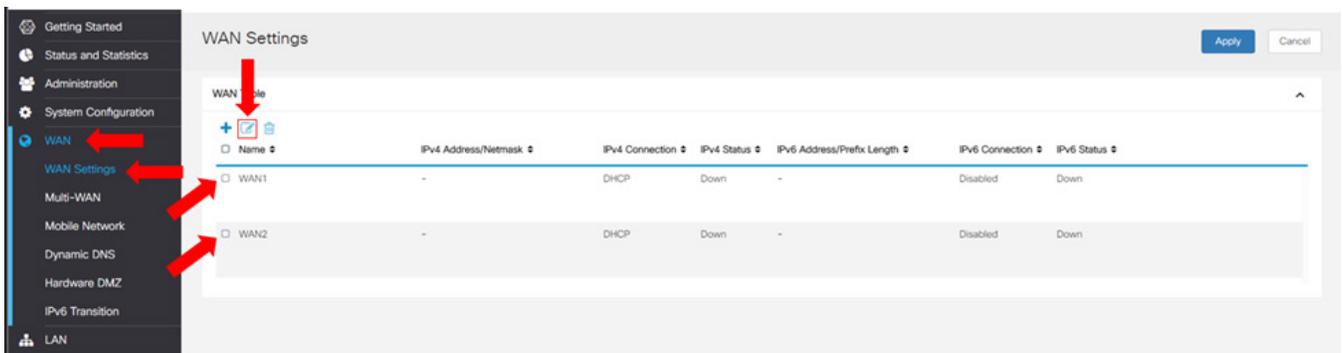
1. Follow the steps 1-12 outlined in Procedure 1 (page 23) to Log into the RV340 Cisco Router.
2. In the left navigation pane, scroll down to "WAN". This should take you to the "WAN Settings" tab.



3. You will need to determine which Internet port of the Cisco you will use for the incoming Static IP line. On the back of the router, there are two WAN ports, labeled "WAN 1" and "WAN 2". Whichever port you plan to use for the incoming Static line, you will need to select when configuring the WAN Setting in the router.



4. Select the box for either the WAN1 or WAN2 for whichever WAN port is being used and then select the "Edit" icon.



- Under "Connection Type", select "Static IP". This will bring up fields as shown in the image below.
- This information can be obtained from your Internet Service Provider.
- Once all of the fields have been filled out, select "Apply"

**Add/Edit WAN Sub-interface**

Sub-interface Name:  WAN1  WAN2

VLAN ID:  (1-4094)

IPv4 **IPv6** Advanced

Connection Type:  DHCP  Static IP  PPPoE  PPTP  L2TP  Bridge

**Static IP Settings**

IP Address:

Netmask:

Default Gateway:

DNS Server: Use DNS as Below

Static DNS 1:

Static DNS 2:

**Note:** 1. This interface Network Service Detection will turn off automatically when protocol is PPPoE. Please go to [Multi-WAN](#) to configure it.

- After selecting "Apply", you will be directed back to the WAN Settings page. Note that the WAN setting that was configured is now showing "Static IP" for the IPv4 Connection.

**WAN Settings** Apply Cancel

WAN Table						
Name	IPv4 Address/Netmask	IPv4 Connection	IPv4 Status	IPv6 Address/Prefix Length	IPv6 Connection	IPv6 Status
<input checked="" type="checkbox"/> WAN1	-	Static IP	Down	-	Disabled	Down
<input type="checkbox"/> WAN2	-	DHCP	Down	-	Disabled	Down

- YOU MUST PERMANENTLY SAVE THE CHANGED SETTINGS ON THE RV340 CISCO ROUTER IN ORDER FOR THE CONFIGURATIONS TO BE RETAINED THROUGHOUT POWER CYCLES!!**  
Go to **Procedure 6 on page 35** of this manual for instructions of how to save these settings.

# Procedure 4: Manual Setup Process for the RV340 Cisco Router

1. Follow the steps 1-12 outlined in Procedure 1 (page 23) to Log into the RV340 Cisco Router.
2. After successfully logging into the router, you will be directed to a "User Accounts" screen as shown below. In order to proceed with programming the router, a new password will need to be entered. The default username and password can continue being used. (Figure 6)

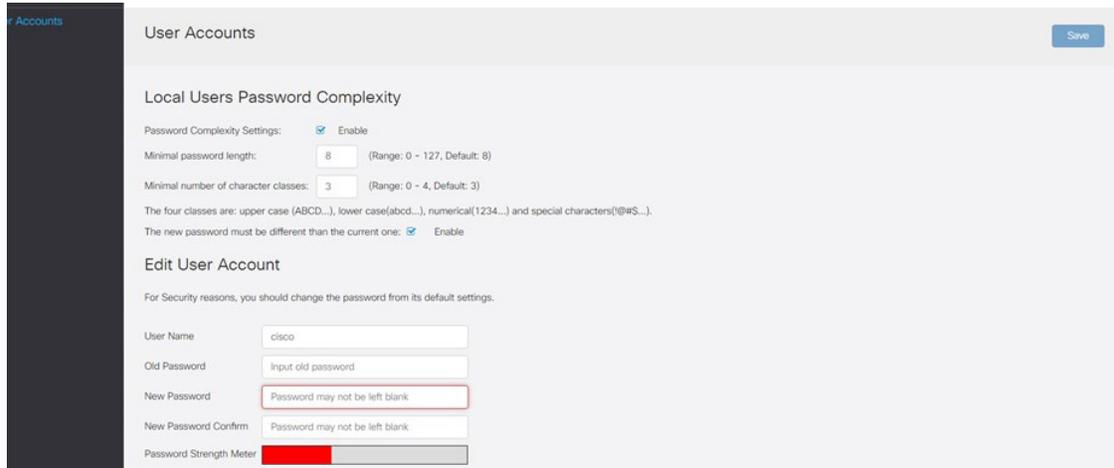


Figure 6

3. Disable the "Password Complexity Settings" at the top of the page. This will allow any password to be entered, even the default password.
4. After unchecking the "Password Complexity Settings", the page should update as shown below:(Figure 7)

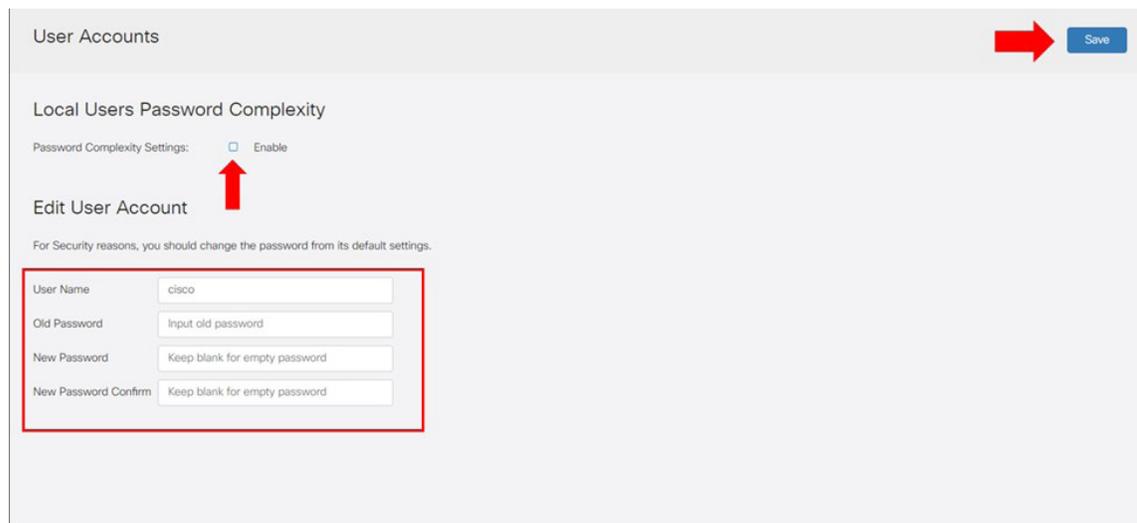


Figure 7

5. You can now enter the following:
  - a. User Name: cisco (no change)
  - b. Old Password: cisco
  - c. New Password: cisco
  - d. New Password Confirm: cisco

**NOTE: Dexter recommends using the default Username of "cisco" and Password of "cisco"**

6. Once the desired Username and Password fields have been entered, select "Save" in the upper right-hand corner of the page.
7. You will then be signed out and required to re-enter the Username and Password you just set.
8. After signing in, you will now be able to configure the settings of the router and should see a screen as shown below. (Figure 8)  
NOTE: The "Initial Setup Wizard" won't appear again once the router is configured.
9. Select "Cancel" to the Initial Setup Wizard.

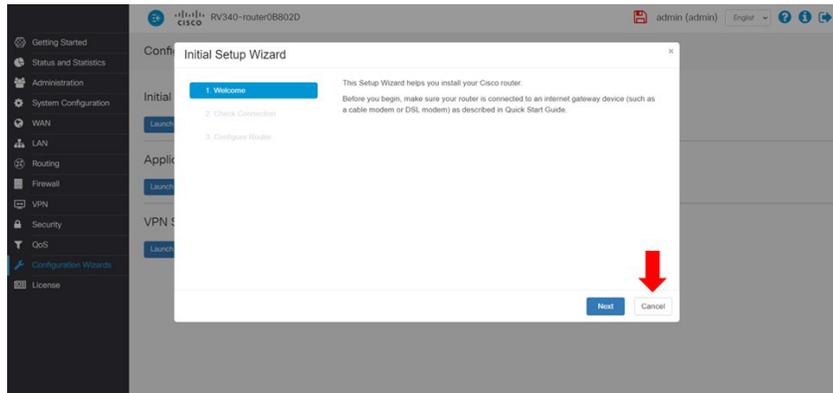


Figure 8

10. In the left navigation pane, scroll down to "LAN" and then select "VLAN Settings" (Figure 9).
  - a. In the VLAN table, check the box for "VLAN1". This should highlight the option.
  - b. Directly below the "VLAN Table" text is an "Edit" icon. Select the "Edit" icon.
    - i. Update the "IPv4 Address" to: 192.168.40.1
    - ii. Update the "Lease Time" to: 43200
    - iii. Update the "Range Start" to: 192.168.40.2
    - iv. Update the "Range End" to: 192.168.40.254
  - c. Select "Apply" in the upper right-hand corner of the page.

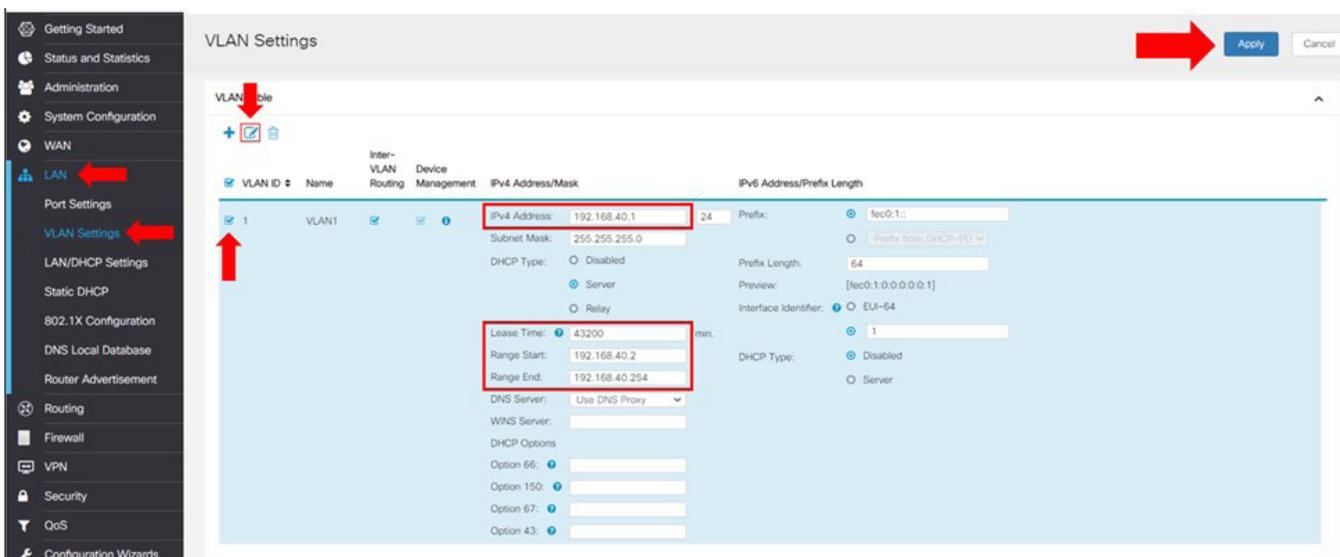


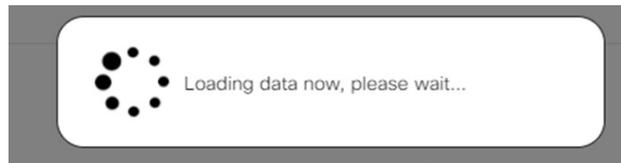
Figure 9

- d. A "Warning" message will appear, informing the user that the router's device IP Address will be changing and that the new device IP address will need to be used going forward on subsequent router logins.
- e. Select "Yes" to the Warning message. (Figure 10)



Figure 10

- f. You should now see a message saying, "Loading data now, please wait..."



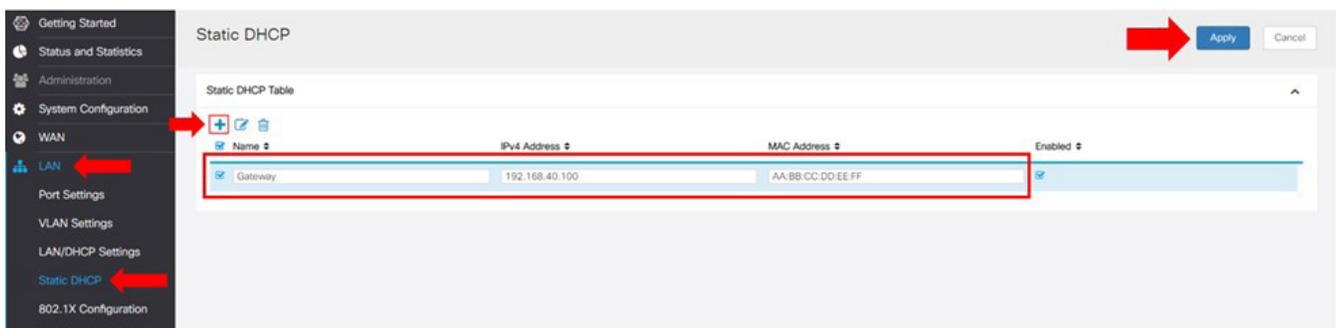
- g. Wait 2 minutes.
- h. After 2 minutes, even though the "Loading data now, please wait..." message is shown, disconnect the CAT5 cable from the laptop, wait 5 seconds and then reconnect the CAT5 cable to the laptop.
- i. In the browser URL, enter "192.168.40.1", the new device IP Address, and select Enter.
- j. Log back into the router using the credentials that were previously configured.

11. In the left navigation pane, under the "LAN" section, select "Static DHCP".

- a. Under the "Static DHCP Table" text, there should be an "Add" ("+" sign) icon. Select the "Add" icon. This will bring up fields for each column.
- b. For the "Name" field, enter: Gateway.
- c. For the "IPv4 Address", enter: 192.168.40.100.
- d. For the "MAC Address", enter the MAC Address of the gateway.

**NOTE:** Make sure the colon (: ) symbol is used to separate every 2 digits, as shown in below image.

the



- e. Once all of these fields have populated with the above information, select "Apply" in the upper right-hand corner of the page.

- f. The page will then show the Gateway entry in the Static DHCP Table, as shown in the below image. (Image 12)



Figure 12

NOTE: It is expected that the gateway's MAC Address will be in lower-case letters after applying the changes.

12. In the left navigation pane, under the "LAN" section, select "DNS Local Database"

- a. Under the "DNS Local Database Table" text, there should be an "Add" ("+" sign) icon. Select the "Add" icon. (Figure 13).
- b. For the "Host Name" field, enter dexter-live-gateway.
- c. For the "IPv4 or IPv6 Address" field, enter 192.168.40.100.
- d. Once these fields are populating with the above information, select "Apply" in the upper right-hand corner of the page.

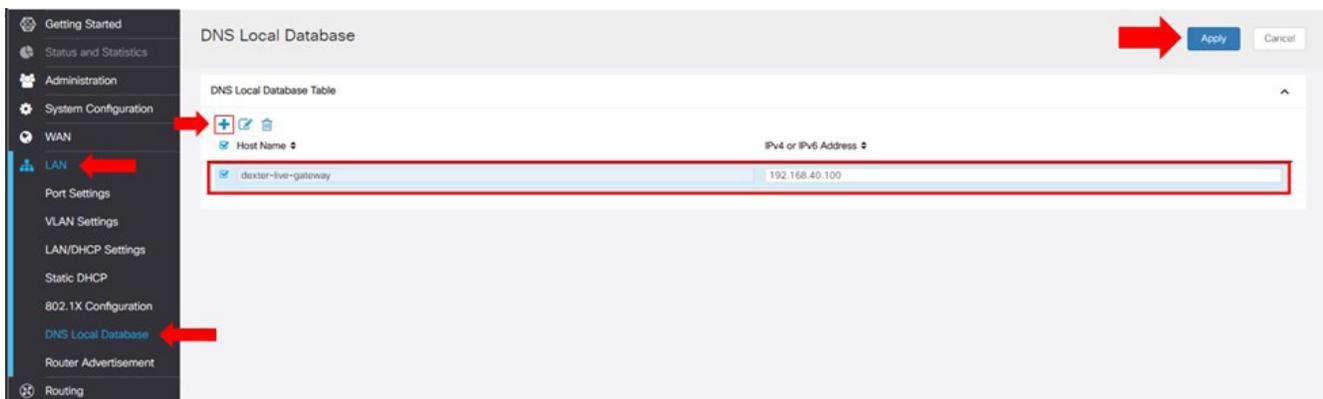


Figure 13

- e. The page will then show the entry in the DNS Local Database Table, as shown in the below image (Figure 14).

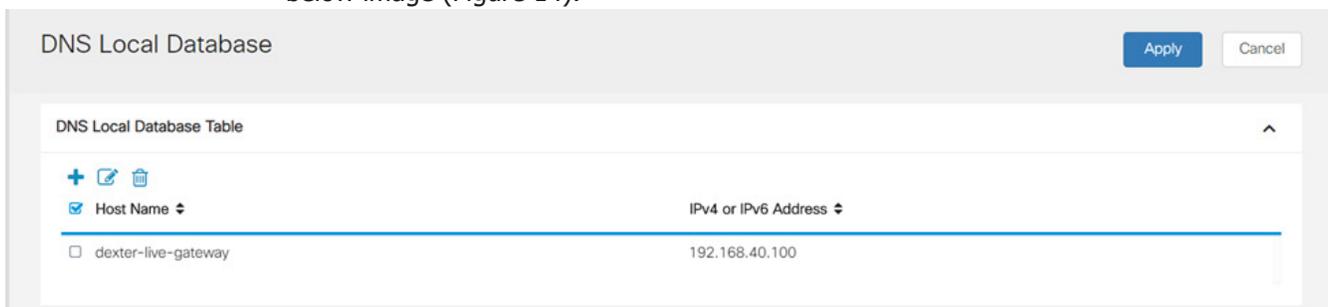


Figure 14

13. In the left navigation pane, select "System Configuration" (Figure 15)
  - a. For the "Host Name", enter: dexterliverouter.
  - b. For the "Domain Name", enter: dexter.localnet.
  - c. Select "Apply" in the upper right-hand corner of the page to apply the changes.

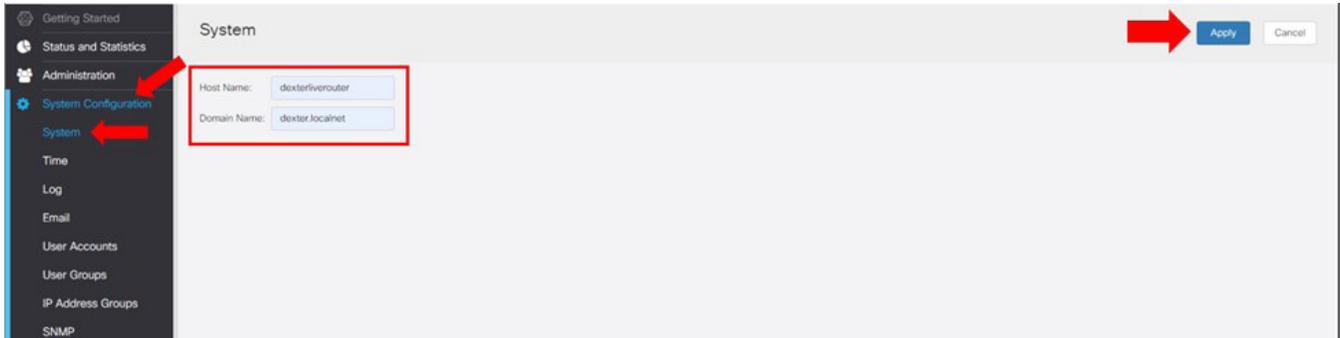


Figure 15

14. In the left navigation pane, select "System Configuration" and then select "User Accounts" (Figure 16)
  - a. Change the "Password Aging Time" to: 0.
    - i. This will allow the password to never reset.
  - b. Select "Apply".

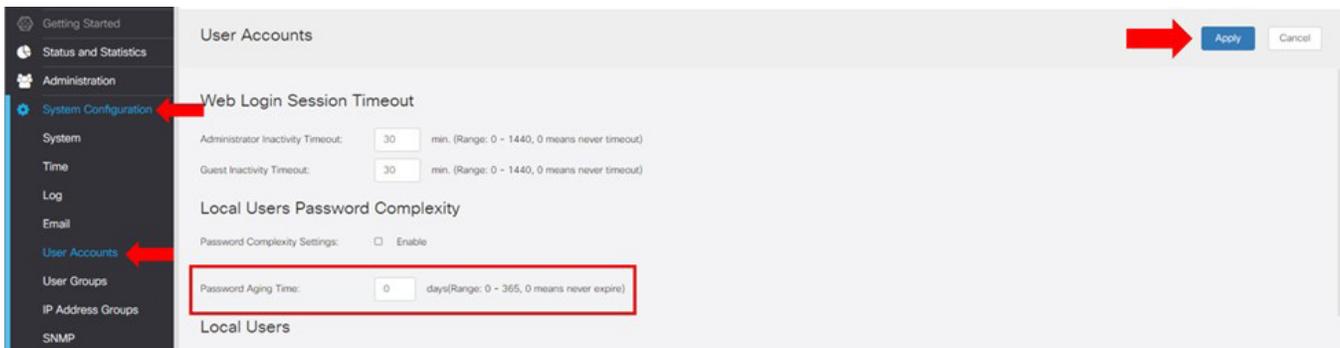


Figure 16

15. At the top of the page, a red "Save" icon (Figure 17) should be blinking. This icon flashes when there are changes that have been made that haven't been permanently applied yet, meaning the changes will not be saved across router power cycles. The next page will instruct you how to save the settings so they are retained across power cycles.



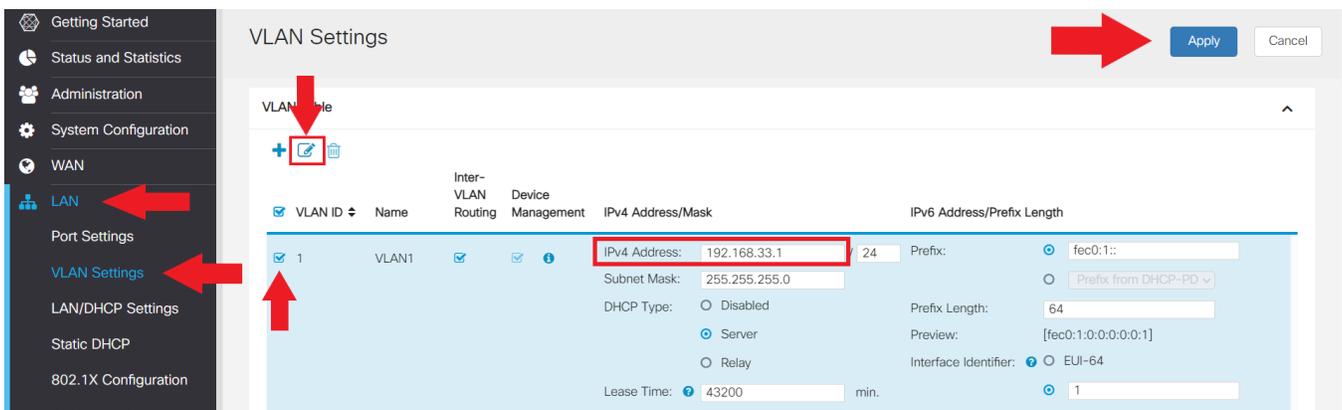
Figure 17

- 16.

**YOU MUST PERMANENTLY SAVE THE CHANGED SETTINGS ON THE RV340 CISCO ROUTER IN ORDER FOR THE CONFIGURATIONS TO BE RETAINED THROUGHOUT POWER CYCLES!!**  
**Go to Procedure 6 on page 35 of this manual for instructions of how to save these settings.**

# Procedure 5: Changing RV340 Cisco Router to a Different Sub- network (Only if directed by Dexter Technical Support)

1. Follow the steps 1-12 outlined in Procedure 1 (page 23) to Log into the RV340 Cisco Router.
2. Once connected, in the left navigation pane, scroll down to "LAN" and then select "VLAN Settings"
  - a. In the VLAN table, check the box for the "VLAN1" option. This should highlight the option.
  - b. Directly below the "VLAN Table" text is an "Edit" icon. Select the "Edit" icon.
  - c. The "IPv4 Address" field should show 192.168.40.1. This field can be modified if there is an existing network already at the location that uses 192.168.40.1 network addresses. To avoid IP addressing issues at the location, you can configure the Cisco router to be on a separate subnetwork. One way to get on a separate subnetwork is to change this "IPv4 Address" by modifying the 3rd digit field in the IPv4 Address to another number. (This digit can range anywhere from 1-254) For this example we will modify the 3rd digit from the default value of 192.168.40.1 to a new subnet value of 192.168.33.1. d. Remember your new device IP Address. It will be needed for future router logins.
3. In the left navigation pane, scroll down to "LAN" and then select "VLAN Settings" (See Below).
  - a. In the VLAN table, check the box for "VLAN1". This should highlight the option.
  - b. Directly below the "VLAN Table" text is an "Edit" icon. Select the "Edit" icon.
    - i. Update the "IPv4 Address" to: 192.168.33.1
    - ii. Update the "Lease Time" to: 43200
    - iii. Update the "Range Start" to: 192.168.33.2
    - iv. Update the "Range End" to: 192.168.33.254
  - c. Once the "IPv4 Address" is modified, select "Apply" in the upper right-hand corner of the page.

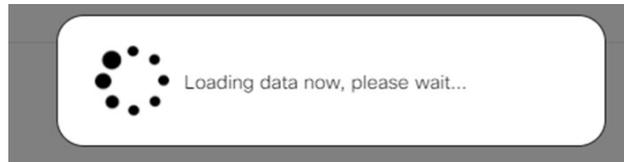


- d. A "Warning" message will appear, informing the user that the router's device IP Address will be changing and that the new device IP address will need to be used going forward on subsequent router logins. Select "Yes" to the Warning message. (Figure 10)



Figure 10

- f. You should now see a message saying, "Loading data now, please wait..."



- g. Wait 2 minutes.
- h. After 2 minutes, even though the "Loading data now, please wait..." message is shown, disconnect the CAT5 cable from the laptop, wait 5 seconds and then reconnect the CAT5 cable to the laptop.
- i. In the browser URL, enter "192.168.40.1", the new device IP Address, and select Enter.
- j. Log back into the router using the credentials that were previously configured.

4. In the left navigation pane, under the "LAN" section, select "Static DHCP".

- a. Under the "Static DHCP Table" text, there should be an "Add" ("+" sign) icon. Select the "Add" icon. This will bring up fields for each column.
- b. For the "Name" field, enter: Gateway.
- c. For the "IPv4 Address", enter: 192.168.40.100.
- d. For the "MAC Address", enter the MAC Address of the gateway.

**NOTE:** Make sure the colon (:) symbol is used to separate every 2 digits, as shown in the below image.

The screenshot shows the Cisco RV340 router's web interface. The left navigation pane is open, and 'LAN' is selected. The main content area is titled 'Static DHCP'. At the top right, there are 'Apply' and 'Cancel' buttons. Below this is a 'Static DHCP Table' section. A red box highlights the 'Add' (+) icon in the top left of the table. The table has four columns: 'Name', 'IPv4 Address', 'MAC Address', and 'Enabled'. A single row is present with the following values: 'Gateway' in the Name column, '192.168.33.100' in the IPv4 Address column, '1c:69:7a:6a:98:a5' in the MAC Address column, and a checked checkbox in the Enabled column. A red arrow points to the 'Apply' button in the top right corner of the page.

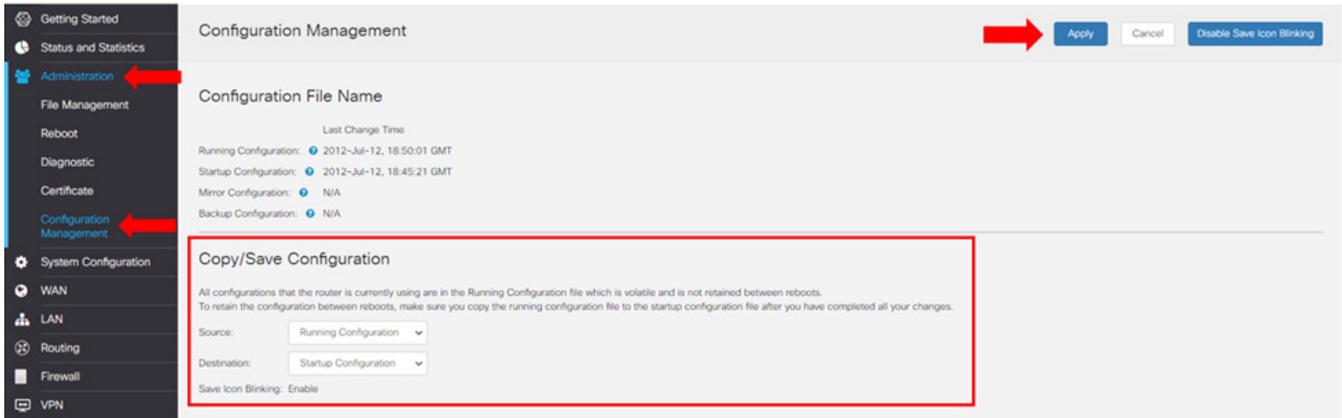
- e. Once all of these fields have populated with the above information, select "Apply" in the upper right-hand corner of the page.

**YOU MUST PERMANANTLY SAVE THE CHANGED SETTINGS ON THE RV340 CISCO ROUTER IN ORDER FOR THE CONFIGURATIONS TO BE RETAINED THROUGHOUT POWER CYCLES!!**  
Go to **Procedure 6 on page 35** of this manual for instructions of how to save these settings.

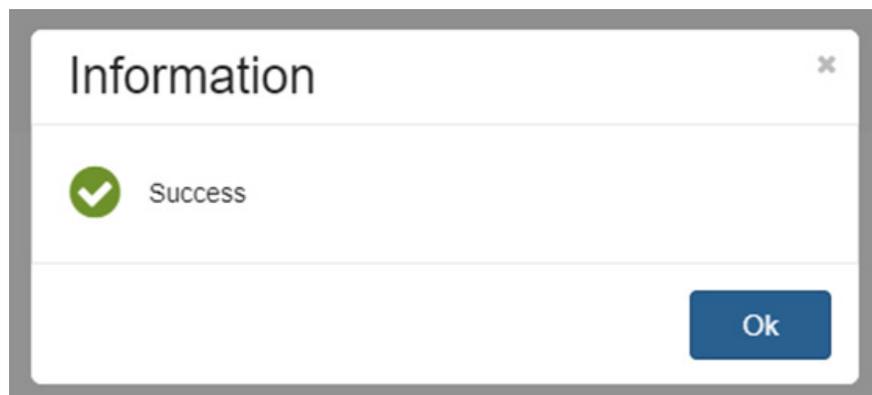
# Procedure 6: Saving Changed Settings on the RV340 Cisco Router

**THE FOLLOWING STEPS MUST BE FOLLOWED IN ORDER FOR THE CONFIGURATIONS TO BE RETAINED THROUGHOUT POWER CYCLES**

1. Saving to the "Startup Configuration".
  - a. In the left navigation pane, select "Administration" and then "Configuration Management".
  - b. At the bottom of the page is a Copy/Save Configuration section. Make sure that :
    - i. Source = Running Configuration
    - ii. Destination = Startup Configuration

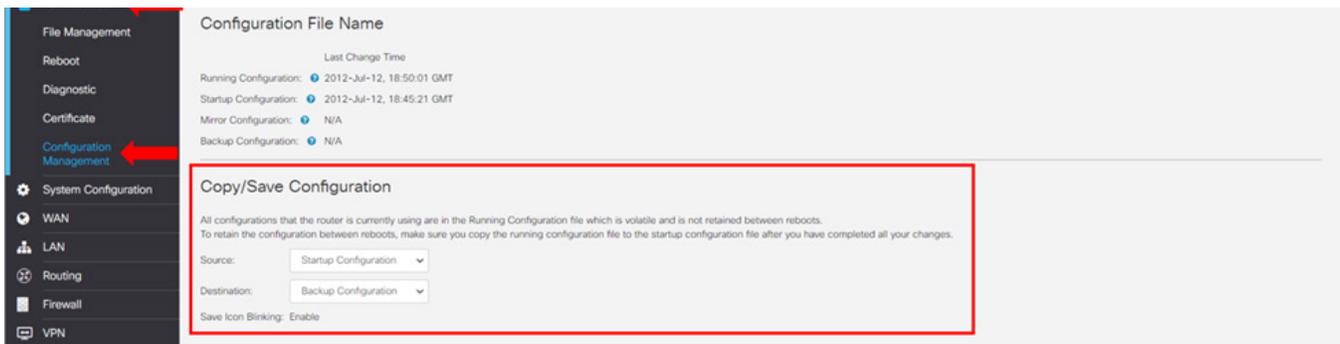


- d. You will see a message of "Loading data now, please wait..." message followed by a "Success" message, as shown below. The receipt of this message means that the router configurations were successfully saved to the Destination, in this case, the Startup Configuration. The router configurations will now be retained throughout router power cycles.



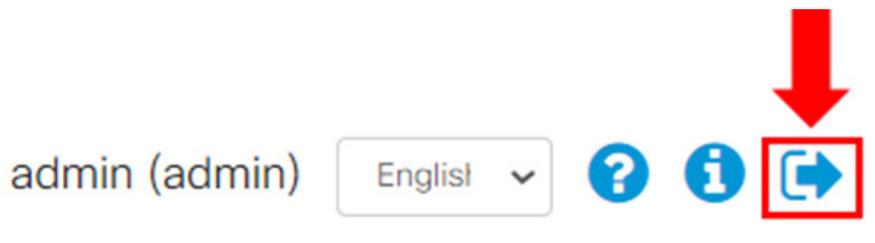
## 2. Saving "Backup Configuration"

- a. The RV340 router also allows you to save the configuration as a backup, locally on the router. This can be used if a configuration was inadvertently changed. This can be saved by performing the following:
  - i. In the left navigation pane, select "Administration" and then "Configuration Management"
  - ii. At the bottom of the page is a Copy/Save Configuration section. Make sure that :
    1. Source = Startup Configuration
    2. Destination = Backup Configuration
  - iii. On the Configuration Management page, select "Apply" in the upper right-hand corner of the page.
  - iv. The "Last Change Time" for the Backup Configuration should populate with a date and time, indicating the configuration was successfully saved to the Backup Configuration.



## 3. End of procedure

4. Log out of the Router by selecting the "Log out" icon, located in the upper right-hand corner of the page.

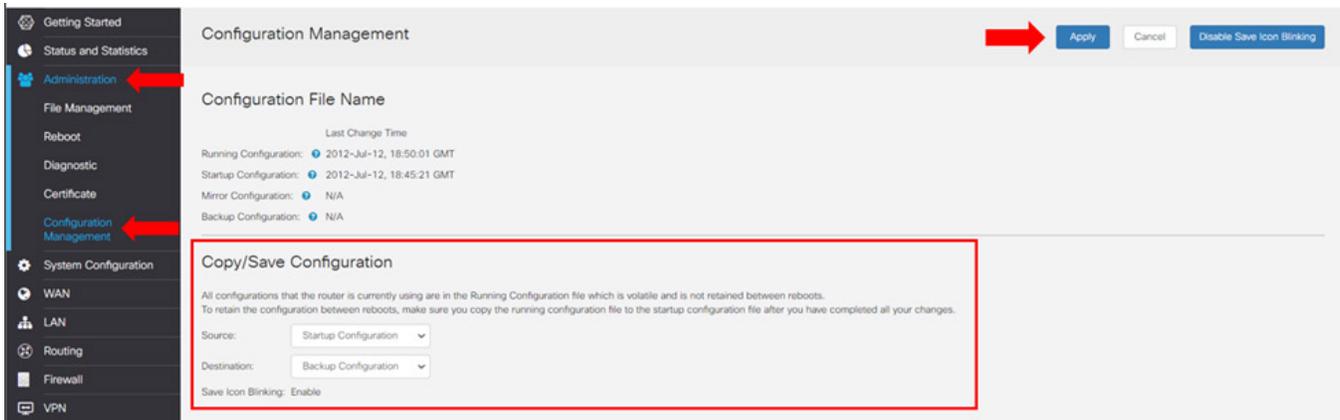


# Procedure 7: Saving the Settings on the RV340 Cisco Router as a Backup File (In case of router factory reset)

The following procedure is the process for creating a Backup File for the Cisco router. This file can be utilized in the event that the Cisco router resets back to Default settings. There are 2 methods for saving a backup file,

- 1) Directly on the Cisco Router Device Storage
- 2) As a backup file which can be saved on the connecting computer

1. **Follow the steps 1-12 outlined in Procedure 1 (page 23) to Log into the RV340 Cisco Router.**
2. After successfully logging into the router, select "Administration" in the left navigation pane and then "Configuration Management".
3. **To save the file directly on the RV340 Cisco Router (Recommended):**
  - a. At the bottom of the page is a Copy/Save Configuration section. Make sure that :
    - i. Source = Startup Configuration
    - ii. Destination = Backup Configuration
  - b. Once the above selections have been made, select "Apply" in the upper right hand corner of the page.



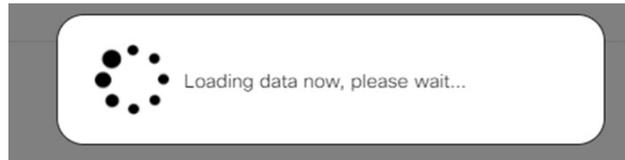
- c. After selecting Apply, the date/time for the "Backup Configuration" at the top of the page will update to the current date/time.



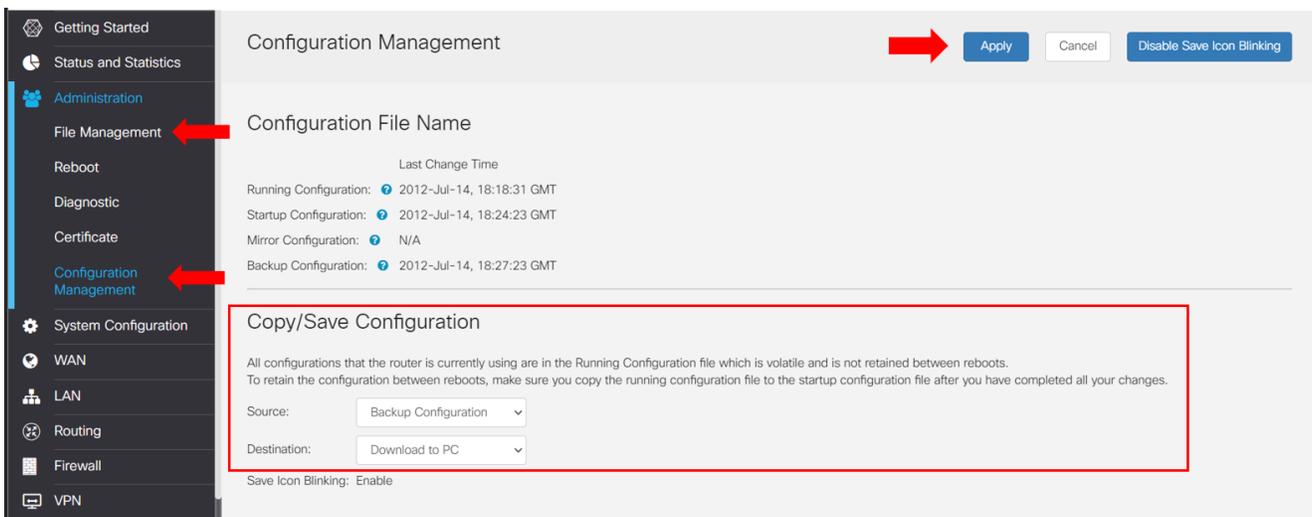
- d. Saving the Startup Configuration to the Backup Configuration will allow the configurations to be stored on the RV340 router as a backup and can be used to restore the router's Startup or Running Configuration settings, if needed.

4. **To save the backup file on your computer instead:**

- a. On the same "Administration" -> "Configuration Management" page, at the bottom of the page, in the Copy/Save Configuration section. Make sure the following selections are made:
  - i. Source: Backup Configuration
  - ii. Destination: Download to PC
- b. Once the above selections have been made, select "Apply" in the upper right-hand corner of the page.
- c. You will see a message that says "Loading data now, please wait..."



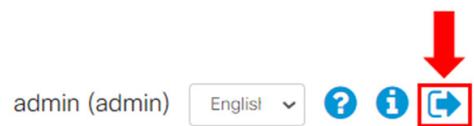
- d. A popup window will then appear which will allow you to save the config file to your PC.
- e. Choose where you would like to save the file.
- f. Optional – You can choose to rename the file to make the file easier to locate in the future.
- g. Proceed with the download.



- h. Keep this backup file in a safe place for future use
- i. Use this file to restore the router's configurations if the router were to ever reset to factory default settings.

5. End of procedure

- 6. Log out of the Router by selecting the "Log out" icon, located in the upper right-hand corner of the page. Once selected, find a safe and easily accessible location to store the backup file for future use.



# Procedure 8: Transferring Location Ownership

**NOTE: Some options, including DexterPay, are only available to the location owner which is automatically assigned to the account that sets up the location. The following steps must be taken by the current DexterLive location owner in order to transfer ownership.**

1. Login to the account that is the current owner of the DexterLive location.
2. To verify the current account owner, select the Users tab. Next to the top account name you should see (Location Owner) next to the name. This is the account you will need to be logged in to.
3. If the new owner is not a current user, select "Add User". Enter the user's name and email address. Select all of the check boxes to assign permission. If this person is the store owner we suggest checking all of the permission boxes to give them full access. Click "Invite User" to complete the invitation. The new user will need to login to their DexterLive account and accept the invitation to the location before ownership can be transferred.
4. To transfer ownership select the double arrow icon next to the new owner's name.
5. A confirmation will appear verifying that you wish to transfer ownership. When you confirm the ownership will be transferred to the user that was selected.

The screenshot shows the DexterLive interface for a location named "Dexter Lab (#10)" at "2211 West Grimes Avenue". The "USERS" tab is selected in the top right. A sidebar on the left contains navigation options: Equipment, Promotions, Users (highlighted), Programming, Alerts & Notifications, Reports, and DexterPay. The main content area lists three users:

- Test User (Location Owner)**: Manage Users, Add Machines, Add Machine Notes, Edit Machine Cycles & Settings, Edit Machine Pricing & Promotions, Download Programming File, Manage Location Networking, See Location Alerts, View Reports, Receive Alert Emails, Revenue Summary Email, Machine Remote Access, Manage DexterPay.
- Andrew Kretz (Active)**: Manage Users, Add Machines, Add Machine Notes, Edit Machine Cycles & Settings, Edit Machine Pricing & Promotions, Download Programming File, Manage Location Networking, See Location Alerts, View Reports, Revenue Summary Email, Machine Remote Access. A red arrow points to the double arrow icon next to his name.
- Dexter Laundry (Active)**: Manage Users, Add Machines, Add Machine Notes, Edit Machine Cycles & Settings, Edit Machine Pricing & Promotions, Download Programming File, Manage Location Networking, See Location Alerts, View Reports, Machine Remote Access.

# **Section 5:** Troubleshooting

# Updating Firmware

The USB supplied in this kit contains different firmware levels for C-series controls. Controls at Level 1.3 must be updated to Level 1.4 before being updated to Level 1.5. Follow the below procedure for updating the controls:

**Note: If you are at level 1.5 you can jump to the latest firmware once you are connected to DexterLive. If you're below that you'll need to follow this procedure to get to level 1.5.**

1. Verify control firmware
  - a. Press and hold the programming button until "PROGRAMMING" is displayed
  - b. Select the START button to enter this menu
  - c. Select the WARM/MED button until "CONTROL" is displayed
  - d. Select the START button to enter this menu
  - e. Select the WARM/MED button until "C\_FIRMWARE" is displayed
  - f. Select the START button to enter this menu
  - g. Make note of this version
  - h. "C\_FIRMWARE" version is \_\_\_\_\_
2. If the "C\_FIRMWARE" version is 01.00.19 (Level 1.3) or lower, follow Procedure #1.
3. If the "C\_FIRMWARE" version is 02.00.51 (Level 1.4), follow Procedure #2.
4. If the "C\_FIRMWARE" version is 03.01.12 (Level 1.5) or higher, follow Procedure #3.

## Updating Dryer Firmware

### Procedure #1 - Loading Firmware 1.4

1. Insert the USB that is included in this kit into a laptop/computer.
2. Go to the USB drive on the laptop/computer.
3. Once found, there should be two folders, "Level 1.4" & "Level 1.5".
4. Double click on the "Level 1.4" folder.
5. There should be two folders displayed, "Dryer" & "Washer".
6. Double click on the "Dryer" folder.
7. There should be two files in this folder, "DexComm 02.00.51" & "DexMain 01.00.12".
8. Load each of the two files onto separate USB sticks. It's important that they be loaded onto the dryer control in the correct order. Label the outside of the USBs as:
  - #1 Comm (Communication or DexComm version 02.00.51)
  - #2 Main (Master or DexMain version 01.00.12)
9. The dryer needs to be in Idle mode. This means that the vend price is being displayed only (not flashing or scrolling any other prompts).
10. Install USB with "#1 Comm" file on it (should see decimal points scrolling)
  - a. Wait for prompt of "Install User File from USB". Use the MED button to advance to prompt for "FIRMWARE".
  - b. Press START button to accept this option.
  - c. When you see the prompt of "To Install- Press Start" press START button (again).
  - d. When the display prompt is back to Idle mode, remove USB.

11. The procedure should now be complete. You can check that the firmware is loaded by going into the programming mode and advancing to the following menu options: "Programming", "Control", "M Micro Version", then "C Micro Version".
12. Repeat this installation sequence on all dryer controls that have "#2 Main" version of 01.00.19.

## **Procedure #2 - Loading Firmware 1.5**

1. Once all of the dryers have been updated to the Level 1.4 firmware, insert the USB provided in the Location Kit into the laptop/computer.
2. Go to the USB drive on the laptop/computer.
3. Once found, there should be two folders, "Level 1.4" & "Level 1.5".
4. Double click on the "Level 1.5" folder.
5. There should be two folders displayed, "Dryer" & "Washer".
6. Double click on the "Dryer" folder.
7. There should be two files in this folder, "DexComm 03.01.12" & "DexMain 01.01.06".
8. Load both files onto the same USB stick.
9. The dryer needs to be in Idle mode. This means that the vend price is being displayed only (not flashing or scrolling any other prompts).
10. Install USB into the control (should see decimal points scrolling).
  - a. Wait for prompt of "Install User File from USB". Use the MED button to advance to prompt for "FIRMWARE".
  - b. Press START button to accept this option.
  - c. When you see the prompt of "To Install- Press Start" press START button (again).
  - d. Should see "LOADING" prompt, then the control will re-boot and eventually go back to Idle.
  - e. When the display prompt is "Done Remove USB" or goes back to Idle mode, remove USB.
11. The procedure should now be complete. You can check that the firmware is loaded by going into the programming mode and advancing to the following menu options: "Programming", "Control", "M firmware", then "C firmware".
12. The correct "M firmware" should be 01.01.06.
13. The correct "C firmware" should be 03.01.12.
14. Return to the beginning of Procedure #1 for Washer updating instructions.

## **Procedure #3 - Loading Firmware 1.6 or higher**

1. For manual firmware updates, follow procedure #2 using the latest firmware version. Once you're above level 1.5 you can jump directly to the latest version, there's no need to install each level.
2. For networked locations, you can update the firmware directly through the DexterLive portal. Select the programming tab and follow the procedure shown.

# Updating Washer Firmware

## Procedure #1 - Loading Firmware 1.4

1. Insert the USB that is included in this kit into a laptop/computer.
2. Go to the USB drive on the laptop/computer.
3. Once found, there should be two folders, "Level 1.4" & "Level 1.5"
4. Double click on the "Level 1.4" folder.
5. There should be two folders displayed, "Dryer" & "Washer".
6. Double click on the "Washer" folder.
7. There should be three files in this folder, "DexComm 02.00.51", "DexMaster 05.01.02", & "DexSlave 02.00.09".
8. Load each of the three files onto separate USB sticks. It's important that they be loaded into the washer control in the correct order. Label the outside of the USBs as:
  - #1 Comm (Communication or DexComm- version 02.00.51)
  - #2 WasherMain (Master or DexMaster- version 05.01.02)
  - #3 WasherSecondary (Slave or DexSlave – version 02.00.09)
9. The washer needs to be in Idle mode. This means that the vend price is being displayed only (not flashing or scrolling any other prompts).
10. Install USB with the Comm file (should see decimal points scrolling).
  - a. Wait for prompt of "Install User File from USB". Use the WARM button to advance to prompt for "FIRMWARE".
  - b. Press START button to accept this option.
  - c. When you see the prompt of "To Install- Press Start" press START button (again).
  - d. When the display prompt is "Done Remove USB" or goes back to Idle mode, remove USB.
11. Install USB with WasherMain on it.
  - a. Wait for prompt of "Install User File from USB". Use the WARM button to advance to prompt for "FIRMWARE".
  - b. Press START button to accept this option.
  - c. When you see the prompt of "To Install- Press Start" press START button (again).
  - d. Should see "LOADING" prompt, then the control will re-boot and eventually go back to Idle.
  - e. Remove USB.
  - f. At this point, if you have a "MEMORY ERROR" on the display, push the programming button for 4 seconds. The "MEMORY ERROR" will still be on the display, but the control should now be ready for Secondary file installation. If "PROGRAMMING" is now displayed, use the "COLD" button to exit out of programming mode. If there is no "MEMORY ERROR" on the display, proceed to the next step.

12. Install USB with WasherSecondary on it.
  - a. Wait for prompt of "Install User File from USB". Use the WARM button to advance to prompt for "FIRMWARE".
  - b. Press START button to accept this option.
  - c. When you see the prompt of "To Install- Press Start" press START button (again).
  - d. Should see "LOADING" prompt, then the control display will be blank for a short amount of time. "PCB Error2" may be displayed at this time.
  - e. Remove USB #3. At this point, if you have a "PCB Error2" displayed, perform a "hard reset" on the control. A "hard reset" resets the control back to factory defaults using the latest firmware that has been loaded.
  - f. Remove power from the control and leave off for 10 seconds.
  - g. Hold down on programming push button and apply power to the control. Continue holding down on programming button until 10 seconds after the "Dexter" prompt is displayed.
13. The procedure should now be complete. You can check that the firmware is loaded by going into the programming mode and advancing to the following menu options: "Programming", "Control", "M firmware", then "S firmware", then "C firmware".
14. Repeat this installation sequence on all washer controls with "C\_FIRMWARE" version of 01.00.19

## **Procedure #2 - Loading Firmware 1.5**

1. Once all of the washers have been updated to the Level 1.4 firmware, insert the USB provided in the Location Kit into the laptop/computer.
2. Go to the USB drive on the laptop/computer.
3. Once found, there should be two folders, "Level 1.4" & "Level 1.5".
4. Double click on the "Level 1.5" folder.
5. There should be two folders displayed, "Dryer" & "Washer".
6. Double click on the "Washer" folder.
7. There should be three files in this folder, "DexComm 03.01.12" & "DexMaster 05.02.14", & "DexSlave 02.00.12".
8. Load all three files onto the same USB stick.
9. The washer needs to be in Idle mode. This means that the vend price is being displayed only (not flashing or scrolling any other prompts).
10. Install USB into the control (should see decimal points scrolling).
  - a. Wait for prompt of "Install User File from USB". Use the WARM button to advance to prompt for "FIRMWARE".
  - b. Press START button to accept this option.
  - c. When you see the prompt of "To Install- Press Start" press START button (again).
  - d. Should see "LOADING" prompt, then the control will re-boot and eventually go back to Idle.
  - e. When the display prompt is "Done Remove USB" or goes back to Idle mode, remove USB.

11. The procedure should now be complete. You can check that the firmware is loaded by going into the programming mode and advancing to the following menu options: "Programming", "Control", "M firmware", then "S firmware", then "C firmware".
12. The correct "M firmware" should be 05.02.14
13. The correct "S firmware" should be 02.00.12
14. The correct "C firmware" should be 03.01.12

### **Procedure #3 - Loading Firmware 1.6 or higher**

1. For manual firmware updates, follow procedure #2 using the latest firmware version. Once you're above level 1.5 you can jump directly to the latest version, there's no need to install each level.
2. For networked locations, you can update the firmware remotely directly through the DexterLive portal. Select the programming tab and follow the procedure shown. This will save a lot of manual installation time.

# Troubleshooting DexterLive Connection

Fault	Description	Customer Action
Connecting to DexterLive Account, No Connection Green Bars on Home Page	DexterLive not seeing Location Gateway	<ol style="list-style-type: none"> <li>1. Cycle Power on Internet provided Modem. Cycle power on Cisco Router. Cycle power on Gateway Module.</li> <li>2. Make sure Cisco router and Gateway are powered up.</li> <li>3. Connect Lap top to Cisco router with Wi-Fi off and make sure you can connect to the internet through the Cisco Router and your internet provided Modem.</li> </ol>
Connected to DexterLive Account, have three green bars but no machines connected (Machines list is populated).	DexterLive site not seeing any Machines. [This is if using DHCP setup]	<p>Connect laptop to Cisco router with Wi-Fi off. From command prompt on your laptop or computer, type " ipconfig" you should show that you are connected to 192.168.40.1 and your address is 192.168.40.*** (assigned 02-254) [This is if using DHCP setup]</p> <p>If showing 192.168.1.1 the Cisco Router has defaulted and will need reconfigured. Contact your Dexter representative.</p>
Connected to DexterLive Account, have three green bars but some machines showing not connected (Machines list is populated)	Not seeing a section of machines	Cycle power on Ethernet switch for section of store not responding.
Cannot connect to internet through Router to outside internet	Not connecting through the router to outside world	<ol style="list-style-type: none"> <li>1. Check Router set up.</li> <li>2. Change Subnet.</li> </ol>
When typing in Gateway code to DexterLive and response is "invalid Gateway Code"	DexterLive web site has not established link to gateway.	<ol style="list-style-type: none"> <li>1. Make sure Gateway is connected to the Cisco Router.</li> <li>2. Make sure Gateway is powered up.</li> <li>3. If Gateway needs an update it will automatically perform at the top of the hour.</li> </ol>

Fault	Description	Customer Action
Pending address	Mac address has been added manually and Gateway has not communicated with this address yet.	<ol style="list-style-type: none"> <li>1. Connection issue, Cable to control, Cable to Ethernet switch, possible control.</li> <li>2. Firmware on control may be old and need updated.</li> <li>3. Mac Address may have been added wrong. Example mac address 00:20:96:04:25:CC, make sure (:) used between numbers not(;), (.), (,), or (-).</li> </ol>
When first connecting not getting a connection light on the control.		Check control Firmware is not up to networking version.
When first connecting and not getting an unclaimed control prompt.	Connection issue	<ol style="list-style-type: none"> <li>1. Check yellow connection light on back of control.</li> <li>2. Verify Ethernet switch is it powered</li> <li>3. Check connection light on Ethernet switch in bulkhead.</li> <li>4. Check connection light on cable from Ethernet switch to back room switch (or Cisco router if plugged in direct).</li> <li>5. Verify serial communication device is plugged into the control</li> </ol>
DexterLive and DexterPay will not activate a specific machine		<ol style="list-style-type: none"> <li>1. Try a remote start through DexterLive, if the start fails, go to Step 2.</li> <li>2. Try to reboot control through DexterLive. Select free vend again. If the start fails, go to step 3.</li> <li>3. Reset power and check the control cable connection (green and orange lights). Select free vend again. If the start fails, go to step 4.</li> <li>4. Check connectivity light on Ethernet switch and reset the connection and power cycle the switch. Select free vend again. If the start fails, go to step 5.</li> <li>5. Power cycle the control. Select free vend again. If the start fails replace the cable.</li> </ol>

The DexterLive ID MAC address can also be read off of the label on the controls (Figure 1 and Figure 2) or the number can be obtained in the Manual programming menu. (Section 1 page 4).

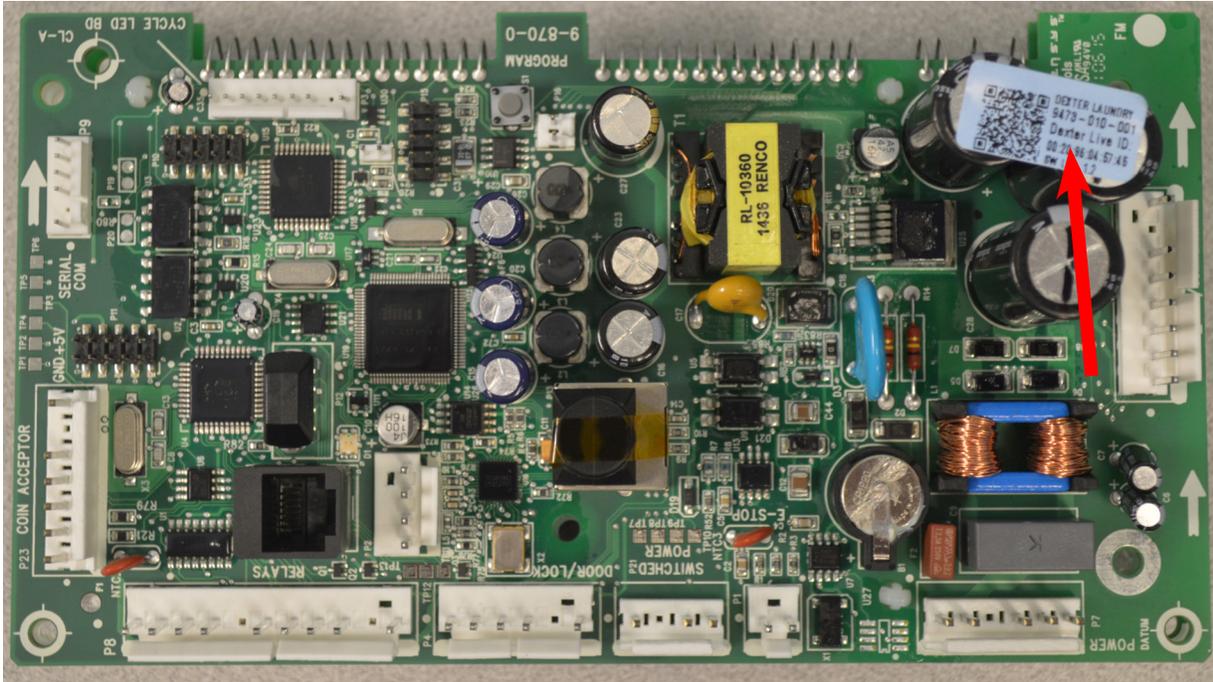


Figure 1 Washer Control ID Label



Figure 2 Dryer Control ID Label

# Section 6:

DexterPay

***DEXTER PAY***<sup>®</sup>  
LAUNDRY MADE EASY

# Setting Up DexterPay

DexterPay is a feature of the DexterLive network. DexterPay allows the laundry to accept credit cards, Apple Pay, and Google Pay through the DexterPay phone app.

DexterLive makes payment easy with DexterPay, a secure payment app that lets laundry customers pay how they'd like. The DexterPay app is fully integrated with the DexterLive network making it FREE to set up. Plus, there's no annual fee - owners only pay when customers use the app. With DexterPay, laundry owners can give customers the convenience of mobile pay while also maximizing revenue. The app makes it simple for users to add PLUS cycles and will notify them when their cycle is finished, increasing turnover. It also provides unprecedented insights into customer habits to improve marketing efforts.

If you are the owner of a networked DexterLive location in a country that works with DexterPay the sign-up process is simple.

You will need to the following:

1. Bank account and routing information
2. Tax ID / EIN
3. Business information, such as address
4. Personal information, including birthdate and social security number, for every individual who owns 25% or more of the business
5. Copies of legal identification (driver's license, passport, etc.)

Account verification is conducted by a secure 3rd party. Most accounts are verified within minutes, but the process could take 2-3 business days.

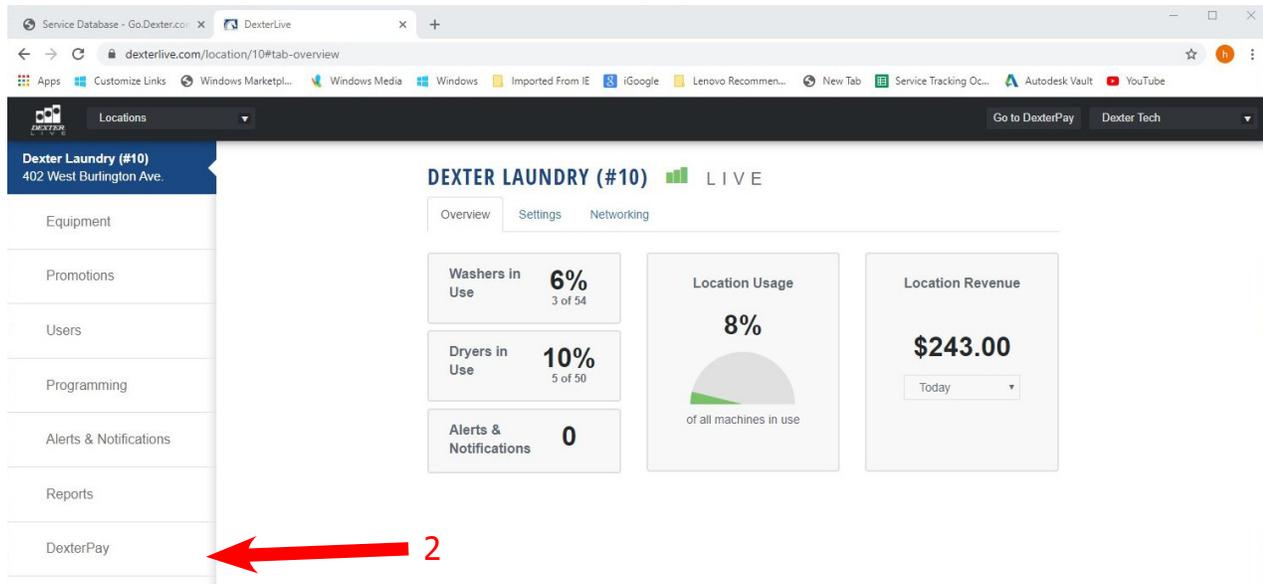
## Signing Up For DexterPay

1. To get started signing up for your DexterPay account, log into your DexterLive account.

**Note: DexterPay can only be setup by the account that is registered as the "owner" of the location in DexterLive. Follow the procedure on page 23 to transfer ownership if needed.**

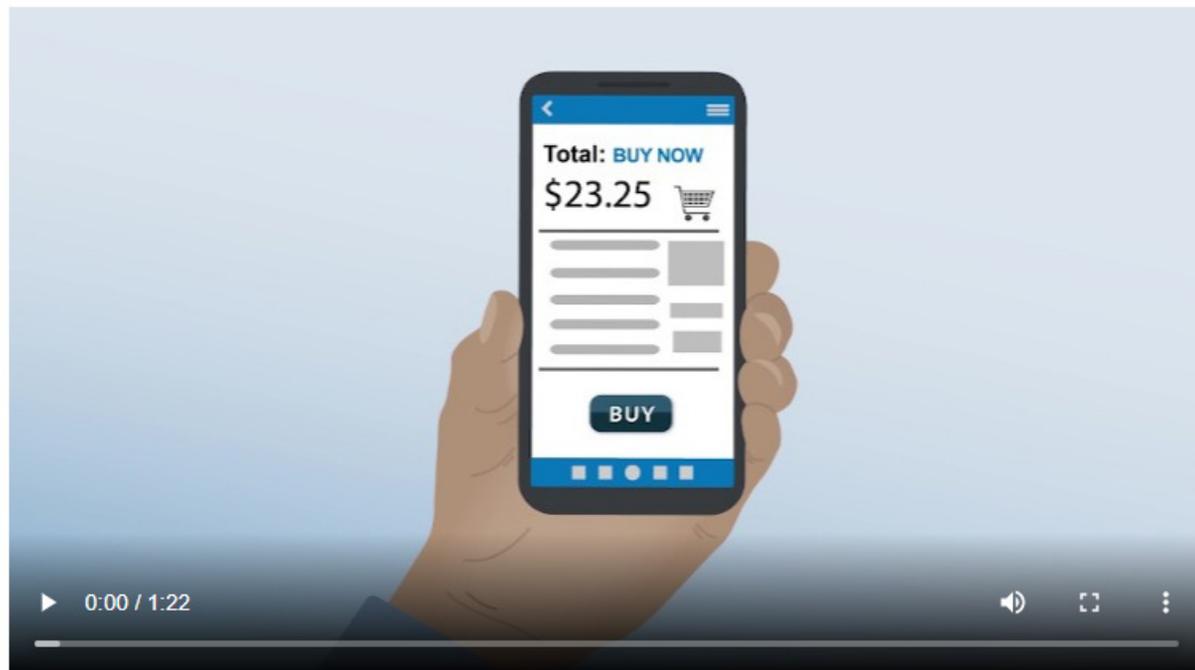
The screenshot shows the DexterLive website interface. At the top, there is a navigation bar with the DexterLive logo on the left, a green status bar in the center that says "Signed out successfully.", and a "Dexter.com" link on the right. Below the navigation bar, the main content area is divided into two sections. On the left, there is a promotional banner for DexterLive with the text "OPEN NEW POSSIBILITIES... LIVE THE LIFE YOU WANT TO, NOT THE LIFE YOU HAVE TO." and an image of hands holding a smartphone displaying the DexterLive app interface. On the right, there is a "LOGIN TO DEXTERLIVE" section. This section includes a "DexterLive" logo, two tabs for "Vended Laundry" and "On-Premise Laundry", and a login form. The login form has fields for "Email" (containing "servicetech@dexter.com") and "Password (Forgot Password?)" (containing "\*\*\*\*\*"). There is a "Remember Me" checkbox and a "Login" button. Below the login form is a "Create a DexterLive Account" button. At the bottom of the login section, there is a "DEXTER AUTHORIZED DISTRIBUTORS" section with the text "Find the Dexter Authorized Distributor nearest you." and a "Find a Distributor" button. A red arrow points to the "LOGIN TO DEXTERLIVE" text, and a red number "1" is next to it.

2. Select the DexterPay tab.



3. On the DexterPay tab you'll see a webinar recording that goes through the setup process in detail and provides information on how to effectively use DexterPay to grow your business. The following steps below will also walk you through the setup process.
4. First time users will see this page, select the "SIGN UP" button to begin the process.  
**Note: Returning users will have a button saying "Access DexterPay".**

## DEXTERPAY



5. Review the Terms & Conditions. After reading, select "Accept".

## DEXTERPAY MOBILE APPLICATION AGREEMENT

Please read this DEXTERPAY Mobile Application Agreement (this "Agreement") as it governs the use of the Mobile App by you and your customers. Your use of the Mobile App indicates your consent to this Agreement.

1. **Services.** DexterPay allows you and your customers to use a mobile application to pay for laundry services. Payment processing services are provided by Stripe and subject to the Stripe Connected Account Agreement (available at <https://stripe.com/us/connect-account/legal>), which includes the Stripe Services Agreement (available at <https://stripe.com/us/legal>) (collectively, the "Stripe Terms"). By using the Mobile App, you agree to be bound by the Stripe Terms, which may be modified from time to time.
2. **License.** DexterPay grants you and your customers a revocable, non-exclusive, non-transferable, limited license to download, install and use the Mobile App for personal and internal business purposes strictly in accordance with the required End-User License Agreement (the "EULA") and applicable Stripe Terms.
3. **Your Account.** Your use, as an owner or a customer, of the Mobile App requires that you have an account with DexterPay and agree to the terms of this Agreement. You consent to the collection, use, sharing and transfer of your personally identifiable information, including the transfer and processing of your information as outlined by the DexterPay Privacy Policy. You acknowledge that third party terms and fees may apply to the use and operation of the Mobile App, such as carriers, terms of service and fees for phone service, data access or messaging capabilities, and that you are solely responsible for payment of all such fees.
4. **No Included Maintenance and Support.** DexterPay may deploy changes, updates or enhancements to the Mobile App at any time. DexterPay may provide maintenance and support for the Mobile App, but has no obligation whatsoever to furnish such services to you and may terminate such services at any time without notice.
5. **Acceptable Use.** You agree that you will not use or encourage others to use the Mobile App in a way that could harm or impair others' use of the Mobile App, or in any unlawful manner or for an unlawful purpose. You also agree that the Mobile App is not intended or recommended for use by people under the age of 18.
6. **Privacy.** In order to operate and provide the service and the Mobile App, DexterPay may collect certain information about you and your customers. DexterPay uses and protects that information in accordance with the DexterPay Privacy Policy (a current version of which can be found at <https://www.dexterlive.com>).
7. **No Warranty.** **THE USE OF THE MOBILE APP IS AT YOUR SOLE RISK. THE MOBILE APP IS PROVIDED ON AN "AS IS" AND "AS AVAILABLE" BASIS. DEXTERPAY EXPRESSLY DISCLAIMS ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.**
8. **iOS Application.** In the event of DexterPay's failure to conform to any applicable warranty, you may notify DexterPay, and DexterPay will refund the purchase price for the Mobile App. **TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, APPLE WILL HAVE NO OTHER WARRANTY OBLIGATION WHATSOEVER WITH RESPECT TO (A) THE MOBILE APP AND (B) ANY OTHER CLAIMS, LOSSES, LIABILITIES, DAMAGES, COST, OR EXPENSES ATTRIBUTABLE TO ANY FAILURE TO CONFORM TO ANY WARRANTY.**
9. **Android Application.** **DEXTERPAY EXPRESSLY DISCLAIMS ALL WARRANTIES AND CONDITIONS OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.**
10. **Suspension and Termination of the Mobile App.** DexterPay reserves the right to suspend or terminate access to the Mobile App at any time and for any reason, including based on the status of your account. You understand that if your account is suspended or terminated, you and/or your customers may no longer have access to the content that is stored within the service.

11. Disputes. You are responsible for all disputes, refunds, reversals, returns or fines related to transactions with your customers pursuant to the terms of the Stripe Services Agreement.
12. Intellectual Property Rights. In the event of a third-party claim that the Mobile App, or your possession and use of the Mobile App, infringes third party's intellectual property rights, DexterPay will be solely responsible for the investigation, defense, settlement and discharge of any such intellectual property infringement claim.
13. Legal Compliance. You represent and warrant that (a) you are not located in a country that is subject to a U.S. Government embargo, or that has been designated by the U.S. Government embargo, or that has been designated by the U.S. Government as a "terrorist supporting" country; and (b) you are not listed on any U.S. Government list of prohibited or restricted parties.
14. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of Iowa.
15. Contact Information. Any questions or disputes regarding this Agreement or the Mobile App should be directed to info@dexter.com.



6. Select the drop-down arrow next to Location, if you only have one location it will pull the address information. If you are the owner of multiple locations, you will need to select the correct location.

### ADD LOCATION

Location:  ← 6

Address:

This address will be displayed to DexterPay app users and printed on your DexterPay signs. If this is not correct, visit the Location Settings tab in DexterLive.

Location Phone Number:

This is the phone number that will be displayed to customers in the app.

Authorization Amount:  ← 7

- Authorization occurs only once per payment method on the first purchase of the day.
- A low minimum authorization reduces the hold that is placed on your customer's account.
- A high authorization ensures the customer has sufficient funds for an entire 24-hour use of your laundry.

Convenience Fee (optional):  ← 8

A convenience fee can be charged to users of DexterPay to off-set transaction fees. This fee will appear as a charge in the daily transaction history for the user.

7. **Set the Authorization Amount:** This is the amount the processor uses to verify valid cards and sufficient funds. The bank will hold these funds, even if the user does not spend that amount, for 3-5 business days. This is customizable up to \$30.00. There are two strategies to consider:

A **low preauthorization** amount (\$1.00) can be set when owners are comfortable with their customer base and they do not want the bank to hold excess funds. The risk of this approach is that users may overdraw their credit limit. If this happens, the owner is out the difference between the total spend and the authorization amount.

A **high preauthorization** amount (\$20.00) can be used when owners are worried about fraud. This protects the owner from customers overspending their limit. The risk of this approach is that customers may have excess funds held. When this happens, the customer often look at the laundry owner, not their bank, as the cause of the hold even though their bank is holding the funds.

8. **Set The Convenience Fee:** The convenience fee is optional. Owners can choose to charge a convenience fee for use of the app, up to \$5.00. This will be a one-time charge Per customer, per day, that will appear in the transaction history at the end of the day. An owner can charge a fee to recoup some of the transaction fees. The risk to charging a fee is that customers may not want to use the app. If a fee is selected, a \$0.30 - \$0.50 fee is recommended.
9. Enter the address for where you would like your free customized DexterPay launch kit to be sent. **Note: This must be to a physical address not a P.O. Box.**

**DexterPay Launch Kit**

To make it easy for you to promote DexterPay, identify your location, and assign machine IDs to your equipment. Dexter Laundry will provide a DexterPay launch kit that includes:

- (2) Marketing posters (18" x 24")
- (2) Instruction posters (18" x 24")
- (2) Location Information posters (18" x 24")
- (1) Marketing poster (24" x 36")
- Machine ID stickers numbers 1 -100
- Copy of DexterPay user video in English and Spanish

If you need additional materials, please contact [marketing@dexter.com](mailto:marketing@dexter.com)

Launch Kit Shipping Information:

First Name:  Last Name:

Address:  City:

Country:  State/Province:

Zip/Postal Code:

Posters can be printed in English or Spanish. Please select which language you would prefer. If you select English and Spanish, you will receive one poster in each language.

English  English and Spanish

Please upload a .png, .eps, .pdf, or .jpg version of your logo if you would like that to be included on the posters (optional).

No file chosen

count:

Windows Ink W

10. Specify the printed language for your DexterPay kit.
  11. Upload you logo to be printed on the posters (optional).
  12. Select "Create a New Account" in the middle, this will open a form for banking and business information.
- Note: Do not select the "add location" until all information is added.**
13. Select country based on location of laundromat, follow the instructions below for your country.

# Entering Banking Information for United States

1. The Nickname can be anything for you to identify the account with.  
Be sure to enter both the routing and account numbers correctly because the system does not verify if there is such an account.  
\* Account numbers must have a maximum of 17 digits for US accounts.
2. These fields must be exact.  
\* Legal business name and Tax ID must match the government documents exactly.  
\* Do not use hyphens in Tax ID.  
\* this must be a Physical address (cannot be a Post office box).
3. "Required Account Opener Information" The personal information must be filled out completely.
4. Select "ID Document" from drop down list.  
\* Photo ID must be either JPG or .PNG file (will not accept PDF File).
5. Enter in the percentage owned.  
\* If anyone else owns 25% or more of the business, "Required Account Opener Information" must be filled out completely for each individual.
6. Click "Save Progress" only if the information is not complete and you will be returning later to finish.
7. Only after all information is completely entered, select the "Add Location" button.

**Note: Account verification is usually same day but may take 3-5 days.**

The screenshot shows the 'Add New Account' form with the following sections and fields:

- Account Nickname:** Text input field.
- Routing Number:** Text input field.
- Re-Enter Routing Number:** Text input field.
- Account Holder Name:** Text input field.
- Account Number:** Text input field.
- Re-Enter Account Number:** Text input field.
- REQUIRED BUSINESS INFORMATION:**
  - Legal Business Name:** Text input field.
  - Tax ID (EIN):** Text input field.
  - Legal Business Address:** Text input field.
  - City:** Text input field.
  - State/Province:** Dropdown menu.
  - Postal Code:** Text input field.
  - Phone Number:** Text input field.
- REQUIRED ACCOUNT OPENER INFORMATION:**
  - Legal First Name:** Text input field.
  - Legal Last Name:** Text input field.
  - Business Title:** Text input field.
  - Email Address:** Text input field.
  - Address:** Text input field.
  - City:** Text input field.
  - State/Province:** Dropdown menu.
  - Postal Code:** Text input field.
  - Phone Number:** Text input field.
  - SSN (Last 4 digits):** Text input field.
  - Year:** Year dropdown menu.
  - Month:** Month dropdown menu.
  - Day:** Day dropdown menu.
- ID Document:**
  - ID Document Image Type:** Dropdown menu.
  - ID Document Image (Front):** File upload button.
- Percentage Ownership of Business:** Text input field with a percentage sign.
- Does another individual own 25% or more of this business:** Radio button.

Red arrows indicate the following actions:

- 1: Points to the 'Add New Account' title.
- 2: Points to the 'REQUIRED BUSINESS INFORMATION' section.
- 3: Points to the 'REQUIRED ACCOUNT OPENER INFORMATION' section.
- 4: Points to the 'ID Document Image Type' dropdown.
- 5: Points to the 'Percentage Ownership of Business' field.
- 6: Points to the 'Save Progress' button.
- 7: Points to the 'Add Location' button.

# Bank Account Information Australia

- The Nickname can be anything for you to identify the account with.
  - \* Be sure to enter both the routing and account numbers correctly because the system does not verify if there is such an account.
  - \* Account numbers must have 5-9 digits for Australian accounts.
- These fields must be exact.
  - \* Legal business name and Tax ID must match the government documents exactly.
  - \* Do not use hyphens in Tax ID.
  - \* this must be a Physical address (cannot be a Post office box).
- "Required Account Opener Information" The personal information must be filled out completely.
- Select "ID Document" from drop down list.
  - \* Photo ID must be either JPG or .PNG file (will not accept PDF File).
  - \* Photo Legal address verification Document must be either JPG or .PNG file (will not accept PDF File).
- Enter in the percentage owned.
  - \* If anyone else owns 25% or more of the business, "Required Account Opener Information" must be filled out completely for each individual.
- Click "Save Progress" only if the information is not complete and you will be returning later to finish.
- Only after all information is completely entered, select the "Add Location" button.

**Note: Account verification is usually same day but may take 3-5 days.**

The screenshot shows the 'Add New Account' form for Australia. Red arrows and numbers 1 through 7 point to specific elements on the form:

- 1:** Points to the 'Add New Account' header.
- 2:** Points to the 'REQUIRED BUSINESS INFORMATION' section.
- 3:** Points to the 'REQUIRED ACCOUNT OPENER INFORMATION' section.
- 4:** Points to the 'Legal First Name' field.
- 5:** Points to the 'Percentage Ownership of Business' field.
- 6:** Points to the 'Add Location' button.
- 7:** Points to the 'Save Progress' button.

## Re-entering DexterPay or Signing Up a Second Location

1. To get started, log into your DexterLive account.

**Note: DexterPay can only be setup by the account that is registered as the "owner" of the location in DexterLive.**

2. Click on either of the DexterPay Buttons.

DEXTER LAUNDRY (#10) LIVE

Overview Settings Networking

Washers in Use 6% 3 of 54

Dryers in Use 10% 5 of 50

Alerts & Notifications 0

Location Usage 8% of all machines in use

Location Revenue \$243.00 Today

Go to DexterPay Dexter Tech

Equipment Promotions Users Programming Alerts & Notifications Reports DexterPay

3. Click on "ACCESS DEXTERPAY" button. If it goes directly to a DexterPay Dashboard, click on the dropdown arrow next to your user name in the upper right hand corner, then select "Add Location".

DEXTERPAY

ACCESS DEXTERPAY

Total: BUY NOW \$23.25

Go to DexterPay Dexter Tech

4. When the DexterPay Dashboard appears, click on the drop-down arrow next to your user name in the upper right hand corner, then select "Add Location".

DEXTERPAY LAUNDRY MADE EASY

Go to DexterLive Dexter Tech

Dashboard Activity Customers Income Statement Disputes

Locations: All Chart Type: Revenue Date Range: Previous 7 Days

Revenue: Previous 7 Days Total Revenue: \$757.00

Add Location Sign Out

5. Repeat the steps for signing up a new location as shown above starting at step 6 in the "Signing Up for DexterPay" section.

# Decline Codes

Decline Codes	Description	Next Steps
authentication_required	The card was declined as the transaction requires authentication.	The customer should try again and authenticate their card when prompted during the transaction.
approve_with_id	The payment cannot be authorized.	The payment should be attempted again. If it still cannot be processed, the customer needs to contact their card issuer.
call_issuer	The card has been declined for an unknown reason.	The customer needs to contact their card issuer for more information.
card_not_supported	The card does not support this type of purchase.	The customer needs to contact their card issuer to make sure their card can be used to make this type of purchase.
card_velocity_exceeded	The customer has exceeded the balance or credit limit available on their card.	The customer should contact their card issuer for more information.
currency_not_supported	The card does not support the specified currency.	The customer needs to check with the issuer whether the card can be used for the type of currency specified.
do_not_honor	The card has been declined for an unknown reason.	The customer needs to contact their card issuer for more information.
do_not_try_again	The card has been declined for an unknown reason.	The customer should contact their card issuer for more information.
duplicate_transaction	A transaction with identical amount and credit card information was submitted very recently.	Check to see if a recent payment already exists.
expired_card	The card has expired.	The customer should use another card.
fraudulent	The payment has been declined as Stripe suspects it is fraudulent.	Do not report more detailed information to your customer. Instead, present as you would the generic decline described below.
generic_decline	The card has been declined for an unknown reason.	The customer needs to contact their card issuer for more information.

<b>Decline Codes</b>	<b>Description</b>	<b>Next Steps</b>
incorrect_number	The card number is incorrect.	The customer should try again using the correct card number.
incorrect_cvc	The cvc number is incorrect	The customer should try again using the correct cvc.
incorrect_pin	The PIN entered is incorrect. This decline code only applies to payments made with a card reader.	The customer should try again using the correct PIN.
incorrect_zip	The ZIP/postal code is incorrect.	The customer should try again using the correct billing ZIP/postal code.
insufficient_funds	The card has insufficient funds to complete the purchase.	The customer should use an alternative payment method.
invalid_account	The card, or connected to, is invalid.	The customer needs to contact their card issuer to check that the card is account the card is working correctly.
invalid_amount	The payment amount is invalid, or exceeds the amount that is allowed.	If the amount appears to be correct, the customer needs to check with their card issuer that they can make purchases of that amount.
invalid_cvc	The cvc number is incorrect.	The customer should try again using the correct cvc.
invalid_expiry_year	The expiration year invalid.	The customer should try again using the correct expiration date.
invalid_number	The card number is incorrect.	The customer should try again using the correct card number.
invalid_pin	The PIN entered is incorrect. This decline code only applies to payments made with a card reader.	The customer should try again using the correct PIN.
issuer_not_available	The card issuer could not be reached, so the payment could not be authorized.	The payment should be attempted again. If it still cannot be processed, the customer needs to contact their card issuer.
lost_card	The payment has been declined because the card is reported lost.	The specific reason for the decline should not be reported to the customer. Instead, it needs to be presented as a generic decline.

<b>Decline Codes</b>	<b>Description</b>	<b>Next Steps</b>
merchant_blacklist	The payment has been declined because it matches a value on the Stripe user's block list.	Do not report more detailed information to your customer. Instead, present as you would the generic_decline described above.
new_account_information_available	The card, or account the card is connected to is invalid.	The customer needs to contact their card issuer for more information.
no_action_taken	The card has been declined for an unknown reason.	The customer needs to contact their card issuer for more information.
not_permitted	The payment is not permitted.	The customer needs to contact their card issuer for more information.
offline_pin_required	The card has been declined as it requires a PIN.	The customer should try again by inserting their card and entering a PIN.
online_or_offline_pin_required	The card has been declined as it requires a PIN.	If the card reader supports Online PIN, the customer should be prompted for PIN without a new transaction being created. If the card reader does not support Online PIN, the customer should try again by inserting their card and entering a PIN.
pickup_card	The card cannot be used to make this payment (it is possible it has been reported lost or stolen).	The customer needs to contact their card issuer for more information.
pin_try_exceeded	The allowable number of PIN tries has been exceeded.	The customer must use another card or method of payment.
reenter_transaction	The payment could not be processed by the issuer for an unknown reason.	The payment should be attempted again. If it still cannot be processed, the customer needs to contact their card issuer.
restricted_card	The card cannot be used to make this payment (it is possible it has been reported lost or stolen).	The customer should contact their card issuer for more information.
revocation_of_all_authorizations	The card has been declined for an unknown reason.	The customer should contact their card issuer for more information.
revocation_of_authorization	The card has been declined for an unknown reason.	The customer should contact their card issuer for more information.

<b>Decline Codes</b>	<b>Description</b>	<b>Next Steps</b>
security_violation	The card has been declined for an unknown reason.	The customer needs to contact their card issuer for more information.
service_not_allowed	The card has been declined for an unknown reason.	The customer needs to contact their card issuer for more information
stolen_card	The payment has been declined because the card is reported stolen.	The specific reason for the decline should not be reported to the customer. Instead, it needs to be presented as a generic decline.
stop_payment_order	The card has been declined for an unknown reason.	The customer should contact their card issuer for more information.
testmode_decline	A Stripe test card number was used.	A genuine card must be used to make a payment.
transaction_not_allowed	The card has been declined for an unknown reason.	The customer needs to contact their card issuer for more information.
try_again_later	The card has been declined for an unknown reason.	Ask the customer to attempt the payment again. If subsequent payments are declined, the customer should contact their card issuer for more information.
withdrawal_count_limit_exceeded	The customer has exceeded the balance or credit limit available on their card.	The customer should use an alternative payment method.

# Troubleshooting DexterPay

Issue / Process	Description	Customer Action
Can not view or access DexterPay screen.	Unsupported browser being used.	DexterPay application can not be accessed through Internet Explorer (white screen). Check resolution and screen size - may have to reduce screen size to see DexterPay tab on LH side (FireFox).
	Location not signed up for DexterPay	DexterPay account must be assigned to an email address that has a DexterLive location associated to it.
Owner has not received the "Welcome" email from DexterPay.	Location has not been approved through Stripe.	Check status of the location in Stripe. Engineering, Marketing and Product Support can check the status of the account. Complete - account is ready. Restricted - usually an issue with tax id number, SSN or bank account issue. Pending - working through the system, usually clears in 36 hours or less. Can take up to 3 days. Rejected - See engineering or marketing.
	Banking account information is incorrect or incomplete.	Verify in Stripe. Payments and Payouts must both be set up with valid accounts. Check for number of characters in the routing number and account number.
	Caught in Spam/Junk folder	Check spam folder.
Owner has not received the startup/signage kit.	Has not been 7-10 business days.	Verify when the account was entered and approved. Customer Support has been receiving mailing/shipping info on signage. Need location name/address.
	Invalid address in the shipping information field.	The materials can be shipped anywhere the owner chooses, including PO Box. Verify the shipping address with marketing.
	Has arrived but owner was not informed.	This happens quite regularly, especially if shipped to a central location. Verify it has been shipped/delivered.

Issue / Process	Description	Customer Action
Owner's application for DexterPay will not submit.	Owner's application for DexterPay will not submit.	System should highlight any missing fields, but verify all are filled out. Verify if location has multiple owners, and that information for all parties is present in the application.
	Too many characters or unacceptable characters entered into a field.	Can not use apostrophe, quotation marks or star. Tax ID should not have a hyphen in it. Bank accounts should only be 12 digits. ****
	Tax ID not correct.	Verify the name and number match tax papers from government exactly.
	Photo ID is not in correct form.	Photo ID uploads must be in .jpg or .png - no others will be accept. If they are not in this format, it is best to remove them and reload in the correct form.
	Owner has attempted to submit form at earlier date. Receives "OOPS" message.	This will usually make the screen spin and spin. This will require engineering to verify they do not have a partial application in the system. Engineering will have to reset if this is the case.
	No physical address given for the business.	Verify that the location has a physical street address. This can not be a PO box. The owner's personal section can have a PO box and the sign/materials can be shipped to a PO Box.
Owner's application for DexterPay will not submit.	Application was saved while being filled out and returned to at a later date.	Usually the saved form can be pulled from the "Account" section drop down of the application. If it is not showing, verify status with engineering. Starting another application while one is saved in the system can cause issues.
	Country has not been selected.	Upon the release of DexterPay to Australia (April 2020), it is now necessary to select the country of the location. This is temporary and will become automatic during a later update deployment.

Issue / Process	Description	Customer Action
Wants to transfer Ownership of a location with DexterPay	No way to transfer ownership shown on location	At this time there is not an easy way to do this once a location is signed up for DexterPay. Will need to be discussed with engineering. Get as much information as possible from both parties.
Owner wants to transfer bank information	Owner wants to change an associated bank account.	The owner can not do this at this time. Engineering and Genova have access to this and can make the changes as needed.
Owner is not seeing deposits in bank account or amounts do not match.	Bank account number or routing number is not correct.	The system does not verify an bank account or routing number during the application process, it only requires a re-entry for verification (ie. Owner could enter the number incorrectly more than once). The bank name and last 4 digits can be verified in Stripe. If it needs changed, consult engineering.
	Using incorrect dates for deposit.	DexterPay pulls from 12AM Wednesday to 11:59PM Tuesday the following week, then pays out on Friday. Verify the dates the owner is looking for are within this time period. Bank holidays that occur on Tuesday/Wednesday will be off by one day and but will even out on the following week.
	Income statement pulls from previous days.	If pulling information from the Income statement, be sure to add the previous day to the dates being pulled. Always think one day behind on any data.
DexterPay is not responding to remote activation.	Machine controls are not at Firmware Version 1.9 or later.	Upgrade firmware. If machine firmware is at level 1.5 or a single USB stick can be used or DexterLive to upgrade to firmware level 1.9 or higher.
	Machines are in "hung up state".	Verify if machines will respond to a DexterLive command. If not, follow DexterLive troubleshooting. If the machine does respond to DexterLive, power cycle machine and/or ethernet switch. Be sure to leave machine powered down for at least 3 minutes.
	Phone application has a glitch.	Have owner at least refresh the app. or power cycle the phone.

Issue / Process	Description	Customer Action
Purchase can not be completed.	DexterPay is not set up.	Verify the location has been accepted for DexterPay and the location is DexterPay enabled.
	Machine does not have a DexterPay ID # associated to it.	Check that the machine has the correct DexterPay ID # number associated to that machine in DexterLive. This column will not appear until at least one machine has an associated DexterPay ID number.
	Customer has incorrect location entered into DexterPay App.	Check that the location number in app matches location number and machine number.
	Machine is not showing online.	Check DexterLive for machine. Can verify it is responsive with a "Remove From Service" command and verify on front of machine. If machine can not be verified,....?
	No or incorrect credit card number on account.	Verify they have payment method checked. If it will allow them to change payment source, cycle power on phone/tablet.
Customer has been overcharged.	Pre-authorization Fee.	Customers often see a higher round number (\$20, \$25, \$30) on a receipt but claim they only spent "\$X". This is most likely the owners pre-authorization fee. This is usually refunded in 1-3 business days. Any concerns about this fee, will need to be discussed between owner and customer.
	Customer attempts using DexterPay, does not go through, and then used quarters to pay vend price.	Machine hang up issue, but if the customer does on cancel the transaction on DexterPay, and immediately goes to coins, the DexterPay system thinks the machine is "started" from the DexterPay purchase. A comparison of time from DexterLive to DexterPay would be required. This could merit a refund.
Customer charge declined.	"Declined" Code given	What "Declined" code was given. See Declined Codes list for more information about these codes.

Issue / Process	Description	Customer Action
Outstanding Balance	Amount does not match any purchase amount.	Customer had enough money in account to pass the pre-authorization amount, but not to cover the entire purchase. Outstanding payments due are figured by this method... Total purchase amount minus the pre-authorization amount. This amount is then charged the 4.99% transaction fee, plus a \$5 outstanding balance fee. Example - Total purchase of \$20.50, pre-auth of \$5. ( $\$20.50 - \$5 = \$15.50$ , $\$15.50 \times .0499 = .77$ , $15.50 + .77 + 5 = 21.27$ ) Customer still owes \$21.27 for this transaction. There will be a block placed on this DexterPay account until it is settled. Outstanding amount will be pulled from customer before a new purchase can be attempted.
	Owner was paid by customer but still showing an outstanding balance on the DexterPay account.	At this time there is no way for an owner to credit a DexterPay customer's account. The outstanding balance will be pulled from the customer's account upon the next DexterPay transaction.
	Customer wants to make a payment to cover a previous Outstanding balance.	Customer must use DexterPay App. again and it will pull the total outstanding amount first, before allowing another purchase. There is not a place/website for a customer to make a payment for an outstanding balance.
	Customer closed bank account after making purchase and before transaction is processed overnight.	Situation - customer makes purchase and is notified by bank of possible fraudulent activity. Customer closes account/card based on this information, same day as purchase, purchase is declined by bank during processing overnight. This was purchase "declined" and possible overdraft fees etc, were induced by the customer. Purchase should be cleared when the customer puts new credit card number in and uses account again. If they change their email as well - a problem could arise as it would be viewed as a new account. This would be handled similar to a disputed purchase. THIS IS MOST LIKELY TO OCCUR ON AN INITIAL SETUP AND USE OF AN DEXTERPAY ACCOUNT.

Issue / Process	Description	Customer Action
Customer charged \$1 but they only used \$.25.	DexterPay Minimum	DexterPay has a minimum purchase of \$1. This is not changeable.
Customer filed a dispute on a purchase, owner does not know to proceed.	Unknown purchase showing on receipt or statement.	When DexterPay was first initiated, customers would see the location owners name and/or email address on the receipt or bank statement. They would then file a dispute with their bank as unknown. This has been changed since the Feb. 6, 2020 DexterPay updates. Since this update, the receipt or statement will say "DexterPay" and then part of a location (limited number of characters). If the disputed transaction is from after this date, please contact engineering.
	Customer disputes purchase.	<p>Owner is being charged \$15 plus the disputed amount. Since an owner can only submit evidence one time on a disputed charge follow the steps below. Document each contact or attempt, with a time, date, who you talked to and outcome of the conversation.</p> <ol style="list-style-type: none"> <li>1) Owner should contact the customer directly. Verify what the dispute is and if it is a valid dispute.</li> <li>2) If the dispute is not valid, have the customer contact their bank and have them pull the dispute. It is advised the owner re-contacts the customer after a couple of days to verify this was completed.</li> <li>3) Owner submits contact records, video evidence, DexterLive/ DexterPay documents, Video evidence and any other valid info.</li> <li>4) Bank will review and will contact owner with verdict. If the dispute upheld, the owner will be forfeit the \$15 fee and the disputed amount. If the dispute is found invalid, the owner will receive both the \$15 fee and the purchase amount. This can take up to 45 days to be credited back to their account.</li> </ol>

Issue / Process	Description	Customer Action
Owner of location has customers making purchases over Pre-Authorized amounts, but only getting paid Pre-Authorization.	Customer has enough money/ credit in account to cover pre-authorization and be approved for purchase, but not enough to cover purchase. Customer either does not return or returns with different email/DexterPay account.	Raise pre-authorization at location. When this has been witnessed the pre-authorization is usually quite low (\$1-\$5). By raising this pre-authorization. It will discourage most of this activity. Have seen this raised to various amounts, several have this set at most expensive wash + one dry cycle (ie - \$12.50) to as high as \$20. If the owner does have a high pre-authorization, it is recommended this is noted somewhere in the store. This notification is being added to the DexterPay app on a location basis.
Changing location information	How to change pre-authorization amount, transaction fees, or location phone number.	Owner of location is the only one that can access this. Log on to DexterLive and go to DexterPay. In the upper right corner click on your name, from the drop down choose "Locations and Accounts". A new screen will appear and changes can be made here. FYI, clicking "enter" or "Update Location" button, will update the location (bar will appear at top of page).
Owner charged \$.30 finance fee more than once a day per customer	Changed Credit cards.	Customer changed payment method in app between purchases. This charge would be correct with this. The charge is applied once per customer per payment method per day.
	New card added.	Customer changed payment method in app between purchases. This charge would be correct with this. The charge is applied once per customer per payment method per day. Have seen when a customer adds a card, then not use it, still charge the new card fee to owner. Stripe would have to look into this.
	New customer.	Customer created a new or second account between purchases. This charge would be correct with this. The charge is applied once per customer per payment method per day.

<b>Issue / Process</b>	<b>Description</b>	<b>Customer Action</b>
<p>Continued...  Owner charged \$.30 finance fee more than once a day per customer</p>	<p>Time of day setting is off.</p>	<p>Prior to the March 31, 2020 DexterPay update, all locations had funds captured at 12 am CT. This means that stores on PST will have their day end at 10 pm PT and capture at 12 am PT. These stores could incur additional transaction fees if a purchase was made for example, before 10 pm PT and another purchase was made after 10 pm PT (would incur two (2) transaction fees). Following this March 31 deployment, the end of the day is at 12 am and captures at 2 am based off the time zone setting of the location. DexterPay will use the Time Zone setting that is set in DexterLive, so owners will need to make sure this is set correctly in order for captures to occur at the correct time. To verify this, go to DexterLive for the location, then the "settings" tab.</p>

# DexterLive Setup Checklist

1. Installer must have a Laptop/Desktop with an Ethernet connection (Nic card) to test the system during installation.
2. Connect laptop directly to Internet Modem (router) [with wireless connection off] and verify a stable connection to the internet.
3. Remove proven internet cat5 cable from the laptop and connect it directly to the Gateway. Connect power to the Gateway and allow two hours for the Gateway to update over the internet.
4. **FOLLOW THE REMAINING INSTRUCTIONS IN THE INSTALLATION GUIDE STEP BY STEP TO PREVENT MISTAKES OR BACKTRACKING!!**
5. Cables should not be connected to the machine controls at the start of the installation. You will be advised when to connect them **ONE AT A TIME** in the instructions.

The Ethernet switches need to be routed and placed in central locations to the machines that will be connected at each (see store layout example Figure 1). Cables can be ran connecting Ethernet switches to other switches or direct to the router device. Caution needs to be taken when routing connecting cables from each switch to the control room where the Gateway and router are located and connected to the incoming internet. Make sure not to route cables over light ballasts, dryer burner housings or any other source of heat damage or electrical noise.

**NOTE: The Ethernet switches should be powered down until cable installation is complete**

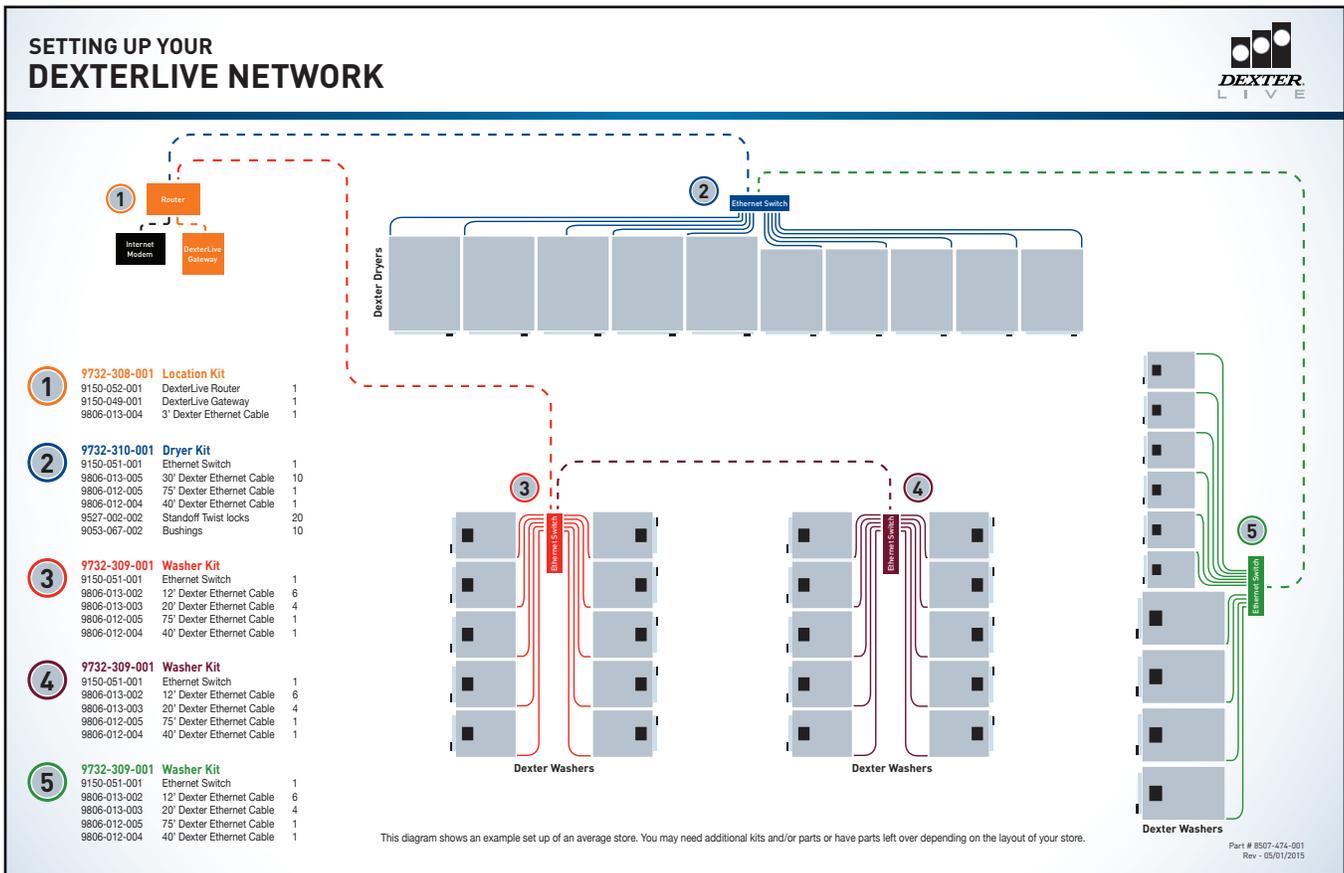


Figure 1