

Sierra Site Controller Installation Manual



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SIERRA SITE CONTROLLER

INSTALLATION MANUAL

Revision D

This manual provides comprehensive installation procedures for the WashPay system. It includes the process of site planning, site preparation, the mechanical installation of the WashPay system and the electrical wiring of the unit.

If further assistance is needed, please contact the distributor from which the WashPay system was purchased.

When calling for assistance, you must have the following information available:

Site Controller Serial Number: _____

Distributor Name: _____

DECLARATION OF COMPLIANCE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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1 Introduction

The WashPay Site Management System is a highly configurable management system for multi-bay self-serve carwashes. The WashPay system consists of the following components:

- WashPay-equipped meter box:** Meter boxes equipped for Washpay will use a Unitec timer module and include a waterproof, swipe-style card reader.
- Sierra Site Controller:** The Site Controller should be installed in an office type area. The area should be dry and located away from the car wash chemicals. If an office area is not available, the Site Controller can be located in the equipment room. If this is the case, it is recommended that the optional NEMA enclosure be used in these locations. The NEMA enclosure may be bolted to the wall in the equipment room.
- Receipt Printer:** The optional WashPay Receipt Printer will be mounted in a pre-cut hole and should be centrally located and visible from all wash bays. Since the printer is operator-accessible from the rear, the ideal location would be in the vicinity of the bill changer.

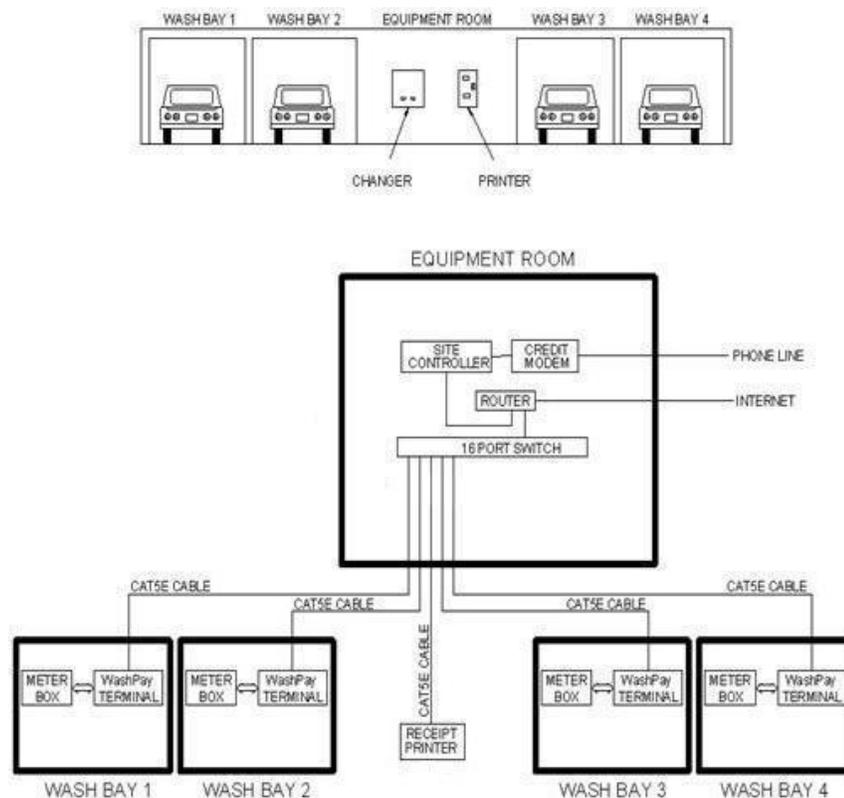


Figure 1. WashPay System Overview

2 Site Planning

Sierra Site Controller – The Site Controller will require a minimum of two 115VAC outlets to power the computer and router. Additional outlets will be required if the optional Network Kit and LCD monitor are purchased. A CAT5E cable will be needed to connect the Site Controller to the router.

Receipt Printer – The Receipt Printer will require a 115VAC outlet. A CAT5E cable will need to run between the Receipt Printer and the 16-port switch (optional).

Meter Box - A CAT5E cable will need to run from the meter box to the site Controller

Each run of CAT5E cable cannot exceed 300 feet.



Warning: Do not run communication wiring in the same conduit as the AC Power wiring.

2.1 Conduit Run Considerations

The WashPay Card Terminal has one cable entrance port located on the back on the bottom right side of the unit. When installing the conduit, position the ends of the run so that they will be easy to line up with these cable entrance ports.



Note: Never run cabling to a WashPay component outside of a conduit.

You will need at least two separate conduit runs, one $\frac{3}{4}$ " diameter conduit for the AC power, coin input and timer wiring from the existing coin meter box, and one $\frac{3}{4}$ "-1" diameter conduit for the CAT5 Ethernet cable from the patch panel in the equipment room/office. AC power lines must have a dedicated conduit run to avoid communication errors.

The WashPay Receipt Printer requires one $\frac{3}{4}$ " diameter conduit for the DC power, and one $\frac{3}{4}$ " – 1" diameter conduit for the CAT5 Ethernet cable from the patch panel in the equipment room/office.

3 Installation

3.1 Installing the Sierra Site Controller

The Sierra Site Controller system consists of a computer, a router, an optional 16-port switch, and an optional report printer. If credit processing will be done using telephone lines, an optional credit modem can also be purchased. If the Internet will be used for credit processing, then the Internet cable can be connected directly to the router and a credit modem will not be necessary. The computer and switch will connect into the router using a CAT5E Ethernet cable.

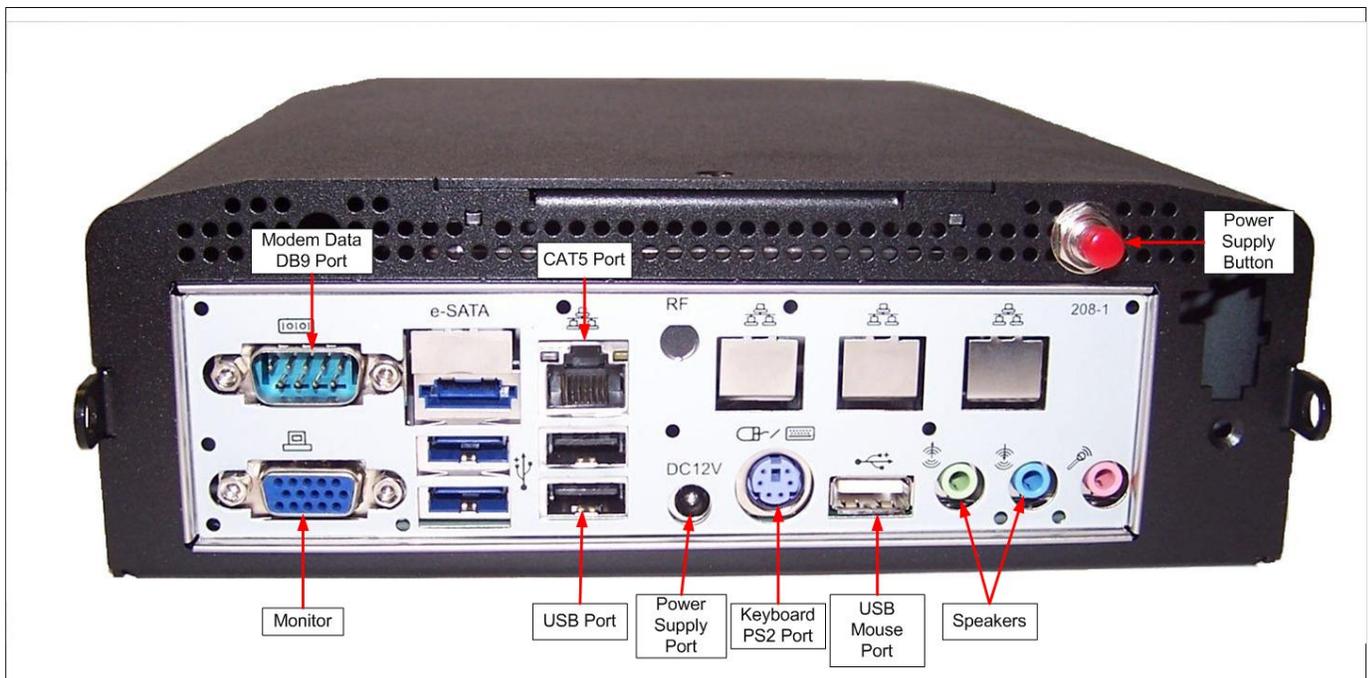


Figure 2. Sierra Site Controller Computer

To install the Site Controller in an office area:

1. Place the Site Controller on a flat surface, such as a desk or table.
2. Connect the CAT5 cable from a LAN port of the router to the site controller.
3. Connect the power supply cable to the power supply port.
4. If applicable, connect the monitor to the monitor port, the keyboard to the PS2 port, and a USB mouse to the USB mouse port.
5. If applicable, connect the modem to the DB9 port.
6. Turn on the power with the red button and program the Site Controller as instructed in the Sierra Management Application Programming Manual

3.2 Installing the NEMA Enclosure

If an office area is not available, the Site Controller can be located in the equipment room. If this is the case, it is recommended that the optional NEMA enclosure be used in this type of location. The NEMA enclosure may be bolted to the wall in the equipment room. The NEMA enclosure is shipped with a mounting plate for the Site Controller

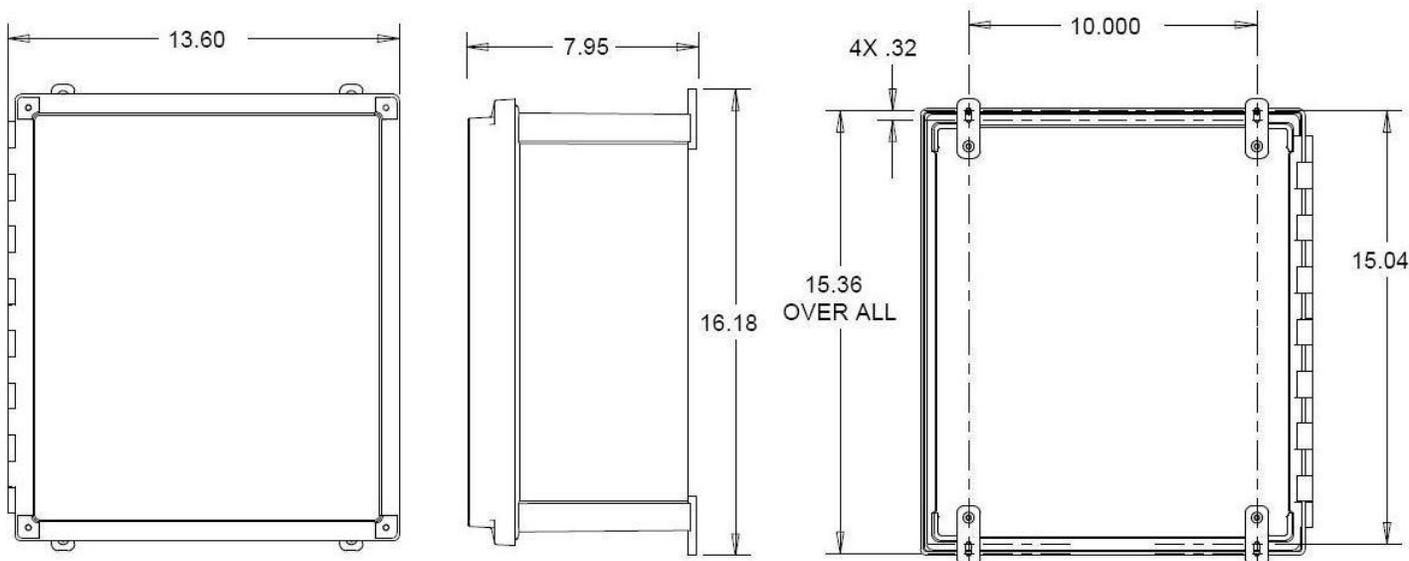


Figure 3. NEMA Enclosure Dimensions

Table 1. NEMA Enclosure Specifications

NEMA Enclosure Specifications	
Dimensions	" 13.60W x 15.36" H x 7.95" D
Weight (includes NEMA box, mounting plate, and Site Controller)	11.85 lbs
Power	115VAC, 60Hz
Enclosure	Polycarbonate

1. Using the dimensions shown in Figure 3, determine where to mount the NEMA enclosure. Make sure the mounting location is a solid surface.
2. Plan cabling to the NEMA box and drill holes with a hole saw in the bottom of the NEMA enclosure to route the cabling to the Site Controller.

3. Mount the NEMA enclosure by bolting it to the wall surface using the included plastic brackets.
4. Install the Site Controller by fitting the screws on the mounting plate in the NEMA box into the slots on the rails mounted on the sides of the Site Controller, so that the ports are installed parallel to the floor. Slide the Site Controller down and tighten the screws to secure it.
5. Connect the power supply cable and the CAT5 cable. Connect the modem, if applicable.

NOTE: DO NOT install the power supply inside the NEMA box.



Figure 4. NEMA Enclosure with Installed Components

3.3 Router

The router provides network connections for each of the devices to the Site Controller. Unitec provides and supports a four-port router. If you require additional ports, you will need to purchase the 16-port Ethernet switch option and use it to expand the network. The router will fit in the NEMA box, if necessary. When troubleshooting the router, refer to the documentation received with the router. For information on configuring the router, see the *Unitec Router Configuration Guide*.

3.4 Dial-up Credit Modem (Optional)

If you use dial-up credit, you will need to purchase the IPTran credit modem option. The modem is connected to the Site Controller. The phone line connection is provided via a RJ-11 jack on the modem. Each modem is pre-programmed with the merchant

account information before it is shipped. You must have your merchant account set up in advance for this to be done.

Appendix A. Installing the Print Controller

The print controller option allows you to print reports from the WashPay to a printer connected to the local area network (LAN). The print controller is pre-configured at Unitec.



Note: You must purchase the USB print cable separately.



Note: Unitec has tested these printers with the print controller and can verify that they will work without any additional setup procedures. If you wish to use a different printer, make sure that it is compatible with the printer driver HP PCL5 or greater.

3.4.1.1 Installation Procedures

1. Connect the USB cable from the printer to the USB port on the print controller.
2. Connect one end of the Ethernet patch cable to the Ethernet port on the print controller.
3. Connect the other end of the Ethernet patch cable to the router.
4. Connect the AC adapter to the print controller and plug it in.

