

# Wash Select II to WashPay Integration Field Retrofit Installation Guide

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Wash Select II Software Version 6.00 and above

POS4000 Software Version 8.25

**Unitec**

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# WASH SELECT II TO WASHPAY INTEGRATION FIELD RETROFIT INSTALLATION GUIDE

This guide provides complete instructions for installing the expansion board and programming the Wash Select II and WashPay Site Controller for integration.

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

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

Wash Select II Serial Number: \_\_\_\_\_

Distributor Name: \_\_\_\_\_

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# Table of Contents

- 1 Introduction.....1**
- 2 Retrofit Installation Procedures.....1**
  - 2.1 Parts Checklist.....1
- 3 Hardware Installation Procedures .....1**
  - 3.1 Perform System Backup.....1
  - 3.2 Disconnect Power to the Wash Select II .....2
  - 3.3 Installation Preparation .....2
  - 3.4 Installation Procedures .....2
    - 3.4.1 Expansion Board Installation Procedures .....3
  - 3.5 WSII Software Upgrade Procedures .....4
  - 3.6 Upgrade POS4000 EPROM .....6
- 4 Networking .....7**
- 5 System Configuration .....8**
  - 5.1 Wash Select II.....8
  - 5.2 WashPay Server Setup .....9
    - 5.2.1 General Site Information .....9
    - 5.2.2 Product Programming .....9
    - 5.2.3 Card Terminal Programming.....9
    - 5.2.4 Receipt Printer Setup .....10
  - 5.3 Download Devices .....11
  - 5.4 User Management .....11
  - 5.5 Wash Select II Notifications to the Site Controller .....12



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## 1 Introduction

This manual provides instructions for integrating the Wash Select II to the WashPay Site Management System. Perform the steps in this manual to all Wash Select II units, the POS4000, and the WashPay server.

Before beginning installation, you must also ensure that you have Wash Select II units, the WashPay server, the router, Internet access through your local Internet Service Provider, and a CAT5E cable terminated in an RJ45 jack running from the router in the office/C-store to the Wash Select II. The CAT5E cable should not be more than 250 feet in length.

## 2 Retrofit Installation Procedures

### 2.1 Parts Checklist

Prior to retrofitting the existing Wash Select II units, verify that all parts in the WSII to WashPay Network Upgrade Kit are present.

- WSII to WashPay Network Expansion Board
- Expansion Board Ribbon Cable
- 4 4-40 M/F stand-offs
- 4 4-40 Nuts with Washers
- Wash Select II EPROM Software Chip version 6.00
- POS4000 EPROM Software Chip version 8.25 and above
- This document

## 3 Hardware Installation Procedures

### 3.1 Perform System Backup

Prior to upgrading the software, it is highly recommended that you generate a hard copy of your site-specific information. This will make it much easier to reprogram your system in the event of data corruption or loss.



**Note:** Only qualified technicians should perform the following installation procedures.

The following reports will be required to reprogram your system: Accounting report, Fleet Account report, Configuration report, Pass code/Pass card report and, if the Paging option is installed, a Pager number report.

### 3.2 Disconnect Power to the Wash Select II

Before you begin the installation, it is important to first disconnect power to the Wash Select II at the main power source. Once this has been done, it is recommended that you verify that the power is off using a voltage meter.



**Warning:** Ensure power is disconnected from Wash Select II before proceeding with the installation. Shut the power off at the main panel box or breaker box and verify by checking to see if the unit is still powered down.

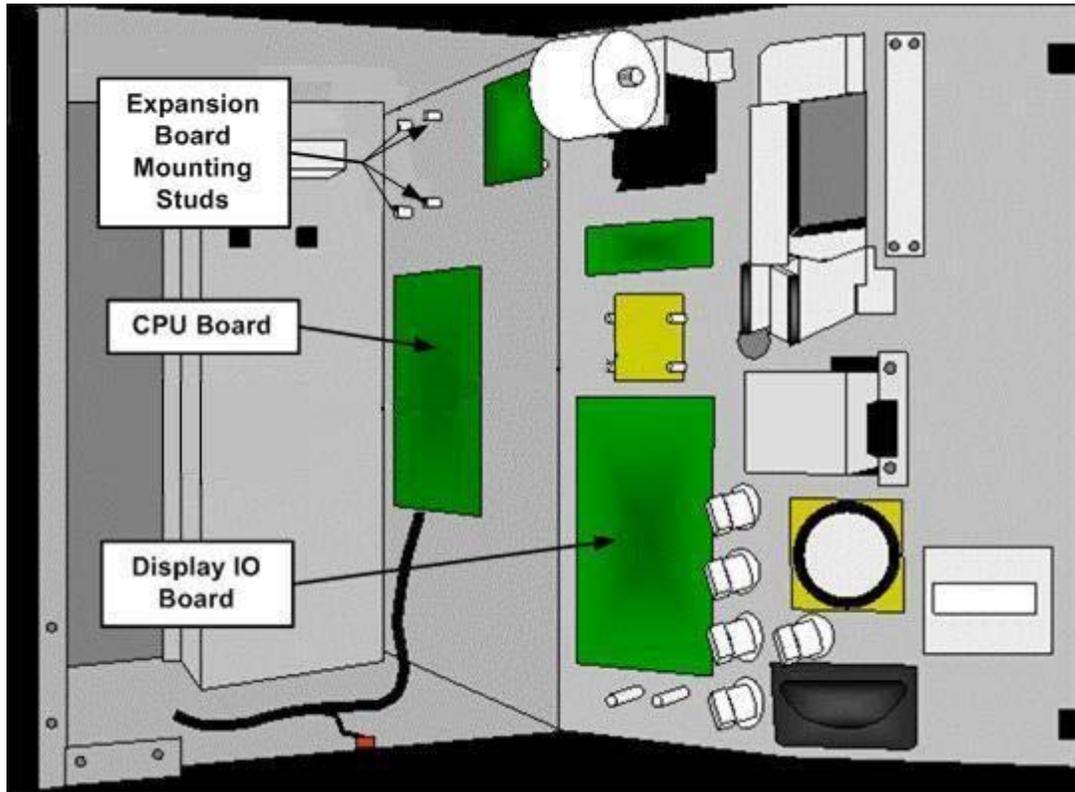
### 3.3 Installation Preparation

Prior to beginning the installation, make sure you have done the following:

1. Power off the WSII.
2. Remove the Coin Hopper.
3. Remove the protective plastic CPU cover from the inside, right-hand wall of the case. This cover is held in place by two wing nuts and two 5/16" hex nuts.

### 3.4 Installation Procedures

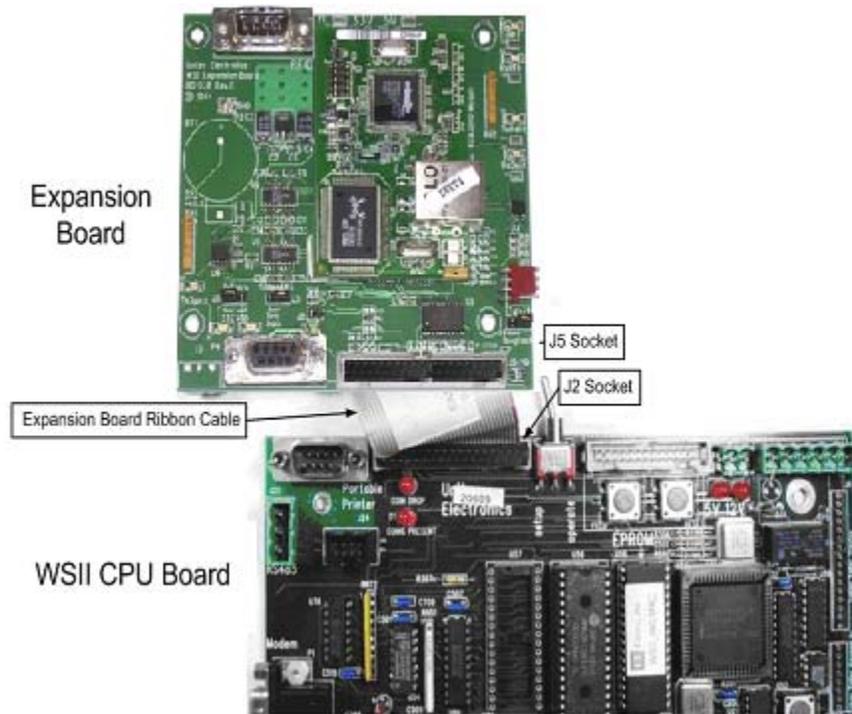
The following figure will help you locate the specific components in the WSII unit that you will be installing in this section.



**Figure 1. WSII Component Locations**

### 3.4.1 Expansion Board Installation Procedures

To install the expansion board in the WSII unit, follow these procedures:



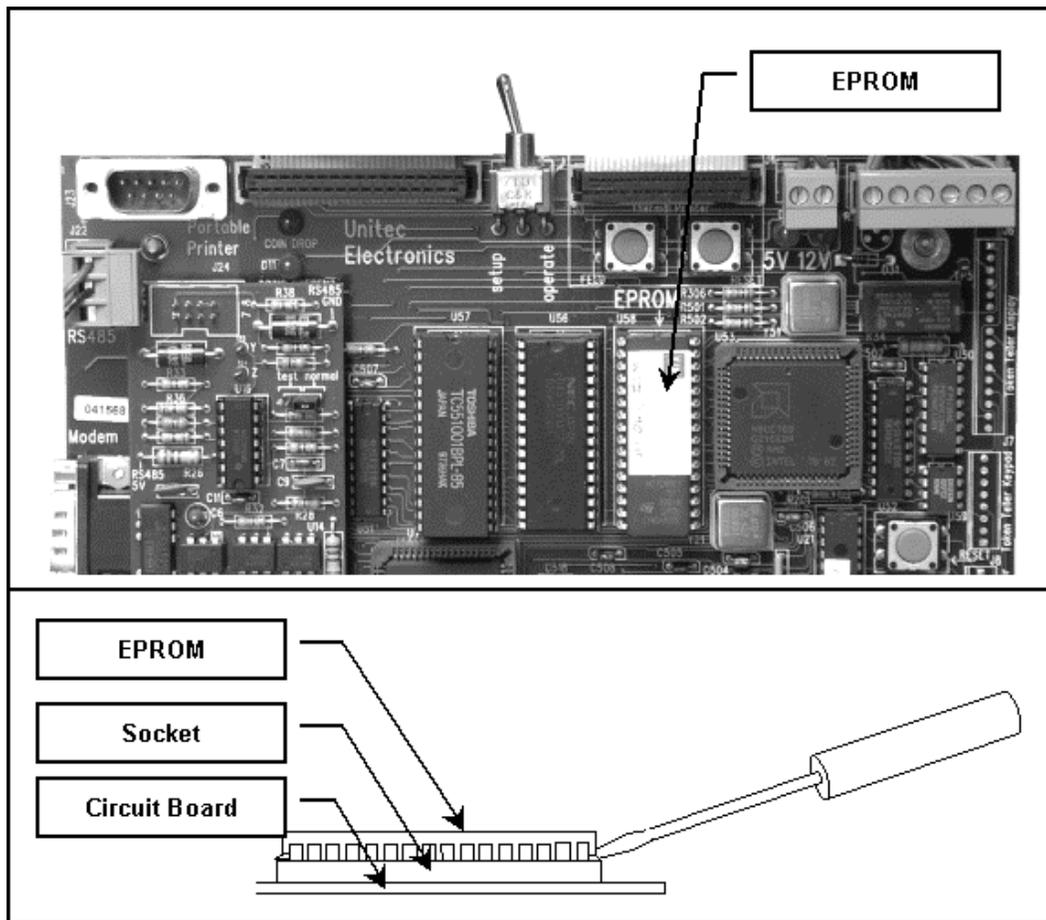
**Figure 2. Expansion and CPU Board Layout**

1. Ensure the main power to the WS2 is turned off.
2. Locate the Expansion Board mounting studs on the inside right wall.
3. Attach the included 4-40 male/female standoffs.
4. Attach the Expansion Board to the standoffs using the included white nylon plastic 4-40 nuts and washers.
5. Connect the ribbon cable from socket J5 on the Expansion Board to socket J2 on the CPU Board.
6. Connect the CAT5 cable to the RJ45 jack on the board.

### 3.5 WSII Software Upgrade Procedures

To upgrade the WSII software, perform the following procedures:

1. Remove the existing EPROM located at connection U58 on the CPU board (see Figure 3) by inserting a small flat-blade screwdriver between the EPROM and the socket and prying it off. Be careful not to damage the socket or the circuit board.



**Figure 3. Locating and Removing the EPROM**

 **Caution:** Take care not to damage any pins when removing or installing chips.

2. Insert the new EPROM into the socket on the board. Chip pins may need to be adjusted to fit into the socket. Use the following steps to adjust the pins:
  - Lay the chip on its side with the pins facing away from you.
  - Gently rock the chip away from you to bend the pins.
  - Lay chip on its other side and rock it away from you.
  - Repeat the above steps, alternating sides of the chip, until pins are at approximately a 90-degree angle and line up in the socket.
3. The notched end of the chip goes up. There is a silk-screened image on the CPU board you can use to line up the notch correctly. This image is labeled EPROM.
4. Push the EPROM chip in gently. Do not force it, as you may cause damage to the chip or the CPU board.
5. Replace the protective plastic cover over the CPU board.

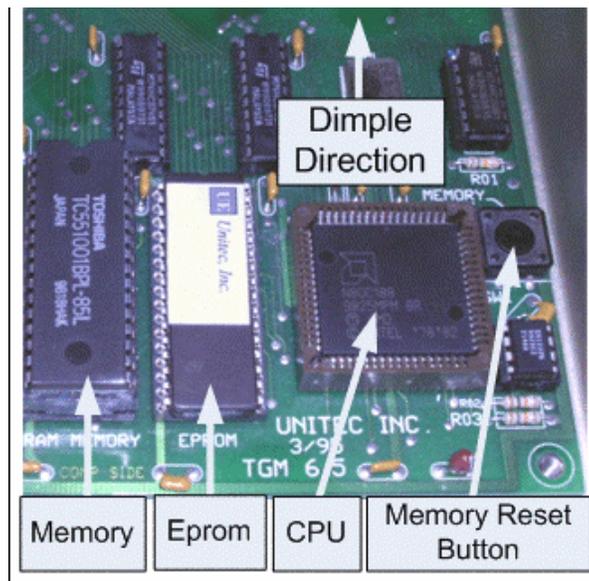
### 3.6 Upgrade POS4000 EPROM

Depending upon the version of software that is currently in the POS4000 console, this procedure may delete ALL configuration information, including all codes, fleet accounts, and accounting information. All setup configurations will be reset to factory defaults. To properly facilitate reprogramming this information, you should print the following reports BEFORE proceeding.

- System configuration
- Pricing report
- Fleet accounts
- Accounting reports (those that are used)
- Message configuration

Perform the following steps to change console software (EPROM):

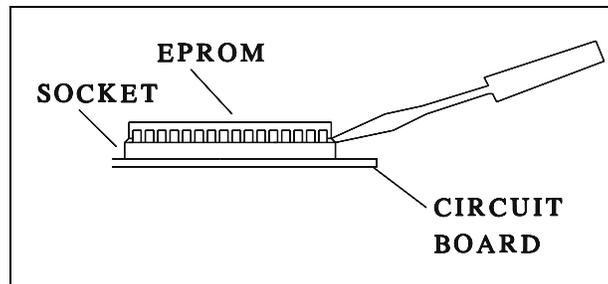
1. Disconnect all cables to the POS4000 console
2. Remove the plastic housing. To do this you must remove 2 screws from the rear and 2 screws from the bottom of the unit.
3. The upper chassis must be partially removed. Remove the middle and front screws along the side of the metal chassis. Loosen the rear two screws on each side of the chassis. This will allow the top piece to open up revealing the main circuit board.
4. Find the EPROM chip, as indicated below:



**Figure 4. POS EPROM Location**

The EPROM chip has a small window on the top surface that may or may not be covered with an adhesive label.

5. Carefully remove the EPROM chip from the socket. Use a small flat head screw driver or an IC remover. Be careful to pry the chip from the socket and not the socket from the board.



**Figure 5. EPROM and Socket**

6. Carefully install the new EPROM into the socket. Make sure that the Dimple on the chip is facing the same direction as it was before (refer to previous drawing). Also, make sure that pins can be properly inserted into the sockets without bending. Component legs can be bent to fit sockets as follows:
  - Lay the chip on its side with the pins facing away from you.
  - Gently rock the chip away from you to bend the pins.
  - Lay chip on its other side and rock it away from you.
  - Repeat the above steps, alternating sides of the chip until the pins line up in the socket without forcing the legs to fit.
7. Reconnect the power and printer connections and turn on the unit. As the system powers up the message “**!!SOFTWARE UPGRADE!!**” will appear momentarily.
8. After the unit is powered up, you **MUST** then press the **RESET BUTTON** to reset the system.
9. After pressing the reset button, the display will prompt you to press 99 or 55. Press **55**.
10. Reset the system two more times. If your system previously contained standard version TG648 and above or Unicam version 656 and above, then the codes and messages should be retained.
11. Replace all screws and plastic cover. Connect all other cables previously attached.

## 4 Networking

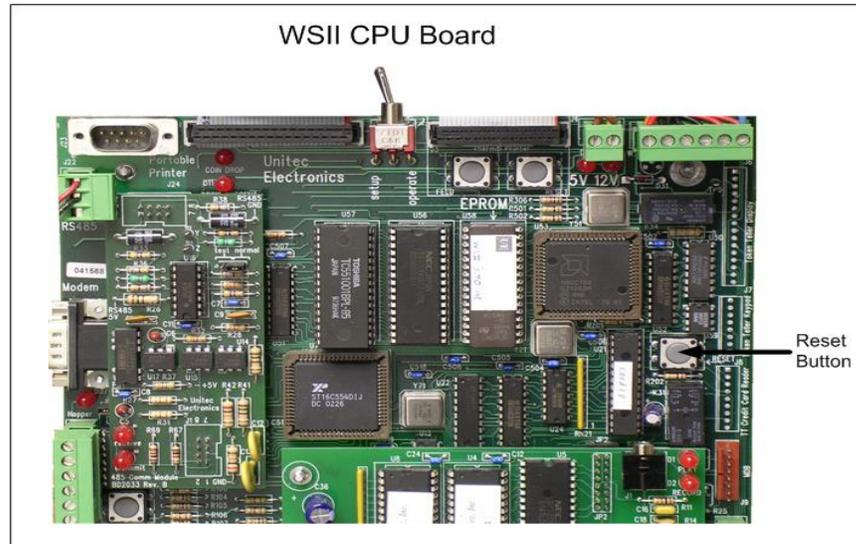
Run the CAT5E Ethernet cable from the router supplied with the WashPay server to the newly-installed expansion board and plug it into the J4 rabbit connector. Power up the Wash Select II and continue with software configuration.

## 5 System Configuration

### 5.1 Wash Select II

The WSII software is designed for easy configuration. Perform the following procedure.

1. Power up the WSII.



**Figure 6. WSII CPU Reset Button**

2. On the WSII, press the **reset button** on the CPU board. This will clear the memory.
3. Press (1) for Yes then press the (\*) key to enter.
4. Set the Credit Mode to **6**. This will automatically set the network parameters.
5. Scroll to Network Parameters. Press “\*” to select.
6. You should see “Rev#: WP2.XX (the “x” is the most current version of software). Press any key.” Press any key to continue. If this message is not displayed, make sure the LED light is lit on the expansion board by the Ethernet cable and make sure the ribbon cable and Ethernet cable connections are secure, then reboot the Wash Select II unit.

7. The network status will be displayed:
  - host connected: communication to the server is established
  - network online: server connected, but no communication
  - network down [x]: where x equals one of the following error codes:
    - 1 No DHCP returned
    - 2 Cannot create TCP server
    - 3 Cannot set up UDP socket
    - 4 Cannot find controller
    - 5 Did not connect to TCP server
    - 6 Did not get a device ID
  - no response: No response from the interface (If "no response", set up will exit.)

The parameters will be sent to the network interface. If successful, it shows "IP addresses set", otherwise "Cannot Set IP".

## 5.2 WashPay Server Setup

The Set-up functions are used to program the WashPay's operational settings and for managing system users. WashPay programming should be performed during installation by your Unitec distributor, but there are some settings that an equipment owner may wish to change, periodically. This section of the manual describes the programmable features that are available. For specific details on using these features, see the *Sierra Management Application Programming Manual* on the manufacturer's website: [www.StartwithUnitec.com](http://www.StartwithUnitec.com).

### 5.2.1 General Site Information

Site information should be set during installation and would not typically need to be changed. The programmable features under site information include the site name and ID (as shown on reports and notifications), credit card account set-up, and pre-authorization or hot file configuration.

### 5.2.2 Product Programming

A self serve wash would only need one product to be setup. The product settings will need to be set up by the installing distributor, but the equipment owner may need to access these settings to change prices.

### 5.2.3 Card Terminal Programming

The card terminal's configuration is programmed by creating a 'device profile' and then downloading the profile to the card terminals. Whenever a change is made to the device profile, the associated card terminals will need to be downloaded with the revised profile

to implement the changes. The device profile configuration file includes a series of set-up pages, which are described in the following sections.

## General Information

The Edit Profile Information page is used to program some general operational settings of the WashPay system including:

- Initial Price
- Initial Swipe Amount
- Additional Swipe Amount
- Credit Drive Off Limit

## Product Dispensing

The product dispensing page is used to assign the timer operational mode, and set the turn on delay and grace times. The self-serve product must be set-up through the Products page before it can be assigned to a device profile. This feature will typically not be changed after installation.

## Equipment Interface

The Equipment Interface Set-up page is used to configure the interface between the card terminal and existing coin box and the pulses per coin or bill. These settings should only be changed by your distributor.

## User Interface Set-up

The User Interface set-up page is used to change messages displayed to customers and adjust 'time-warning times for certain timer modes. This page is also used to customize the text on the screens, that an operator may wish to adjust including the welcome message, thank you message, and stop button message.

### 5.2.4 Receipt Printer Setup

The receipt printer setup only requires a paynode name and header and footer text. The site operator may change the receipt message text at any time.

## 5.3 Download Devices

Once the self serve and receipt printer profiles have been configured, the device profile must be downloaded. You may choose to download each device individually or download all devices at once. The devices will reboot and come up in operational mode.

## 5.4 User Management

Unique User IDs and passwords should be set up for employees, service personnel or others that may need access to the WashPay system. The User Set-up pages are used to create new user accounts and to edit or delete an existing account. User privileges that can be assigned are arranged in groups as follows:

- User Management – Allows the user to set-up and manage other user accounts.
- Device Set Up – Allows access to the device (profile) programming functions.
- Accounts and Promotions – Allows the user to set up and manage promotional programs and house accounts.
- Reports – Allows the user to access the WashPay's accounting reports
- Utilities – Allows the user to access system utilities including data logging and database back-up functions.

## 5.5 Wash Select II Notifications to the Site Controller

In the event there is an error generated by the Wash Select II, the Wash Select II will send an error message to the WashPay Site Controller as well as a notification to the site owner.

WSII Pager ID	WSII Description	WashPay Alert ID	WashPay Alert
1	Hopper low	16	Peripheral low (10%)
2	Hopper empty	17	Peripheral empty
4	Wash out of service	4	Auto – Out Of Service
8	Printer paper	17	Peripheral empty
9	Printer power error	12	Peripheral error
10	Printer error	12	Peripheral error
11	Bill jam	13	Peripheral jammed
12	Bill stacker full	14	Peripheral full
13	Bill validator error	12	Peripheral error
14	Card reader error	12	Peripheral error
16	Wash fault	2	Fault -- Out Of Service
18	Wash in service	5	Auto – returned to service
20	Security alarm	25	Alarm activated