



Speed Queen Alliance MDC (C1 Harness)

BluKey Pulse and Serial Protocol

## Installation Manual



BluKey™ Pro Serial  
BluKey™ Pro Pulse



BluKey™ Pulse

## Preparing the Machine for Installation

- **Machine Power:** Ensure the laundry machine is disconnected from its power source.
- **Installer Connectivity:** For BluKey registration, confirm your smartphone has a stable internet connection (Wi-Fi or cellular data) to use the PayRange App.
  - PayRange service requires a data connection on a user's mobile device.
- **Jumper:** Install a jumper if it is not already in the machine. This is required to configure the control board to accept **Serial Mode** or **card**-based input.
- **Required PayRange Hardware:** Ensure you have the correct harnesses and sufficient BluKey devices on hand to complete installations on all machines at the location.



**Figure 1**

## Machine Out of Order

- If the machine has **power**, register and connect to the BluKey and harness as usual.
- If the machine has **no power**, use another machine to power and register the BluKey. Use the Machine ID, position number, and harness type for the out-of-order machine
- Leave the registered BluKey in the first machine. Once the broken machine is repaired or replaced, retrieve the device and install it in the correct machine.



Figure 2

## BluKey Configuration Steps

**Pulse Mode:** Use this mode when the machine is configured to accept coins or pulse signals from a coin mechanism. Pulse Mode installations are supported with either BluKey model: **BluKey Pro** or **BluKey Pulse**.

**Serial Mode:** Use this mode when the machine is configured to accept serial or card-based input. Serial Mode installations are supported only with the **BluKey Pro** model.

### BluKey Pro Model:

- Connect the **BluKey Pro** to the **C1 harness** as depicted in **Figure 3**.



Figure 3

### BluKey Pulse Model:

- Connect **BluKey Pulse** to the **Interface Module**.
- Connect **C1 Harness** to the other end of the **Interface Module** (See **Figure 4**)

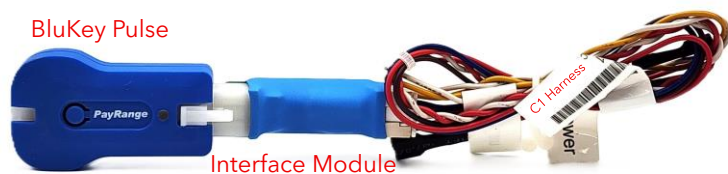


Figure 4

## Configure the Laundry Interface Module for BluKey Pulse Module Only:

**Important:** The interface module switches must be set to match the machine's settings and programming. Incorrect switch settings may make the BluKey incompatible or behave unpredictably.

### Switch 1:

- **OFF**-BluKey's 12-pin Coin Connector will be used to audit coins.
- **ON**-Machine does not accept coins, or the coin audit function will not be used.

### Switch 2:

- **OFF**- Used for Washers. Payment will be disabled when the machine is in use.
- **ON**- Used for Dryers. Payment is always allowed for top-off transactions. Set to OFF to disable top off transactions

### Switch 3:

- Set to **ON** for all machines to accept BluKey Pulse.

### Switch 4:

- Unused

## Harness Installation

1. If not done so already, **disconnect** the machine from its **power** source.
  - a. Connect the BluKey to the harness.

2. **Open** the machine **control panel** to access the machine's control board.

3. Plug the **7-pin** adapter from the C1 harness, into the machine's **Debit Port**, labeled **H4** on the machine control board (see **Figure 6 & 7**).

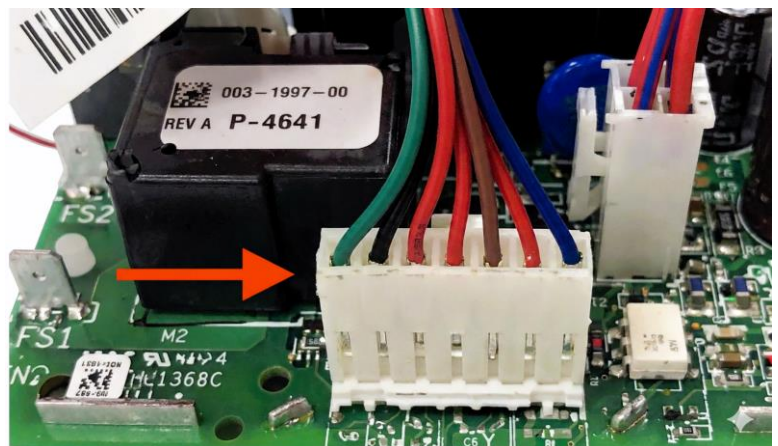


Figure 6

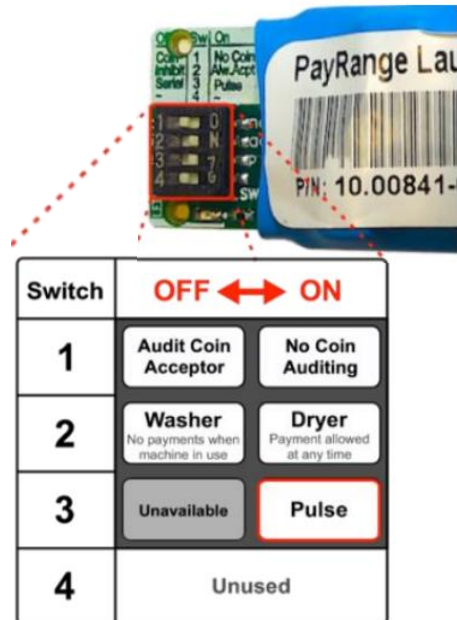
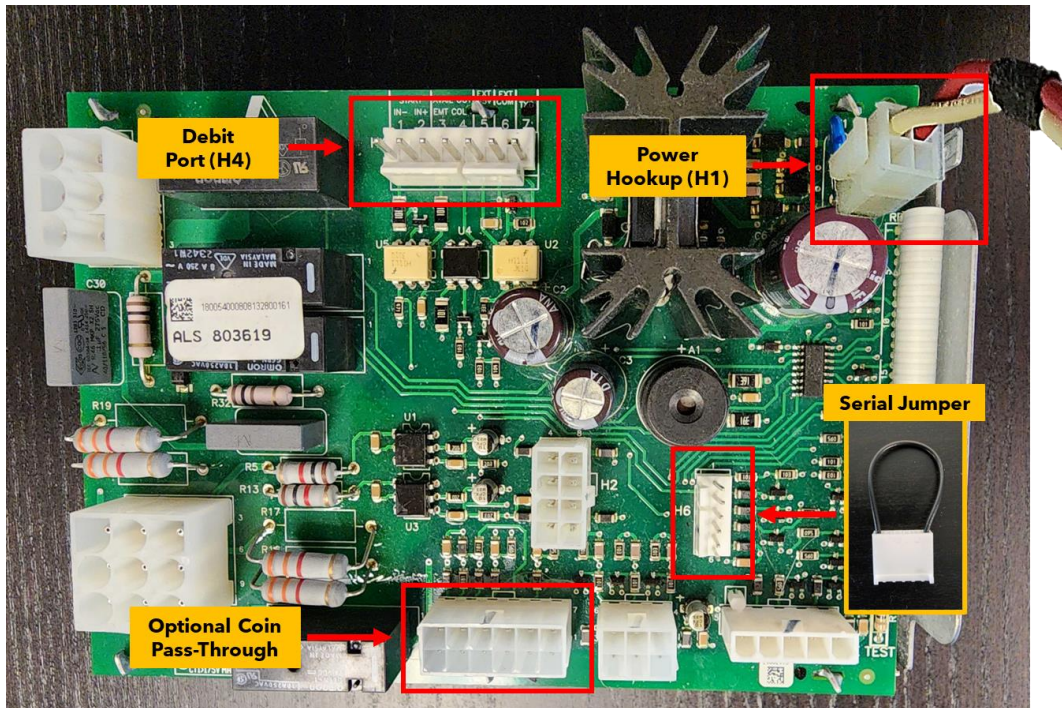


Figure 5



**Figure 7. Control board layout shown for reference only; actual layouts may vary.**

4. Locate the machine's **Power Hookup**, labeled **H1** on the machine control board (**Figure 7**).
5. Pinch the clip on the **Power Hookup** connector to disconnect it from the control board (**Figure 7**).
6. Connect the **Power** adapter from the C1 Harness into the machine's **Power Hookup (H1)**:

**IMPORTANT: Do NOT** connect the C1 power harness adapter to any other machine connectors. Refer to **Figure 7** for an example of the control board layout.

**Option A-** For machines **without** the power hookup extension adapters:

- a. Insert **P1: Power Hookup for MDC** adapter pins into the machine's power hookup clip that was disconnected in Step 5.
- b. The red and white **pins** must be inserted in the correct **orientation**: The crimped edge of the pin must face the plastic clip, as seen in **Figure 9**.

- i. **Polarity does not matter** in this connection. Install one wire per square socket in the power hookup clip; the red and white wires may be placed in either socket.
- c. Plug the Power Hookup connector from Step 5 back into the board.

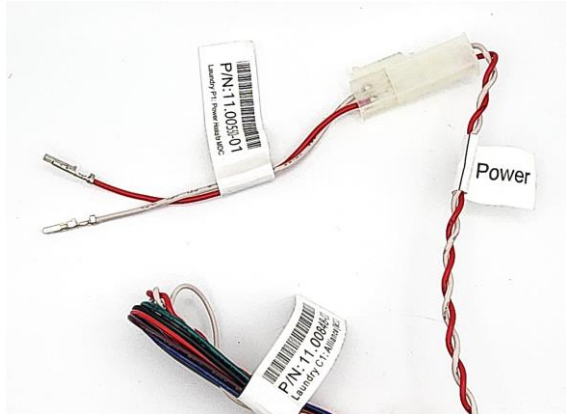


Figure 7



Figure 9

**Option B-** For machines **with** the power hookup extension adapters:

- a. **Disconnect the P1: Power Hookup for MDC** adapter pins from the C1 harness (**Figure 10**).
- b. Connect the C1 **Power** harness to the machine's power hookup extension adapter.
- c. Plug the Power Hookup connector, from Step 5. back into board.

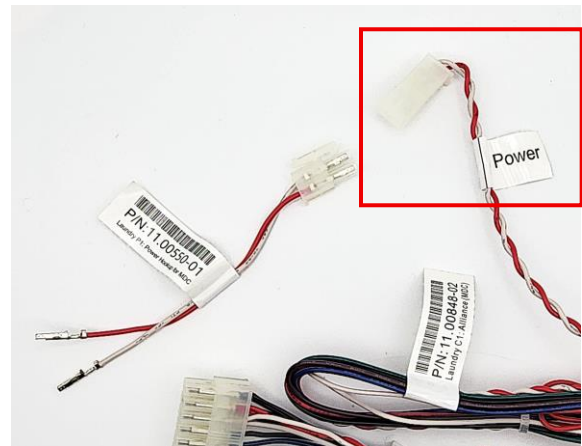


Figure 10

7. **Optional Coin Pass-Through (Figure 11):** Used only for coin drop auditing. **Do not connect if** the machine does not accept coins, has dual coin acceptors, or does not require cash reporting.

- If present, disconnect the machine's **12-pin Coin Connector**
- Connect the **Coin 12-pin** adapter from the **C1 harness** in its place.



Figure 11

8. **Jumper Installation-Serial Protocol Only:** If not already installed, insert the MDC serial jumper into the machine.

Refer to **Figure 7** for an example of the 6-pin jumper connector location; actual control board layouts may vary.

9. **Power on** the machine.

## Affixing Machine Decals

(Refer to the signage/decal placement reference guide for complete placement details)

- Number machines left-to-right and top-to-bottom to make it easier for customers to locate machines.

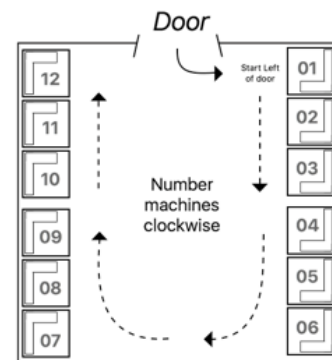


Figure 12

- For stacked machines that require two devices, the top machine should be lower number.

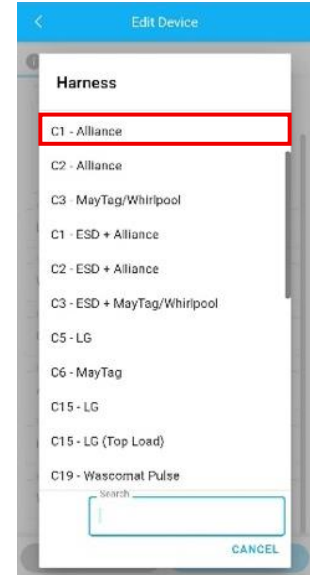


**Figure 13**

## Register BluKey with PayRange App

Refer to the “*Registering the PayRange BluKey*” reference guide for the complete steps for registration.

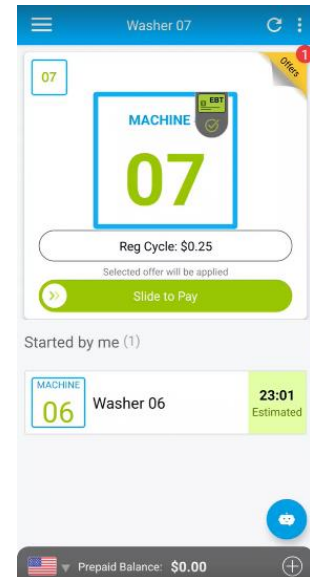
- Be sure to select the specific harness type during registration; in this case, select **C1-Alliance** (see **Figure 14**).
- Under Protocol, select **Protocol or Serial** based on installation type.



**Figure 14**

## Test Transaction

1. On the main screen in the PayRange App, select the machine you wish to test payment.
2. Slide the **Green** arrow to the right to send a test transaction payment (**Figure 15**).
3. Verify the machine’s display shows the PayRange balance or value of free purchase code (**Figure 16**).
4. Press Start on the machine to begin the cycle or press the X in the PayRange App to cancel the transaction. The account will not be charged for a cancelled transaction.
  - If the test transaction is unsuccessful, refer to the “*PayRange Troubleshooting Guide*”.



**Figure 15**



**Figure 16**

**Repeat Steps for All Machines Requiring the C1 Harness.**