



Troubleshooting
Reference Guide



I. Introduction

This guide provides standard troubleshooting procedures for common issues encountered during the installation, registration, and operation of the PayRange payment system and related hardware.

The troubleshooting workflow is designed to systematically eliminate the most common causes of installation and operational issues. Technicians should complete each step and applicable troubleshooting section before escalating a problem.

While this guide addresses the majority of known issues, some problems may be unique to a specific machine, manufacturer, or site condition and may require additional investigation. If all applicable troubleshooting steps have been completed and the issue remains unresolved, escalate the issue to your PayRange point of contact or the PayRange Technical Support Team for further assistance.

When escalating an issue, be prepared to provide the machine model, BluKey serial number, LED status, troubleshooting steps performed, and any error messages or observations collected during diagnosis.

II. Initial Inspection Checklist

Before troubleshooting a specific issue, complete the following inspection steps:

A. Verify Machine Power

- Machine powers on normally → Continue to Step **B. Verify BluKey Status**
- Machine has no power → Perform the following checks:
 1. Verify the machine is plugged into a functioning power source.
 2. Verify any circuit breakers or disconnects are in the ON position.
 3. Verify all connectors to the machine control board are fully seated and secure.
 4. Using a voltmeter, verify voltage is present at the machine power input (follow all applicable safety procedures).
 5. If the machine still does not power on after completing these checks, the issue is likely machine-related rather than PayRange-related. The machine may require service by a qualified technician. Notify the owner or location contact of the machine status.

B. Verify BluKey Status



BluKey LED is illuminated → Continue to [III. BluKey LED Pattern Troubleshooting](#)

If no LED is present → Perform the following checks:

1. Check the connection between BluKey, harness and the machine are secure.
2. Replace the BluKey
3. If not resolved continue to **C. Verify Harness Connections**

C. Verify Harness Connections

Refer to the appropriate machine installation guide for harness routing and connection locations. Check if the following connections:

- PayRange harness connections are fully seated
- Coin input connector is connected
- Card reader connections are secure
- No damaged wires or bent pins

If a wiring issue is found, correct it and retest the machine before continuing.

D. Verify Machine and Blukey Programming

- Confirm correct harness type selected in the PayRange App.
- Confirm correct protocol selected in the PayRange App (Pulse or Serial)
- Refer to the machine-specific programming guide to verify the machine's settings match the installation requirements

E. Verify Dip Switch Settings (Machines That Use Dip Switches)

- Determine whether the machine model utilizes dip switch configuration.
- If applicable, verify dip switch settings match the machine-specific installation requirements.
- Refer to the machine-specific installation guide for the correct dip switch configuration.

Common Examples:

Speed Queen (legacy/pre-Quantum models)

[Other applicable models]



If the machine model does not utilize dip switch settings, proceed to Section D.

F. Verify Mobile Device Requirements

- Bluetooth enabled
- Cellular data available
- Latest PayRange app installed
- User logged into PayRange app











G. Verify Registration Information

- Correct BluKey serial number assigned
- Correct machine number assigned
- QR decal matches machine assignment
- Device appears in the PayRange management system

If all checklist items pass, proceed to the symptom-specific troubleshooting sections.

III. BluKey LED Pattern Troubleshooting

Table 1

LED Pattern		Meaning	Recommended Action
Solid Blue		BluKey Ready	No Action-Normal Operation
No LED		No power due to bad connection between BluKey and machine controller	<ol style="list-style-type: none"> 1. Check connection between BluKey, harness and machine are secure. 2. Replace the BluKey 3. Replace the Harness
Solid Red		<ul style="list-style-type: none"> • Incorrect Firmware on BluKey • Machine controller is programmed for wrong protocol (serial or pulse) 	Under edit device, Verify or update the correct firmware in the PayRange app by editing the device
Flashes Blue and Red		No Payment for the last 24 hours	<ol style="list-style-type: none"> 1. Power-cycle the BluKey or machine to reset the warning. 2. Check the LED pattern for next steps 3. If LED is Blue, send a test transaction from the PayRange app
Slowly Flashes Red		<ul style="list-style-type: none"> • Machine is running a wash cycle • Card reader communication error 	<ol style="list-style-type: none"> 1. When cycle is completed, machine will return to solid blue (ready mode) 2. If wash is not in cycle: <ol style="list-style-type: none"> a. Check if the coin input and card reader are correctly connected (refer to the correct machine manual for assistance). b. Power cycle the machine
Slowly Flashes Blue		BluKey is communicating with the PayRange App.	No Action-Normal Operation
Slowly Flashes Purple		Transaction in progress	No Action-Normal Operation
Quickly Flashes Blue		BluKey is upgrading	Keep power on until completed
Quickly Flashes Red		BluKey hardware error	Replace BluKey
Quickly Flashes Purple		<ul style="list-style-type: none"> • Uploading transactions • Downloading upgrades 	No Action-Normal Operation

IV. Common Problems and Solutions

Table 2

Problem	Possible Causes	Solutions
<p>Pricing will not push to BluKey Pro</p>	<ul style="list-style-type: none"> • Wrong harness selected • Firmware mismatch • Machine not refreshing 	<ul style="list-style-type: none"> • Verify the correct serial harness and protocol are selected during registration in the PayRange app. • Verify the BluKey Pro firmware is up to date. • Power-cycle the machine.
<p>PayRange App not loading</p>	<ul style="list-style-type: none"> • Poor cellular signal/ Internet connectivity issue • Bluetooth disabled • Outdated PayRange app • Mobile device issue 	<ul style="list-style-type: none"> • Verify mobile internet connectivity: <ul style="list-style-type: none"> ○ Open a mobile browser and test YouTube loading speed. <ul style="list-style-type: none"> ▪ If YouTube loads slowly or fails, move to an area with a stronger cellular signal. ▪ If YouTube loads normally, force the PayRange app to close and reopen it. • Verify Bluetooth is enabled on the mobile device. • Verify the latest version of the PayRange app is installed. • Restart the mobile device if necessary.

<p>The wrong machine is starting</p>	<ul style="list-style-type: none"> • Incorrect machine mapping or registration • Duplicate or incorrect machine numbering • BluKey Pro assigned to the wrong machine • Machine configuration mismatch 	<ul style="list-style-type: none"> • Attempt to reproduce the issue using the PayRange app. • Verify the BluKey Pro serial number is assigned to the correct machine under Edit Devices in the PayRange app. • Verify the BluKey Pro serial number assigned to the machine matches the BluKey Pro installed inside the machine. • Test multiple machine selections to verify consistent behavior. • If the issue persists, verify the BluKey Pro registration and machine settings are correct.
<p>Prices are wrong</p>	<ul style="list-style-type: none"> • Incorrect room or machine pricing configuration • Incorrect pricing profile assigned • Pricing update did not sync to the machine 	<ul style="list-style-type: none"> • Verify the room and machine pricing are configured correctly: <ul style="list-style-type: none"> ○ App: <ul style="list-style-type: none"> ▪ Menu > Edit Device > [Scan BluKey Pro Device ID] ▪ Verify pricing options are correct. ○ Manage Portal: <ul style="list-style-type: none"> ▪ Menu > Devices > List > [Search BluKey Pro Device ID] > Pricing

		<ul style="list-style-type: none"> ▪ Verify the correct pricing profile is assigned. • If pricing is incorrect, update pricing and submit changes. • If pricing appears correct, resubmit the pricing profile. • If pricing is still not updated, perform the following steps in order: <ol style="list-style-type: none"> 1. Power-cycle the machine. 2. Rapid cycle the machine to zero. 3. Rapid cycle through the final cycle period and allow the machine to time out completely.
<p>Machine tiles do not appear in the PayRange app</p>	<ul style="list-style-type: none"> • BluKey Pro offline or not communicating • Mobile device connectivity issue • Bluetooth disabled • Machine registration issue • Firmware or communication issue 	<ul style="list-style-type: none"> • Verify mobile internet connectivity. • Verify Bluetooth is enabled on the mobile device. • Force close and reopen the PayRange app. • Verify the latest version of the PayRange app is installed. • Verify the BluKey Pro has power and LED is solid blue. <ul style="list-style-type: none"> ○ Refer to the “BluKey Pro

		<p>Troubleshooting Light Codes” guide.</p> <ul style="list-style-type: none"> • Inspect BluKey Pro wiring and harness connections. • Power-cycle the machine if necessary. • If machine tiles still do not appear, escalate unresolved issues to technical support.
<p>The machine will not start when scanning the QR code</p>	<ul style="list-style-type: none"> • BluKey Pro offline or not communicating • QR code assigned to incorrect machine • Bluetooth or internet connectivity issue • Machine registration or synchronization issue • Wiring or harness connection issue 	<ul style="list-style-type: none"> • Verify mobile internet connectivity and Bluetooth functionality. • Verify the machine number displayed in the PayRange app matches the number printed on the QR decal. • Verify the machine appears correctly in the PayRange app. • Attempt to reproduce the issue by starting the machine from the machine tile in the PayRange app. • If the machine appears but does not start, open the machine and inspect the BluKey Pro status indicator light and wiring connections. <ul style="list-style-type: none"> ○ Refer to the BluKey Pro Troubleshooting Light Codes guide

		<p>for additional diagnostics.</p> <ul style="list-style-type: none"> • Verify harness connections are fully seated and connected to the correct ports. • Power-cycle the machine if necessary.
<p>Dryer times are wrong</p>	<ul style="list-style-type: none"> • Incorrect dryer time configuration assigned in the pricing profile • Incorrect pricing profile assigned • Configuration changes not syncing to the machine • Machine not refreshing updated settings 	<ul style="list-style-type: none"> • Verify dryer time settings in the management system. <ul style="list-style-type: none"> ○ App: <ul style="list-style-type: none"> ▪ Menu → Edit Device → Scan BluKey Pro Device ID → Pricing ▪ Verify dryer cycle times and pricing are correct. ○ Manage Portal: <ul style="list-style-type: none"> ▪ Menu → Devices → List → Search BluKey Pro Device ID → Pricing ▪ Verify the correct pricing profile is assigned. • If times are incorrect, update the settings and submit changes. • If settings appear correct, resubmit the pricing profile. • If dryer times still do not update, perform

		<p>the following steps in order:</p> <ol style="list-style-type: none"> 1. Power-cycle the machine. 2. Rapid cycle the machine to zero. 3. Rapid cycle through the final cycle period and allow the machine to fully time out.
<p>PayStation is down</p>	<ul style="list-style-type: none"> • PayStation power issue • Router connectivity issue • Cellular network issue • Internet connectivity unavailable • Hardware communication failure 	<ul style="list-style-type: none"> • Power-cycle the PayStation by unplugging it, waiting 60 seconds, and reconnecting power. • If the issue persists, verify router connectivity: <ul style="list-style-type: none"> ○ Connect a mobile device to the router's Wi-Fi network. ○ Open a mobile browser and test YouTube loading. • If YouTube does not load: <ul style="list-style-type: none"> ○ Reposition the router and test again. ○ Verify cellular signal strength. ○ If available, test a router using a different carrier's SIM card. • If YouTube loads successfully, escalate to the PayRange

		<p>Technical Support team.</p>
<p>EC19 / EC11 / EC18 / D16 appears on the machine display</p>	<ul style="list-style-type: none"> • Harness connection issue • Loose or disconnected wiring • BluKey Pro communication issue • Machine control board communication fault 	<ul style="list-style-type: none"> • Power off the machine before inspecting wiring or harness connections. • Verify all harnesses and wiring connections are fully seated and connected properly. • After verifying connections, restore power and test machine operation. • If the error remains, inspect BluKey Pro status indicators and communication wiring. • Refer to the BluKey Pro Troubleshooting Light Codes guide for additional diagnostics.
<p>ERR appears on the machine display when inserting an ESD card</p>	<ul style="list-style-type: none"> • Loose or incorrect wiring connection • ESD reader communication issue • BluKey Pro communication fault • Faulty ESD reader hardware 	<ul style="list-style-type: none"> • Power off the machine before inspecting connections. • Verify all harnesses and wiring connections are fully seated and connected properly. • Restore power and test machine operation. • If the issue persists, inspect BluKey Pro status indicators and communication wiring. • Refer to the BluKey Pro Troubleshooting Light

		<p>Codes guide for additional diagnostics.</p> <ul style="list-style-type: none"> • If all connections and BluKey Pro indicators appear normal, replace the ESD reader and retest.
<p>Coins not being recognized by the machine</p>	<ul style="list-style-type: none"> • Coin connector disconnected • Loose or incorrect harness connection • BluKey Pro or harness communication issue • Machine coin input fault • Coin mechanism malfunction 	<ul style="list-style-type: none"> • Power off the machine before inspecting connections. • Verify the coin connector is fully seated and connected to the correct harness port. • Restore power and test machine operation. • If coin operation still fails, disconnect the BluKey Pro and harness assembly and test the machine with no payment hardware connected. • If coin operation functions normally without payment hardware installed: <ul style="list-style-type: none"> ○ Reconnect the PayRange hardware and retest. ○ Inspect BluKey Pro status indicators and harness connections. ○ Refer to the BluKey Pro Troubleshooting Light Codes guide

		<p>for additional diagnostics.</p> <ul style="list-style-type: none">• If coin operation does not function without payment hardware connected, troubleshoot the machine's coin system and control components as needed.
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V. Escalation

Escalation Process

If the issue cannot be resolved using the troubleshooting procedures in this guide, escalate the issue using the following process:

1. **Notify Your Manager**

- Review the troubleshooting steps that have already been completed.
- Provide any relevant photos, LED patterns, error messages, and machine information.

2. **Contact the Field Service Manager**

- If the issue remains unresolved, escalate the case to the Field Service Manager for additional technical assistance.
- Include all troubleshooting steps that have been performed to avoid duplicate efforts.

3. **Contact PayRange Support**

- If further assistance is required, contact PayRange Support.
- Phone: **+1 (855) 856-6398**
- Provide the machine type, BluKey serial number (if applicable), LED status, troubleshooting steps performed, and any supporting photos or documentation.



Note: Before escalating an issue, ensure all troubleshooting steps in this guide have been completed and documented.