



KR PBC205 PUSH BUTTON CONTROLLER

Instructional Guide

SYSTEM OVERVIEW

The KR PBC205 manages coinbox push-button inputs, button LED feedback, standard function outputs, and auxiliary/horn outputs.

HOW IT WORKS

The controller features **5 Auxiliary (AUX) outputs** on the **J1 connector** that can be paired with any button function. These outputs are highly versatile and typically used to:

- Trigger a pump to run.
- Run a pump at varying speeds or pressures (High, Medium, Low).
- Signal hot or cold water solenoid valves.

STANDARD WIRING CONFIGURATION

By default, the AUX outputs are mapped as follows:

AUX Output Pin	Default Function	Description
AUX 0 (J1-7)	Pump Run	High Pressure
AUX 1 (J1-8)	Medium Pressure	Intermediate pump speed/pressure
AUX 2 (J1-9)	Low Pressure	Low-demand application
AUX 3 (J1-10)	Cold Water	Cold water solenoid valve
AUX 4 (J1-11)	Hot Water	Hot water solenoid valve

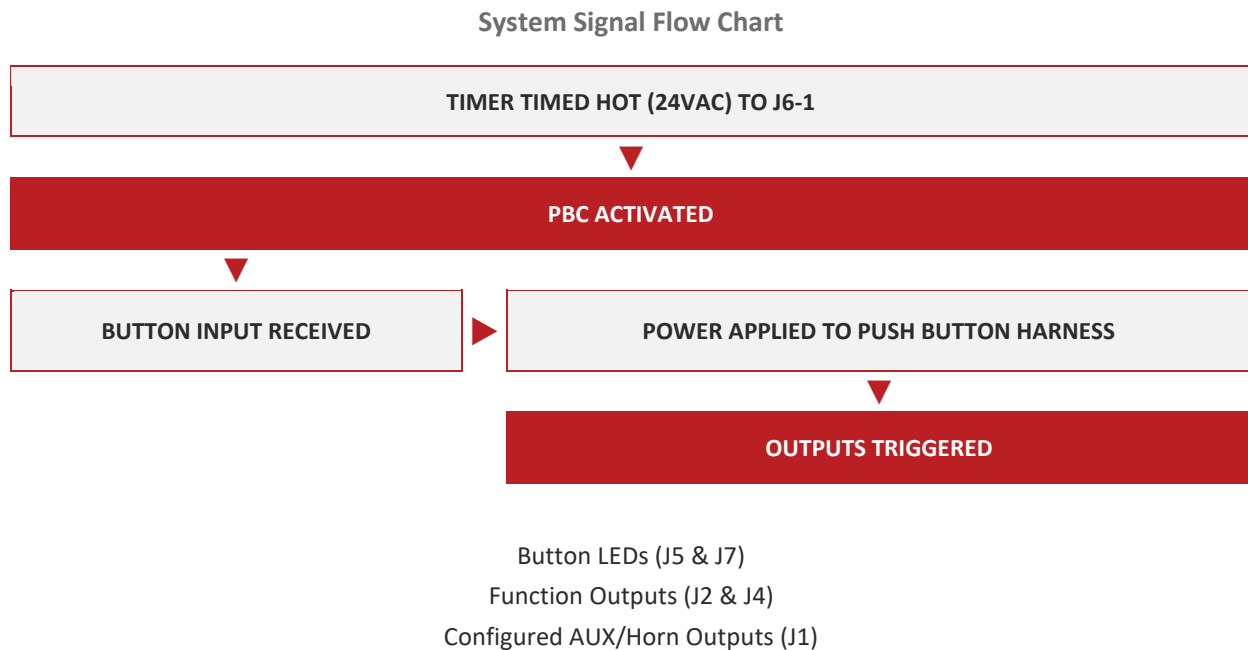
NOTE

These AUX outputs can be customized to activate with any combination of button selections.

SIGNAL & CONTROL FLOW

The PBC205 operates in series with the coinbox timer circuit. Here is how the control signal flows through the system:

1. **Activation:** The timer receives payment and energizes the timed hot wire, sending a **24vAC signal** to the **J6-1 (Timer Input)** pin on the controller.
2. **Ready State:** Once this 24vAC signal is received, the PBC becomes active and unlocks the front faceplate buttons.
3. **Selection:** When a user presses a button, that specific function circuit is latched (held on).
4. **Reset:** The selected circuit remains active until either a *different* button is pressed or the timer runs out of time.



HOW TO CONFIGURE THE AUX OUTPUTS

Customizing which auxiliary outputs trigger with each button selection is simple and does not require external programming tools.

1. **Enter Config Mode:** Press and hold the **Config** button for **3 seconds**.
2. **Select Function:** Press the button on the front faceplate that you want to program.
3. **View Current Config:** The controller will light up the LEDs for the AUX outputs currently mapped to that button.
4. **Toggle AUX Outputs:** Press the corresponding AUX buttons to toggle them **ON** or **OFF** for the selected function.
5. **Save & Exit:** Simply stop pressing buttons. Let the PBC "*time out*" (approximately 5–10 seconds of inactivity) to automatically save your changes and return to normal operation.

CONNECTOR REFERENCE & PINOUT

J3 POWER	
4	3
2	1

J6 BUTTON INPUTS					
24	23	...	14	13	
12	11	...	2	1	

J7 LED		
6	5	4
3	2	1

J5 LED OUTPUTS (A)					
18	17	...	11	10	
9	8	...	2	1	

J4 FUNCTION		
8	7	6
5	4	3

J2 FUNCTION (A)					
16	15	...	...	10	
9	8	...	...	1	

J1 AUX/HORN					
12	11	10	9	8	7
6	5	4	3	2	1

PIN DEFINITIONS

J3: Power Inputs (Connects to Bay Terminal Strip)

- **J3-1:** L1 24VAC +
- **J3-2:** L2 24VAC -
- **J3-3 & J3-4:** Ground

J1: Auxiliary / Horn Outputs (Connects to Bay Terminal Strip / Horn)

- **J1-1 through J1-6:** L2 24VAC - Function (Ground return legs)
- **J1-7:** Aux Output 0 (Default: Pump Run / High Pressure)
- **J1-8:** Aux Output 1 (Default: Medium Pressure)
- **J1-9:** Aux Output 2 (Default: Low Pressure)
- **J1-10:** Aux Output 3 (Default: Cold Water)
- **J1-11:** Aux Output 4 (Default: Hot Water)
- **J1-12:** Horn Output 24VAC +

J6: Button Inputs (Connects to Middle Terminal on Switch)

- **J6-1:** Timer Input (24VAC from Coinbox Timer)

J5 & J7: LED Outputs (Connects to (+) On Switch)

J2 & J4: Function Outputs (Connects to Bay Terminal Strip)

TECHNICAL TIP: SWITCH WIRING EXAMPLE

When wiring a switch (such as a **STOP Button**), refer to this typical terminal connection layout:

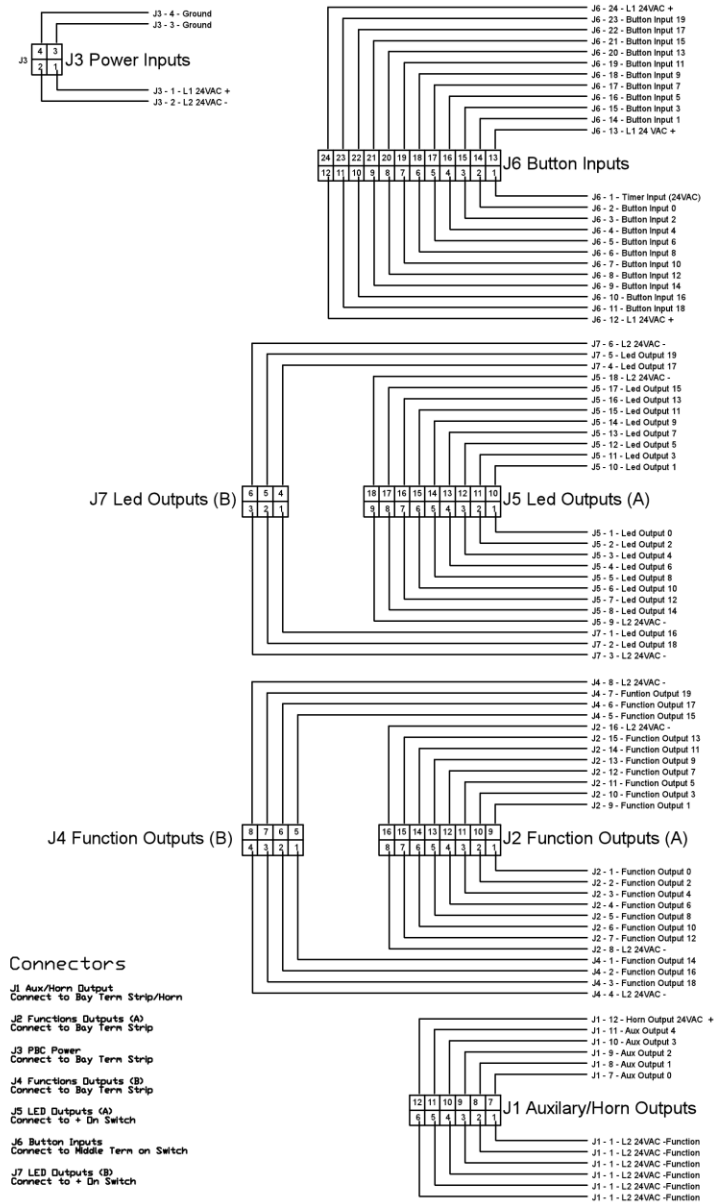
- **Button Input:** Connect **J6-2 (Button Input 0)** to the center/middle terminal of the switch.
- **LED Power (+):** Connect **J5-1 (LED Output 0)** to the positive LED terminal on the switch.
- **Common Power (+) feed:** J6-12 (L1 24VAC +)
- **Common Ground (-) feed:** J5-9 (L2 24VAC -)

I/O REDUNDANCY & FIELD RECOVERY

The PBC205 is built with substantial I/O headroom (up to **20 distinct functions/inputs/LEDs**), which is typically more than a standard coinbox requires.

- **Easy Field Fix:** If a specific terminal port (such as Function Output 2 on J2-2) fails or is damaged, you do not need to replace the controller.
- **Redirection:** Simply move the wire to any unused function terminal (e.g., Function Output 12 on J2-7) and relocate its corresponding Button Input (J6) and LED Output (J5/J7) to match the new channel.

APPENDIX: PBC 205 PIN-OUTS SCHEMATIC



PBC205
Push Button Controller