

Steps for Reprogramming PCO2 Boards with the Carel “Smart-Key”

When reprogramming the boards, both the master control and the slave boards will need to be programmed. No Remote Display is used with the “*Smart Key*”. No need to move dip switches with the “*Smart-Key*”.

Master Control

1. Record the system variables settings in the *System Variables* menu.
2. Record the PID Loop settings (*Mag-Lev Modules only, See Service Rep addendum for access*)

Master Control and Slave Board

3. Turn off power and remove the communication cable (J11) to the board being programmed.
4. Put “*Smart-Key*” device in the phone line socket (just to the left of J11) of the Carel Board.
5. Turn on power (do not hold or press any key’s beforehand). You should see the *green arrow* light on the key start blinking slowly. Wait until the *arrow* goes solid green and the *Start* button light’s up *green*.
6. Push the *Start* button.
7. The *arrow* should start blinking again slowly and gradually blink faster.
8. Wait until the *arrow* stay’s solid, the *Start* key lights back up, and you hear a beeping sound. This means the programming has completed.
9. Power down the Carel board (no need to push any buttons beforehand).
10. Remove the “*Smart-Key*” plug in the communication cable and repeat process to each board.

After Programming

Turn power on to the master control and all modules.

1. During the *12 second countdown* Push & hold the *Prg & Up* arrow keys simultaneously for 2 seconds. This will restore all Variables to factory settings.
2. Go to the *System Variables* menu and set variables to the previously recorded settings.
3. (*Mag Lev Modules only*) Go to *System Variables – Factory Setup*, enter password *O-B-R-U-T*. Set the PID loop settings to previous.

For PCOXS boards ONLY* (This is the small slave board that has a display and keys)

Set up the Slave Board Access

(The PCOxs does not have dip switches for address settings)

1. Shut off power to the board
2. Remove the communication plug at J11
3. While holding the *UP* and *ALARM* buttons simultaneously turn power on to board.
4. Hold until the following screen appears.

PLAN ADDRESS: 0
UP: INCREASE
DOWN: DECREASE
ENTER: SAVE & EXIT

5. Set each module to the appropriate address (1-8) using the *UP / DOWN* Keys.

Check Modbus Settings

1. Go to module 1 Status screen
2. Push Prg & Up arrow key. The following should display.
Baud 19200 Slave 001
Parity: none Poll: 01S
Stop bits:2