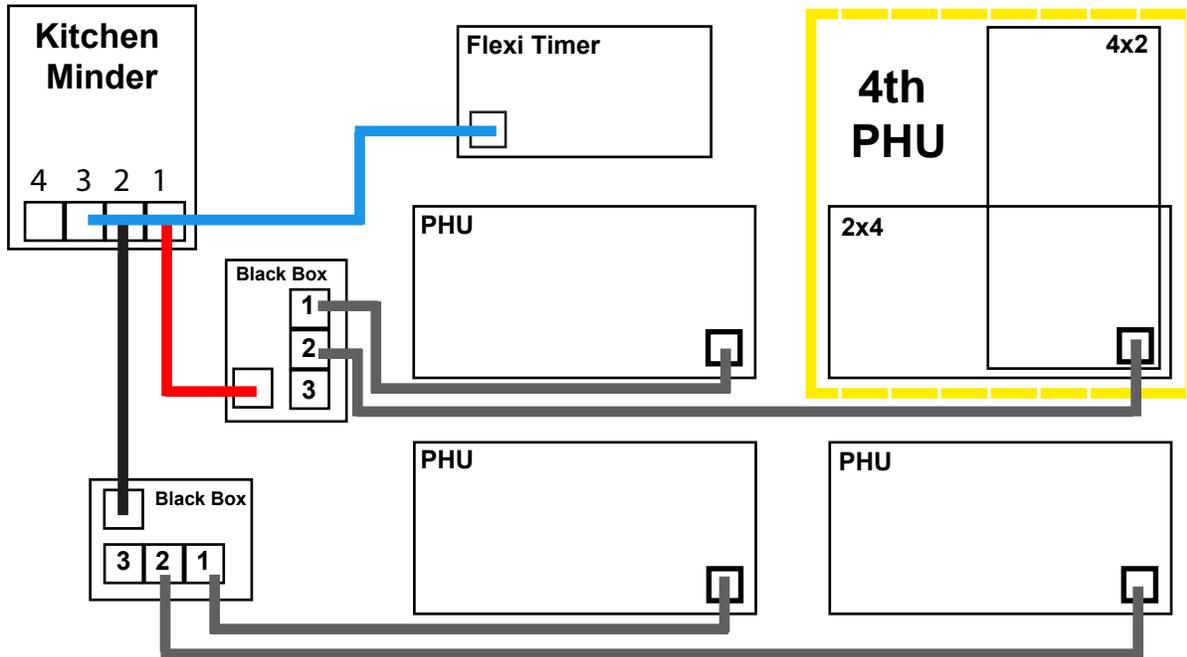


ADDING A 4TH PHU TO THE KITCHEN MINDER™ SYSTEM

OPTION #1 – New Duke PHU with ICC Timer Bars to Existing Duke/ICC units

NOTE – There are two types of PHUs available from Duke. PRIMARY PHUs include an ICC “black box” and have multiple connection ports on the back of the unit. SECONDARY PHUs do not include an ICC “black box”, and have only one connection port on the back of the unit. The schematic below is for use with a new Duke SECONDARY unit. If you have received a PRIMARY unit, see the instructions in the text box for adding this unit to your system.



Make Connections (SECONDARY PHU)

1. Locate the 96" 6-conductor data cable (grey) supplied with your new Duke SECONDARY PHU. Replacement cable is available from Duke or ICC if needed.
2. Connect one end of cable to the back of the new SECONDARY PHU.
3. For external black boxes, connect the other end of the cable to a free port on the ICC black box. For internal black boxes, connect the other end of the data cable to a free port on the back of the PRIMARY PHU.

Make Connections (PRIMARY PHU)

1. Open the side panel of the PHU to access the black box. DISCONNECT the small rounded plug that supplies power to the black box. YOU WILL NOT RECONNECT THIS PLUG, as the unit will be powered by the CAT5 cable (step 2).
2. Connect one end of a CAT5 cable (can be purchased locally) to the back of the new PHU.
3. Route the CAT5 cable to the back of the KITCHEN MINDER and connect the other end to the open COM 3 port.
4. If the COM 3 port is already in use on the KITCHEN MINDER, the new PHU will need to be converted to a SECONDARY PHU, which involves bypassing the black box inside the unit. Contact ICC tech support if you are unsure of this procedure.

Check Connections

1. On the KITCHEN MINDER, perform the Product Location Test (see ATTACHMENT #1) to check for proper connections. Note the PHU # for product assignment in PC MINDER™. PHU #s used in the PC MINDER software are assigned as follows:

KITCHEN MINDER Com 1, Black Box Port 1,2,3 = PHU 1,2,3 on PC MINDER PHU screen
KITCHEN MINDER Com 2, Black Box Port 1,2,3 = PHU 4,5,6 on PC MINDER PHU screen
KITCHEN MINDER Com 3, Black Box Port 1,2,3 = PHU 7,8,9 on PC MINDER PHU screen

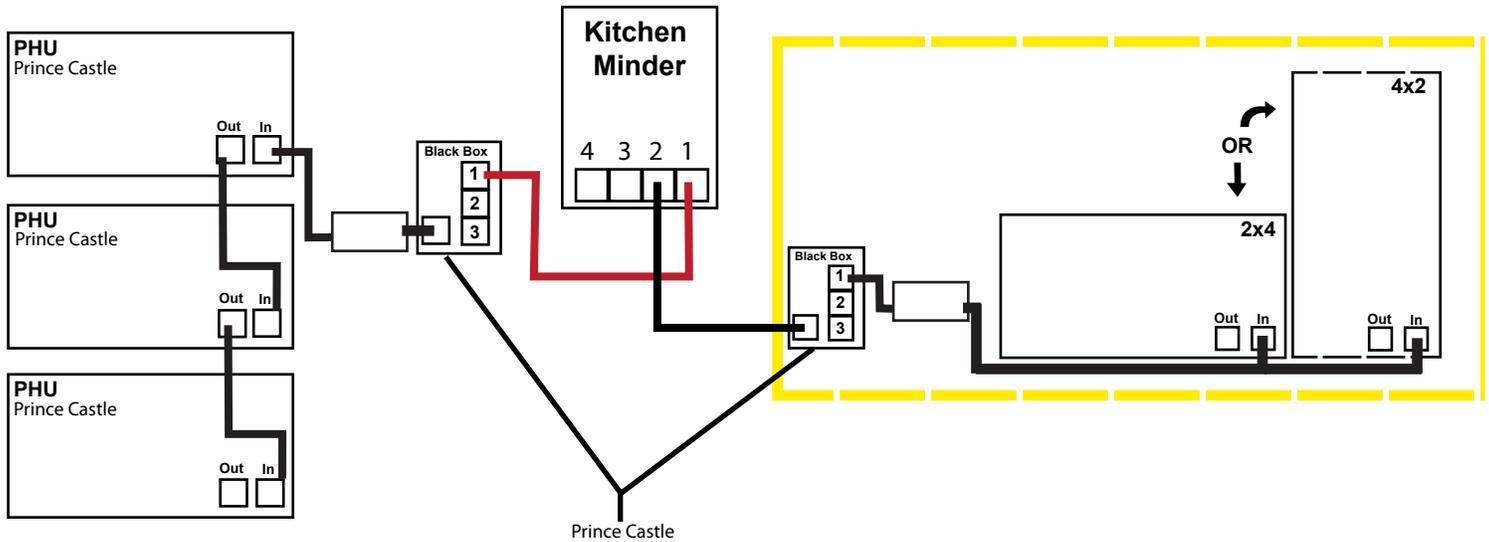
Product Assignment

1. Assign product names to the new PHU in the PC MINDER program using the noted new PHU number.
2. Transfer the data to the KITCHEN MINDER using the Send Data function in PC MINDER and check for proper operation.

ADDING A 4TH PHU TO THE KITCHEN MINDER™ SYSTEM

OPTION #2 – New Prince Castle PHU/Timer Bars to Existing Prince Castle PHU/Timer Bars

NOTE – Connecting a Prince Castle PHU/Timer Bar to the KITCHEN MINDER system requires a Prince Castle Translator Kit (part number 990195-70) which is available from ICC free of charge. Also required is a CAT5 cable that will extend from the Prince Castle Translator Box to the KITCHEN MINDER, which can also be purchased from ICC or obtained locally.



Make Connections

1. Locate the Prince Castle Translator Kit (PN 990195-70) and CAT5 cable.
2. Connect one end of the CAT5 cable to COM2 or another free COM port (1-3) on the KITCHEN MINDER.
3. Connect the other end of the CAT5 cable to the KITCHEN MINDER port on the Prince Castle Translator Box (980195-70).
4. Connect the Level Shifter Adaptor (980830) to the Warmer 1 port of the Prince Castle Translator Box. Note the label on the Level Shifter Adaptor to ensure the proper end is connected to the Prince Castle Translator Box!
5. Connect the 96" data cable (grey) included with your Prince Castle Translator Kit to the "IN" port of the new PHU. Connect the other end of this cable to the Level Shifter Adaptor.
6. Check (and change if needed) the Prince Castle timer bar and bin addresses using the instructions provided with this document. Following the schematic above, you must set the bin number to 2, and the timer bar address to 2.

(See ATTACHMENT #2 to complete this task).

Check Connections

1. On the KITCHEN MINDER, perform the Product Location Test (see ATTACHMENT #1) to check for proper connections. Note the PHU # for product assignment in PC MINDER™. PHU #s used in the PC MINDER software are assigned as follows:

KITCHEN MINDER Com 1, Prince Castle Translator Box Port 1, Bar Address 2,3,4 = PHU 1,2,3 on PC MINDER PHU screen
KITCHEN MINDER Com 2, Prince Castle Translator Box Port 1, Bar Address 2,3,4 = PHU 4,5,6 on PC MINDER PHU screen
KITCHEN MINDER Com 3, Prince Castle Translator Box Port 1, Bar Address 2,3,4 = PHU 7,8,9 on PC MINDER PHU screen

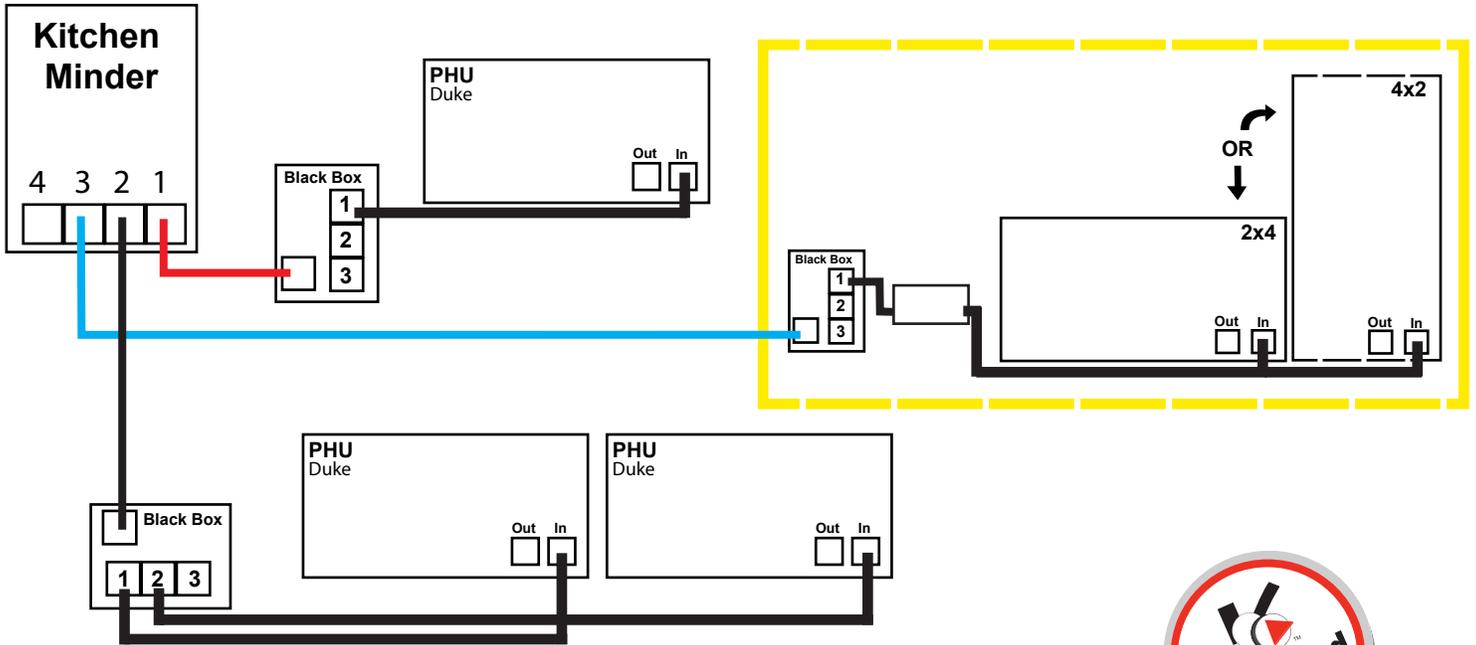
Product Assignment

1. Assign product names to the new PHU in the PC MINDER program using the noted new PHU number.
2. Transfer the data to the KITCHEN MINDER using the Send Data function in PC MINDER and check for proper operation.

ADDING A 4TH PHU TO THE KITCHEN MINDER™ SYSTEM

OPTION #3 – New Prince Castle PHU/Timer Bars to Existing Duke PHU/ICC Timer Bars

NOTE – Connecting a Prince Castle PHU/Timer Bar to the KITCHEN MINDER system requires a Prince Castle Translator Kit (part number 990195-70) which is available from ICC free of charge. Also required is a CAT5 cable that will extend from the Prince Castle Translator Box to the KITCHEN MINDER, which can also be purchased from ICC or obtained locally.



Make Connections

1. Locate the Prince Castle Translator Kit (PN 990195-70) and CAT5 cable.
2. Connect one end of the CAT5 cable to COM3 or another free COM port (1-3) on the KITCHEN MINDER.
3. Connect the other end of the CAT5 cable to the KITCHEN MINDER port on the Prince Castle Translator Box (980195-70).
4. Connect the Level Shifter Adaptor (980830) to the Warmer 1 port of the Prince Castle Translator Box. Note the label on the Level Shifter Adaptor to ensure the proper end is connected to the Prince Castle Translator Box!
5. Connect the 96" data cable (grey) included with your Prince Castle Translator Kit to the "IN" port of the new PHU. Connect the other end of this cable to the Level Shifter Adaptor.
6. Check (and change if needed) the Prince Castle timer bar and bin addresses using the instructions provided with this document. Following the schematic above, you must set the bin number to 2, and the timer bar address to 2. (See **ATTACHMENT #2 to complete this task**).

Check Connections

1. On the KITCHEN MINDER, perform the Product Location Test (see **ATTACHMENT #1**) to check for proper connections. Note the PHU # for product assignment in PC MINDER™. PHU #s used in the PC MINDER software are assigned as follows:

KITCHEN MINDER Com 1, Prince Castle Translator Box Port 1, Bar Address 2,3,4 = PHU 1,2,3 on PC MINDER PHU screen
KITCHEN MINDER Com 2, Prince Castle Translator Box Port 1, Bar Address 2,3,4 = PHU 4,5,6 on PC MINDER PHU screen
KITCHEN MINDER Com 3, Prince Castle Translator Box Port 1, Bar Address 2,3,4 = PHU 7,8,9 on PC MINDER PHU screen

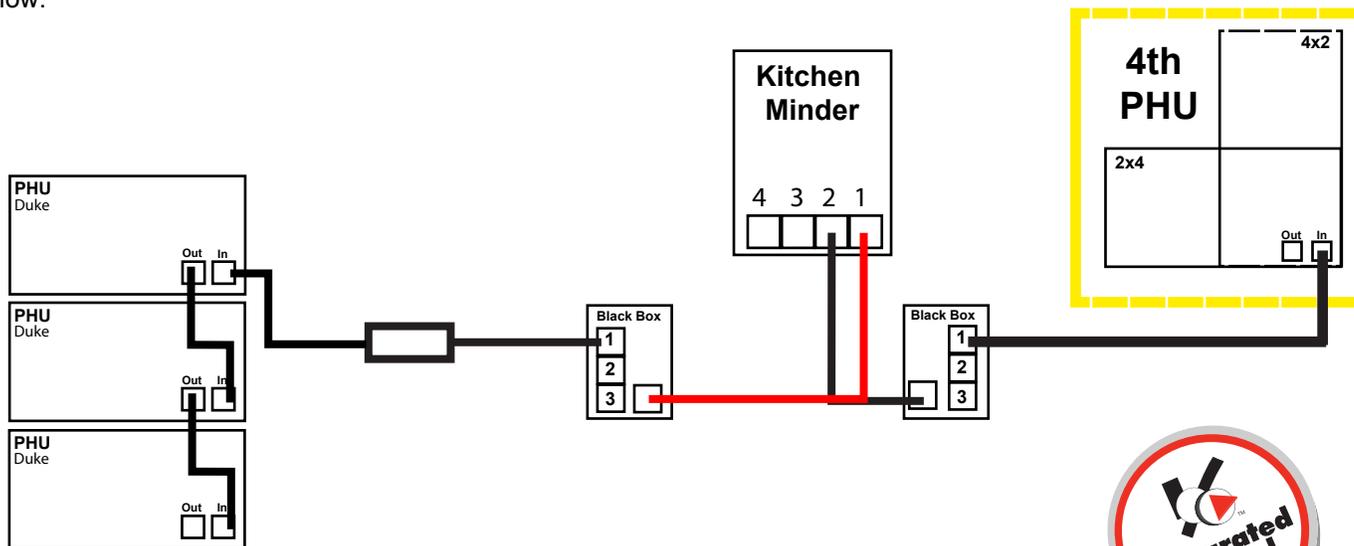
Product Assignment

1. Assign product names to the new PHU in the PC MINDER program using the noted new PHU number.
2. Transfer the data to the KITCHEN MINDER using the Send Data function in PC MINDER and check for proper operation.

ADDING A 4TH PHU TO THE KITCHEN MINDER™ SYSTEM

OPTION #4 – New Duke PHU/ICC Timer Bars to Existing Prince Castle PHU/Timer Bars

NOTE – There are two types of PHUs available from Duke. PRIMARY PHUs include an ICC “black box” and have multiple connection ports on the back of the unit. SECONDARY PHUs do not include an ICC “black box”, and have only one connection port on the back of the unit. In order to connect a Duke PHU with ICC Timer Bars to the KITCHEN MINDER system with existing Prince Castle PHUs, you MUST add a PRIMARY Duke PHU to the system. If you have ordered and received a SECONDARY Duke PHU, you will need to purchase an ICC black box (part number 980195) from ICC to successfully complete the installation. Contact ICC directly should you need further ordering or installation instructions. The schematic below represents a SECONDARY PHU with an added ICC black box. For adding a PRIMARY PHU, see the text instructions below.



Make Connections (PRIMARY PHU)

1. Open the side panel of the PHU to access the black box. DISCONNECT the small rounded plug that supplies power to the black box. YOU WILL NOT RECONNECT THIS PLUG, as the unit will be powered by the CAT5 cable (step 2).
2. Connect one end of a CAT5 cable (can be purchased locally or through ICC) to the back of the new PHU.
3. Route the CAT5 cable to the back of the KITCHEN MINDER and connect the other end to the COM 2 port or another free COM port (1-3) on the KITCHEN MINDER.

Make Connections (SECONDARY PHU)

1. Mount the ICC black box (PN 980195) near the newly added Duke PHU.
1. Locate the 96" 6-conductor data cable (grey) supplied with your new Duke SECONDARY PHU. Replacement cable is available from Duke or ICC if needed.
2. Connect one end of cable to the back of the new SECONDARY PHU.
3. Connect the other end of the cable to the Warmer 1 port on the ICC black box.
4. Connect one end of a CAT5 cable (can be purchased locally or through ICC) to the ICC black box.
5. Route the other end of the CAT5 cable to the back of the KITCHEN MINDER, and connect to the COM2 (or other available COM port (1-3)).

Check Connections

1. On the KITCHEN MINDER, perform the Product Location Test (see ATTACHMENT #1) to check for proper connections. Note the PHU # for product assignment in PC MINDER™. PHU #s used in the PC MINDER software are assigned as follows:

PRINCE CASTLE TIMER BARS

KM Com 1, PC Translator Box Port 1, Bar Address 2,3,4 = PHU 1,2,3
KM Com 2, PC Translator Box Port 1, Bar Address 2,3,4 = PHU 4,5,6
KM Com 3, PC Translator Box Port 1, Bar Address 2,3,4 = PHU 7,8,9

ICC TIMER BARS

KM Com 1, Black Box Port 1,2,3 = PHU 1,2,3
KM Com 2, Black Box Port 1,2,3 = PHU 4,5,6
KM Com 3, Black Box Port 1,2,3 = PHU 7,8,9

Product Assignment

1. Assign product names to the new PHU in the PC MINDER program using the noted new PHU number.
2. Transfer the data to the KITCHEN MINDER using the Send Data function in PC MINDER and check for proper operation.

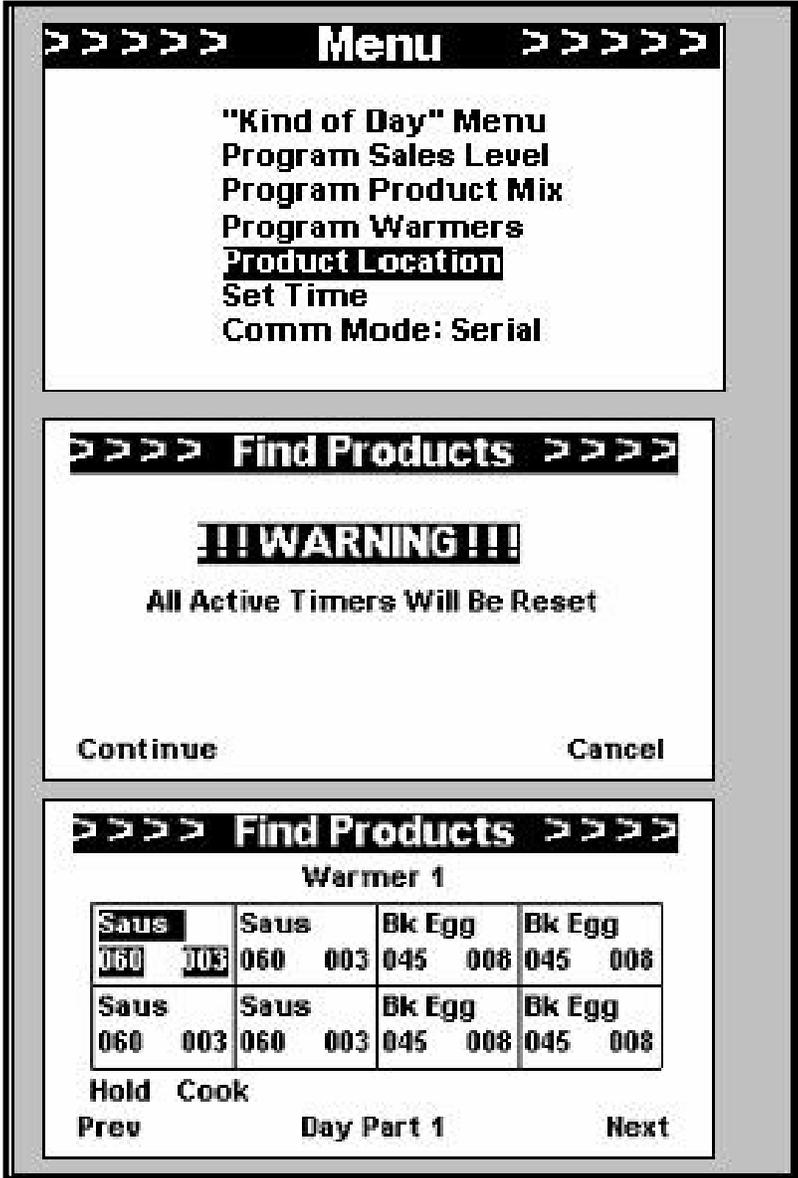


ATTACHMENT #1

KITCHEN MINDER™ Product Location Test

The Product Location Test is performed on the KITCHEN MINDER to determine the PHU number for each PHU in the kitchen. PHU numbers are used in the PC MINDER™ software to assign products to specific PHU pans. The Product Location Test is also frequently used to troubleshoot the KITCHEN MINDER system, as it will identify any potential communication issues between the KITCHEN MINDER and each PHU. To conduct the Product Location Test, follow the steps outlined below:

1. Press the “Menu” key on the KITCHEN MINDER
2. Use the “Arrow Down” key to highlight Product Location (See Photo at right).
3. Press the “Select” key on the KITCHEN MINDER



4. Screen will display the “Warning” message (see photo). This message refers to ONLY the current holding times for products that are now being held. No other programming in the KITCHEN MINDER or PC MINDER will be lost
5. Select the left “Function” key to continue

6. PHU (warmer) #1 is displayed. Timer bar on the PHU designated as PHU #1 will display one red light. Make a note of which PHU is #1 (or if there is no PHU #1), then continue.
7. Select the right “Function” key to move to the next PHU #
8. Continue until all PHU #s have been identified

Additional Tips

- A. For vertical or other non-traditional PHUs, you may use the “Select” key while reviewing a PHU to move from one pan to another. This can be helpful in identifying how the non-traditional PHU is displayed in PC MINDER, which will make assigning products easier!
- B. It is important to remember to view the PHU from the FRONT (where the on/off switch is located) when performing this test and assigning products in PC MINDER. If the red light illuminates on the RIGHT side of the timer bar during the Product Location Test. The PHU is being viewed from the back

ATTACHMENT #2

Programming the PRINCE CASTLE Timer Bar

To use a Prince Castle PHU/Timer Bar with the KITCHEN MINDER™, you must ensure the bin address and timer bar address are set properly. Note that if your new PHU has timer bars on the front and back, you will only set the bar address on the FRONT side of the PHU.

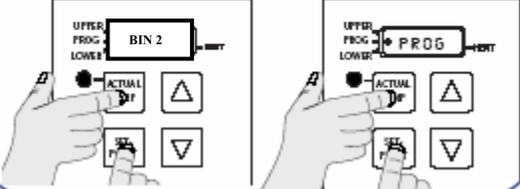
IMPORTANT! Prince Castle VERTICAL PHUs act as TWO, four-pan PHUs when functioning with the KITCHEN MINDER system. Therefore, you will need to program the TOP 4 PANS of the unit as one PHU in PC MINDER™, and the BOTTOM 4 PANS as a separate PHU in PC MINDER. Use the Product Location Test on the KITCHEN MINDER to determine which PHU numbers to use.

Setting the BIN Address

1

A. Turn the power switch off, wait 15 seconds. Turn the switch to ON while pressing and holding the ACTUAL and SET-POINT buttons. The display will show the current bin address.

B. Continue to hold the buttons until PROG LED turns on.

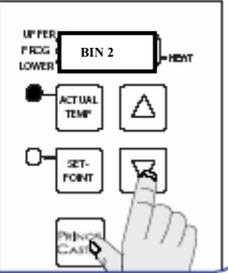


2

Use the UP or DOWN Arrow buttons to scroll to the desired address. Press the PRINCE CASTLE LOGO Button to store the new address.

IMPORTANT! The bin address MUST be set to 2 to function properly!

Continue to the next section to set the timer bar address.



Setting the TIMER BAR Address

1

To check the timer address, press and hold the PRINCE CASTLE LOGO button and the DOWN Arrow button. The current timer address will be displayed in the far right timer display.

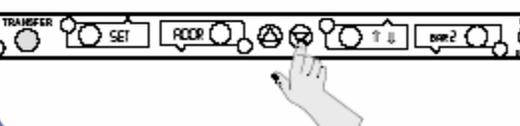
To change the current address, continue to next step



2

To change the timer address, turn the unit power switch off and wait 15 seconds. Turn the power switch back on and immediately press and hold the PRINCE CASTLE LOGO button and the DOWN Arrow button for approximately 6 seconds or until the display shows SET ADDR ↑ ↓ ADDR 2

The address number will blink on/off.



3

Use the UP or DOWN Arrow button to scroll to the desired address. Press the MENU/ENTER button to store the new address and return to normal operating mode.

Available addresses are:
BR1 thru BR9, BRF, BRB, BRD, BRE and BRF.



!!

NOTE – When adding a Prince Castle PHU to a new Prince Castle Translator Box or to a new COM port on the Kitchen Minder, you must set the FRONT timer bar on the new PHU to BIN 2, and ADDRESS 2!