Overview of Alphanumeric 3Hx4W Timer Bars and Control
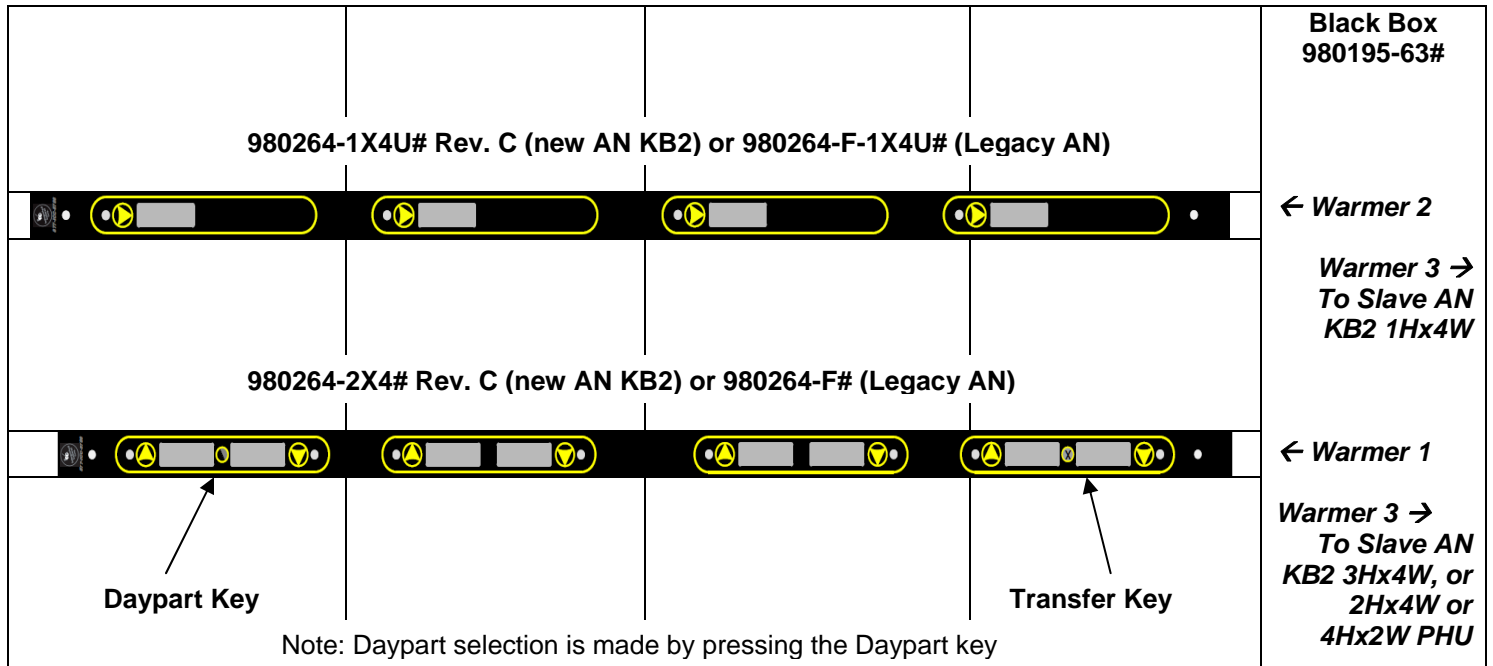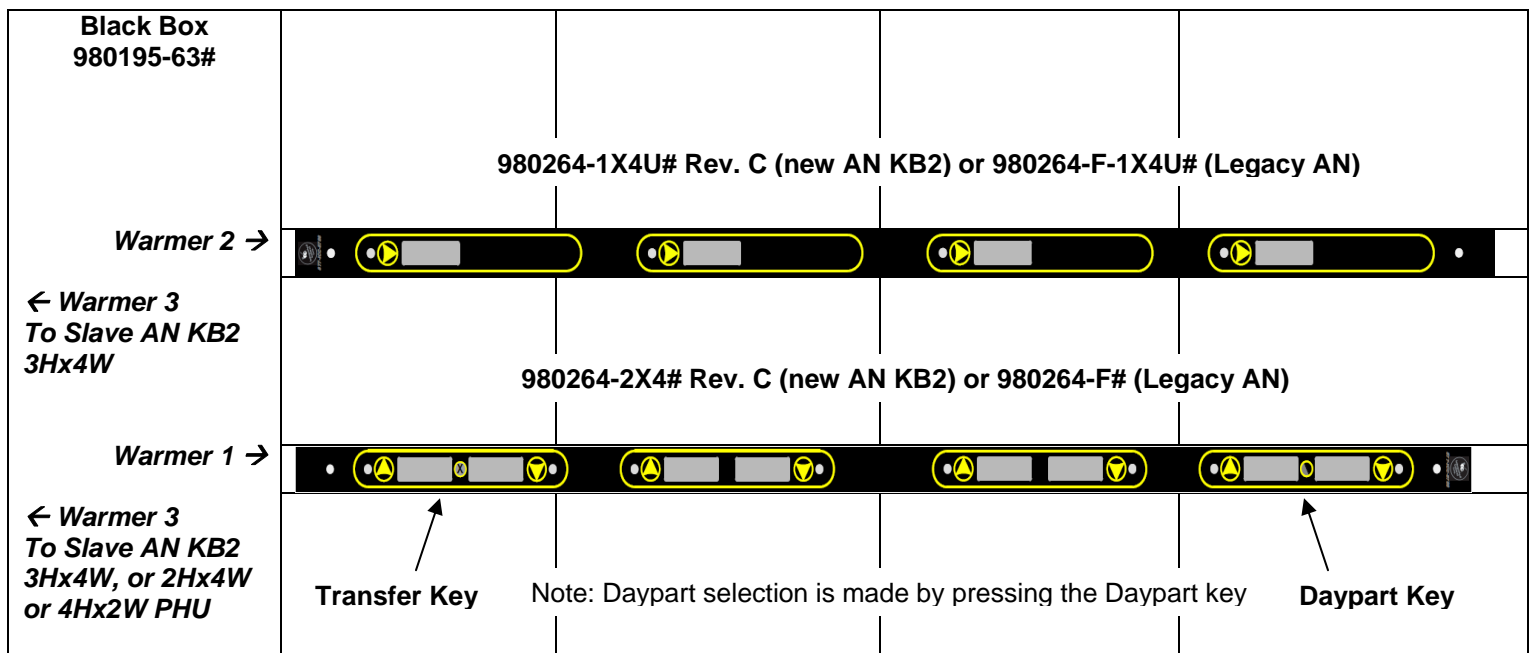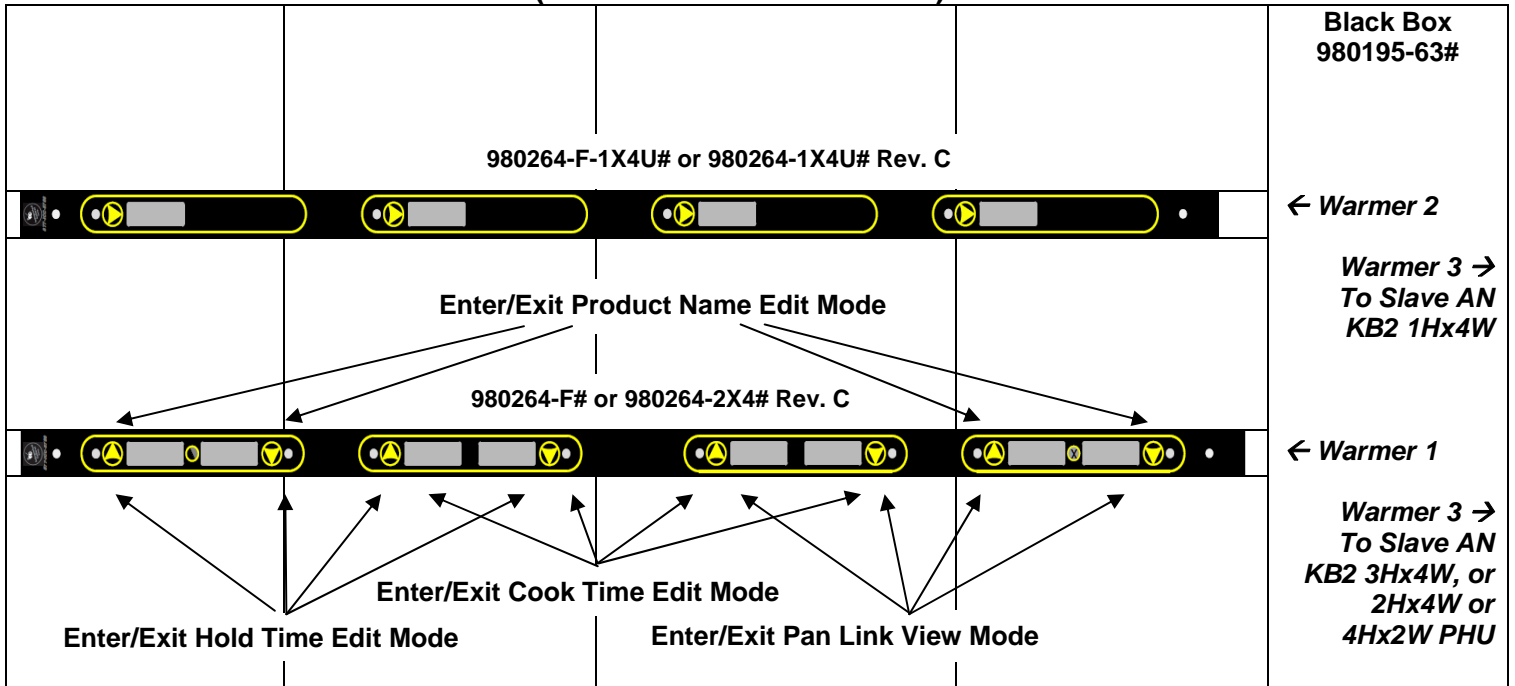## Front view of Main 3Hx4W PHU with Alphanumeric Timer Bars and Control

Black Box 980195-63#

980264-1X4U# Rev. C (new AN KB2) or 980264-F-1X4U# (Legacy AN)

← *Warmer 2*

Warmer 3 →
To Slave AN KB2 1Hx4W

980264-2X4# Rev. C (new AN KB2) or 980264-F# (Legacy AN)

← *Warmer 1*

Warmer 3 →
To Slave AN KB2 3Hx4W, or 2Hx4W or 4Hx2W PHU

Daypart Key

Transfer Key

Note: Daypart selection is made by pressing the Daypart key

Back view of Main 3Hx4W PHU with Alphanumeric Timer Bars and Control

Black Box 980195-63#

980264-1X4U# Rev. C (new AN KB2) or 980264-F-1X4U# (Legacy AN)

Warmer 2 →

← *Warmer 3 To Slave AN KB2 3Hx4W*

980264-2X4# Rev. C (new AN KB2) or 980264-F# (Legacy AN)

Warmer 1 →

← *Warmer 3 To Slave AN KB2 3Hx4W, or 2Hx4W or 4Hx2W PHU*

Transfer Key

Note: Daypart selection is made by pressing the Daypart key

Daypart Key

Black Box 980195-63#

980264-F-1X4U# or 980264-1X4U# Rev. C

← *Warmer 2*

Warmer 3 →
To Slave AN
KB2 1Hx4W

Enter/Exit Product Name Edit Mode

980264-F# or 980264-2X4# Rev. C

← *Warmer 1*

Warmer 3 →
To Slave AN
KB2 3Hx4W, or
2Hx4W or
4Hx2W PHU

Enter/Exit Cook Time Edit Mode

Enter/Exit Hold Time Edit Mode   **Enter/Exit Pan Link View Mode**

Numbers in pan wells indicate the order of pan selection in manual programming modes.

Black Box 980195-63#

| 9 | 10 | 11 | 12 |

← *Warmer 2*

980264-F-1X4U# or 980264-1X4U# Rev. C

Warmer 3 →
To Slave AN
KB2 1Hx4W

| 1 | 3 | 5 | 7 |

← *Warmer 1*

980264-F# or 980264-2X4# Rev. C

Warmer 3 →
To Slave AN
KB2 3Hx4W, or
2Hx4W or
4Hx2W PHU

| 2 | 4 | 6 | 8 |

Pan Select   Advance Cursor   **Increment   Decrement**

Numbers in pan wells indicate the order of pan selection in manual programming modes.

Warning – Do not unplug or plug Timer bars from the Black Boxes or Power Supply Boxes. This will cause damage to the units!

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Hold Time Programming for current Daypart

Programming should be performed on the front side of the warmer.

1. *Enter Hold Time* programming by pressing the **4 leftmost UP & DOWN** keys simultaneously.

2. The **left LED** will turn **FLASHING RED**, indicating that the programming function is activated, and the alphanumeric display for each pan will show its current *Hold Time* in minutes.

3. In addition to the times shown in the alphanumeric displays, the **GREEN**, **RED** and **YELLOW LED's** represent the *Hold Time*. Add the values of each color to calculate the *Hold Time* of the **RED LED** currently flashing.

   > Green = 5 minutes
   > Yellow = 20 minutes
   > Red = 60 minutes (excluding the **FLASHING RED** light that indicates the current pan)
   > Green Flashing = 30 minutes
   > Yellow Flashing = 120 minutes

4. **Increase** *Hold Time* by pressing the **rightmost UP** arrow key.

5. **Decrease** *Hold Time* by pressing the **rightmost DOWN** arrow key.

6. *Hold Time* may be set in 5 minute increments from 5 to 120 minutes and 30 minute increments from 120 to 660 minutes (11 hours).

7. Press the **leftmost UP** key to move the **FLASHING RED LED** to the next pan to program.

8. *Save* and *Exit Hold Time* programming by pressing the **4 leftmost UP & DOWN** keys simultaneously.

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Cook Time Programming for current Daypart

Programming should be performed on the front side of the warmer.

1. *Enter Cook Time* programming by pressing the **4 center UP & DOWN** keys simultaneously.

2. The **leftmost LED** will turn **FLASHING RED**, indicating that the programming function is activated, and the alphanumeric display for each pan will show its current *Cook Time* in minutes.

3. In addition to the times shown in the alphanumeric displays, the **GREEN**, **RED** and **YELLOW LED's** represent the *Cook Time*. Add the values of each color in the section to calculate the *Cook Time* of the **RED LED** currently flashing.

   > Green = 5 minutes
   > Yellow = 20 minutes
   > Red = 60 minutes (excluding the **FLASHING RED** light that indicates the current pan)
   > Green Flashing = 30 minutes
   > Yellow Flashing = 120 minutes

4. **Increase** *Cook Time* by pressing the **rightmost UP** arrow key.

5. **Decrease** *Cook Time* by pressing the **rightmost DOWN** arrow key.

6. *Cook Time* may be set in 1 minute increments from 1 to 10 minutes, 5 minute increments from 10 to 120 minutes and 30 minute increments from 120 to 660 minutes (11 hours).

7. Press the **leftmost UP** key to move the **FLASHING RED LED** to the next pan to program.

8. *Save* and *Exit Cook Time* programming by pressing **the 4 center UP & DOWN** keys simultaneously.

Note: Do not program the *Cook Time* **with a value greater than the** *Hold Time***.**

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Product Name Programming for current Daypart

Programming should be performed on the front side of the warmer.

1. *Enter Product Name* programming by pressing the **2 leftmost UP & DOWN** keys and **the 2 rightmost UP & DOWN** keys simultaneously.

2. The **leftmost LED** will turn **RED**, indicating that the programming function is activated, and the **leftmost** display of the keyboard shows the current 4-character product name with its leftmost character blinking. This indicates you are programming PAN 1 and the blinking character indicates the current cursor position within the 4-character NAME.

3. To advance the cursor within the current name, press the 2nd button from the left (the leftmost **DOWN** key) on the keyboard.

4. To change the character at the current cursor position, press the **rightmost** button (Down Arrow) on the keyboard to change to the preceding character value and the **2nd button** from the right (Up Arrow) to change to the next character value from the following list:

```
<space>!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz
```

5. Press the leftmost UP key to move the RED LED to the next pan to program.

6. *Save* and *Exit* Product Name programming by pressing the **2 leftmost UP & DOWN** keys and the **2 rightmost UP & DOWN** keys simultaneously. *It is recommended that you press and hold the leftmost pair of pan buttons first to avoid inadvertent character changes when pressing the rightmost pair.*

Note: *You should check your PANS LINKED configuration after editing product NAMES to assure they are linked as desired.*

Pan Link Viewing for current Daypart

Pan linkage for alphanumeric timer bars and controls is determined exclusively from the 4-character product name. Pans are linked if and only if their product names are the same.

Viewing should be performed on the front side of the warmer.

1. Enter *Link Programming* by simultaneously pressing the **4 rightmost UP & DOWN** keys.

2. The **leftmost LED** will turn **RED**, indicating that the programming function is activated.

3. All **LEDs** that are **GREEN** indicate the pans that are linked to the **RED LED**.

4. Press the **leftmost UP** key to move the **RED LED** to the next pan to link.

5. To exit *Link Programming*, press the **4 rightmost UP & DOWN** keys.

Stand-Alone and Kitchen Minder Modes

The Factory Default is Stand-Alone Mode.
Stand-Alone mode: The Black Box will not seek a signal from a Kitchen Minder

Once a Kitchen Minder is attached, the Black Box is automatically changed to Kitchen Minder Mode. If the Black Box loses communication with the Kitchen Minder (cable unplugged, Kitchen Minder is powered off) after 30 seconds, the Timer Bar displays "NoKM" on all the modules until communication is reestablished and at that time the programmed products are redisplayed. If power to the Black Box is reset and there is no communication to the Kitchen Minder, after 3-5 min "NoKM" will be displayed on all modules.

To temporarily override the "NoKM" error message, simply press the Daypart key once.

To permanently reset the Black Box to Stand-Alone mode, power off the Black Box, then simultaneously press the Daypart Key while powering up the Black Box.
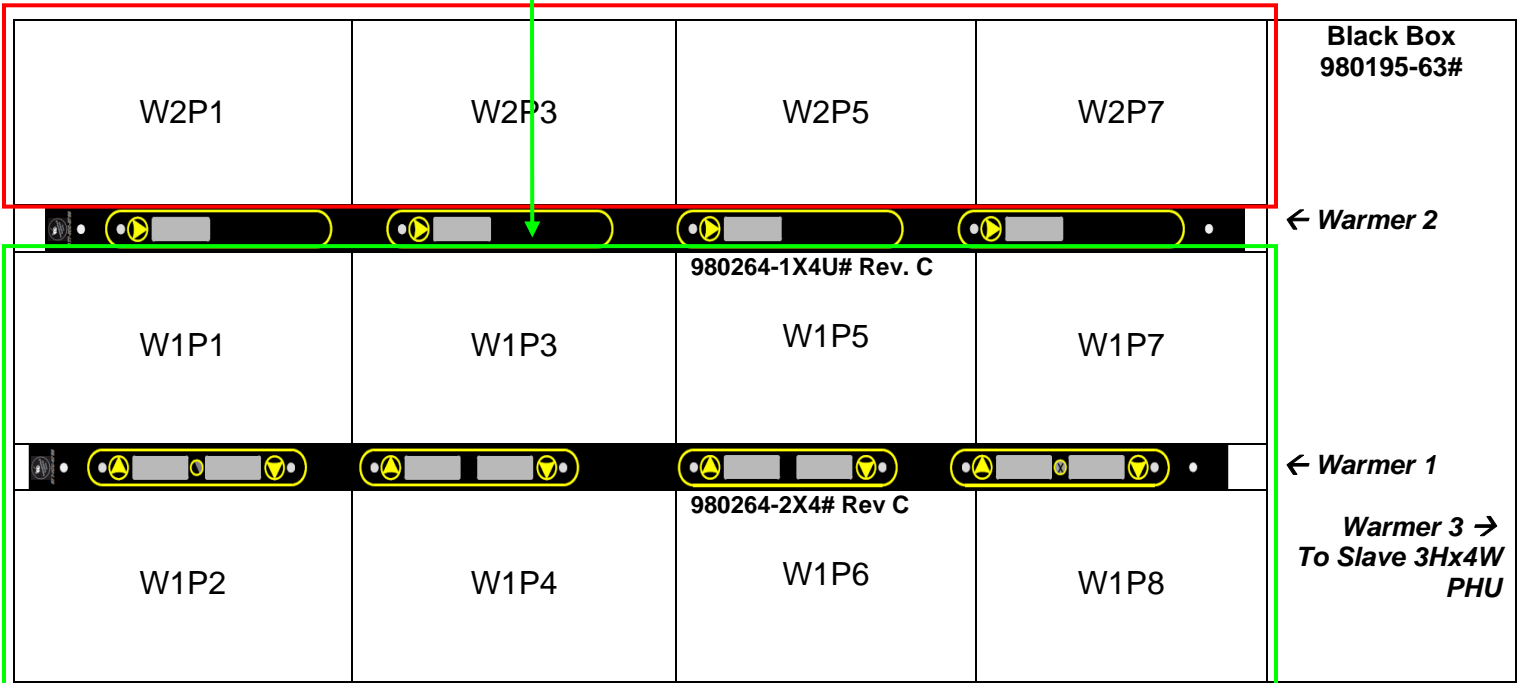
Kitchen Minder Mode Programming

When in Kitchen Minder Mode, the user loses any manual programming abilities.

Ideally, programming the Black Box when in Kitchen Minder Mode is done through PC Minder, though it can be done via the Kitchen Minder console. To program the Pans properly, it is important to understand how the Black Box interprets a 3x4 configuration.
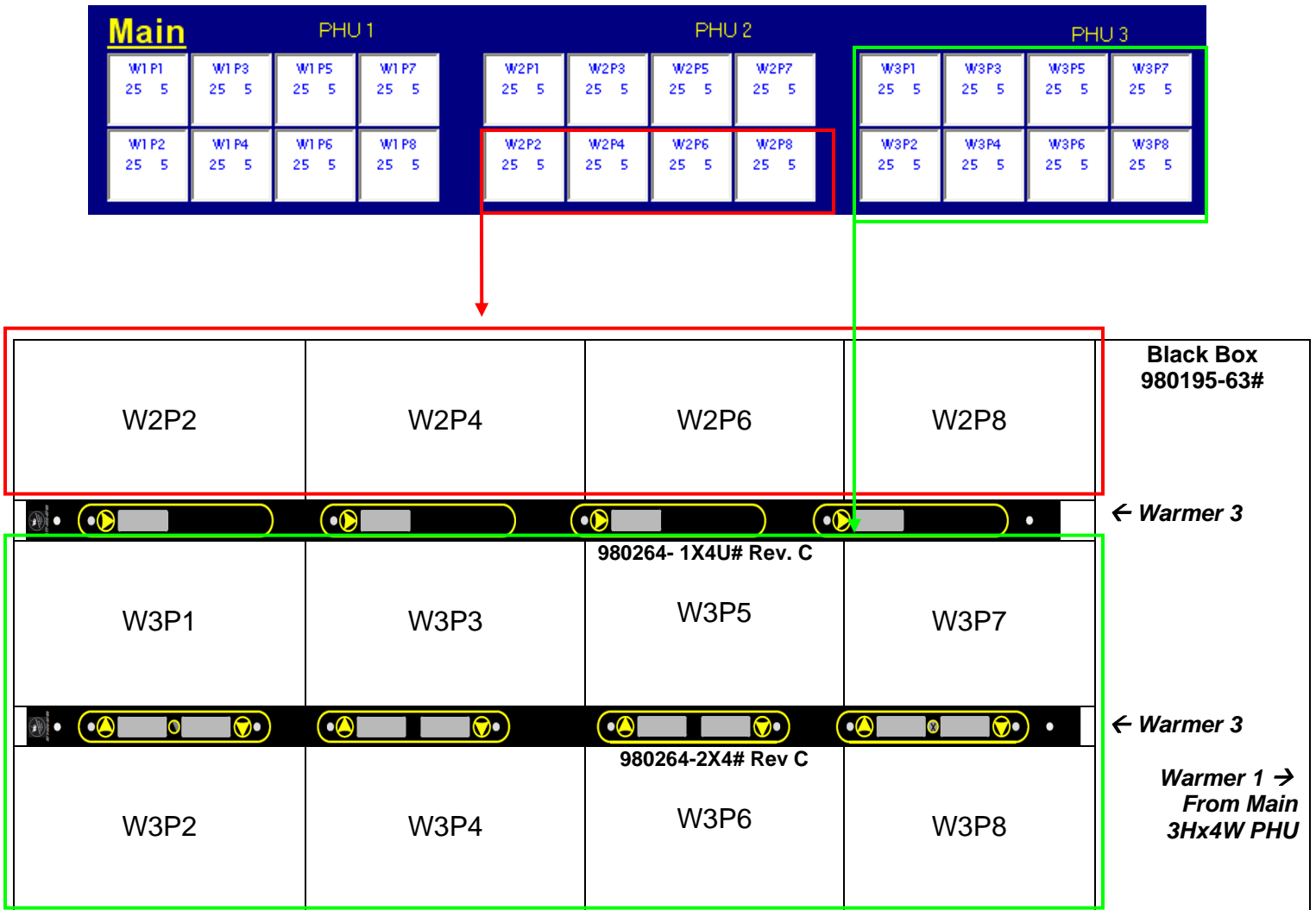
Main (PHU1) 3H x 4W Programming

Main (PHU1) 3H x 4W PHU on Warmer Port 1 – Front View

Secondary (PHU2) 3H x 4W Programming

Main	PHU 1					PHU 2				PHU 3			
	W1P1 25 5	W1P3 25 5	W1P5 25 5	W1P7 25 5		W2P1 25 5	W2P3 25 5	W2P5 25 5	W2P7 25 5	W3P1 25 5	W3P3 25 5	W3P5 25 5	W3P7 25 5
	W1P2 25 5	W1P4 25 5	W1P6 25 5	W1P8 25 5		W2P2 25 5	W2P4 25 5	W2P6 25 5	W2P8 25 5	W3P2 25 5	W3P4 25 5	W3P6 25 5	W3P8 25 5

W2P2	W2P4	W2P6	W2P8	**Black Box 980195-63#**

← *Warmer 3*

980264- 1X4U# Rev. C

W3P1	W3P3	W3P5	W3P7	

← *Warmer 3*

980264-2X4# Rev C

W3P2	W3P4	W3P6	W3P8	*Warmer 1 → From Main 3Hx4W PHU*

Secondary (PHU2) 3H x 4W PHU on Warmer Port 3 – Front View

Special Dual 3x4 PHU Manual Editing Considerations

Since the 3x4 AN KB2 UBB supporting these PHU's usually will be connected to a Kitchen Minder, manual editing should be an infrequent occurrence.

When required, manual editing (a) should be performed for **one PHU at a time** and (b) should be performed *while standing in front of the warmer to be programmed*.

Manual editing for 3x4 PHU's is performed in the same manner as for 2Hx4W and 4Hx2W PHUs, but with some special considerations regarding editing for the upper four pans as described below.

Generally, advancing pans on one PHU will also advance pans on the other PHU. The selected pan's LED will be RED.

However, when advancing pans to the uppermost 4 pans on a 3x4 PHU will only select (and illuminate the LED for) the next pan on the PHU whose pan selection key was pressed. On the other PHU, no pan's LED will be illuminated RED until the Pan select button on that warmer is pressed, at which time both PHU's lower leftmost pan will be selected.

Incrementing and decrementing pan time values and pan name letters will affect only the selected pan on the PHU whose increment or decrement button is pressed. When the selected pan is in the upper four of a 3X4 PHU, there is no selected pan on the other PHU.

When editing product name, the cursor advance button will the select pan on each. When the selected pan is in the upper four of a 3X4 PHU, there is no selected pan on the other PHU.

Although in practice "use first" LED indications are provided across PHUs, when viewing pan linkage (which is based on product names being identical), linkage is restricted to pans linked on each PHU separately – showing all pans on the PHU linked with that PHU's selected pan. However, when the selected pan is in the upper four of a 3x4 PHU, no pan is selected on the other PHU and no pan linkage on the other PHU is shown until the pan select button on that PHU pressed selecting a pan on that PHU, at which time pan linkage will be indicated on both warmers until one of the upper four pans is selected.

Mixed 3x4 PHUs and 4H/4W PHUs

If PHU2 is a 2Hx4W or 4Hx2W PHU, pressing its pan select button will only select from among the 8 pan locations on that PHU and PHU1. Selecting the upper pans on the 3x4 PHU1 will result in no pan being selected on the 4W/4H PHU2 until the pan select button on PHU2 is pressed again.

PHU Configuration Support

The Dual 3Hx4W AN KB2 UBB SW is primarily intended to support the following configurations:

PHU 1 (with timer bars connected in Warmer Port 1 and Warmer Port 2)
1) PHU1 is legacy 3x4 AN or RLGL PHU using legacy 2Hx4W AN timer bars connected to Warmer port 1 and legacy 1Hx4W AN or RLGL timer bars connected to Warmer port 2
2) PHU1 is AN KB2-based 3x4 AN PHU using AN KB2 2Hx4W AN timer bars connected to Warmer port 1 and AN KB2 1Hx4W timer bars connected to Warmer port 2

PHU 2 (with timer bars connected in Warmer Port 3 only)
1) PHU2 is legacy 2Hx4W or 4Hx2W AN or RLGL PHU using legacy 2Hx4W AN timer bars connected to Warmer port 3
2) PHU2 is AN KB2-based 3x4 AN PHU using AN KB2 2Hx4W AN timer bars connected to Warmer port 3 and AN KB2 1Hx4W timer bars also connected to Warmer port 3
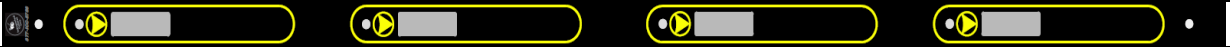
Guidelines:

1) PHU1 must always be a 3Hx4W PHU with a 2x4 timer bar connected to Warmer port
2) Warmer port 2 should only be used to connect 1Hx4W timer bars (whether AN KB2, legacy AN or RLGL) for use as part of the 3X4 PHU1
3) PHU2 must be connected to Warmer Port 3
4) PHU2 may be a 4H or 4W PHU (whether AN KB2, legacy AN or RLGL)
5) PHU2 may be a 3x4 AN KB2-based PHU

Warnings:

1) ***Do NOT to plug in or move AN KB2 timer bars to different ports on a powered up KB PS box (980680#)*** as this will damage the KB PS box resulting in input power being provided unregulated to any attached timer bars. If the KB PS box continues to be used once damaged it will damage any attached legacy AN KBs and will likely damage any attached AN KB2 timer bars.
2) Plugging in or moving AN KB2 timer bars on a 980195-63# will not damage the Black Box but will cause it to reset.

Factory Default Product Names

Main (PHU1) 3H x 4W PHU on Warmer Port 1 – Front View

W2P1	W2P3	W2P5	W2P7	**Black Box 980195-63#**
				← *Warmer 2*
		980264-1X4U# Rev. C		
W1P1	W1P3	W1P5	W1P7	
				← *Warmer 1*
		980264-2X4# Rev C		
W1P2	W1P4	W1P6	W1P8	*Warmer 3 → To Slave 3Hx4W PHU*

Slave (PHU2) 3H x 4W PHU on Warmer Port 3 – Front View

W2P2	W2P4	W2P6	W2P8	**Black Box 980195-63**
				← *Warmer 3*
		980264- 1X4U# Rev. C		
W3P1	W3P3	W3P5	W3P7	
				← *Warmer 3*
		980264-2X4# Rev C		
W3P2	W3P4	W3P6	W3P8	*Warmer 1 → From Main 3Hx4W PHU*