Kitchen Minder Installation Pictorial

1. The Installation Inspection form and completion reporting

Each installation team is supplied with a Kitchen Minder Installation/Inspection Form that is required to be completed and submitted to ICC along with digital images of the completed installation. A restaurant manager or other authorized BK representative must sign off on the installation.


Kitchen Minder Installation / Inspection Form

BK Restaurant Number # 36 _____ 730 N.W. 36th Street, Miami FL 331.27

Pre Install (Installer – Manager)   YES   NO
1. Duke or Prince Castle Timer Bars? .... Duke ☐ Prince Castle ☐ Translator Box used ☐ Both ☐
2. PHU timer bar labels secured. Needs replaced? (Y/N).. ☐ ☐
Number of timer bar label kits required? Day Part QTY _____ Non Day Part QTY _____
F/B connector QTY _____ RJ12 data cable QTY _____
3. PHU timer bars working properly? (Y/N) .... ☐ ☐
4. Number of PHU timer bars replaced? .... QTY _____
5. Unplug and Remove steamer timer bar? (Y/N) Fill holes ☐ .... ☐ ☐
6. Number of black boxes replaced (not working)? .... QTY _____
7. Flexi-16 Timer installed/upgraded? (Y/N) .... ☐ ☐

Wiring – Mounting (Manager Approval)
1. Kitchen Minder mounting secured? (Y/N) .... ☐ ☐
   -Method used: (PHU bracket ☐, new chase ☐ / existing chase ☐ Extender ☐)
                                                             Photo? ☐
2. Wires on back of Minder secured? (in tubing ☐ / other ☐ _____   Photo? ☐
3. Minder power supply secured (Y/N) .... ☐ ☐
4. Electrical supply added? (Y/N) .... ☐ ☐
   Uninterrupted source ☐ or switch/breaker ☐ labeled? (Y/N) ....Photo? ☐ ☐ ☐
5. Main board wires secured? (Y/N) ....Photo? ☐ ☐ ☐
6. Specialty board wires secured? (Y/N) .... Photo? ☐ ☐ ☐
7. U-channel installed? (number used) .... QTY _____ Photo? ☐ ☐ ☐
8. Grade sign mounted in staff's view? (Y/N) ....Photo? ☐ ☐ ☐

Minder Functions (Installer inspection)
1. Minder off, no lights on timing bar / keyboards? (Y/N) (Should be NO)................. ☐ ☐
2. Minder on, grade and timing bar / keyboards light? (Y/N) (Should be Yes)............. ☐ ☐
3. PHU pan location test passes? (Y/N) (Review / Check with Manager) .... ☐ ☐
4. Set Date and Time (Y/N) .... ☐ ☐
5. Reinitialize Minder (turn off, hold "Select" while turning on)

PC Minder Operation Set-Up
1. Enter restaurant hours and store managers' (or shift manager's) names? (Y/N) .... ☐ ☐
2. Load Product Sales Mix (add products)? (Y/N) ** (Review / Check with Manager)..... ☐ ☐
3. Program Warmer (PHUs)? (Assign Products) (Y/N) .... ☐ ☐
4. Data transfer (send Kitchen Minder format)? (Y/N) .... ☐ ☐
5. Check product location via Kitchen Minder? (Y/N) .... ☐ ☐
6. Set Day Part (Y/N) .... ☐ ☐

QES – Grade Set-Up
1. Open QES program (enter BK Number)? No. _____ .... ☐ ☐
2. Grade displayed on (grade sign) and QES? (Y/N) errors shown? _____ ...... ☐ ☐

Minder Training
1. Has Manager been previously trained? (Y/N) .... ☐ ☐
2. Minimum daily functions explained for untrained? (Y/N) .... ☐ ☐
3. Manuals/guide available and reviewed with manager? (Y/N) .... ☐ ☐
   (QES/PC Minder, Mgrs Guide, KM Ref. Guide, Training Packet)
4. Steps for additional help explained? (Y/N) .... ☐ ☐

Rest Manager Name _____   Rest Manager Signature _____

Install Team Member _____ Completion Date _____ Completion Time _____
Kitchen Minder S/N _____   Grade S/N _____

When complete fax to 866-827-9987   ** Trained managers pick same day a week ago   1 of 1
BK Kitchen Minder July-August 2006   Untrained managers pick the Thursday a week ago   5/19/2010

2. Are all the PHU Timer Bars functioning properly?

    a.   Ensure that ALL existing PHU Timer Bars are functioning properly.
- i.   Recycle power to all PHU's (turn off/on).
- ii.   Test each Button/LED, start at the far left as follows:
- iii.   Press the Timer Bar button. The LED should turn Green. If the LED turns Red, then out, this means there is no time programmed but it is functioning properly, go to step v.
- iv.   Press the same button. The LED should turn Red.
- v.   Move to the next button and go to step iii.
- vi.   Move to the next PHU and go to step ii.

    b.   If any PHU timer equipment needs to be replaced, the manager is informed and signs off on the work to be performed. This work may be chargeable for parts plus labor.
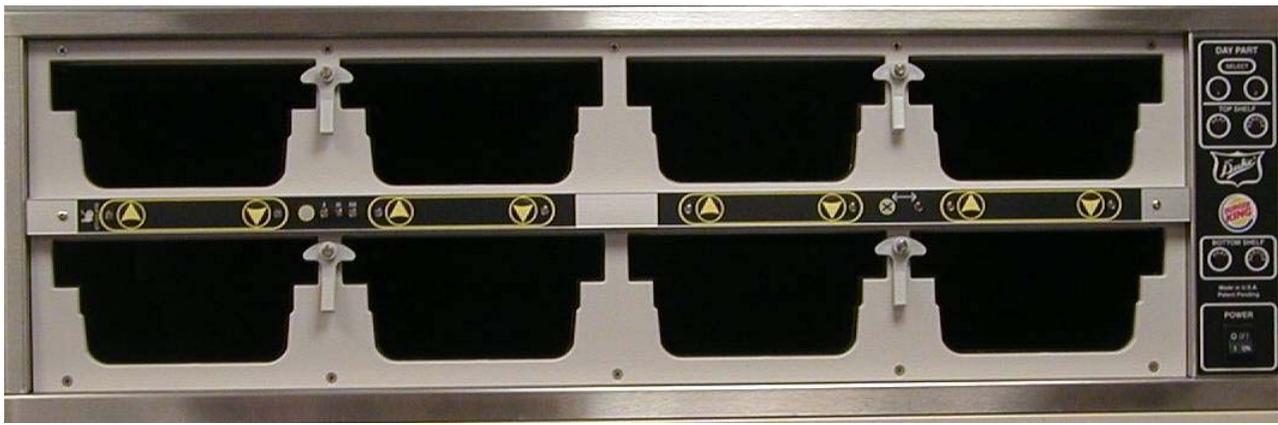
3. Where will the Kitchen Minder and Grade Sign be mounted?
   a. Note the desired placement of Kitchen Minder, Grade Sign and other optional peripherals (Manager Assistant/Buddy/Flexi, etc). This is usually determined by the Restaurant Manager, District Manager or other operations person.
   b. For recommended locations and cable diagrams for optional Manager's Assistant and Buddy Minder units, please refer to the instructions in those kits.
   c. The Kitchen Minder and Grade Sign must be seen by both the crew members operating the broiler and the fryers.
   d. The Kitchen Minder may be mounted to the top of a PHU using an optional bracket or by drilling into a chase.
   e. The Grade Sign can be hung from drop ceiling brackets or mounted to a hard ceiling using an optional bracket.
   f. Keep in mind that hard ceilings opposed to drop ceilings will require different cable run methods and/or tools.
   g. Refer to Item #18 below for wiring diagrams.
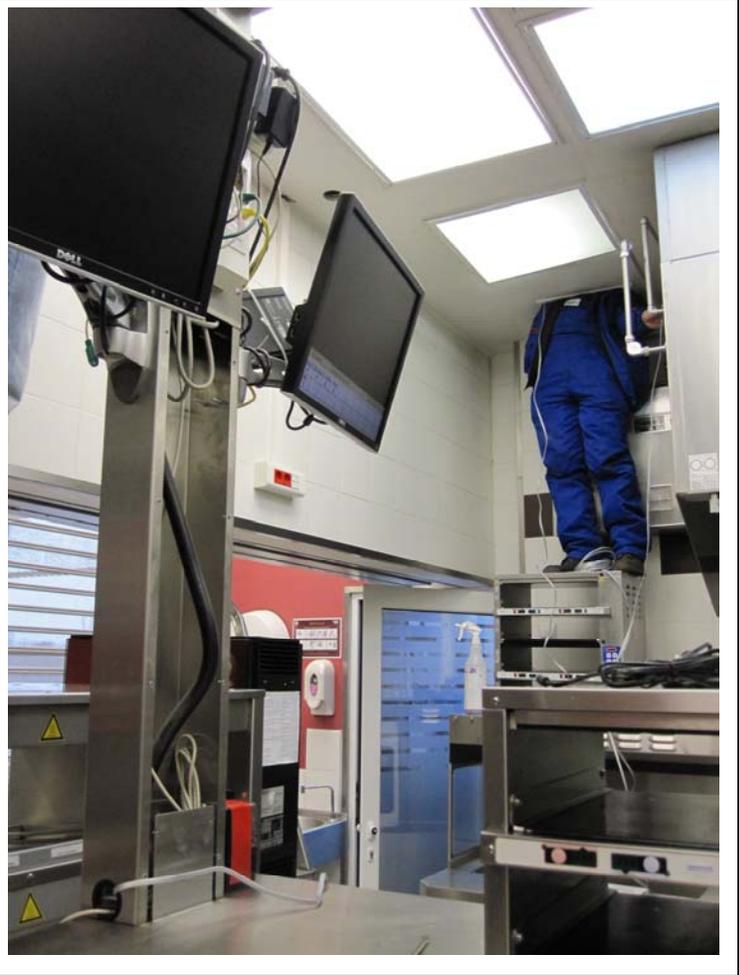
4. PHU Timer Control software check/change – Duke PHU's

    a. For Duke PHU's with ICC Timer Bars the software chip in the Black Box must be version 3.02 or higher.

    b. Locate each Black Box. The back of the PHU will have three connectors.

    c. DANGER – HIGH VOLTAGE! ALWAYS unplug power to the PHU when removing the side panel.

    d. Remove the right side panel of the PHU exposing the Black Box.

    e. Remove the Black Box cover.

    f. If the software chip label indicates a version less than v3.02, replace the chip with the supplied upgrade chip.

    g. **CLEAN** the rear connectors with cotton swabs/alcohol and electrical protectant/lubricate such as WD-40.
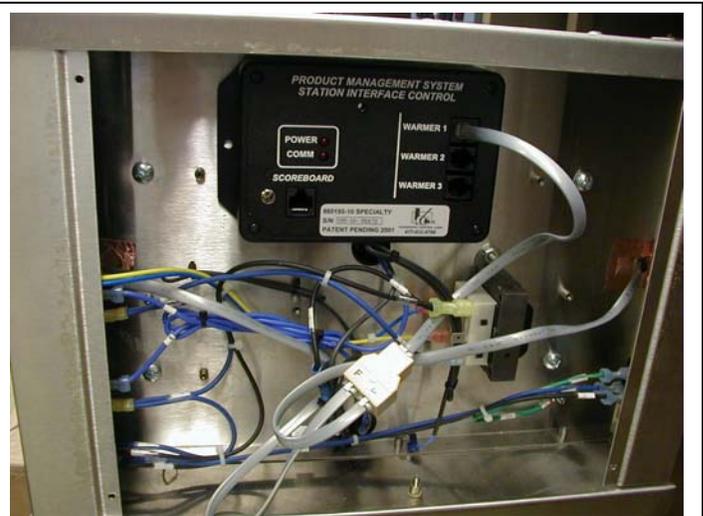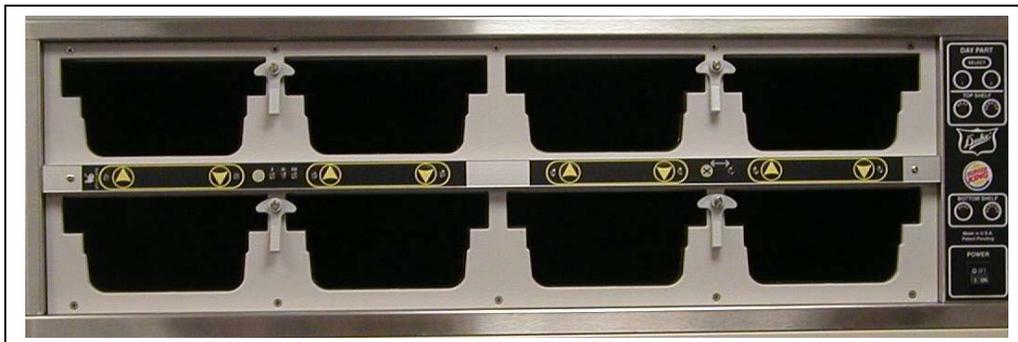
5. Prince Castle PHU's - PHU Timer Bar software check/change - Bar & Bin addressing

a. For Prince Castle PHU's and Timer Bars the software in the bars must be Kitchen Minder compatible.

b. Check the software of EACH Timer Bar by simultaneously pressing the Prince Castle and down arrow buttons on the bar.

c. Compare the version number to the table below, if the version is DIFFERENT, the bars must be flashed using the meLabs programmer (this tool is available from ICC) and a PC laptop or a Prince Castle programmer supplied by Burger King.

The latest version is in **bold**

2x2, 2x4	PHU's	v1.05, v1.15, v1.46, v1.56, **v1.48**
2x3	PHU's	v1.05, v1.15, v1.73, v1.83, **v1.75**
2x4	PHU's	v4.49, v4.59, **v4.5B**
3x4	PHU's	Bottom Bar **v4.5B**, Top bar **v9.B1**

d. One or more Prince Castle Translator Kits are supplied with each Kitchen Minder Kit for restaurants with Prince Castle PHU's. Mount the box(es) close to where the Kitchen Minder will be mounted and connected in later steps.

d. Connect the supplied PN 980830# Level shifter to Warmer1 port of the Prince Castle Translator Box PN 980195-70.
e. **CLEAN** the "IN" & "OUT" connectors with cotton swabs/alcohol and electrical protectant/lubricate such as WD-40.
f. Connect the appropriate length **ICC supplied** 6-pin flat cable to the Level shifter and to the "IN" port of the 1st 2x4 PHU.
g. Where applicable connect another supplied appropriate length **ICC supplied** 6-pin flat cable from the "OUT" port of the 1st PHU to the "IN" port of the 2nd 2x4 PHU.
h. Where applicable connect another supplied appropriate length **ICC supplied** 6-pin flat cable from the "OUT" port of the 2nd PHU to the "IN" port of the 3rd 2x4 PHU.
i. NOTE: Each Translator Box can handle a maximum of Qty-3 2x4 PHU's OR Qty-1 4x2 PHU and Qty-1 2x4 PHU. Each 4x2 PHU counts as 2-PHUs. See the 4x2 picture on the next page.

j. Re-addressing the Timer Bars:
   a. Power off the PHU,
   b. Power on the PHU. Immediately press the Prince Castle button and down arrow button simultaneously for five seconds.
   c. The far right display will show "Bar2" - "2" will be blinking. The software version number will be displayed on the left display.
   d. Use the arrow up or down keys to program the proper address.
      i. The bars must have different addresses. It is not mandatory to address the bars as detailed below but for consistency use the following scheme:
      ii. Address the 1st PHU off the Translator Box to Bar2.
      iii. Address the 2nd PHU to Bar3.
      iv. Address the 3rd PHU to Bar4.
k. When the proper address is displayed, press the ENTER button on Timer Bar.
l. Recycle power on PHU.
m. Repeat for all FRONT Timer Bars. The rear timer bars do not get addressed.

n. Check the Bin number on each PHU – ALL Bin numbers must be 2.
   a. With the PHU powered ON, press the Actual Temp and Set Point keys on the PHU control simultaneously.
   b. The current Bin number setting will display.
        i. If Bin2 is displayed, move on to the next PHU and repeat step ii until all PHU's have Bin2 assigned.
        ii. To change the Bin number to 2, power OFF the PHU.
        iii. Hold down the Actual Temp and Set Point keys simultaneously while powering ON the PHU until the small "PROG" led is illuminated (this takes up to five seconds).
        iv. Press the up or down arrow until Bin2 is displayed.
        v. Press the Prince Castle button on the PHU control.
        vi. Press the Actual Temp and Set Point keys on the PHU control simultaneously to double check that Bin2 is assigned.

A 4x2 PHU counts as 2 PHU's

Bar2 on KM COM1 = PHU1

Bar3 on KM COM1 = PHU2

6. Mount the Kitchen Minder

a. In the location determined in Step 2, mount the Kitchen Minder using the optional PHU bracket or by drilling into the chase.

7. Mount the Grade Sign

a. In the location determined in Step2, mount the Grade Sign using the optional PHU bracket or by attaching it to the drop ceiling supports.

8. Run the Kitchen Minder Cables

a. Run the supplied red 10 ft. (3.6m.) Cat5 cable from COM1 of the Kitchen Minder to the first Duke Black Box or Prince Castle Translator Box.

b. If applicable run the supplied black 50 ft. (15.2m.) or compatible shorter length Cat5 cables from COM2 of the Kitchen Minder to the 2nd Duke Black Box or Prince Castle Translator Box.

c. If applicable run a Cat5 cable from COM3 of the Kitchen Minder to the 3rd Duke Black Box or Prince Castle Translator Box or ICC Flexi-16 Timer.

d. Run the supplied gray 25 ft. (7.6m.) Cat5 cable from COM4 of the Kitchen Minder to the Grade Sign. *NOTE: If an optional Manager's Assistant or Buddy Minder is to be installed, please refer to the Installation Instructions included in those kits for cable routing directions*.

e. Run the **ICC supplied** 6-pin flat 75 ft. (23m.) cable from the Programming port of the Kitchen Minder to the Back-of-House computer.

9. Run Power to the Kitchen Minder

    a. Using the supplied Kitchen Minder power supply and line cord, insert the 12V DC plug into the power port of the Kitchen Minder.

    b. Plug the country specific line cord into a 100-240V AC power outlet.

10. Attach the 801114 connector to Back-of-House computer

    a. Plug the 801114 BOH connector in to a free COM port on the computer
    b. If a free COM port is not available, use the optional ICC supplied Prolific USB-Serial converter
        i. Follow the USB-Serial converter instructions for your particular Computer Operating System to install the converter.
    c. Plug the 801114 BOH connector into the USB-Serial converter.
    d. Plug the 6-Pin cable from the Kitchen Minder into the 801114 BOH Connecter.

KITCHEN MINDER™ Adaptor (Must Display 801114)

Serial to Computer

USB to Serial

11.	**Install the Kitchen Minder Series Software on the BOH Computer**
a.	Sign-on to the computer as the Administrator.
b.	Use the supplied CD to install the KMSS software on the Back-of-House Computer.
c.	Follow the prompts and click the Next and Install buttons to complete the installation.

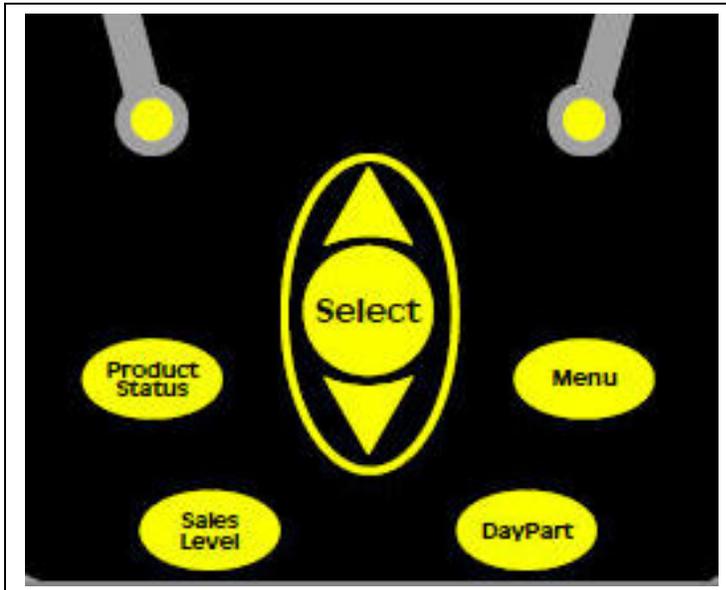| **13.**	**Power up the Kitchen Minder and test Grade Sign connection**
a.	Watch the Grade Sign while turning the Kitchen Minder on with the power switch.
b.	The Grade LEDs should change colors (Red, Green, Yellow) then display a letter grade.

14. **Test PHU Connections – Product Location test**
This test ensures proper electrical connection and communication between the Timer Bars and the Kitchen Minder. It also provides the PHU
number assigned to the Kitchen Minder for the Manager to program products to the proper pans.
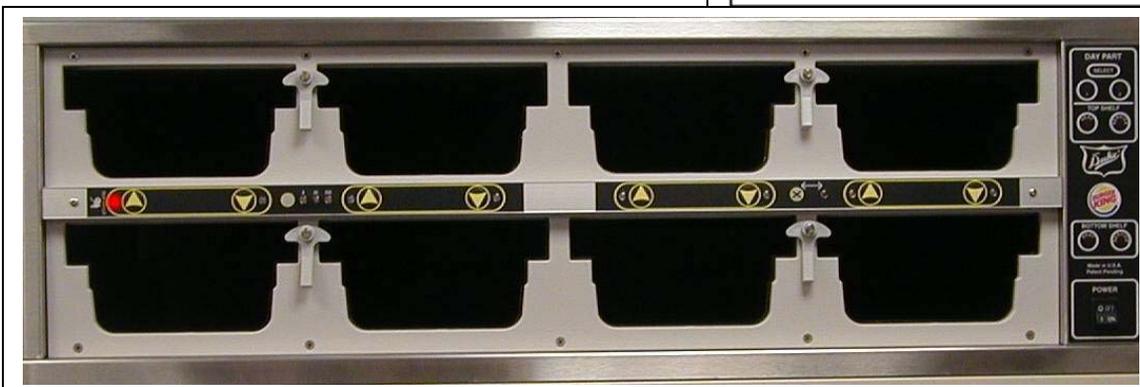
a.   Press the Menu button on the Kitchen Minder

b.   Arrow down to Product Location then press the Select button.

c.   Press the Continue button (left soft key). All Red Timer Bar LED's should go out.

d.   PHU1 is displayed on the Kitchen Minder. The top left pan is highlighted.

e.   The top left pan on the PHU hooked up to PHU1 should have a Red LED.

f.   Use the tables below for Duke and Prince Castle to help determine where a Red LED should be expected.

g.   As you identify the KM PHU number, record this information and communicate this to the manager to assist in product set-up on the PC Minder program.

⊃⊃⊃⊃⊃ **Menu** ⊃⊃⊃⊃⊃

"Kind of Day" Menu
Program Sales Level
Program Product Mix
Program Warmers
Product Location
Set Time
Comm Mode: Serial

⊃⊃⊃⊃ **Find Products** ⊃⊃⊃⊃

!!! WARNING !!!

All Active Timers Will Be Reset

Continue   Cancel

Warmer 1

Saus		Saus		Bk Egg		Bk Egg	
060	**003**	060	003	045	008	045	008
Saus		Saus		Bk Egg		Bk Egg	
060	003	060	003	045	008	045	008

Hold Cook
Prev   Day Part 1   Next

DUKE PHU'S			Prince Castle PHU'S		
KM COM#	**Box Warmer#**	**KM PHU#**	**KM COM#**	**Bar Address#**	**KM PHU#**
1	1	1	1	2	1
1	2	2	1	3	2
1	3	3	1	4	3
2	1	4	2	2	4
2	2	5	2	3	5
2	3	6	2	4	6
3	1	7	3	2	7
3	2	8	3	3	8
3	3	9	3	4	9

h.   Press the Next button (right soft key) to advance to each of the nine possible PHUs.

i.   When done press the Product Status button.

j.   If the Product Location test is not successful:
   i. Check all cable connections
   ii Duke PHU's - check software version Black Boxes
   iii Prince Castle PHU's – check software on Timer Bars
   iv. Prince Castle PHU's – check Bar and Bin addresses

k.   Repeat the Product Location test.

15.   Test Back-of-House to Kitchen Minder connection

a.   Go in to the PC Minder program.
b.   If prompted for a password, type "admin" - click OK. (This is the permanent Password)
c.   Click Tools - Communication Test
d.   When the process completes, the proper Com port will be set for both PC Minder and QES programs.
e.   If the process fails, check the connections & Com Port settings in Windows Device Manager and retry step a.
f.   Add a "Test" manager name, Click Tools, Edit Manager Names
    i. Type "Test" in the lower blank box, Click Add, Exit.
g.   Send data (blank) to the Kitchen Minder to test data communication.
    i. Click the Send to Kitchen Minder tab
    ii. Click the Send Forecast tab
    iii. The Kitchen Minder will start to "beep" every second and the Update Status Bar will start to fill blue from left to right.
    iv. Click OK after Send is complete
   v. If the send fails go to Step a. and repeat.
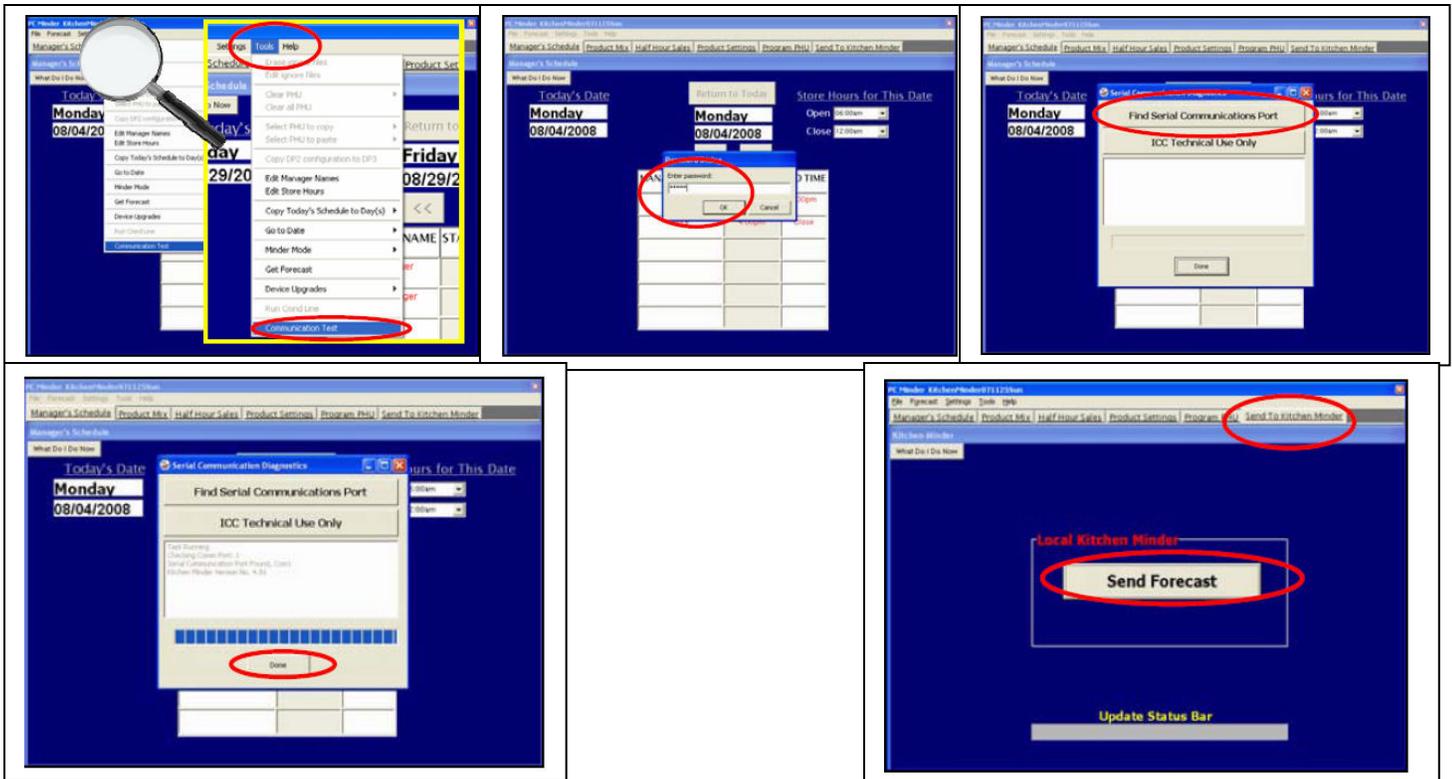
16. QES Setup

a. Go in to the QES program.
b. If prompted for a BK number, type in the OFFICIAL 5-digit Burger King number assigned by BK Corp.
c. If not prompted, check that the BK number has been previously input:
   i. Click Edit, BK number
   ii. Check that the BK number is correct, correct if needed, Click OK.
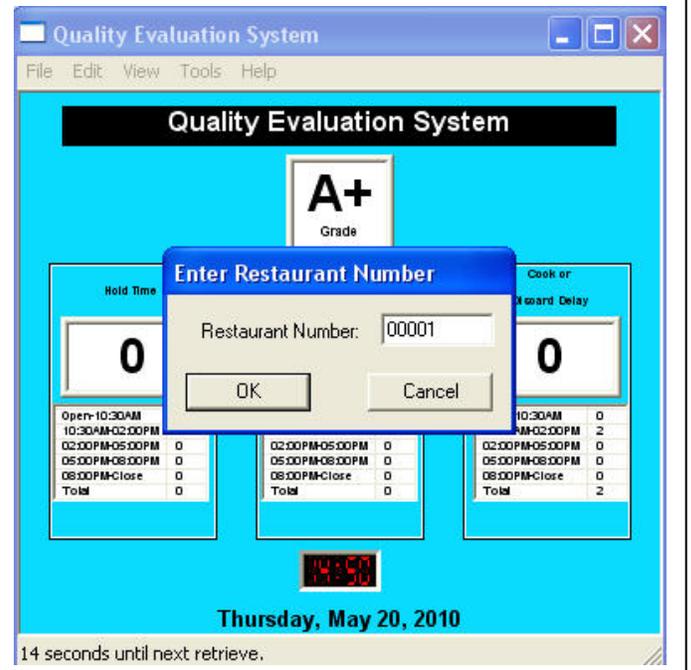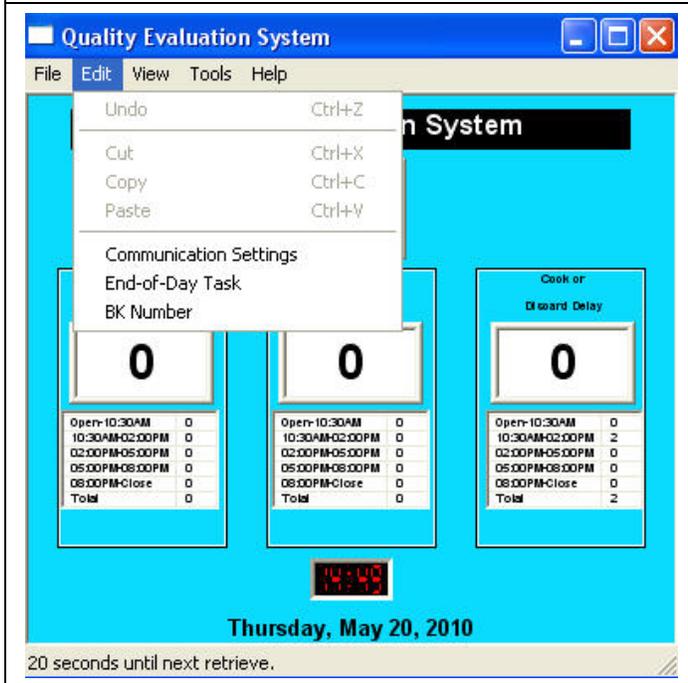
16.   Secure all cables for a neat installation!

    a.   Use the supplied cable ties and black tubing to secure all cables.
    b.   Create strain reliefs at the Kitchen Minder, Grade Sign, PHU and Back-of-House connections.
    c.   Use additional cable ties if necessary.
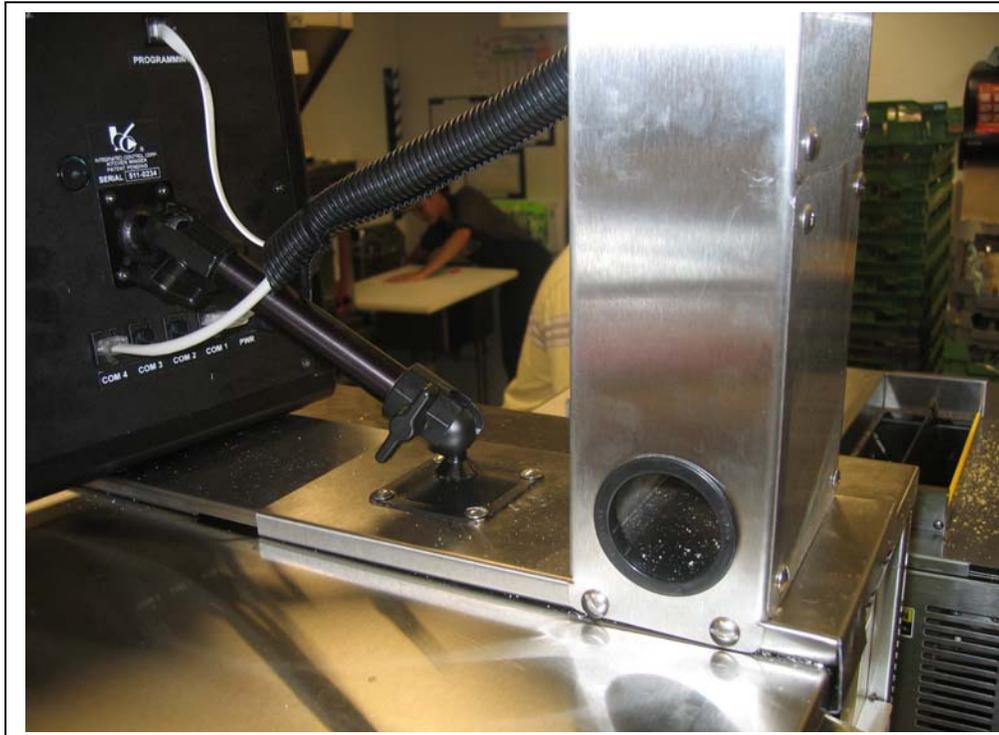
17. **Digital Photos and completed Installation Inspection Form of your perfect installation**

    a.   Take digital photos of the Kitchen Minder (front and rear), Grade Sign, PHU and Back-of-House cable connections and routing.

    b.   Ensure the Installation Checklist is complete and signed off by an authorized BK person.

    c.   Upload the photos and form to ICC's FTP server in the folder assigned by BK number.

Rest Manager Name _____   Rest Manager Signature _____

Install Team Member _____ Completion Date _____ Completion Time _____
Kitchen Minder S/N _____   Grade S/N _____

When complete fax to 866-827-9987   ** Trained managers pick same day a week ago   1 of 1
BK Kitchen Minder July-August 2006   Untrained managers pick the Thursday a week ago   5/19/2010
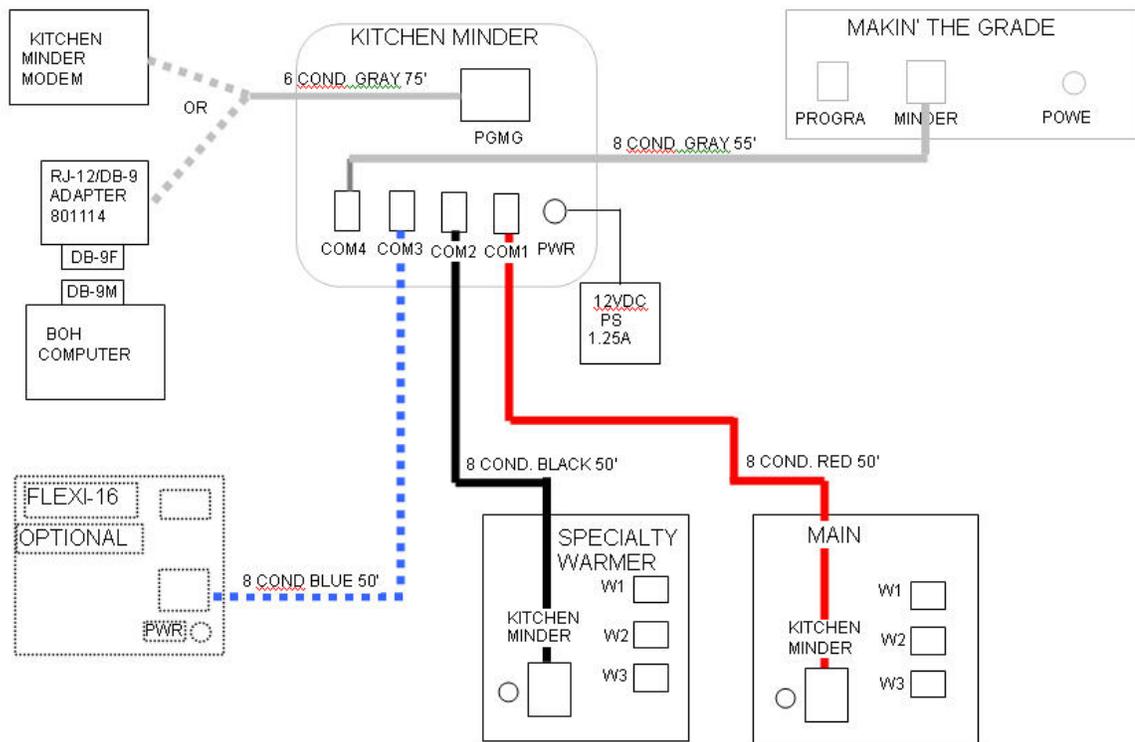
18. Wiring Diagrams

   a.   Kitchen Minder and Duke PHUs
   b.   For Manager Assistant and/or Buddy Minder diagrams, see the instructions in those installation kits
   c.   NOTE: You can use Duke and Prince Castle PHU's on the same Kitchen Minder but NOT on the same COM Port.
   i. ie; You can have 3 Duke PHU's attached to COM1 and 3 Prince Castle PHU's attached to COM2

Drawing No: 892512   Rev. H   Released: 20 May 2010
Title: Kitchen Minder Wiring Diagram

Kitchen Minder Wiring Diagram (Basic with ICC Timer Bars)

18. Wiring Diagrams (continued)

d. Kitchen Minder with Prince Castle PHU's

INTERCONNECTION DIAGRAM-
KITCHEN MINDER TO PRINCE CASTLE TIMER BARS

KITCHEN MINDER

COM1   COM4

MAKIN' THE GRADE

MINDER

8 COND. GRAY 25'

W2 and W3 –NOT USED

PC TRANSLATOR

MINDER

W1
W2
W3

980930 Conn/Adapter

8 COND. RED 10'

6 COND GRAY 8'

BIN 2
Prince Castle 2x4

Bar 2

IN   OUT

BIN 2
Prince Castle 2x4

Bar 3

IN   OUT

BIN 2
Prince Castle 2x4

Bar 4

IN   OUT

6 COND GRAY 50'

6 COND GRAY 14'