

FDC KilnView Configuration Manual



KilnView Manual

What is KilnView:

What you need to run KilnView

Page 3

Review FDC-2010-K5C & KilnView Configuration
Limitations with FDC-2010-K5C firmware v2.x and above
(Firmware v2.0 released April 2008)

Launching KilnView Configuration Utility

KilnView – Configure Alarm Names:

Page 7

KilnView – Configure Option Names:

Page 8

KilnView – Configure Relay/Analog Setup:

Page 9

KilnView – Configure Output Names:

Page 11

KilnView – Configure Core/MC Probes:

Page 12

KilnView Software Usage & Warranty

Page 13

This Manual, “KilnView Configuration”, describes how to configure KilnView software to match the configuration of the FDC-2010-K5C Kiln Control(s).

Refer to the KilnView_Manual_Rev_1.1 for setup, operation, troubleshooting and other information.

This & the following 2 pages offer descriptions of:

- 1) KilnView PC based Supervisory Software
- 2) Overview of the FDC-2010-K5C Kiln Control Configuration
- 3) Overview of KilnView Configuration.

1) What is KilnView?

KilnView is a SCADA and configuration package for FDC 300 series digital backup controllers and FDC-2010-K5C Kiln control system. Note the limitations below on FDC-2010-K5C version 2.x and above.

The FDC-2010-K5C firmware version 1.x is fully compatible with KilnView.

(Note: KilnView v1.1 is only compatible with FDC-2010-K5C when configured as a Kiln only control system with the limitations shown at bottom of this page.)

KilnView v1.1 is not compatible with the FDC-2010-K5C v2.x when configured as a Pallet Heat-Treat only or Combination Kiln Pallet Heat-Treat control system while operating in the Pallet Heat-Treat mode.)

Data from each device can be viewed and changed from the Windows® base KilnView package. Connection to controllers is accomplished via an RS485 (one to many) connection.

KilnView provides a rich set of tools for control interaction and data analysis. View Control data in Kiln Faceplate, digital, trend or bargraph format. Change setpoint, tuning parameters, alarm setpoints or units for any controller on the link.

The KilnView software can monitor up to 64 devices. Any of these 64 devices can have their data saved to the hard disk at user-defined rates. Data file analysis tools (digital and auto-trend) make looking at schedule run data a simple task.

The project based approach to the software make setup for different product runs a “snap” and easy for operators to work with.

Important:

KilnView Limitations when used with FDC-2010-K5C version 2.x or greater

KilnView version v1.1 is current as of April 2008.

The FDC-2010-K5C v2.x was released April 2008 that includes features that are not compatible with KilnView v1.1

KilnView and FDC-2010-K5C configured in Pallet Heat-Treat Mode

KilnView v1.1 should NOT be used in applications where the FDC-2010-K5C is configured as a Pallet Heat-Treat only or as a Combination Kiln and Pallet Heat-Treat control system.

KilnView v1.1 will NOT accurately communicate with the FDC-2010-K5C v2.x while running in the Pallet Heat-Treat Mode. KilnView will NOT generate communication error logs AND the operator may not be aware that the temperature values shown on KilnView's display DO NOT reflect the Kiln's temperature values & control action depicted while the FDC-2010-K5C is running in the Pallet Heat-Treat mode.

KilnView and FDC-2010-K5C configured in Dry Kiln Mode

KilnView v1.1 will communicate with the FDC-2010-K5C v2.x while in the Kiln Mode.

KilnView may only be used with the FDC-2010-K5C v2.x when configured in the Kiln only mode with end user understanding the limitations below.

KilnView Limitations when communicating with FDC-2010-K5C v2.x:

- KilnView must not have optional temperature inputs configured as MC sensors – all optional sensors must be configured within KilnView to be temperature.
- EMC: KilnView does not display nor can it configure Schedules logic based on EMC value shown on the FDC-2010-K5C color touch screen display.

What You Need To Run KilnView

PC: 2GHZ Pentium4 with 128MB of Ram.

KilnView will run on a lesser machine but performance could suffer if large trend buffers are used. Serial port #1 must be available on the computer.

Win2000 and WinXP Professional operating system supported.

When using the security options WinXP Professional is recommended.

KilnView was developed on WinXP Professional. Although KilnView compatibility testing was done on Win98 (ver2), NT4.0 (SP6A), 2000 and XP, we found that XP Professional (SP1) offered the best system stability of all operating systems tested. System security implementation on XP Professional was also our first choice during testing.

All examples for setup of security are given using WinXP Professional.

Controller models 300 series or FDC Kiln controllers with RS 485 communications.

When using RS 485 communications (PC to many controllers) an RS485 to RS232 converter is required. Future Design Controls offers the model SN-10A converter for this purpose.

These devices convert the RS232 signal from a computer to an RS 485 multi-drop communications signal. A straight through 9-pin to 9-pin cable is required for connection from the PC to the converter.

Note:

1. Windows® is a registered trademark of the Microsoft Corporation.

This manual covers the KilnView PC software interface. For detailed operation and configuration of the Orion kiln controller, please see Orion controller manual for p/n# FDC-2010-K5C.

2) FDC-2010-K5C Configurator Overview:

The FDC-2010-K5C configurator is a program that allows the OEM or user to setup all options for the FDC-2010-K5C controller runtime software. The configurator program will not run at the same time as the main runtime software, therefore, no kiln control functions are active while the OEM or operator is editing the configurator program.

The configurator program is a powerful tool that allows full customization of the FDC-2010-K5C controller. Text editing for all inputs, outputs and event names can be customized via the configurator. All Orion control functionality can be edited via the configurator.

The Orion configurator program will run the first time power is applied to the FDC-2010-K5C controller. The configurator can also be run when the runtime software is exited and the "Run Configurator On Next Power Up" option is selected. The next time the unit is re-powered the configurator will run.

Note: Each Time the FDC-2010-K5C configurator software is exited; the FDC-2010-K5C controller runtime software will run after the unit is re-powered.

The FDC-2010-K5C configurator provides the following functionality:

1. Text editing for all input, output and event names
2. Probes enables for core and moisture sensors
3. Scaling for all moisture sensors
4. Programmable output types for dynamic runtime viewing.
5. Programmable delays for all alarm inputs
6. Program output disable during digital input alarms
7. Enable/disable options for runtime view.
8. "Splash Screen" name editing for custom OEM or user requirements.
9. Stage Advance delay when input from MC or Core Temperature event (FDC-2010-K5C version 2.x and above are not available with MC inputs).
10. Configurable 4-20mA output(s) for control of Heat, Spray, Vent, Fan or retransmission of dry and/or wet bulb temperature or setpoint values.

For further information review *FDC-2010-K5C Configuration Manual* available on our site or through your supplier.

3) KilnView Configurator Overview

For proper operation KilnView Configuration must match the FDC-2010-K5C configuration. Therefore it is important that the exact FDC-2010-K5C configuration is documented and available when configuring KilnView.

Care should be taken when KilnView will communicate with more than one FDC-201-K5C Kiln Controls to insure that KilnView is configured to match the appropriate Kiln Control address 1-16.

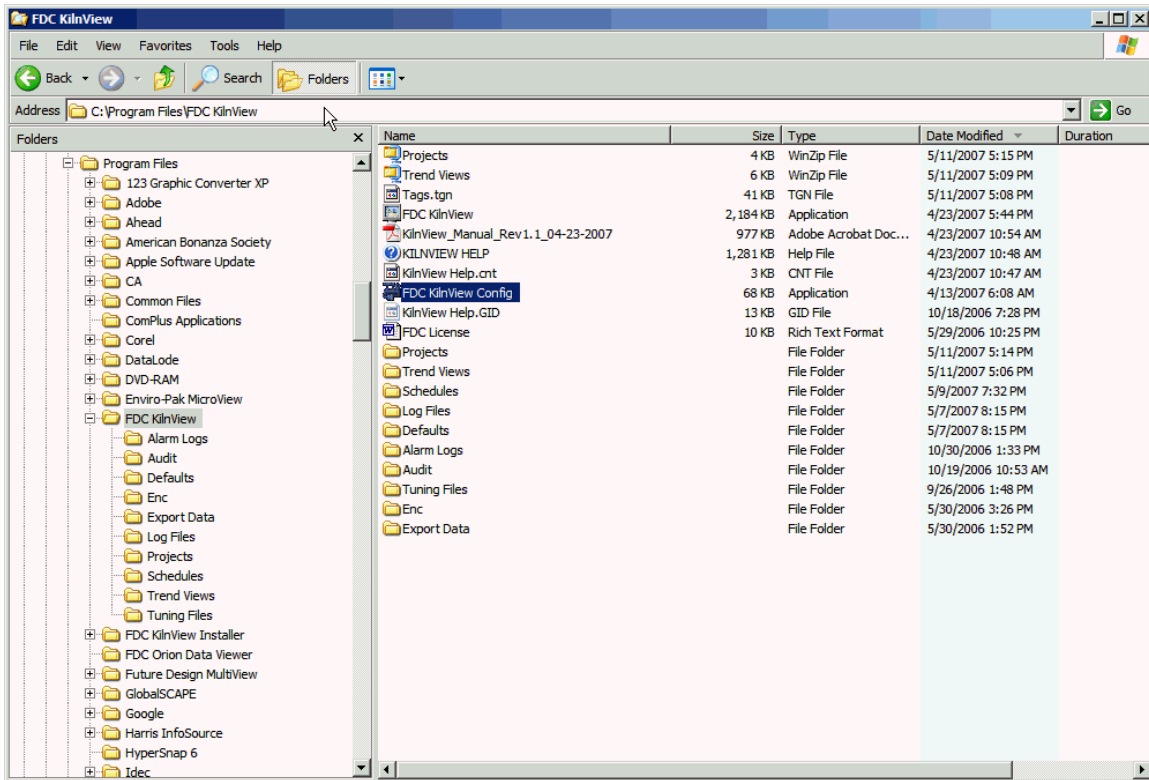
The following parameters must be configured within KilnView for up to 16 FDC-2010-K5C Kiln Controls that may communicate with KilnView:

1. Alarm Names [1-11 alarm names]
2. Option; Names and Enable/Disable [1-26 options]
3. Relay/Analog Output Setup for Vent, Fans, Heat and Spray
4. Output/Event Names [1-22 output names]
5. Probes enables for core and moisture sensors. FDC-2010-K5C versions 2.x and above do not support moisture sensors; all optional sensors must be configured as temperature core sensors. (v2.0 began shipping April 2008).

Note: Failure to properly configure KilnView to specific FDC-2010-K5C Kiln Controls is that the operator will see different text descriptions and input & output availability of the above features between the control & KilnView PC software.

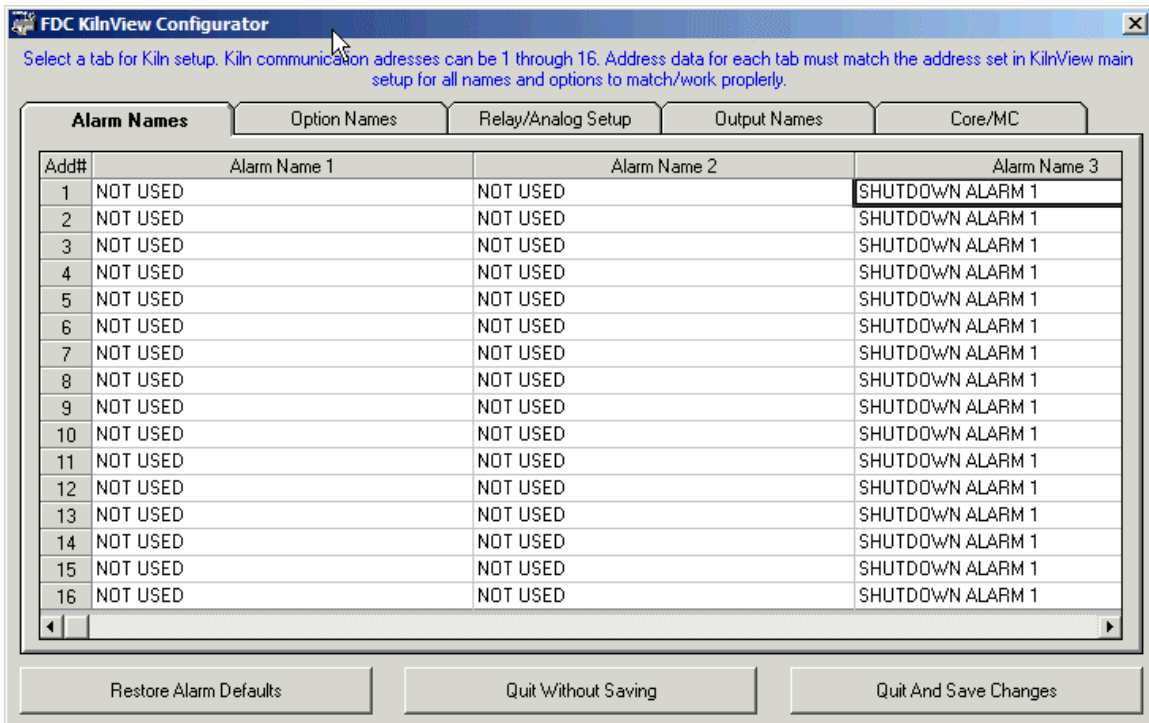
KilnView Configuration Launch

KilnView Configuration utility is launched from the KilnView directory typically found in the Programs directory.
 C:\Program Files\FDC KilnView\FDC KilnView Config



KilnView Configuration Utility will launch as shown below.

Five tabbed windows will be shown for configuration:
 Alarm Names, Options Names, Relay/Analog Setup, Output Names and Core/MC.



KilnView Configuration – Alarm Names

It is important that every FDC-2010-K5C Kiln Control to communicate with KilnView has:

- 1) Appropriate Address assigned to the FDC-2010-K5C Control – refer to the FDC-2010-K5C Manual. [Kiln System Settings, Modbus Slave Address for RS485.]
- 2) Alarm Name documentation to allow KilnView to be configured with the same Alarm Names as configured in the appropriate FDC-2010-K5C Kiln Control.

KilnView Alarm Name Configuration

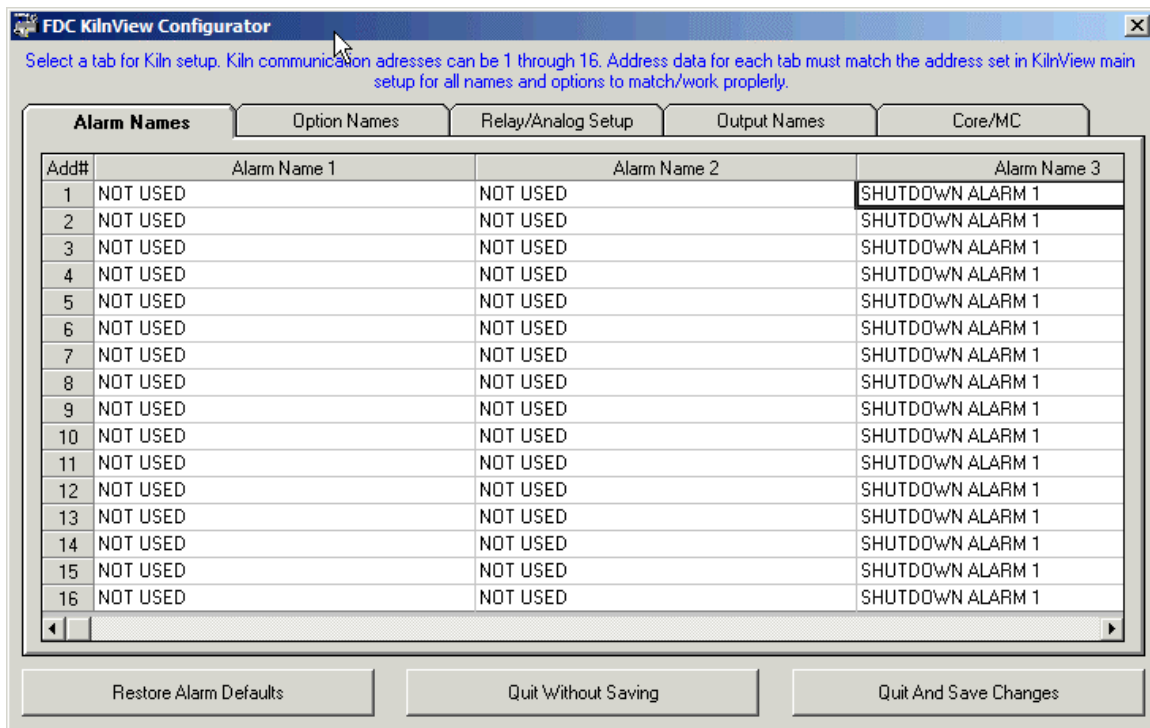
Refer to the FDC-2010-K5C Kiln Config Manual for detail on naming Alarms and alarm logic; section “Edit Digital Inputs/Alarm Names”.

The FDC-2010-K5C control provides up to 15 digital inputs mapped to specific kiln functions and programmable alarms. The first two digital inputs are used for the synchronization of fans for heat/spray operation and remote profile hold; these are shown below as Alarm Name 1 & 2 and whose names in both KilnView and the FDC-2010-K5C cannot be altered. There are four additional inputs, profile run, profile stop, next stage advance and previous stage advance that are not considered alarm functions and are not named. Therefore, 11 alarm fields are shown with the first two, fan synchronization & profile hold not being configurable.

The names for the Temperature Process High and the Deviation High & Low alarms are not configurable.

The FDC-2010-K5C Kiln Control allows custom names for the following parameters:

- Alarm Names; 11 Alarms are shown.
 - Alarms #1 & 2 cannot have custom names.
 - The remaining 9 alarms by have custom names assigned.
 - Alarms #3 - #7 may be configured as indicating alarms or to shutdown specific outputs and/or the entire Kiln.
 - Alarms #8-11 are indicating alarms only



Alarm Names: Using the bottom scroll bar position the cursor in the appropriate Alarm column and row matching the Kiln Control address to be configured and change the text to the appropriate Alarm Name.

The “Restore Defaults” button will always reset the name to factory default values if required.

When complete click the “Quit and Save Changes” button.

KilnView Configuration – Option Names

It is important that every FDC-2010-K5C Kiln Control to communicate with KilnView has:

- 1) Appropriate Address assigned to the FDC-2010-K5C Control – refer to the FDC-2010-K5C Manual.
[Kiln System Settings, Modbus Slave Address for RS485.]
- 2) Option Configuration data for Names and Enable/Disable documentation to allow KilnView to be configured with the same Option Names and whether enabled/disabled as configured in the appropriate FDC-2010-K5C Kiln Control.

KilnView Option Configuration; Option Names & Enable/Disable

Refer to the FDC-2010-K5C Kiln Config Manual for detail on naming and enable/disable Options; section “Edit Option Names”.

The Edit Option Names screen allows the user to edit the names for each of the kiln options which are settable functions that equate to kiln operations such as heat enable, spray control, vents, etc. Up to 6 custom events correspond to relay outputs (for each event) and can be used for any special operation that requires a relay output in manual operation or during automated schedule operation (different options can be set per stage).

Optional MC/Weight or Temperature Inputs: Up to 6 additional analog (4-20mA) inputs are available. These are enabled within KilnView in this section – refer to Options 13–17 with default names of MP1-MP6 to enable these inputs.

There are 26 options that may be named and disabled or enabled. Refer to the following page for a complete listing of the default Options and a view of how the Option list appears in the FDC-2010-K5C control.

Note: Option names are limited to 17 characters with exception of the 6 fields with default descriptions of MP1 through MP6, which are limited to 7 characters. Character length limitation differs for the FDC-2010-K5C Kiln Control, 14 and 4 characters respectively compared to the aforementioned 17 and 7 character limitation with KilnView.

Add#	Op1 Enabled	Option Name 1	Op2 Enabled	Option Name 2	Op3 Enabled	Option Name 3	Op4 Enabled
1	<input checked="" type="checkbox"/>	KILN ON	<input checked="" type="checkbox"/>	HEAT ON	<input checked="" type="checkbox"/>	SPRAY ON	<input checked="" type="checkbox"/>
2	<input checked="" type="checkbox"/>	KILN ON	<input checked="" type="checkbox"/>	HEAT ON	<input checked="" type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
3	<input checked="" type="checkbox"/>	KILN ON	<input checked="" type="checkbox"/>	HEAT ON	<input checked="" type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
4	<input checked="" type="checkbox"/>	KILN ON	<input checked="" type="checkbox"/>	HEAT ON	<input checked="" type="checkbox"/>	Enter Custom Name	<input type="checkbox"/>
5	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
6	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
7	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
8	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
9	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
10	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
11	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
12	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
13	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
14	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
15	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>
16	<input type="checkbox"/>	KILN ON	<input type="checkbox"/>	HEAT ON	<input type="checkbox"/>	SPRAY ON	<input type="checkbox"/>

Option Names: Using the bottom scroll bar position the cursor in the appropriate Alarm column and row to match the Kiln Control address to be configured and change the text to the appropriate Alarm Name.

Enable/Disable Option: Position the cursor on the appropriate “Op Enabled” column and row and click the box to enable or disable an option. Above address’s 1-4 are enabled for Op1 through Op3.

The “Restore Defaults” button will always reset the name to factory default values if required.

When complete click the “Quit and Save Changes” button.

Following is a brief description of each of the kiln events:

Default Name	Description
Kiln On:	Main kiln switch. No kiln operations are active unless this event is turned on.
Heat Enable:	Heat control is enabled when this event is on.
Spray On:	Activates spray output(s) continuously when this event is on
Vent 1 On:	Activates Vent #1 relay output continuously when this event is on
Vent 2 On:	Activates Vent #2 relay output continuously when this event is on
Vent 3 On:	Activates Vent #3 relay output continuously when this event is on
Vent Auto:	Vents operate off of wet bulb when this event is on (selectable for DB also)
Fans Fwd:	Activates fan forward relay output.
Fans Rev:	Activates fan reverse relay output.
Fans Auto:	Fans operate (fwd, rev) based on timing settings in runtime setup mode.
MON1:	Event selection for MC1/Weight1 probe during automated schedule runs.
MON2:	Event selection for MC2/Weight2 probe during automated schedule runs.
MON3:	Event selection for MC3/Weight3 probe during automated schedule runs.
MON4:	Event selection for MC4/Weight4 probe during automated schedule runs.
MON5:	Event selection for MC5/Weight5 probe during automated schedule runs.
MON6:	Event selection for MC6/Weight6 probe during automated schedule runs.
Equalization:	Activates equalization relay output. (DO NOT USE with FDC-2010-K5C version 2.x or above
Stage Alarm:	Activates stage alarm relay output. Used to alert operator to check load during stage.
Cool Down:	Activated during stage when "cool down" event is selected in runtime.
Cust Event 1:	Activates customer 1 relay output. Can be used for any relay output requirement
Cust Event 2:	Activates customer 2 relay output. Can be used for any relay output requirement
Cust Event 3:	Activates customer 3 relay output. Can be used for any relay output requirement
Cust Event 4:	Activates customer 4 relay output. Can be used for any relay output requirement
Cust Event 5:	Activates customer 5 relay output. Can be used for any relay output requirement
Cust Event 6:	Activates customer 6 relay output. Can be used for any relay output requirement

FDC-2010-K5C firmware version 2.x (April 2008) provides EMC & %RH on its' main view; KilnView does NOT show these values.

Option List as depicted in the FDC-2010-K5C Kiln mode; page 1 of 2 [page 2 not shown].



KilnView Configuration – Relay/Analog Setup

It is important that every FDC-2010-K5C Kiln Control to communicate with KilnView has:

- 1) Appropriate Address assigned to the FDC-2010-K5C Control – refer to the FDC-2010-K5C Manual. [Kiln System Settings, Modbus Slave Address for RS485.]
- 2) Relay/Analog Setup documentation to allow KilnView to be configured with the same Relay/Analog Setup as configured in the appropriate FDC-2010-K5C Kiln Control.

KilnView Relay/Analog Setup

Refer to the FDC-2010-K5C Kiln Config Manual for detail on Relay/Analog Setup for Vent, Fans, Heat and Spray; section “Relay/Analog Setup”.

Add#	Vent Relay	Vent Analog	Fans Relay	Fans Analog	Heat Output Relay
1	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off
2	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off
3	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off
4	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off
5	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
6	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
7	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
8	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
9	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
10	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
11	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
12	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
13	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
14	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
15	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
16	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off

Enable/Disable Option: Position the cursor on the appropriate Output column and row and click the box to enable or disable an option. Above address's 1-4 are enabled Vent Relay, Fans Relay & Heat Output Relay; not shown to the right Heat Output Analog, Spray Output Relay and Spray Output Analog.

Note: KilnView Configuration utility will allow both “Relay” and “Analog” outputs to be selected but when “Quit and Save Changes” a dialog box will pop directing you to select one or the other.

The “Restore Defaults” button will always reset the name to factory default values if required.

When complete click the “Quit and Save Changes” button.

KilnView Configuration – Output Names

It is important that every FDC-2010-K5C Kiln Control to communicate with KilnView has:

- 1) Appropriate Address assigned to the FDC-2010-K5C Control – refer to the FDC-2010-K5C Manual [Kiln System Settings, Modbus Slave Address for RS485.]
- 2) Output Names documentation to allow KilnView to be configured with the same Output Names as configured in the appropriate FDC-2010-K5C Kiln Control.

KilnView Output Names Setup

Refer to the FDC-2010-K5C Kiln Config Manual for detail on Output Names; section “Edit Output Names”.

There are 22 Output Names that may be named.

Add#	Output Name 1	Output Name 2	Output Name 3
1	Custom Name Here for each Outp	EQUALIZy	EQUALIZATION
2	ALARM BUZZER	EQUALIZE	EQUALIZATION
3	ALARM BUZZER	EQUALIZE	EQUALIZATION
4	ALARM BUZZER	EQUALIZE	EQUALIZATION
5	ALARM BUZZER	EQUALIZE	EQUALIZATION
6	ALARM BUZZER	EQUALIZE	EQUALIZATION
7	ALARM BUZZER	EQUALIZE	EQUALIZATION
8	ALARM BUZZER	EQUALIZE	EQUALIZATION
9	ALARM BUZZER	EQUALIZE	EQUALIZATION
10	ALARM BUZZER	EQUALIZE	EQUALIZATION
11	ALARM BUZZER	EQUALIZE	EQUALIZATION
12	ALARM BUZZER	EQUALIZE	EQUALIZATION
13	ALARM BUZZER	EQUALIZE	EQUALIZATION
14	ALARM BUZZER	EQUALIZE	EQUALIZATION
15	ALARM BUZZER	EQUALIZE	EQUALIZATION
16	ALARM BUZZER	EQUALIZE	EQUALIZATION

Output Names: Using the bottom scroll bar position the cursor in the appropriate Output column and row matching the Kiln Control address to be configured and change the text to the appropriate Output Name.

The “Restore Defaults” button will always reset the name to factory default values if required.

When complete click the “Quit and Save Changes” button.

KilnView Configuration – Core/MC

It is important that every FDC-2010-K5C Kiln Control to communicate with KilnView has:

- 1) Appropriate Address assigned to the FDC-2010-K5C Control – refer to the FDC-2010-K5C Manual [Kiln System Settings, Modbus Slave Address for RS485.]
- 2) Core/MC documentation to allow KilnView to be configured with the same Core/MC enable/disabled as configured in the appropriate FDC-2010-K5C Kiln Control.

KilnView Core/MC Setup (note below on NOT configuring system as “MC” or “Weight” input with FDC-2010-K5C version 2.x and above)

FDC-2010-K5C software versions 1.x - refer to the FDC-2010-K5C Kiln Config Manual for detail on Core/MC; section “Core/Moisture Sensor Setup”. [MC equals Moisture Control or Moisture Sensor.]

The FDC-2010-K5C version 2.x and above does NOT support MC – Moisture Sensor inputs. Software Version 2.0 began shipping April 2008; refer to the FDC-2010-K5C manual to determine software version.

Each FDC-2010-K5C Kiln Control may be configured to enable/disable Probe #1, RTD Core temperature input and Probes 2-7 optional MC/Temp inputs [4-20mA input] (v1.x only). **With FDC-2010-K5C v2.x & above Probes 2-7 MUST be configured as as Core Temperature sensors; DO NOT configure as MC or Weight sensors as the FDC-2010-K5C version 2.x does not support MC or Weight input and/or control logic.**

KilnView configuration for these analog 4-20mA inputs, (RTD or thermocouple inputs with FDC-2010-K5C v2.x) whether used for MC/Weight Probes or as temperature values, must also be set under the Tab “Option Names”.

MC/Weight Probes used as Core Temperature Probes:

- Enable the appropriate address.

MC/Weight Probes used as Moisture Content [MC] or Weight – NOT Core Temperature inputs:

- Do NOT check the 2nd column shown below if the specific Kiln Control is has these inputs configured for MC/Weight inputs or no inputs at all.

Note: FDC-2010-K5C version 2.x and above do NOT support MC/Weight inputs sensors.

Add#	Standard Core Probe Used	MC/Weight Probes Used As Core/Temp
1	<input checked="" type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off
2	<input checked="" type="checkbox"/> On/Off	<input checked="" type="checkbox"/> On/Off
3	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
4	<input checked="" type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
5	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
6	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
7	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
8	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
9	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
10	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
11	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
12	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
13	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
14	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
15	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off
16	<input type="checkbox"/> On/Off	<input type="checkbox"/> On/Off

Enable/Disable Option: Position the cursor on the appropriate Output column and row and click the box to enable or disable that the “Standard Core Probe Used” and/or “MC/Weight Probes Used as Core/Temp”.

Above address's 1-4 have “Standard Core Probe Used” enabled and address's 1 & 2 “MC/Weight Probes Used as Core/Temp” enabled.

The “Restore Defaults” button will always reset the name to factory default values if required.

When complete click the “Quit and Save Changes” button.

Software Usage Note:

The selection, application or use of Future Design products or software is the purchaser or user's responsibility. No claims will be allowed for any damages or losses, whether direct, indirect, incidental, special or consequential.

In addition, Future Design reserves the right to make changes without notification to purchaser or user to materials or processing that do not affect compliance with any applicable specification. Future Design Controls makes no warranties when using FDC KilnView software on any computer or system.

Warranty:

Future Design Controls provides no warranty or representations of any sort regarding the fitness of use or application of its products by the purchaser. Users are responsible for the selection, suitability of the products for their application or use of Future Design Controls products.

Future Design Controls shall not be liable for any damages or losses, whether direct, indirect, incidental, special, consequential or any other damages, costs or expenses excepting only the cost or expense of repair or replacement of Future Design Control products as described below.

Future Design Controls sole responsibility under the warranty, at Future Design Controls option, is limited to replacement or repair, free of charge, or refund of purchase price within the warranty period specified for the Future Design product only. This warranty does not apply to damage resulting from transportation, alteration, misuse or abuse. Future Design Controls reserves the right to make changes without notification to purchaser to materials or processing that do not affect compliance with any applicable specifications.

Return Material Authorization:

Contact Future Design Controls for Return Material Authorization Number prior to returning any product to our facility.



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