



How to Receive and Compare Settings from a PCD

During Commissioning of a PCD, Application Settings can be received, compared and verified via the WinPCDT2 software. This procedure will clarify how to display and compare the selected File Database Settings with the Actual Values in the PCD. If the PCD Settings are incorrect, the correct Settings can be uploaded to the PCD by using the “Send Database Data to Unit” button.

Precautions

1. During Commissioning make sure the VR-3S is bypassed.
2. Press the Ground Block pushbutton (the associated LED is lit) until all three Phases are closed in.
3. If “Receive All Settings” is selected, the subject database file listed in the Enterprise Explorer screen will be overwritten with the actual PCD Settings.
4. If the “Send Unit Data to Database” is pressed, the File Database Settings will be overwritten for the selected window screen.

Instructions

1. Double click on the selected Unit Database to be compared with the PCD

The screenshot shows a window titled "WinPCDT2 - Enterprise Explorer" with a menu bar containing "Unit", "Edit", and "About". Below the menu bar is a table with the following columns: Name, Catalog Number, Unit Addr, Baud, Comm Port, and Firmware. The table contains several rows of data, with the row for "SN.220790" highlighted in blue.

Name	Catalog Number	Unit Addr	Baud	Comm Port	Firmware
ABB_Example	8R371041313001	001	9600	COM1	2.5
FPC REL 3.1	8R371041313001	001	9600	COM1	2.5
sample	8R171041313111	001	9600	COM2	2.52
SN.211030	8R181041313101	001	9600	COM2	2.6
SN.220261	8R171041313001	001	9600	COM2	2.3
SN.220406	8R371041313111	000	9600	COM2	2.52
SN.220790	8R371041313001	000	9600	COM2	2.52
Type2	8R371041313001	000	9600	COM2	2.52

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2. Select “On-Line Database and Unit”

Manage Unit

Name/Model: SN.220790 (PCD-2000-

Catalog Number: 8R371041313001

Off-line (Database Only)

On-line (Database and Unit)

Fault/Operation Records Download

Back

3. Press “Proceed”

Unit Information

Name: SN.220790

Model: PCD-2000-ANSI

Catalog Number: 8R371041313001

Serial Number: 220790

CPU Software Version Number: 2.52

DSP Software Version Number: 1.2

Front Panel Version Number: 2

Rear Comm Version Number: 0

Proceed

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4. Press “Back”

Front Panel Status (Connected)

Front Panel	Status
Alternate 2 Active	Disabled
Alternate 1 Active	Disabled
Primary Active	Enabled
Reclose Block	Disabled
SEF Block	Disabled
Ground Block	Disabled
Remote Block	Disabled
Breaker Status	OPEN

Breaker status is based on 52a being Closed and 52b being Open, when the unit is Closed

5. From the Main Menu, select and double click “Settings”

Main Menu

Name/Model: Catalog Number:

Selections

- Metering
- Settings**
- Records
- Operations
- Test
- Front Panel Status
- Waveform Capture
- Programmable Curves
- Trip/Close Commands
- Miscellaneous Commands
- Power Quality
- Quick Setup

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6. From the Settings Menu, select and double click “Configuration Settings”

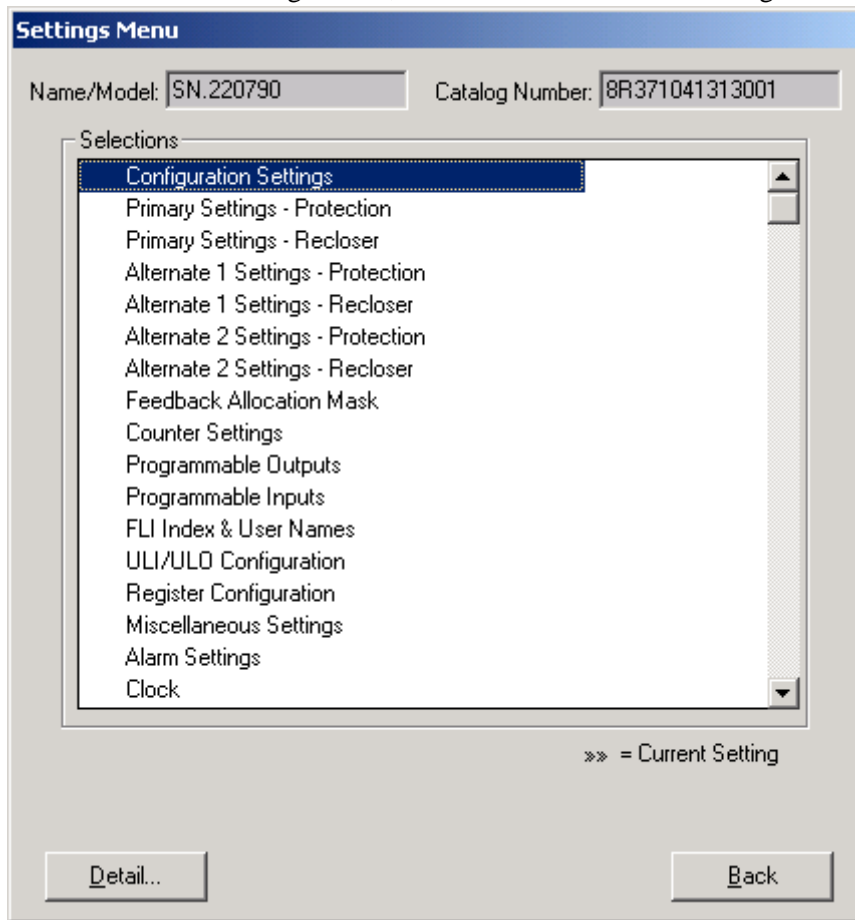


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- From Configuration Settings, select “**Receive Data from Unit**”. The **Actual Unit Value** from the PCD will be displayed in the blue column. As shown in step 8.

Configuration Settings

Name/Model: Catalog Number:

Setting	Database Value	Actual Unit Value
Phase CT Ratio	600	
Neutral CT Ratio	600	
SE CT Ratio	100	
Recloser Mode	Three Phase Tripping	
VT Ratio	60	
VT Connection	120V Wye	
Positive Sequence Reactance/Mile	0.001	
Positive Sequence Resistance/Mile	0.001	
Zero Sequence Reactance/Mile	0.001	
Zero Sequence Resistance/Mile	0.001	
Line Length(Miles)	0.1	
Trip Failure Time(Cycles)	18	
Close Failure Time(Cycles)	18	
Curve Set	Recloser	
Phase Rotation	ABC	

Database Value Detail... Receive Data from Unit Change Passwords...

Send Database Data to Unit -->> <<-- Send Unit Data to Database Print... Back

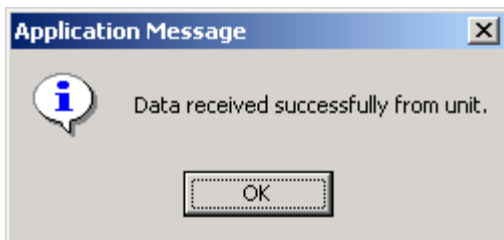


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8. The PCD **Actual Unit Values** can now be compared to the Enterprise Explorer **Database Value**

Configuration Settings

Name/Model: SN.220790 Catalog Number: 8R371041313001

Setting	Database Value	Actual Unit Value
Phase CT Ratio	600	600
Neutral CT Ratio	600	600
SE CT Ratio	100	100
Recloser Mode	Three Phase Tripping	Three Phase Tripping
VT Ratio	60	60
VT Connection	120V Wye	120V Wye
Positive Sequence Reactance/Mile	0.001	0.001
Positive Sequence Resistance/Mile	0.001	0.001
Zero Sequence Reactance/Mile	0.001	0.001
Zero Sequence Resistance/Mile	0.001	0.001
Line Length(Miles)	0.1	0.1
Trip Failure Time(Cycles)	18	18
Close Failure Time(Cycles)	18	18
Curve Set	Recloser	Recloser
Phase Rotation	ABC	ABC

Database Value Detail... Receive Data from Unit Change Passwords...

Send Database Data to Unit --> <<-- Send Unit Data to Database Print... Back

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9. Drag the Right Hand Vertical Scroll bar downward to view the remainder of the Configuration Settings

Configuration Settings

Name/Model: Catalog Number:

Setting	Database Value	Actual Unit Value
Alternate 2 Setting	Enable	Enable
Cold Load Timer Mode	Seconds	Seconds
79V Timer Mode	Seconds	Seconds
Voltage Display Mode	VIn	VIn
Frequency	60 Hz	60 Hz
Breaker Fail Mode	Open State	Open State
Target Display	Last	Last
Local Edit	Enabled	Enabled
WHz/VarHr Meter Mode	KWHz	KWHz
LCD Light	Timer	Timer
Unit Name	PCD2000	PCD2000
Demand Time Constant	15 Min.	15 Min.
LCD Contrast Adjustment	50	50
Zone Sequence Coordination	Enabled	Enabled
Close Delay Time(Sec)	0	0

Database Value Detail... Receive Data from Unit Change Passwords...

Send Database Data to Unit -->> <<-- Send Unit Data to Database Print... Back

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10. After the Settings are verified, press “Back” to return to the Settings Menu

11. Repeat the same process for Primary – Settings Protection

Settings Menu

Name/Model: SN.220790 Catalog Number: 8R371041313001

Selections

- Configuration Settings
- Primary Settings - Protection**
- Primary Settings - Recloser
- Alternate 1 Settings - Protection
- Alternate 1 Settings - Recloser
- Alternate 2 Settings - Protection
- Alternate 2 Settings - Recloser
- Feedback Allocation Mask
- Counter Settings
- Programmable Outputs
- Programmable Inputs
- FLI Index & User Names
- ULI/ULO Configuration
- Register Configuration
- Miscellaneous Settings
- Alarm Settings
- Clock

>> = Current Setting

Detail... Back

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12. When comparing Settings, pay special attention to numeric values/decimal points

Primary Settings - Protection

Name/Model: Catalog Number:

Setting	Database Value	Actual Unit Value
51P Curve Select (Phase Slow)	D (116)	D (116)
51P Pickup Amps	100	100
51P Time Multiplier	1	1
51P Minimum Response (sec)	0	0
51P Time-Curve Adder (sec)	0	0
50P-1 Curve Select (Phase Fast)	R (105)	R (105)
50P-1 Pickup X (Multiple of 51P)	1	1
50P-1 Time Multiplier	1	1
50P-1 Minimum Response (sec)	0	0
50P-1 Time-Curve Adder (sec)	0	0
50P-1 Curve Block Pickup (Multiple of 50P-1)	Disable	Disable
50P-2 Select (Definite Time)	Disable	Disable
50P-2 Pickup X (Multiple of 51P)	1	1
50P-2 Time Delay (sec)	0	0
50P-2 Curve Block Pickup (Multiple of 50P-2)	Disable	Disable

Database Value Detail... Receive Data from Unit

Send Database Data to Unit --> <<-- Send Unit Data to Database Print... Back

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13. Verify Primary Settings - Recloser

Primary Settings - Recloser

Name/Model: Catalog Number:

Setting	Database Value	Actual Unit Value
Single Phase Tripping Mode	Single Ph Disabled	Single Ph Disabled
79 Reset Time (sec)	20	20
79-1 Mode Select: 51P	Enable-3P	Enable-3P
79-1 Mode Select: 50P-1	Enable-3P	Enable-3P
79-1 Mode Select: 50P-2	Disable	Disable
79-1 Mode Select: 50P-3	Disable	Disable
79-1 Mode Select: 51N	Enable-3P	Enable-3P
79-1 Mode Select: 50N-1	Enable-3P	Enable-3P
79-1 Mode Select: 50N-2	Disable	Disable
79-1 Mode Select: 50N-3	Disable	Disable
79-1 Mode Select: 46	Lockout-3P	Lockout-3P
79-1 Mode Select: 67P	Lockout-3P	Lockout-3P
79-1 Mode Select: 67N	Lockout-3P	Lockout-3P
79-1 Open Interval Time (sec)	0.5	0.5
79-2 Mode Select: 51P	Enable-3P	Enable-3P

Database Value Detail... Receive Data from Unit

Send Database Data to Unit --> <<-- Send Unit Data to Database Print... Back

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14. Verify Programmable Outputs and Inputs; first maximize the window, press ‘‘Receive Data from Unit’’ then ‘Receive Data from Database’’. All of the checked selections must match.

	Out1b	Out2b	Out1c	Out2c	Out3c	Out4c	N/A	N/A	FB8	FB7	FB6	FB5	FB4	FB3	FB2	FB1	
Times:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
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Receive Data from Database Receive Data from Unit Continue

Send Data to Unit Send Data to Database Exit

Back

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Programmable Inputs - Source Local (Unchanged)

Name:	Logic	In1b	In2b	In1c	In2c	In3c	In4c	In5c	In6c	In7c	FB6	FB7	FB8	FB5	FB4	FB3	FB2	FB1
53a	AND	C															win tag	tag bin
53b	AND		C															
CLSBLK	OR																C	C
ALT2	OR																C	C
TABMSG	AND																C	
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C = Enable = Closed, Disable = Opened O = Enable = Opened, Disable = Closed

Receive Data from Database Receive Data from Unit
Send Data to Unit Send Data to Database Print... Back

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15. Repeat the same process for the Alternate Settings Groups, Counter Settings and Alarm Settings

Settings Menu

Name/Model: Catalog Number:

Selections

- Configuration Settings
- Primary Settings - Protection
- Primary Settings - Recloser
- Alternate 1 Settings - Protection**
- Alternate 1 Settings - Recloser
- Alternate 2 Settings - Protection
- Alternate 2 Settings - Recloser
- Feedback Allocation Mask
- Counter Settings
- Programmable Outputs
- Programmable Inputs
- FLI Index & User Names
- ULI/ULO Configuration
- Register Configuration
- Miscellaneous Settings
- Alarm Settings
- Clock

»» = Current Setting

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16. Press Back till the Main Menu is displayed. Select and Double Click “Waveform Capture”

Main Menu

Name/Model: SN.220790 Catalog Number: 8R371041313001

Selections

- Metering
- Settings
- Records
- Operations
- Test
- Front Panel Status
- Waveform Capture**
- Programmable Curves
- Trip/Close Commands
- Miscellaneous Commands
- Power Quality
- Quick Setup

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17. From the Waveform Capture Menu, select and double click “Oscillographics Data Capture Settings”

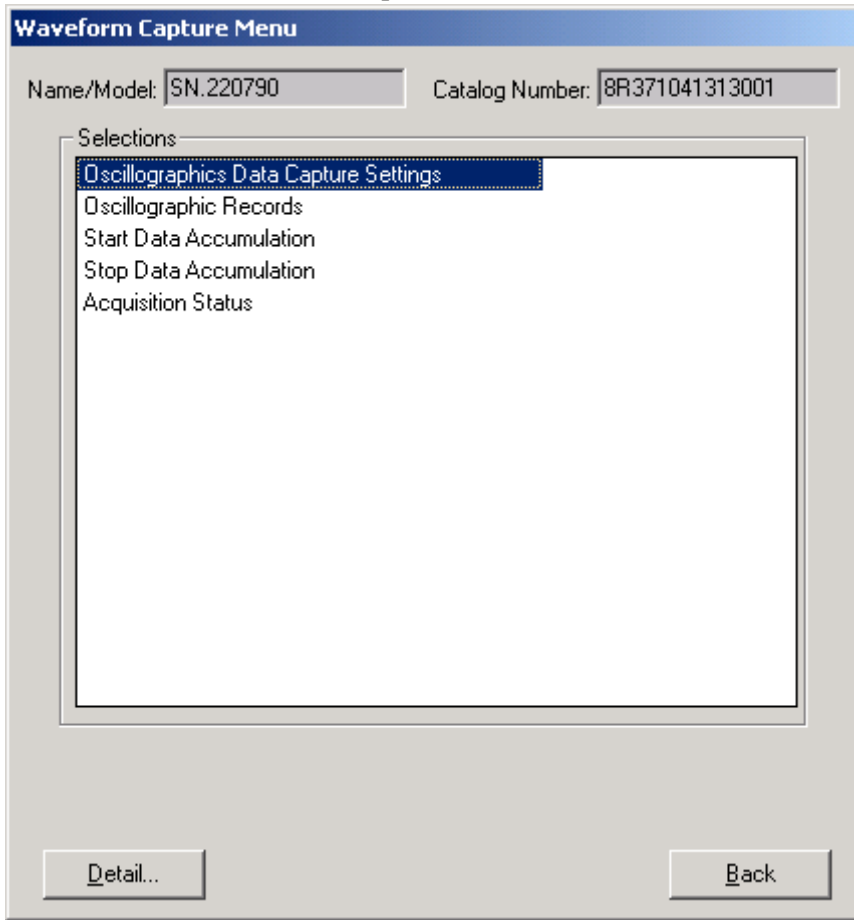


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18. Press “Receive Data from Unit”. The Actual Unit Value will be displayed as shown. Compare to the Database Value.

Oscillographics Data Capture Settings

Name/Model: Catalog Number:

Setting	Database Value	Actual Unit Value
Record Size	8 Rec. of 8 Cycles	8 Rec. of 8 Cycles
Single Shot Mode	No	No
Appended Record Mode	No	No
Trigger Position	0	0
51P	No	No
50P-3	No	No
50P-2	No	No
50P-1	No	No
51N	No	No
50N-3	No	No
50N-2	No	No
50N-1	No	No
67P	No	No
67N	No	No
46	No	No
27	No	No

Call 1-800-929-7947 option 5 or +1-407-732-2510 for any other questions you may have.

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