PXBCM Meter Color Touchscreen Display User Manual





1 Introduction

The Eaton PXBCM Meter 6" Color Touchscreen Display (PXBCM-DISP-6) is pre-programmed to communicate with Eaton PXBCM-MB Meters. The programming allows access to branch-circuit-monitor data and meters through the PXBCM meter base. The built-in navigation functions are simple and convenient, allowing easy navigation between screens. The display has been designed to display overall system information for up to 25 configured virtual meters, 100 channel data meters, and alarms.

2 Installation

For installation and connection information, please refer to "PXBCM Meter Color Touchscreen Display Quick Start Guide" (Eaton Pub. #TD150016EN).

3 Using the Touchscreen

3.1 Basic Navigation

Basic navigation between the screens is accomplished by touching labeled tabs, category areas, buttons or other available selections. In addition, unused areas of the screen can be used to navigate back to the home screen.

The home screen provides access to Meter Base (MB) information, Meter Module (MMP1-MMP4) information, Virtual Meters, Channel Data, or Alarms. Touching a tab, category, or information button will take the user to the selected screen (see Figure 1).

Settin	gs	PX B	SCM EIT	ž
PXB	CM-DIS	P-6 V1.00.00		
МВ	PXBCM-I	MB	In	fo
MMP1	PXBCM-I	MMS-L21-A	Int	fo
MMP2	PXBCM-I	MMS-R21-A	Int	fo
MMP3	PXBCM-I	MMS-L09-A	Int	io i
MMP4	PXBCM-I	MME-X25-333MV	Int	io
Met	ters	Channel Data	Alarms	;
 Virtual N	leters	Channel Data	Alarms	

Figure 1. Navigating from the Home Screen to Virtual Meters, Channel Data, or Alarms Screens.

Touching the information button on the MB row will take the user to the screen with Meter Base information (see Figure 2).

Back Previous	Next	
		E:T·N
MB Info	Firmware 1	.00.00
Assembly Name :	PXBCM-MB	
Part Number :	66C2887G01	
Assembly Rev :	01	Ethernet
Board Rev:	01	
Serial Number :	150801M11234	
Mode Switches :	OFF OFF	
Meters	Channel Data	Alarms

Figure 2. Meter Base Information.

As with many of the screens, the header contains several navigation buttons. Touching the "Back" arrow will return the user to the previous level in the hierarchy, in this case, the home screen. Touching the "Next" arrow will take the user to the next associated screen, MMP1 information in this case. Touching the "Previous" arrow will take the user to the previous associated screen, MMP4 information in this case.

Touching the information button for one of the Meter Modules (MMP1-MM4) will take the user to the appropriate screen with information for the selected Meter Module (see Figure 3).

Back	Previous	Next	
			E-T-N
MMP2	Info	Firmware 1	.00.00
Assembl	y Name:	PXBCM-MMS-F	R21-A
Part Num	nber:	66C2313G01	
Assembl	y Rev:	02	
Board Re	ev:	01	
Slave As	sembly:	01	
Serial Nu	imber:	150120M21234	
Mete	ers	Channel Data	Alarms

Figure 3. Meter Module Information.

3.2 Meters Tab

Touching the Meters tab will take the user to the list of configured Main and Virtual Meters (see Figure 4). There are up to 25 virtual meters (7 on each of the first three pages and 4 on the fourth page).

		•	#1-#25	F:T•N
Vir	tual Meters			Main
1	HVAC BldgA	`	L	Data
2	Lighting A01			Data
3	Lighting A03)ata
4	Lighting A05			Data
5	Chiller A			Data
6	Elevator			Data
7	Exterior A01	1)ata
		A	T	

Figure 4. Main and List of Virtual Meters.

Each Virtual Meter or Main has a couple screens containing detailed data for the selected meter (see Figure 5).

3.3 Channel Data Tab

Touching the Channel Data Tab will take the user to a Category Selection screen (see Figure 6). Once there, the user will be able to select one of nine categories.

- The Voltage Pairing category identifies the current channel name and associated voltage for each current channel.
- The Voltage category displays the three line-to-line voltages and three line-to-neutral voltages.
- The Amps/Max Amps category displays the present RMS amps and largest recorded amps for each channel.
- The Fwd./Rev. Energy category displays the accumulated Forward kWh and Reverse kWh for each channel.
- The Watts/Max. Watts category displays the present RMS watts and largest recorded watts for each channel.
- The VA/Max.VA category displays the present RMS VA and largest recorded VA for each channel.
- The Amp Demand/Peak category displays the most recently calculated Amp Demand and largest recorded Amp Demand for each channel.
- The Fwd./Rev. Demand category displays the most recently calculated Forward Watt Demand and Reverse Watt Demand for each channel.
- The Power Factor category displays the apparent power factor for each channel.

•	•	Main Me	eter	•		•	Main	Mete	er
CT Rating	2000	Breaker Rating	2000	Fwd. [Demand		281	1901	Watts
Watts 1	19750	Max Watts	258071	Rev. D	emand			0	Watts
VA 1	37644	Max VA	266390	Peak	Fwd. Dei	mand	372	2109	Watts
PF	0.87			Peak	Rev. Der	nand	41	1901	Watts
Fwd Energy		524507	.1 KWH	IA	382.0	Amps			
Rev Energy		62940	.8 KWH	IB	396.0	Amps			
				IC	374.0	Amps			
						A	T		
		Meter#	1			•	Met	ter#	1
Meter: HVA	 C BldgA	Meter# Mai	! 1 n Meter	Fwd.	 Demand	•	Met 1	ter# 0375	1 Watts
Meter:HVAC	C BldgA 100	Meter# Mai Breaker Rating	r Meter 100	Fwd. Rev. [Demand Demand	•	Mei 1	ter# 0375 0	1 Watts Watts
Meter: HVAC CT Rating Watts	BldgA 100 10390	Meter# Mai Breaker Rating Max Watts	1 n Meter 100 11481	Fwd. Rev. [Peak	Demand Demand Fwd. De	mand	Ме 1 1	ter# 0375 0 1498	1 Watts Watts Watts
Meter: HVAC CT Rating Watts VA	BldgA 100 10390 11943	Meter# Mai Breaker Rating Max Watts Max VA	1 n Meter 100 11481 13027	Fwd. I Rev. I Peak Peak	Demand Demand Fwd. De Rev. Dei	mand	Ме 1 1	ter# 0375 0 1498 0	1 Watts Watts Watts Watts
Meter: HVAC CT Rating Watts VA Avg. Amps	C BldgA 100 10390 11943 33.6	Meter# Mai Breaker Rating Max Watts Max VA Max. Amps	1 n Meter 100 11481 13027 36.2	Fwd. I Rev. I Peak Peak PF	Demand Demand Fwd. De Rev. Der	mand mand	Ме 1 1	ter# 0375 0 1498 0 0.88	1 Watts Watts Watts Watts
Meter: HVAC CT Rating Watts VA Avg. Amps Forward En	C BldgA 100 10390 11943 33.6 ergy	Meter# Mai Breaker Rating Max Watts Max VA Max. Amps 4550	1 n Meter 100 11481 13027 36.2 0.8 KWH	Fwd. Rev. I Peak Peak PF	Demand Demand Fwd. De Rev. Dei	mand	Ме 1 1	ter# 0375 0 1498 0 0.88	1 Watts Watts Watts Watts
Meter: HVAC CT Rating Watts VA Avg. Amps Forward En- Reverse En	C BldgA 100 10390 11943 33.6 ergy ergy	Meter# Mai Breaker Rating Max Watts Max VA Max. Amps 4550	1 n Meter 100 11481 13027 36.2 0.8 KWH 0.0 KWH	Fwd. I Rev. I Peak Peak PF	Demand Demand Fwd. De Rev. Dei	mand	Ме 1 1	ter# 0375 0 1498 0 0.88	1 Watts Watts Watts Watts

	PXE	CM FITON
Voltage Pairing	Voltage	Amps/ Max.Amps
Fwd./Rev. Energy	Watts/ Max. Watts	VA/ Max. VA
Amp Demand/ Peak	Fwd./Rev. Demand	Power Factor
Meters	Channel Data	Alarms



Touching a category will take the user to the channels 1-7 data for the selected category and the most recently selected MMP. From within the Channel Data screens, the "Previous" and "Next" arrows navigate to adjacent Meter Modules. For example, from MMP1, "Previous" navigates to MMP4 while "Next" navigates to MMP2. Also within the Channel Data screens, the "Up" and "Down" arrows navigate through pages of channel data, specifically 1-7 on the first page, 8-15 on the second page, 16-21 on the third page, and AX1-AX4 on the fourth page (see Figure 7).

	•	 	MMP1 >> Ar	mps
		Name	Amps	Max. Amps
1	сти	HVAC BidgA A	38 A	48 A
2	CTT	HVAC BldgA B	42 A	49 A
3	CTS	HVAC BidgA C	40 A	47 A
4	CTR	LightingA01A	22 A	44 A
5	ста	LightingA01B	24 A	45 A
6	CTP	LightingA01C	23 A	43 A
7	сто	Chiller A	51 A	58 A
			•	

Figure 7. Channel Data Screen.

3.4 Alarm Tab

Touching the Alarms tab will take the user to an overview of the alarms (see Figure 8). Displayed are the number of Latched Current Alarms and Latched Voltage Alarms for each MMP1, MMP2, MMP3, and MMP4, which act as buttons to display additional alarm details (see Figure 9).



Figure 8. Alarms Summary Screen.

Effective August 2015

-		MMP1	>> A	larms			\mathbf{b}	MMP	21 >> Al	larms
Current Alarms	Latch Low I	ned High	Status	%Rating	Currei	nt Alarms	Latcl Low	hed High	Status	%Rating
HVAC BldgA A	0	0	Normal	38	HVAC	BldgA A	0	0	Normal	38
HVAC BldgA B	0	0	Normal	42	HVAC	BldgA B	0	0	Normal	42
HVAC BldgA C	0	0	Normal	40	HVAC	BldgA C	0	0	Normal	40
LightingA01A	0	1	High	44	Lightin	gA01A	0	1	High	44
LightingA01B	0	1	High	45	Lightin	gA01B	0	1	High	45
LightingA01C	0	1	High	43	Lightin	gAD1C	0	1	High	43
Chiller A	0	0	Normal	51	Chiller	A	0	0	Normal	51
A Real Property lines and the second		•						•		
•	•	MMP1	>> A	larms				MMP	1 >> Al	arms
Voltage Alarms	itched	MMP1	>> A	larms	Volta	age Alarm counters	• I	MMP _ow _7	1 >> AI	High
Voltage Alarms La	itched w High	MMP1	>> A Status	larms %Rating	Volta C VAN	age Alarm counters	L	MMP _ow 7	1 >> AI	larms High 2
Voltage Alarms La Lov VAN 1	itched w High 0	MMP1	>> A Status Normal	larms %Rating 98	Volta C VAN VBN	age Alarm counters	► I	MMP _ow 7 7	1 >> AI	High 2 1
Voltage Alarms La Lov VAN 1 VBN 1	itched w High 0 0	MMP1	>> A Status Normal Normal	larms %Rating 98 97	Volta C VAN VBN VCN	age Alarm counters	L	MMP _ow 7 7 7 7	1 >> AI	High 2 1 2
Voltage Alarms La Lov VAN 1 VBN 1 VCN 1	itched w High 0 0	MMP1	>> A Status Normal Normal Normal	larms %Rating 98 97 99	Volta C VAN VBN VBN	age Alarm counters		MMP _ow 7 7 7	1 >> AI	High 2 1 2
Voltage Alarms La Lov VAN 1 VBN 1 VCN 1	itched w High 0 0 0	MMP1	>> A Status Normal Normal Normal	larms %Rating 98 97 99	Volta C VAN VBN VCN	age Alarm counters	•	MMP Low 7 7 7	1 >> AI	High 2 1 2
Voltage Alarms La Lov VAN 1 VBN 1 VCN 1	itched w High 0 0	MMP1	>> A Status Normal Normal Normal	larms %Rating 98 97 99	Volta C VAN VBN VCN	age Alarm	•	MMP Low 7 7 7	1 >> AI	High 2 1 2
Voltage Alarms La Lov VAN 1 VBN 1 VCN 1	itched w High 0 0	MMP1	>> A Status Normal Normal Normal	larms %Rating 98 97 99	Volta C VAN VBN VCN	age Alarm counters	L	MMP _ow 7 7 7	1 >> AI	High 2 1 2
Voltage Alarms La	itched w High	MMP1	>> A Status	larms %Rating	Volta C VAN	age Alarm counters	• I	MMP _ow 7	1 >> AI	larms High 2

Figure 9. Latched Alarms.

Touching MMP1, MMP2, MMP3, or MMP4 on Alarm Counter rows will take the user to screens with further alarm details. The Current Alarm Counters include columns for "Low-Low" (i.e. very low), "Low," "High," and "High-High" (i.e. very high). Meanwhile, the Voltage Alarm Counter include columns for "Low" and "High" (see Figure 10).

Figure 10. Current Alarm Counters and Voltage Alarm Counters.

Instruction Booklet **IB150007EN** Effective August 2015

Notes:

Notes:

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