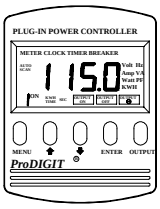
Model 2000C
Plug-in Power Controller
Operation Manual

Congratulations on your purchase, and welcome to Prodigit 2000C Plug-in power controller. This operation manual will guide you step by step for the various functions of the Power Controller.

Warning:

- To prevent fire or shock hazard, do not expose the unit to rain or moisture.
- The operating voltage is limited to 100~115 Vac 50/60 Hz, Don't use it in other voltage ratings.
- Indoor use only.
- The maximum output current is 15A.
- To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

1. Installation: (refer to figure 7 and 8)



2000C includes a precision digital Power Meter, Electronic Timer with up to 8 ON/OFF, Programmable Electronic Breaker, power up delay switch and spike free power switch.

Plug the 2000C to wall outlet, then connects the appliance or equipment to its receptacle, the LCD display will be lit after power up. Please setup the present time in the CLOCK function (refer to 5.1) if the Timer function is necessary for you.

Note: The present time in clock function needs to re-program after power failure or Plug-out 2000C from the wall outlet. Others setting is stored into the not erasable memories (EEROM) of 2000C.

2. Key Function: (refer to figure 1)

MENU：Menu Select function
↑： Up or last item
↓： Down or next item
ENTER： Input or confirm the setting
OUTPUT： Output ON/OFF control
Note: There is an Auto-Repeat function on"**↑**" and "**↓**" key if it was pressed for more than one second continuously. This feature can simplify the data programmed operation.

3. Menu Function:

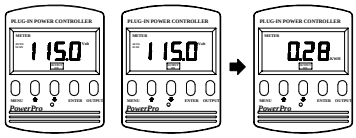
Press **MENU** to select the function in the sequence below:
METER→CLOCK→TIMER→BREAKER →METER→… etc.

4. Meter Display function:

The LCD display shows the RMS Voltage, RMS Current, Active Power (Watt), AC power line Frequency (Hz), Electric energy quantity (KWH), Apparent Power (VA) & Power Factor (P.F.).

Volt：display the RMS voltage value of power line, the normal line voltage in North-America is 115 Volts.

Amp：display the RMS current value from



power line to appliance, lower amps reading imply the power consumption is low.

Watt：display the power consumption value, lower watts reading means the power consumption is low.

Hz：display the power line frequency value, the normal line frequency in north America is 60 Hz.

VA：display the apparent power value, where VA = Vrms x Arms.

PF：display the Power Factor value of the electric Appliance or electronic product, the PF range is 0.1～1.0, where PF = W / (Vrms x Arms) or PF= cos0 for an inductive or a capacitive loading. There is less reactive power and less harmonic current pollution in the AC power line if PF is approaching unity.

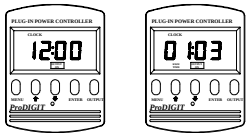
KWH: it shows the energy consumption for the testing appliance, this is the electric bill quantity unit in the country, please refer to the electric power company for the fare rate in your area.

Note: One KWH (Kilo-Watt-Hour) means an appliance dissipate 1000 Watts electric power for one Hour.

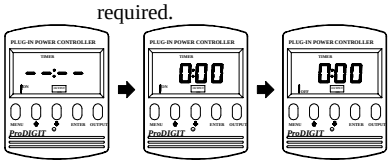
4.1. Press **MENU** to METER function.
4.2. Press **↑↓** key to display Volt、Amp、Watt、Hz、VA、PF、KWH.
4.3. Or Press **ENTER** to enter the Auto Scan mode, in this mode, the meter will show the sequence of voltage, current, and active power for 1 second each automatically. Press any key will escape from Auto Scan mode.

5. Clock function:

5.1. Set Present Time.
5.1.1. Press **MENU** to CLOCK function.
5.1.2. Press **ENTER**, the "Hour" on LCD display will flash, then Press **↑ ↓** key to edit the present "Hour".
5.1.3. Press **ENTER** key, the "Minute" on LCD display will flash, then Press **↑ ↓** key to edit present "Minute", finally Press **ENTER** to confirm the present time setting is completed.
5.2. The time duration of KWH meter:
2000C includes a Kilo-Watt-Hour(Electric bill quantity) meter, it starts to accumulate KWH and its duration time(hour) after power ON or manual reset operation.
5.2.1. Press **MENU** to select CLOCK function.
5.2.2. Press **↑ ↓** key to display The time duration of KWH, the KWH TIME announciator on LCD display will flash, it indicates the accumulation of KWH and KWH hour is in process. This feature is useful to measure the electric energy consumption status for the testing appliance.
5.2.3. Press **ENTER** key if KWH and KWH hour is required to reset to ZERO, the screen will display "rESt",then press **ENTER** again, the KWH time and KWH Meter will reset to zero.



5.2.4. In 5.2.3, when LCD display shows "rESt", you can press **MENU** If the KWH hour and KWH meter reset to zero is not required.



6. Electronic Timer Function:

There are up to eight ON and OFF programmable Electronic Timer function within model 2000C. The program sequence is shown below:
1 ON → 1 OFF → 2 ON → 2 OFF → 3 ON → ••• → 8 ON → 8 OFF→ TIMER ON/OFF → 1 ON → 1 OFF。

6.1. How to program:
6.1.1. Press **MENU** to select TIMER function.
6.1.2. Press **ENTER** to program for the first Timer setting(1 ON)
6.1.3. The "Hour" on LCD display will flash, Press **↑ ↓** key to edit "Hour", then press **ENTER**.
6.1.4. The "Minute" on LCD display will flash, Press **↑ ↓** key to edit "Minute", then press **ENTER**.
6.1.5. Repeat the above procedures (6.1.3 & 6.1.4) for next Timer programs (1 OFF, 2 ON, …etc.) until Timer setting is completed or the last (8 OFF) Timer setting is finished.
6.1.6. Press **OUTPUT** to terminate the Timer settings, the LCD screen shows Timer control output status is "on" (output is controlled by Timer automatically) or "oFF" (output is controlled manually), press **ENTER** key, then use **↑ ↓** key to edit status, finally press **MENU** key. Or just press **MENU** key to save the Timer program into the memory of 2000C. The LCD screen will display "SAVE" to indicate Timer Program and status is saved in 2000C.

Note： All of the Timer(from 1 ON till 8 OFF) was programmed to 00：00 (disable) in factory.

6.2. Timer control status (ON) or (OFF):(same as 6.1.1)
6.2.1. Press **MENU** key to Timer function.
6.2.2. Press **OUTPUT** key,the LCD shows the Timer control output status is "on"(output is controlled by Timer automatically) or "oFF" (output is controlled manually), where the right-down corner of LCD screen "OUTPUT 🕘" announciator is ON..

6.2.3. Press **ENTER** key, then use ↑ ↓ key to edit the desired status, finally press **MENU** key, Or just press **MENU** key to save the Timer program into the memory of 2000C. The LCD screen will display "SAVE" to indicate Timer Program and status is saved in 2000C.

6.3. Timer programmed data review：

6.3.1. Press **MENU** to Timer function.

6.3.2. Press ↑ ↓ key to review each Timer's program. It indicates on LCD screen "－－：－－" means no Timer action.

Note：Output control by Timer is set to "ON" for 2000C in factory.

7. Electronic Breaker function:

The AC Power output can be shutdown automatically with audible alarm when the load current is over the Programmed Breaker Current (0.1 - 15.0A). Please note the Programmed Breaker Current should be higher than the RMS current of ppliance.

7.1. Press **MENU** to BREAKER function.

7.2. Press **ENTER**, the Breaker current on LCD display will flash, then press ↑↓ key to edit the Breaker Current, finally press **ENTER** to complete the breaker current setting.

Note：The Electronic Break current is set to 15 Arms in factory.

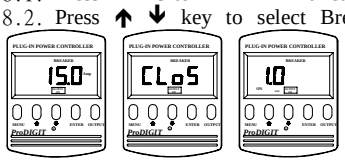
Tips: For proper Breaker current setting, please measure the RMS current (refer to 4.2) first for the specific appliance to be controlled, then program the Breaker current 110% to 120% of the measured RMS current, this feature can limit the ac current of specific appliance to operate within 10 to 20% higher than normal value.

8. Power Up Delay Switch：

Programmable output ON (with up to 60 seconds delay) or OFF after ac line power is ON or when AC power is restored after a power failure, this feature can avoid high surge current which cause by all appliance are turned ON at same time.

8.1. Press **MENU** to BREAKER function.

8.2. Press ↑ ↓ key to select Breaker



current or "CLOS"/"oPEn" (Power up ON/OFF).

8.2.1. When the LCD display "CLOS" or "oPEn", then press **ENTER** to edit power up ON/OFF status, the LCD display will flash, press ↑ ↓ key to edit "CLOS" or "oPEn", finally press **ENTER** key to complete settings.

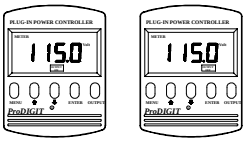
8.2.2. The LCD will flash to show power up delay time if power up ON is programmed in 8.2.1, then use ↑↓ key to edit power up delay second (1~60 sec), finally Press **ENTER** to SAVE the setting (LCD will show "SAVE" to indicate data into EEROM of 2000C).

Note： The Power up delay is set to 3 seconds for 2000C in factory.

9. Power Output ON/OFF control:

The power output switch can be controlled by TIMER automatically or manually.

The LCD screen display the present Output ON or OFF status (refer to figure 1). "OUTPUT ON" indicates present ac power switch is "ON", "OUTPUT OFF" indicates present ac switch is "OFF", "OUTPUT ⏲" indicates present ac switch is controlled by Timer.



9.1. TIMER controlled: Output ON/OFF is controlled by Timer program, please refer to 6.2 Timer control ON/OFF status.

9.2. Manual control:

9.2.1. Press **OUTPUT** key, the "OUTPUT ON" or "OUTPUT OFF" announciator on LCD will flash.

9.2.2. Press ↑ ↓ key to select OUTPUT ON or OUTPUT OFF on the LCD display.

9.2.3. Press **ENTER** to confirm the Output is ON or OFF.。

Note：In Timer automatic control mode, it is still available for Manual ON/OFF control.

Model 2000C Specifications:

ITEM	RANGE	
RMS voltage	85.0 ~ 125.0 Vrms	
RMS current	0.00 ~ 15.00 Arms	
Active power	0 ~ 3750 Watts	
Apparent power	0 ~ 3750 VA	
Line Frequency	47.0 ~ 63.0 Hz	
Power Factor	0.00 ~ 1.00	
Energy Quantity	0.00 ~ 9999 KWH	
KWH Hour	00:00～9999	
Electronic Breaker	0.1 ~ 15.0 Arms	
Clock	0:00～23:59	
Electronic Timer	0:00～23:59	
Items	**Accuracy**	
	Max.	Typ.
RMS voltage	1%	0.2%
RMS current	1%	0.3%
Active power	2%	0.5%
Apparent power	2%	0.5%
Line Frequency	2%	±0.1Hz
Power Factor	0.03	0.01
Energy Quantity	2%	0.5%
KWH Hour	30 ppm	
Electronic Breaker	1%	0.3%
Clock	30 ppm	
Electronic Timer	30 ppm	

Note: The typical accuracy for voltage is in the range of 90V～125V and for current is in the range of 0.2A～15A.

One piece type Dimension：
130.0mm(Height) x 60.0mm(Width) x 36.7mm(Depth)

Detachable type Dimension：
130.0mm(H) x60.0mm(W) x 36.7mm(D)
85.0mm(H)x 60.0mm(W) x 17.0mm(D)
Weight：155 g (one piece.),
205 g (detachable)
Power consumption：10VAmax Cable
Length: 110 cm.

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Appendix：
PROGRAM TIMER TABLE

TIMER		TIME	
1	ON		
	OFF		
2	ON		
	OFF		
3	ON		
	OFF		
4	ON		
	OFF		
5	ON		
	OFF		
6	ON		
	OFF		
7	ON		
	OFF		
8	ON		
	OFF		

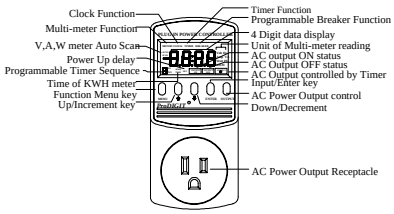

Figure 1 Model 2000CS Front panel function description

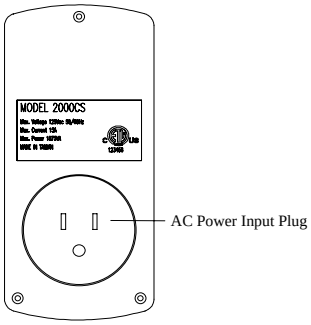

Figure 2 Model 2000CS Rear Panel

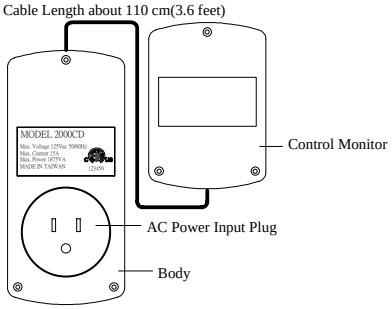

Figure 3 Model 2000CD Rear Panel

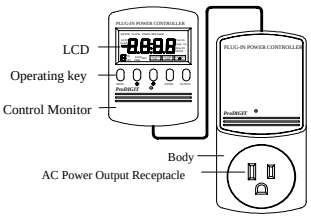

Figure 4 Model 2000CD Front Panel

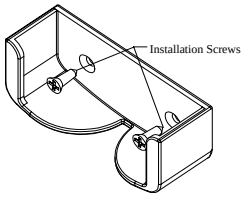

Figure 5 2000CD Control Moinitor pocket Installation Diagram

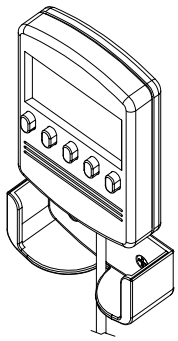

Figure 6 2000CD Contronl monitor pocket

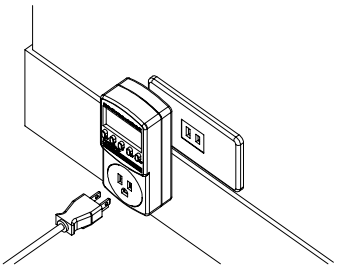

Figure 7 2000CS Installation Diagram

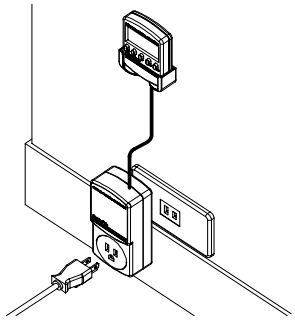

Figure 8 2000CD Installation Diagram

Function Configuration Table