

airPHX

PA2400 Timer Guide



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airPHX PA2400 7-Day Timer User Guide



This user guide will help guide you through the programming process of the PA2400 7-Day Timer that is located on the front of the PA2400. A step by step sample program can be found at the end of this guide. If you should have any further questions, please contact your airPHX representative 855-424-7749 (855-4 AIRPHX).



Important Facts:

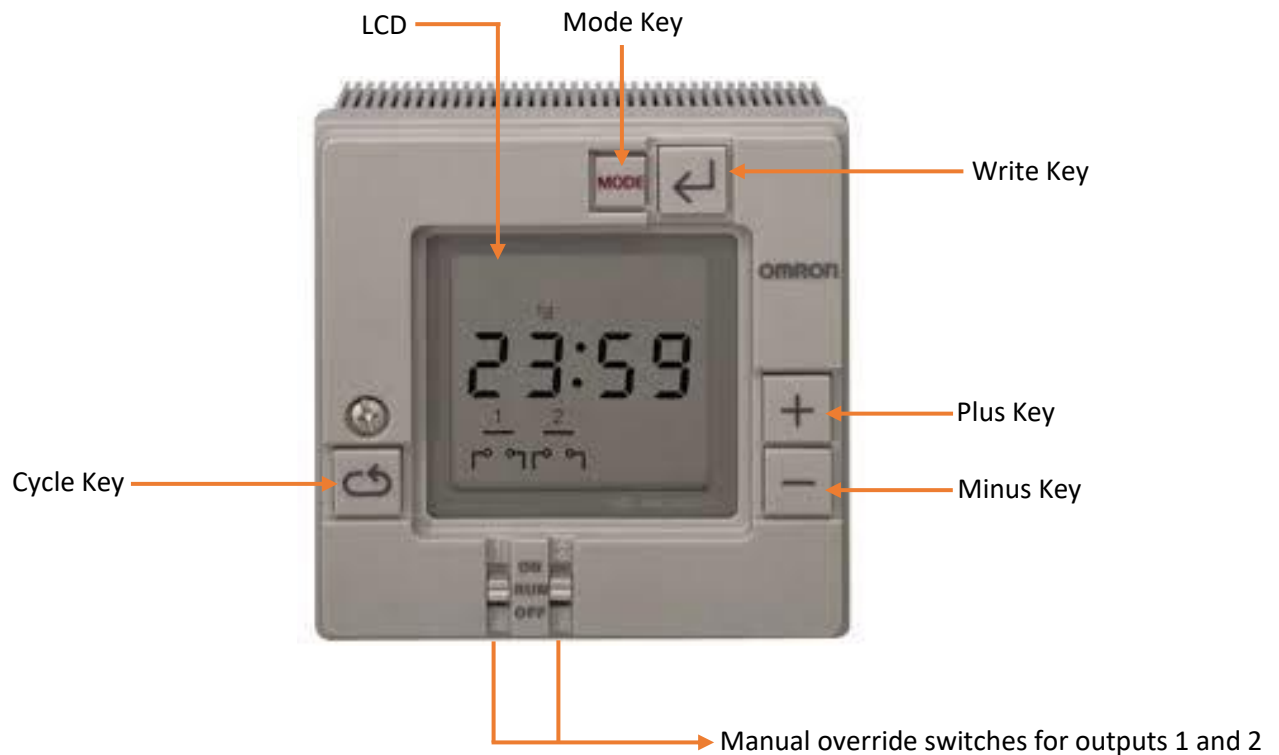
- The override switches located on the front of the timer will override the timer's function. Please make certain that both switches 1 and 2 are in the RUN position when you have completed your programming.
- The PA2400 has a switch located on the right side of the unit, please refer to quick start guide, that activates the timer. This switch needs to be in the on position for the timer circuit to function.

Timer Specifications







- Easy operation with five keys.
- Up to 24 steps of ON/OFF operations can be set.
- Memory protection during power failure for up to 10 years.
- Certified for UL and CSA safety standards.
- The same setting can be used for multiple-day operation and Timer operation.
- Time format = 24 hour.

Rated supply voltage	100 to 240 VAC (50/60 Hz)
Operating voltage range	85% to 110% of rated supply voltage
Power consumption	Approx. 4 VA at 240 VAC
Control outputs	15 A at 250 VAC, resistive load at 50C 12 A at 250 VAC, resistive load at 55C Minimum applied load: 100 mA at 5 VDC (failure level: P, reference value)

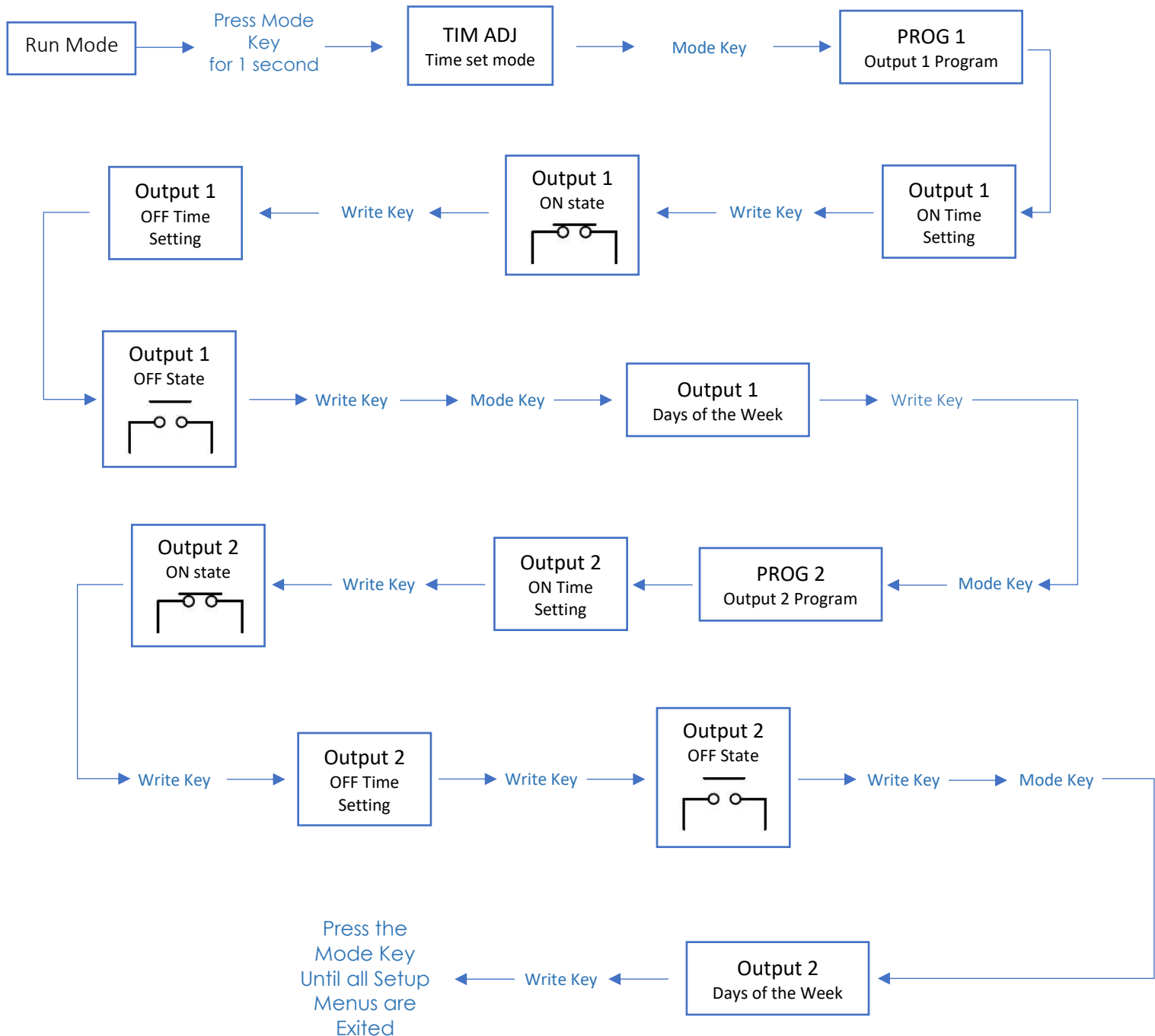
Timer Overview



Key Operation

Key	Name	Function
	Mode Key	Changes program mode
	Write Key	To write the set data using the Plus and/or Minus Key. Reads out the set program.
 	Plus Key Minus Key	The plus and minus key is used toggle through selections. When the Plus Key is held down, the displayed digit increments continuously; when the Minus Key is held down, it decrements continuously. Note that if the same key is pressed twice, the output specification becomes invalid; neither ON nor OFF is set.
	Cycle Key	Specifies the cycle program. Pressing this key twice causes the set cycle program to be cleared.
	Manual Override Switch	ON: Turns ON output 1 and overrides the scheduled program within the timer RUN: Executes scheduled program OFF: Turns OFF output 1 and overrides the scheduled program within the timer First and second output can be operated independently.

Mode of Operations Overview



Programing



The PA2400 7-day timer can run two different time schedules. One schedule for the week days and another for the weekend. Output 1 is reserved for the week days and output 2 is reserved for the weekends

Set the current time: This is done in the order of "day of week", "hour" and "minute".

1. Start by putting the timer in "TIM ADJ" mode. This is done by pressing the **MODE** key for longer for 1 second.
2. Set the current **day of the week** using the **Plus/Minus Keys**. The day will appear in **BOLD** when correctly selected. Press the **Write Key** once the desired day is selected.
3. Set the current "hour" using the **Plus/Minus Keys**. Press the **Write Key** once the desired hour is selected.
4. Set the current "minutes" using the **Plus/Minus Keys**. Press the **Write Key** once the desired minutes are selected.

* During initial startup the timer will already be in "TIM ADJ" mode.

Schedule Programing Output 1:

The schedule programming is completed in the order of hour, minutes, output state and days of the week.

This section covers setting the time and on/off state for output 1.

Setting schedule time:

1. Once the current time is set and the timer is still in "TIM ADJ" mode, press the **Mode Key** to put the Timer in "PROG 1" mode. If you have exited from the "TIM ADJ" mode, you will need to hold the **Mode key** for 1 second until "TIM ADJ" appears and then press the **Mode key** again to get into "PROG 1" mode.
2. Set "hour" using the **Plus/Minus Keys**. Press the **Write Key** once the desired hour is selected.
3. Set "minutes" using the **Plus/Minus Keys**. Press the **Write Key** once the desired minutes are selected.

Setting on state for output 1:

1. After setting the minutes the program will take you to the output state at this point select the "ON" state for output 1 using the **Plus/Minus Key**. Press the **Write Key** once the desired state is selected. These steps set the ON time for the schedule.
2. Set "hour" using the **Plus/Minus Keys**. Press the **Write Key** once the desired hour is selected.
3. Set "minutes" using the **Plus/Minus Keys**. Press the **Write Key** once the desired minutes are selected.
4. Specify "OFF" state for output 1 using the **Plus/Minus Key**. Press the **Write Key** once the desired state is selected.

Programing cont.



5. The next display will show **00:00**. ***DO NOT CHANGE THIS SETTING.*** Press the *MODE Key*. This will take you to the *days of the weeks* programming for the output.



This symbol represents the on state.



This symbol represents the off state.

Sitting the days of the week for output 1:

1. Once you have completed setting the off state for output 1 press the *Mode key* to access the "DAY SET" mode.
2. Set "*day of the week*" using the *Plus/Minus Keys*. Press the *Write Key* once the desired *day of the week* is selected.
3. Repeat these steps for all the *days of the week*.

The selected days are in **BOLD**. These are the days that the schedule will run.

Once the above steps are complete the timer is fully programmed and ready for use. Remember to slide the manual override switches to the RUN positions.

Deleting Programs

Deleting from Normal Operation Programs (ON Time/OFF Time)

1. Call up the output display for the program to be deleted by pressing the Write Key. The minus sign (–) for the output point will flash.
2. Next, change the display to disable the output using the Plus and Minus Keys. For NC contacts, press the Plus Key and for NO contacts, press the Minus Key. The connecting bar above the contacts will disappear and the display will flash to indicate that the output has been displayed.
3. Press the Write Key to delete.

Sample Program

Example Schedule:

For this example, we will be setting the following schedule in which the unit will run:

Monday through Friday - 11:00pm to 6:00am

Saturday and Sunday - 10:00pm to 8:00am

Output 1 PROG 1 programs the week day

Output 2 PROG 2 programs the weekend

Setting the current time:

1. Start by putting the timer in "TIM ADJ" mode. This is done by pressing the **MODE** key for longer for 1 second. *
2. Set the current **day of the week** using the **Plus/Minus Keys**. The day will appear in **BOLD** when correctly selected. Press the **Write Key** once the desired day is selected.
3. Set the current "**hour**" using the **Plus/Minus Keys**. Press the **Write Key** once the desired hour is selected.
4. Set the current "**minutes**" using the **Plus/Minus Keys**. Press the **Write Key** once the desired minutes are selected.

Setting the on time for output 1 (PROG 1):

1. Using the **Plus/Minus Keys**, change the **hour** to **23**, keeping in mind that the time is displayed in a 24-hour format.
2. Press the **Write Key**.
1. Using the **Plus/Minus Keys**, change the minutes to 00.
2. Press the **Write Key**.
3. Using the **Plus/Minus Keys**, set the output state for output 1 to **ON** (☐^{ON}☐).
4. Press the **Write Key**.

Setting the off time for output 1 (PROG 1):

1. Using the **Plus/Minus Keys**, change the **hour** to **6**, keeping in mind that the time is displayed in a 24-hour format.
2. Press the **Write Key**.
3. Using the **Plus/Minus Keys**, change the minutes to 00.
4. Press the **Write Key**.
5. Using the **Plus/Minus Keys**, set the output state for output 1 to **OFF** (☐^{OFF}☐).
6. Press the **Write Key**.



Next you will see 00:00 flashing on the display. Do not change this setting.

7. Press the **Mode** key to continue.

* During initial startup the timer will already be in "TIM ADJ" mode.

Sample Program cont.

Setting the week day that the unit will run for output 1 (PROG 1):

1. While **SUN** is highlighted press the **Minus Key** to deselect Sunday. It will now be bold.
2. Press the **Write Key**.
3. Continue pressing the **Write key** until **SAT** is displayed. Press the **Minus Key** to deselect Saturday.
4. Press the **Write Key**.
5. This completes the schedule for the week days. The next step is to program the weekend "PROG 2"

Setting the on time for output 2 (PROG2):

1. Press the **Mode key**. This takes you to "PROG 2"
2. Using the **Plus/Minus Keys**, change the **hour** to 22.
3. Press the **Write Key**.
4. Using the **Plus/Minus Keys**, change the minutes to 00.
5. Press the **Write Key**.
6. Using the **Plus/Minus Keys**, set the output state for output 1 to **ON** (☐^o☐).
7. Press the **Write Key**.

Setting the Off time for output 2 (PROG 2):

1. Using the **Plus/Minus Keys**, change the **hour** to 8.
2. Press the **Write Key**.
3. Using the **Plus/Minus Keys**, change the minutes to 00.
4. Press the **Write Key**.
5. Using the **Plus/Minus Keys**, set the output state for output 1 to **OFF** (☐^o☐).
6. Press the **Write Key**.
7. *Next you will see 00:00 flashing on the display. **Do not change this setting.***
8. Press the **Mode** key to continue.



Setting the week day for output 2 (PROG 2):

1. While **SUN** is highlighted press the **Write Key** to select Sunday.
2. Continue Pressing the **Write Key** until **SAT** is displayed.
3. Continue pressing the **Write key** until **SAT** is displayed. Press the **Write Key** to select Saturday.
4. Press the **Mode key** to exit all programming.