

Operating Instructions
Baseball Master Panel
model MP04A1



Document MP04A1M1

Phenix Controls Inc.

1619 S. Minnie Street
Santa Ana, CA 92707

Phone: 714 - 547- 4316

Fax: 714 - 547- 4338

Email: info@phenixcontrols.com

Web: www.phenixcontrols.com

Table of Contents

Operating Instructions.....	1
Features.....	3
Description.....	3
Firmware Updates.....	4
Requesting Cage Information.....	4
Emergency Procedures.....	5
Renting.....	6
Running, Pausing, and Deleting Games.....	8
Special Features.....	9
Auditing.....	10
Programming.....	13
Troubleshooting.....	17
Appendix A - Master Panel Functions.....	18
Appendix B - Memory Locations.....	18

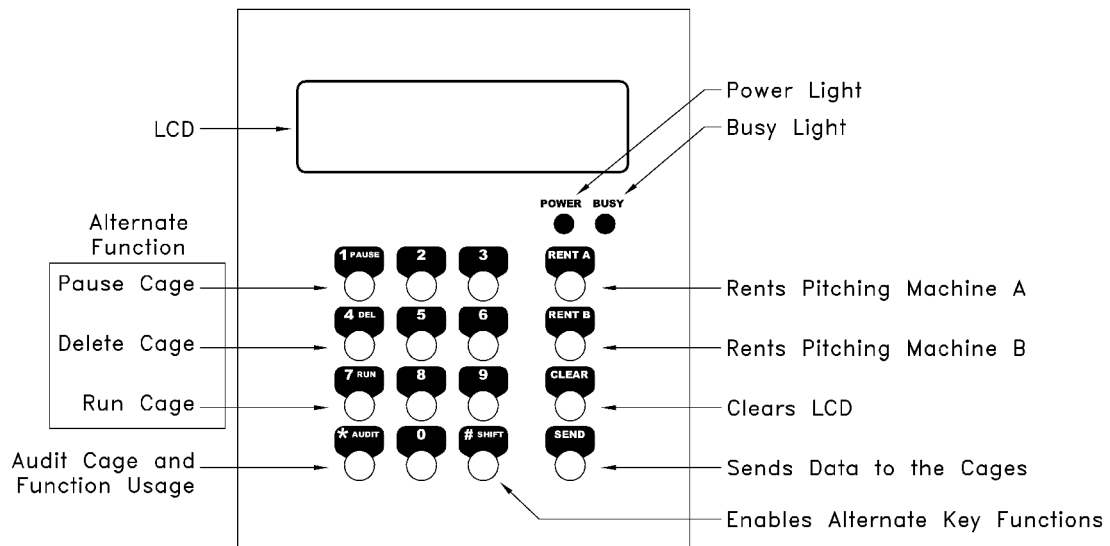
Features

- LCD Display
- Time (15, 30, 45, 60, or 90 minutes) and Ball (50,100, 150, or 250 balls) rental
- Run, Pause, or Delete all or individual games from the office
- Machine A or Machine B Rental
- 1 to 30 cages controlled (60 pitching machines)
- Allow monitoring of the time remaining or the number of balls left to be pitched in any cage at any time
- Provide a control and auditing system that cannot be circumvented or altered by employees
- Permit programmable control of the number of balls to be pitched and the number of coins collected per game
- Allow auditing of the keypad to determine the number of times each function has been used

Description

Model MP04A1 is a microprocessor controlled batting cage computer. It provides control and auditing of one to thirty cages from an office.

Keypad



Firmware Updates

This Manual is for Master Panel model MP04A1 with firmware “PGM 909602.” This Manual applies to Master Panels manufactured or with a firmware update after March 1, 2006.

If the display shows “Mach-A” or “Mach-B” when “Clear”, “1”, “Rent A” or Rent B” is entered, then you have the latest firmware “PGM 909602.”

Contact the factory for firmware updates.

Requesting Cage Information

To find out the status of any cage:

1. Press “ Clear ”
2. Enter the cage number “ 1-30 ”
3. Press “ Send ”

The “Busy” light will come on while the computer gets data from the cage. If no cage is

connected at that cage number the display will show

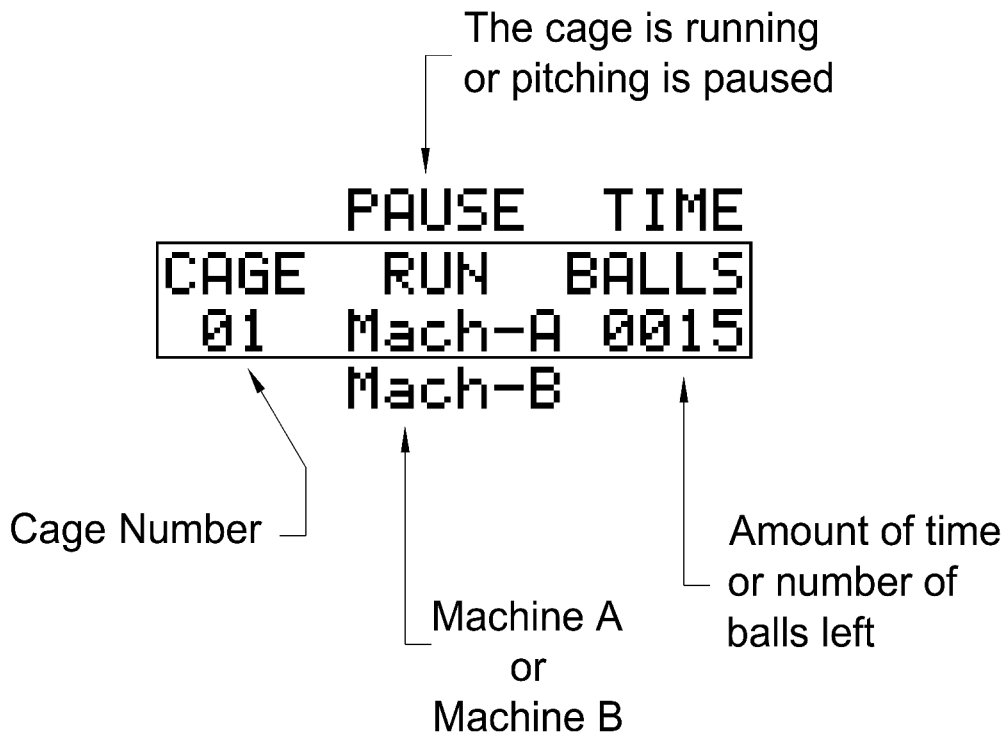
CAGE
01

 . If the cage is

connected and the cage is not being used the display will show

CAGE	OFF
01	0000

 . The display will show any of the following operating conditions.



Emergency Procedures

The Batting Cage Controls System is not designed to be a safety system. It is only designed to provide specific control of batting cages. Safety is the responsibility of the batting cage owners through proper operating procedures.

Quickly Pause All Cages from the Master Panel

The quickest way to stop all cages is to put them into pause by:

Press “#”

Press “Clear”

This will pause all cages. This will give the batting cage operators time to decide which cages to RUN and which should be DELETED. Pausing is preferable to deleting because customers do not lose games that they have paid for.

Quickly Pausing from the Coin Mech Interface

Each Cage can be paused with its own Coinmech. This will NOT pause all cages.

Coin Mech Interface model CM01

Press the optional pushbutton connected to the pause input on the coinmech. See connection drawings for installation.

Coin Mech Interface model CM02

Pause is activated by pressing the Run A and Run B buttons at the same time. The buttons are then locked out for 5 seconds before they can be used to start the cage.

Coin Mech Interface model CM03

Pause is activated by pressing the Center Pause button or by pressing the Run A and Run B buttons at the same time. The Run A and Run B buttons are then locked out for 5 seconds before they can be used to start the cage.

Renting

Balls

To Rent balls:

1. Press “ Clear ”
2. Enter the cage number “ 1-30 ”
3. Press “ Rent A ” for Machine A or “ Rent B ” for Machine B
4. Enter the number of balls to rent “ 50, 100, 150, 200, or 250 ”
5. Press “ Send ”

The display will show figure 1 for Machine A or figure 2 for Machine B. When “Send” is pressed “Rent” will change to “Pause.” Balls will start pitching when “Run” is activated at the cage or from the Master Panel.

```
CAGE RENT BALLS
01 Mach-A 0050
```

Figure 1

```
CAGE RENT BALLS
01 Mach-B 0050
```

Figure 2

Time

To Rent time:

1. Press “ Clear ”
2. Enter the cage number “ 1-30 ”
6. Press “ Rent A ” for Machine A or “ Rent B ” for Machine B
3. Enter the amount of time to rent in minutes “ 15, 30, 45, 60, or 90 ”
4. Press “ Send ”

The display will show figure 3 for Machine A or figure 4 for Machine B. When “Send” is pressed “Rent” will change to “Pause.” Balls will start pitching when “Run” is activated at the cage or from the Master Panel .

```
CAGE RENT TIME
01 Mach-A 0015
```

Figure 3

```
CAGE RENT TIME
01 Mach-B 0015
```

Figure 4

Game

To Rent a game:

1. Press “ Clear ”
2. Enter the cage number “ 1-30 ”
7. Press “ Rent A ” for Machine A or “ Rent B ” for Machine B
3. Enter “ 11 ”
4. Press “ Send ”

The display will show figure 5 for Machine A or figure 6 for Machine B. The number displayed under “GAME” is the number of balls that will be pitched. This number is set in the Programming mode under Balls/Vend. When “Send” is pressed “Rent” will change to “Pause.” Balls will start pitching when “Run” is activated at the cage or from the Master Panel .

CAGE	RENT	GAME
01	Mach-A	0018


Figure 5

CAGE	RENT	GAME
01	Mach-B	0018

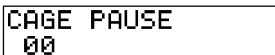
Figure 6

Running, Pausing, and Deleting Games


Running when a Game is Paused

<p>To run games:</p> <ol style="list-style-type: none">1. Press “ Clear ”2. Press “ 0 ” for all cages [default] or enter the cage number “ 1-30 ”3. Press “ # ”4. Press “ 7, 8, or 9 ”5. Press “ Send ”	 <p>CAGE RUN 00</p> <p>Figure 7</p>
---	--

Pausing when a Game is Running


<p>To pause games:</p> <ol style="list-style-type: none">1. Press “ Clear ”2. Press “ 0 ” for all cages [default] or enter the cage number “ 1-30 ”3. Press “ # ”4. Press “ 1, 2, or 3 ”5. Press “ Send ”	 <p>CAGE PAUSE 00</p> <p>Figure 8</p>
---	--

Deleting


<p>To delete games:</p> <ol style="list-style-type: none">1. Press “ Clear ”2. Press “ 0 ” for all cages [default] or enter the cage number “ 1-30 ”3. Press “ # ”4. Press “ 4, 5, or 6 ”5. Press “ Send ”	 <p>CAGE DEL 00</p> <p>Figure 9</p>
--	--

Special Features

Free Play

<p>To Start Free Play:</p> <ol style="list-style-type: none">1. Press “ Clear ”2. Press “ 0 ” for all cages [default] or enter the cage number “ 1-30 ”3. Press “ # ”4. Press “Rent A”5. Press “1”6. Press “ Send ” <p>“Free Play” bypasses the coin mechs and allows ven games to be started from the RUN A or RUN B buttons.</p> <p>Note: In Free Play, Machine B games will only work with Coin Mech Interface model CM02.</p> <p>Note: The Computer will not indicate the cage is in Free Play.</p>	 <p>Figure 10</p>
--	--

Ending Free Play

<p>To End Free Play from the Computer:</p> <ol style="list-style-type: none">1. Press “ Clear ”2. Press “ 0 ” for all cages [default] or enter the cage number “ 1-30 ”3. Press “ # ”4. Press “4, 5, or 6”5. Press “ Send ” <p>To End Free Play from Coin Mech Interface model CM01:</p> <ol style="list-style-type: none">1. Press and Release PGM button. <p>To End Free Play from Coin Mech Interface model CM02:</p> <ol style="list-style-type: none">1. Press and Hold “A”2. Press “Time”3. Release Both Buttons	 <p>Figure 11</p>
--	--

Auditing

Time

To find out how many times “ 15, 30, 45, 60, or 90 minutes ” have been rented:

1. Press “ Clear ”
2. Press “ * ”
3. Press “ 1, 2, 3, 4, or 5 ” for “ 15, 30, 45, 60, or 90 ” minute rental

The number displayed under “Mem” is the memory location. The number displayed under “Time” represents the number of times that this function has been used. In this example we are checking memory location 1 which is for “15 minute time rental”; the number under “Time” shows that this function has only been used once.

CAGE	MEM	TIME
00	01	0001

Figure 10

Ball

To find out how many times “ 50, 100, 150, 200, or 250 balls ” have been rented:

1. Press “ Clear ”
2. Press “ * ”
3. Press “ 6, 7, 8, 9, or 10 ” for “50, 100, 150, 200, or 250 ” ball rental

The number displayed under “Mem” is the memory location. The number displayed under “Balls” represents the number of times that this function has been used. In this example we are checking memory location 10 which is for “250 ball rental”; the number under “Time” shows that this function has only been used once.

CAGE	MEM	BALLS
00	10	0001

Figure 11

Game

To find out how many times a game has been rented from the computer:

1. Press “ Clear ”
2. Press “ * ”
3. Press “ 11 ”

The number displayed under “ Mem ” is the memory location. The number displayed under “ Game ” represents the number of times that this function has been used. In this example we are checking memory location 11 which is for “ Game rental ”; the number under “ Game ” shows that this function has only been used once.

CAGE	MEM	GAME
00	11	0001

Figure 12

Pause

To find out how many times the pause function has been used from the computer:

1. Press “ Clear ”
2. Press “ * ”
3. Press “ 14 ”

The number displayed under “ Mem ” is the memory location. The number displayed under “ Pause ” represents the number of times that this function has been used. In this example we are checking memory location 14 which is for “ Game Pausing ”; the number under “ Pause ” shows that this function has only been used once.

CAGE	MEM	PAUSE
00	14	0001

Figure 13

Run

To find out how many times the run function has been used from the computer:

1. Press “ Clear ”
2. Press “ * ”
3. Press “ 13 ”

The number displayed under “ Mem ” is the memory location. The number displayed under “ Runs ” represents the number of times that this function has been used. In this example we are checking memory location 13 which is for “ Game Run ”; the number under “ Runs ” shows that this function has only been used once.

CAGE	MEM	RUNS
00	13	0001

Figure 14

Delete

To find out how many times the delete function has been used from the computer:

1. Press “ Clear ”
2. Press “ * ”
3. Press “ 12 ”

The number displayed under “ Mem ” is the memory location. The number displayed under “ Del ” represents the number of times that this function has been used. In this example we are checking memory location 12 which is for “ Game Deleting ”; the number under “ Del ” shows that this function has only been used once.

CAGE	MEM	DEL
00	12	0001

Figure 15

Cage Rents

To find out how many coins have been dropped into a cage:

1. Press “ Clear ”
2. Press “ * ”
3. Press “ 16 ”
4. Enter the cage number “ 1-30 ”
5. Press “ Send ”

To find out how many coins have been dropped into another cage repeat steps 4 and 5. To exit from Auditing mode press “ Clear ”

The number displayed under “ Mem ” is the memory location. The number displayed under “ Cage ” is the cage number. The number displayed under “ Coins ” shows the number of coins that have been dropped into this cage. In this example we are checking memory location 16, which is for “ Coins ”; the number under “ Cage ” shows that we are checking Cage 1, and the number under “ Coins ” shows that only one coin has been dropped into this cage.

CAGE	MEM	COINS
01	16	0001

Figure 16

Programming

Entering Program Mode

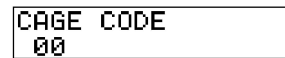
To enter the programming mode:

1. Press “ Clear ”
2. Press “ 31 ”
3. Enter the computer code i.e. “ 1234 ”

If the correct code is entered the display will change to the programming screen (Figure 18.)

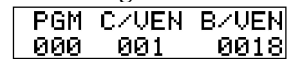
If the wrong code is entered press “ # ” and start over.

You need to be in the programming mode to change the coins/vend, balls/vend, operating modes, LCD contrast, or the cage number.



```
CAGE CODE
00
```

Figure 17



```
PGM C/VEN B/VEN
000 001 0018
```

Figure 18

Coins per Vend

To change the number of coins needed to run a game:

1. Enter the number of coins “ 1-255 ”
2. Press “ Rent A ”
3. Press “ Send ”

Balls per Vend

To change the number of balls pitched per game:

1. Enter the number of balls “ 1-255 ”
2. Press “ Rent B ”
3. Press “ Send ”

Cage Number

Note: Disconnect all cages from line except the cage you are going to program otherwise any cage connected to the line will have its cage number changed also.

To program a cage number:

1. Press “ Clear ”
2. Enter the cage number “ 1-30 ”
3. Press “ * ”
4. Press “ Send ”

Operating Modes

The Baseball System has the following features that can be set or cleared:

Mode	Description	Set	Cleared
0	This mode affects how a baseball or a softball game is selected in a Time Rental. If this mode is set, baseball or softball is selected with the “Run” button. If this mode is cleared, baseball or softball is selected with a coin drop.	1	0
1	Mode 1 and Mode 2 affect how a baseball or a softball game is selected and run in a game rental. If this mode is set, baseball or softball is selected with a coin drop and run with a “Run” button. If this mode is cleared, Mode 2 is enabled.	2	0
2	Note: This mode is only enabled if Mode 1 is cleared. Mode 1 and Mode 2 affect how a baseball or a softball game is selected and run in a game rental. If this mode is set, baseball or softball is selected and run with the “Run A” or “Run B” button. If this mode is cleared, baseball or softball is selected and run with a coin drop.	4	0
3	If this mode is set, the light box does not go into the pause mode after a game has been pitched. Mode 7 should also be cleared.	8	0
4	This mode tells the computer if there is only one machine at this cage. If this mode is set, “B” rental is enabled. If this mode is cleared, “B” rental is disabled.	16	0
5	This mode enables or disables missing ball shutdown. If this mode is set, the cage changes to the “Pause” condition when no ball is pitched within 1 minute. Pitching can be resumed by pressing “Run.”	32	0
6	This mode enables or disables Free Play. If this mode is set, Free Play will be enable all the time. If this mode is cleared, Free Play can be activated and deactivated using the procedures under Special Functions.	64	0
7	This mode enables or disables the accumulation of coins after run is activated. If this mode is set, multiple games can be rented by dropping in multiple coins after run is activated. If this mode is cleared, multiple games can only be rented until run is activated; any more coins dropped in after run is activated do not accumulate games.	128	0

These modes are programmed into the computer by adding the mode numbers. For example, if modes 0 and 2 are cleared and modes 1, 4, 5, and 7 are set, the operating number is 178.

Mode 0 disabled	0
Mode 1 enabled	2
Mode 2 disabled	0
Mode 4 enabled	16
Mode 5 enabled	32
Mode 7 enabled	+128
Operating Number	178

Note: Disconnect all cages from line except the cage you are going to program otherwise any cage connected to the line will have its mode changed also.

Note: Balls/vend and Coins/vend will have to be re-entered after setting the modes.

<p>To change the operating mode:</p> <ol style="list-style-type: none"> 1. Enter "255" 2. Press "Rent A" 3. Enter the operating number (0-255) 4. Press "Rent B" 5. Press "Send"

Warning Light Brightness

This setting allows you to change the level of brightness of the warning lights.

<p>To change the warning lights brightness:</p> <ol style="list-style-type: none"> 6. Enter "254" 7. Press "Rent A" 8. Enter the level of brightness (0-255) 9. Press "Rent B" 10. Press "Send" 	<p>Settings: 1 to 255 → Dimming Range 255 → Full Bright</p>
--	--

Note: Balls/vend and Coins/vend will have to be re-entered after setting the mode, warning light brightness, or LCD contrast.

LCD Contrast

This setting allows you to change the level of brightness of the warning lights.

To change the LCD contrast: 11. Enter "253" 12. Press "Rent A" 13. Enter the level of contrast (0-255) 14. Press "Rent B" 15. Press "Send"	Settings: 1 to 255 → Contrast Range 255 → Most Contrast
---	--

Note: Balls/vend and Coins/vend will have to be re-entered after setting the mode, warning light brightness, or LCD contrast.

Exiting Program Mode

Press "# " to exit from the programming mode
--

Troubleshooting

Problem	Solution
When a function is entered into the Master Panel the display changes, which erases all the information that was entered.	The Light box is sending data i.e. balls left or time remaining to the Master Panel and it is overwriting the entered information. Pressing "Clear" before you enter a function will stop the cage from sending data.
Incorrect or unusual information is displayed on the Master Panel.	The Light Box and the Master Panel are sending data at the same time. Press "Clear" and re-send the computer data.
Why can't I enter any ball or time amount that I want?	Allowing any ball or time amount to be entered does not allow auditing. Also, this prevents your customers from getting less or more time than what they pay for.
A game does not start when the "Run" function is entered.	"Run" will only work if the cage is in "Pause." If the Computer does not show "Pause" when you check the cage status, then "Run" will not work. Rent a game first, then use "Run."
When a game is rented longer than 60 minutes the machine shuts down before the time is up.	There is a timer that resets the machine after 60 minutes if there are no balls pitched or inputs from the coinmech or computer. This feature resets the machine when no one is using it for 60 minutes. Free Play mode should be used when you want to disable this feature.
The machine is not counting balls.	Check that the ball switch is working and installed correctly. There should be 5 volts DC across the ball switch wires. When the switch is activated the voltage should drop to 0 volts DC. If the correct voltage is not at the ball switch check for 5 volts DC on the light box board ball input. If there is no voltage then the light box board needs to be replaced. Otherwise, the problem is with the wires running to the ball switch.
The ball feeder is running but the pitching machine is not.	Check that the ball feeder wires and the pitching machine wires are not reversed.

Appendix A - Master Panel Functions

FUNCTION	KEY 1	KEY 2	KEY 3	KEY 4	KEY 5	KEY 6
Request Run	Clear	1-30	Send			
Rent Machine A	Clear	1-30	Rent A	Time / Balls ¹	Send	
Rent Balls/Vend	Clear	1-30	Rent A	11	Send	
Rent Machine B	Clear	1-30	Rent B	Time / Balls ¹	Send	
Rent Balls/Vend	Clear	1-30	Rent B	11	Send	
Stop all Games	Clear	0	#	1	Send	
Stop a Game	Clear	1-30	#	1	Send	
Run all Games	Clear	0	#	7	Send	
Run a Game	Clear	1-30	#	7	Send	
Delete all Games	Clear	0	#	4	Send	
Delete a Game	Clear	1-30	#	4	Send	
Display Rents	Clear	*	1-14			
Display Cage Rents	Clear	*	16	1-30		
Free Play	Clear	0-30	#	A	1	Send
Enter Program Mode	Clear	31	CODE ²			
Program Balls	Enter Balls ³	Rent B	Send			
Program Coins	Enter Coins ³	Rent A	Send			
Program Cage Numbers	Clear	1-30	*	Send		
End Program Mode	#					

Appendix B - Memory Locations

Memory Location		Memory Location	
1	15 minute time rental	9	200 ball rental
2	30 minute time rental	10	250 ball rental
3	45 minute time rental	11	Game rental
4	60 minute time rental	12	Deletes
5	90 minute time rental	13	Runs
6	50 ball rental	14	Pauses
7	100 ball rental	15	Not Implemented
8	150 ball rental	16	Coins

¹ Valid time rentals – 15, 30, 45, 60, 90

Valid ball rentals – 50, 100, 150, 200, 250

² 4 digit managers code

³ Valid numbers – 1-255