



# Gemini Controls Treadmill Controls

## Cross Reference Sheet

To purchase controls below contact Gary Dobberfuhr at: Phone: 1-262-377-8585  
Fax: 1-262-377-4920  
Email: [gary@geminicontrols.com](mailto:gary@geminicontrols.com)

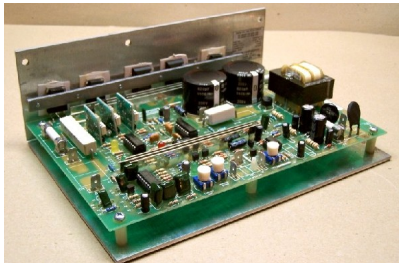
### Bodyguard Controls

Bodyguard # 517395 Gemini # 12M04-00112

PWM 2 Quadrant Control 120VAC input

0-90 VDC Output 7 AMPS Continuous 16 AMPS Max Dimensions: 12" x 6 1/2" x 3"

For motoring and braking in one direction of rotation Braking resistors needed



### DP Controls

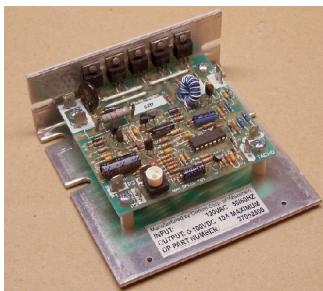
DP # 3705-2500 Gemini # 12M04-00085

SCR Control 120VAC input

0-100 VDC Output 10 AMPS Max

Dimensions: 4 1/2" x 4 1/2" x 1 3/4"

Control has a Tach input



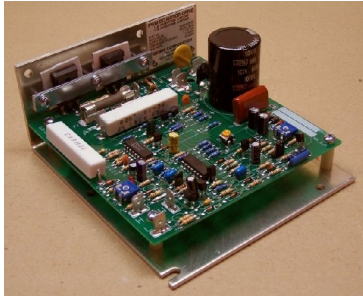
DP # 3704-8100 Gemini Old # 12M04-00079 Old # 12M04-00168 New Updated # 12M04-00146-03

PWM Control 120VAC input

0-100 VDC Output 7 AMPS Continuous 16 AMPS Max

Dimensions: 5 3/4" x 5" x 2 1/2"

Safety - provided by run-a-way protection and zero speed lock-out



### **Hebb / Trimline Controls**

Hebb # KK2022 Gemini # 12M04-00110 SCR Control 240VAC input

0-180 VDC Output 7.5 AMPS Continuous Duty

Dimensions: 3 1/2" x 4 1/2" x 2 1/2"



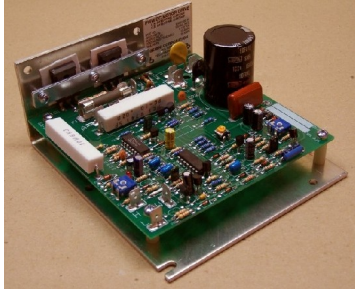
Hebb # KK2126 Gemini Old # 12M04-00101 Old # 12M04-00146-01 New Updated # 12M04-00146-03

PWM Control 120VAC input

0-100 VDC Output 7 AMPS Continuous 16 AMPS Max

Dimensions: 5 3/4" x 5" x 2 1/2"

Safety - provided by run-a-way protection and zero speed lock-out

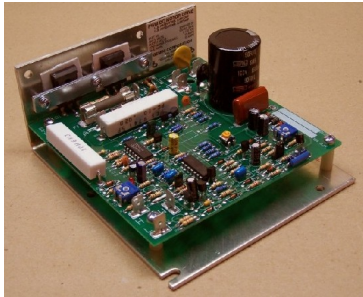


Hebb # KK6190 Gemini Old # 12M04-00070-H Old # 12M04-00146-01 New Updated # 12M04-00146-03

PWM Control 120VAC input

0-100 VDC Output 7 AMPS Continuous 16 AMPS Max Dimensions: 5 3/4" x 5" x 2 1/2"

Safety - provided by run-a-way protection and zero speed lock-out



Hebb # ????? Gemini Old # 12M04-00070-HS Old # 12M04-00146-01H New Updated # 12M04-00146-03H

PWM Control 120VAC input

0-100 VDC Output 7 AMPS Continuous 16 AMPS Max Dimensions: 5 3/4" x 5 1/2" x 2 1/2"

Safety - provided by run-a-way protection and zero speed lock-out This has a finned heat sink on back)

### **Pacer / SST Controls**

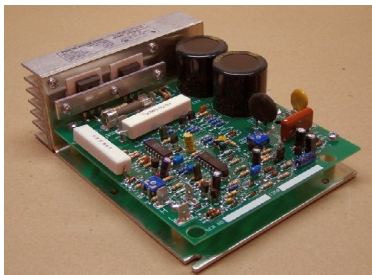
Pacer / SST # B084R Gemini Old # 12M04-00100 New Updated# 12M04-00155-01

PWM Control 120VAC input

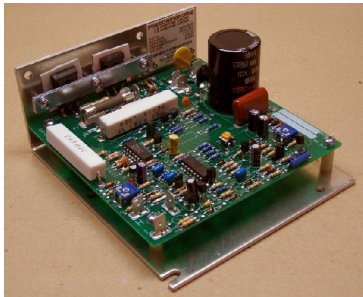
0-120 VDC Output 12 AMPS Continuous 25 AMPS Max Dimensions: 5 3/4" x 5 1/2" x 2 1/2"

Safety - provided by run-a-way protection and zero speed lock-out.

This has a finned heat sink on back)

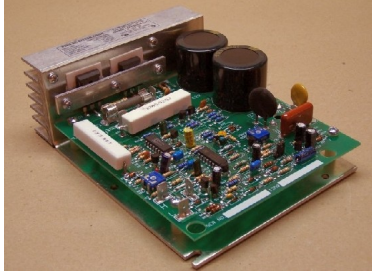


Pacer / SST # B091 Gemini Old # 12M04-00070-01 Old # 12M04-00146-01  
New Updated # 12M04-00146-03  
PWM Control 120VAC input  
0-100 VDC Output 7 AMPS Continuous 16 AMPS Max Dimensions: 5 3/4" x 5" x 2 1/2"  
Safety - provided by run-a-way protection and zero speed lock-out

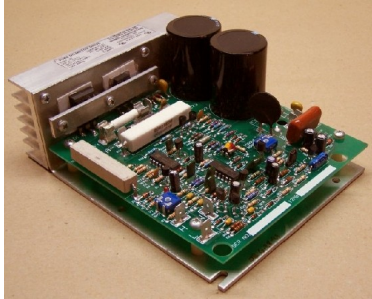


### **Spirit Controls**

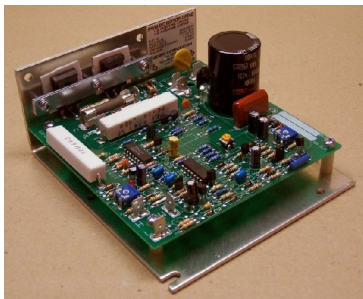
Spirit # 10280 Gemini Old # 72M04-00077  
New Updated# 12M04-00155-01  
PWM Control 120VAC input  
0-120 VDC Output 12 AMPS Continuous 25 AMPS Max Dimensions: 5 3/4" x 5 1/2" x 2 1/2"  
Safety - provided by run-a-way protection and zero speed lock-out  
This has a finned heat sink on back)



Spirit # 10284 Gemini Old # 72M04-00078 & 72M04-00079 Some 72M04-00079 are available.  
New Updated # 12M04-00157-01 PWM Control 240VAC input  
0-180 VDC Output 5 AMPS Continuous 15 AMPS Max Dimensions: 5 3/4" x 5 1/2" x 3"  
Safety - provided by run-a-way protection and zero speed lock-out



Spirit # 10243 Gemini# Old # 12M04-00070-50 or 12M04-00151 or 12M04-00151-01  
New Updated # 12M04-00151-02 PWM Control 120VAC input  
0-120 VDC Output 12 AMPS Continuous 25 AMPS Max Dimensions: 5 3/4" x 5" x 2 1/2"  
Safety - provided by run-a-way protection and zero speed lock-out



### **Trotter / Cybex Controls**

Trotter / Cybex # AD11665 Gemini # 12M04-00073-81 PWM 2 Quadrant Control 120VAC input  
0-90 VDC Output 7 AMPS Continuous 16 AMPS Max Dimensions: 15" x 6 1/2" x 2 1/2"  
For motoring and braking in one direction of rotation Equipped with digital speed pot and brake  
Resistors



Trotter / Cybex # AD12112 PWM Gemini # 12M04-00074-81 PWM 2 Quadrant Control 240VAC input  
0-180 VDC Output 7 AMPS Continuous 16 AMPS Max Dimensions: 15" x 6 1/2" x 2 3/4"  
For motoring and braking in one direction of rotation Equipped with digital speed pot and brake  
Resistors

### **Other Available Gemini Treadmill Controls**

Gemini # 12M04-00109 SCR Control 120VAC input  
0-90 VDC Output 7.5 AMPS Continuous Duty Dimensions: 3 1/2" x 4 1/2" x 2 1/2"

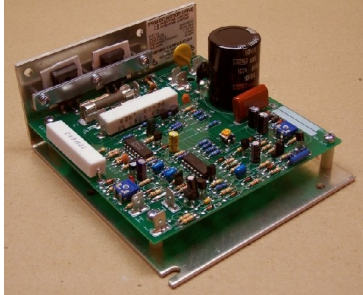


Gemini # 12M04-00151-02 PWM Control 120VAC input

0-120 VDC Output 12 AMPS Continuous 25 AMPS

Max Dimensions: 5 3/4" x 5" x 2 1/2"

Safety - provided by run-a-way protection and zero speed lock-out Standard Gemini PWM Control adaptable to many treadmills.



Gemini # 12M04-00155-01

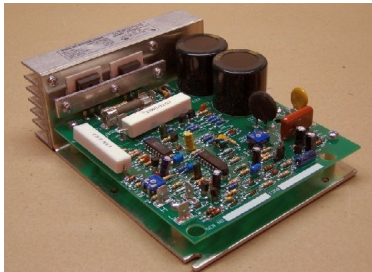
PWM Control 120VAC input

0-120 VDC Output 12 AMPS Continuous 25 AMPS

Max Dimensions: 5 3/4" x 5 1/2" x 2 1/2"

Safety - provided by run-a-way protection and zero speed lock-out

This has a finned heat sink on back. This is a beefier version of the 12M04-00151-02 Standard Gemini PWM Control adaptable to many treadmills.



Gemini # 12M04-00181

Unified treadmill power and motor speed

controller PWM Control 120VAC input

0-120 VDC Output 12 AMPS Continuous 25 AMPS

Max Dimensions: 5 3/4" x 5" x 2 1/2"

Safety - provided by run-a-way protection and zero speed lock-out

(PWM) dc motor controller with the console computer power supply, the elevation motor controls, and interfaces for the computer's speed sensor, elevation sensor, and speed control signals. The power board provides 12 volts dc to the treadmill console computer. It also provides a pulse signal to the console whose frequency is proportional to the exact operating speed, to allow accurate display of speed, and to allow the console computer to detect when the set speed and the actual speed are not the same.

A logic signal from the console activates one of two relays to cause the elevation motor to raise or lower the angle of the track. A position feedback potentiometer in the elevation motor assembly indicates the actual elevation for display or control of the elevation. The computer in the console sends a speed command signal to the power board, which in turn sends this signal to the speed controller. This

command signal is usually in the form of a pulse width modulated and isolated logic signal. Because of the complexity of the interconnections, it's important for a customer to coordinate the use of these unified controllers with Gemini's application engineers to avoid problems.



Gemini # 12M11-00001 & 12M11-00002

Electronics package; Console, PWM speed control, and Motor for Light Duty Treadmill Repair

This package was designed by Gemini to repair older SCR drive treadmills and upgrade them to PWM technology. This is for light duty treadmills for 0-5 MPH. Due to continuing updates; actual product at time of shipping may look slightly different.

Package Consists of:

PWM Control 120VAC input

0-110 VDC Output 7 AMPS Continuous 16 AMPS Max

Dimensions: 5 3/4" x 5" x 2 1/2"

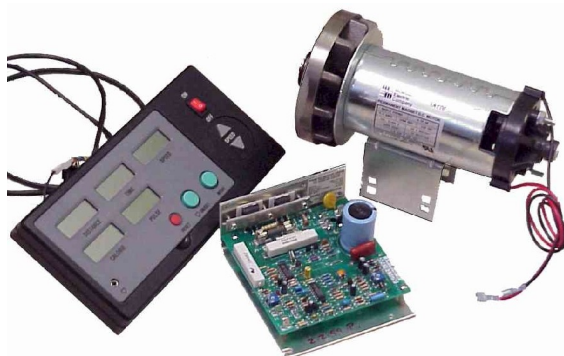
Safety - provided by run-a-way protection and zero speed lock-out

Display and control Console and all wire harnesses.

1 1/2 HP McMillan Motor with flywheel and pulley. Motor is available in 2 configurations:

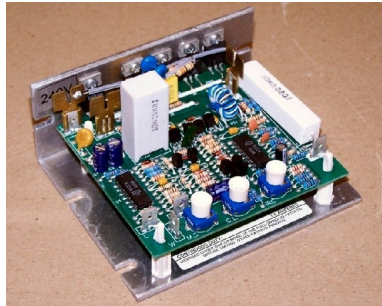
12M11-00001 Counterclockwise motor for Treadmills with the pulley on the right.

12M11-00002 Clockwise motor for Treadmills with the pulley on the left.





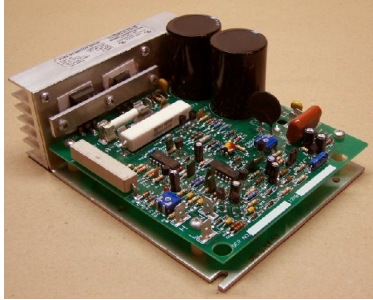
Gemini # 12M04-00110 SCR Control 240VAC input  
0-180 VDC Output 7.5 AMPS Continuous Duty Dimensions: 3 1/2" x 4  
1/2" x 2 1/2"  
Standard Gemini SCR Control adaptable to many treadmills.



Gemini # 12M04-00140 PWM Control 240VAC input  
0-180 VDC Output 7 AMPS Continuous 10 AMPS Max Dimensions: 5 3/4" x 5"  
x 2 3/4"  
Safety - provided by run-a-way protection and zero speed lock-out Standard Gemini PWM  
Control adaptable to many treadmills.



Gemini # 12M04-00157-01 PWM Control 240VAC  
input  
0-180 VDC Output 5 AMPS Continuous 15 AMPS Max Dimensions: 5 3/4" x 5  
1/2" x 3"  
Safety - provided by run-a-way protection and zero speed lock-out  
This has a finned heat sink on back This is a beefier version of the 12M04-00140 Standard Gemini PWM  
Control adaptable to many treadmills.



Gemini # 12M03-00164

Digital Accel / Decel Control for PWM motor controls Input 12 VDC Output 0-12VDC

2 Normally Open Push Buttons are needed to control the speed. Adjustments for output voltage and time delay

Dimensions: 2" x 3"

