

**PG-CB63**

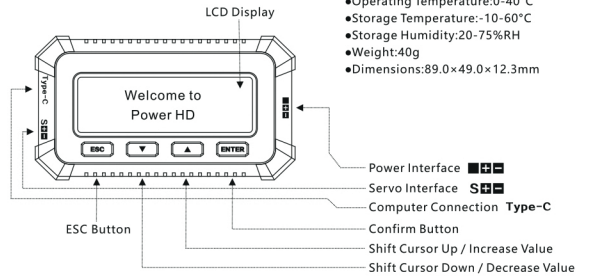
PG-CB63 is a multi-function program box with built-in high-performance microprocessor and compact size for Power HD programmable servos.

Functions:

1. Servo parameters setting
2. Computer connection setting
3. Servo testing

Model No.: PG-CB63

- PGB PGC series programming
- Operating Voltage: 5-8.4V DC
- Idle Current: <20mA
- Operating Temperature: 0-40°C
- Storage Temperature: -10-60°C
- Storage Humidity: 20-75%RH
- Weight: 40g
- Dimensions: 89.0x49.0x12.3mm



**Parameters:**

Settings	Value	Functions
▶ 1.Max Power	[1-10]	This option controls the final output of the servo. Higher value provides more torque and faster speed. Meanwhile consumes more power and produces more heat.
▶ 2.Boost	[1-10]	This option controls the punch of the servo. Higher value provides better punch with more heat.
▶ 3.Dead Band	[1-10]	This option controls the no-operation signal zone. Higher value reduces undesired whipping but increases response time.
▶ 4.Tension	[1-03]	Higher value provides better control feeling but increases undesired whipping and heat.
▶ 5.Force	[1-10]	Higher value provides higher torque with more heat.
▶ 6.Brake	[1-10]	Drive motor brakes earlier at higher value. Higher value reduces undesired whipping but lowers the speed.
▶ 7.Center	[L10-0-R10]	Adjust the neutral angle of the servo.
▶ 8.Soft Start	[Y / N]	Servo moves to center point very slowly if the servo is not at center point when power-on.
▶ 9.Write Data	/	Write Data ( Servo / Memory)
▶ 10.Read Data	/	Read Data ( Servo / Memory)
▶ 11.Default	/	Restore to default settings

Notes:For non-professional drivers, it is not recommended to adjust the value higher than default settings. Higher values may cause undesired power consumption and heating. The settings of Boost, Tension, Force and Brake are relevant, please adjust the values according to actual demands.

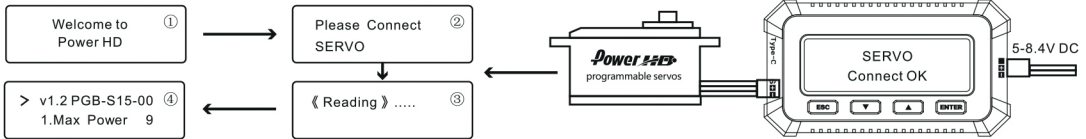
Servo Test	Functions	Value
▶ Broad Band	test broad band servo PWM signal angle	PWM:500µs-900µs-1500µs-2100µs-2500µs
▶ Narrow Band	test narrow band servo PWM signal angle	PWM:500µs-750µs-1000µs

Notes: 1. Most servos for surface or boat are broadband servos. 2. Most servos for surface or boat may not change angle when switching from 500µs to 900µs or 2100µs to 2500µs.

Information	
▶ PGC-LCD-6033	The firmware version of program box.

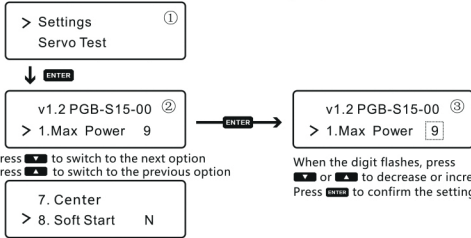
**Program Box Interface**

( Note: All operations require connection to compatible Power HD programmable servos.)



**Setting procedures**

\* Program box will automatically enter the setting menu after each power on. User needs to press ESC in order to return to the main menu.  
 \* On main menu, user can switch the cursor to Setting and press ENTER to enter the setting menu.



Press **ESC** to switch to the next option  
 Press **ESC** to switch to the previous option

When the digit flashes, press **ESC** or **ESC** to decrease or increase value.  
 Press **ENTER** to confirm the setting.

**How to save settings**

\* After changing the settings, the parameters need to be written in order to be saved.  
 \* The setting can be written into servo or the memory of the program box.  
 (Only by writing the settings into servo can make the settings take effect.)

**Saving settings procedures**

On the setting menu, press **ESC** or **ESC** to 9. Write Data. Then press **ENTER** to choose where to write.  
 To Servo In order to make the settings take effect.  
 To Memory Save the settings to the memory of the program box.



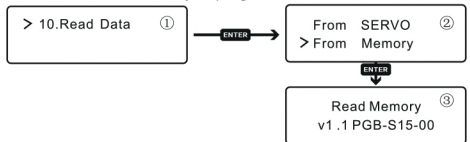
**Servo testing operation**



Notes:The default center point signal of broad band servo is 1500µs.  
 Test signal range: 500µs-900µs-1500µs-2100µs-2500µs.  
 The default center point signal of narrow band servo is 750µs.  
 Test signal range: 500µs-750µs-1000µs.  
 How to test: Press **ESC** or **ESC** to change the signal, servo angle may change accordingly.  
 \* When Soft Start is set to "Y", Servo Test function may not work properly.

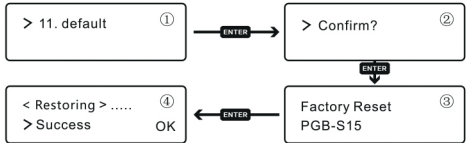
**How to read data and restore default settings**

How to read from memory of program box:



On setting menu, press **ESC** or **ESC** to switch the cursor to 10. Read data  
 Then press **ENTER** to enter Read data menu.  
 Switch cursor to From Memory, then press **ESC** or **ESC** to switch to the data file you need.

How to restore default settings.



On setting menu, press **ESC** or **ESC** to switch the cursor to 11.default.  
 Then press **ENTER** to enter Restore default menu.  
 Press **ENTER** to confirm restore default operation.

**Connecting to PC**

User can use PC software to adjust settings or to update firmware.  
 Upgrade procedures:Connect the Program Box to PC correctly, power on.  
 On Power HD PC software, press "Connect" to establish connection to Program box.  
 After connection, press "Information" -> "Load firmware", then select the new firmware file and press "LCD Upgrade".



**After-sales Service:**

The company's products provide one-year warranty service from the date of purchase. The warranty period start from the invoice/receipt date of the purchase. Under normal use, for non-human caused product failure, the buyer could present the buying invoice/receipt and defective item to the distributor or Power HD after sales dept for warranty service.

- Any of the following cases is not included in free warranty:
- Failure caused by not follow the operation instructions;
  - Failures caused by man-made falls, collisions, etc.;
  - Failure caused by self-assembly, disassembly or repair;
  - Failure caused by accident, misuse, or deliberate damage;

For products that exceed the warranty period or non-free repair, our after-sales department will also serve you warmly.

After the warranty period, our company can provide maintenance for the products on sale;

Our company has the right to upgrade without notice.

