Power HD PG-CB63 Multi Function Program Box User Guide

User Guide
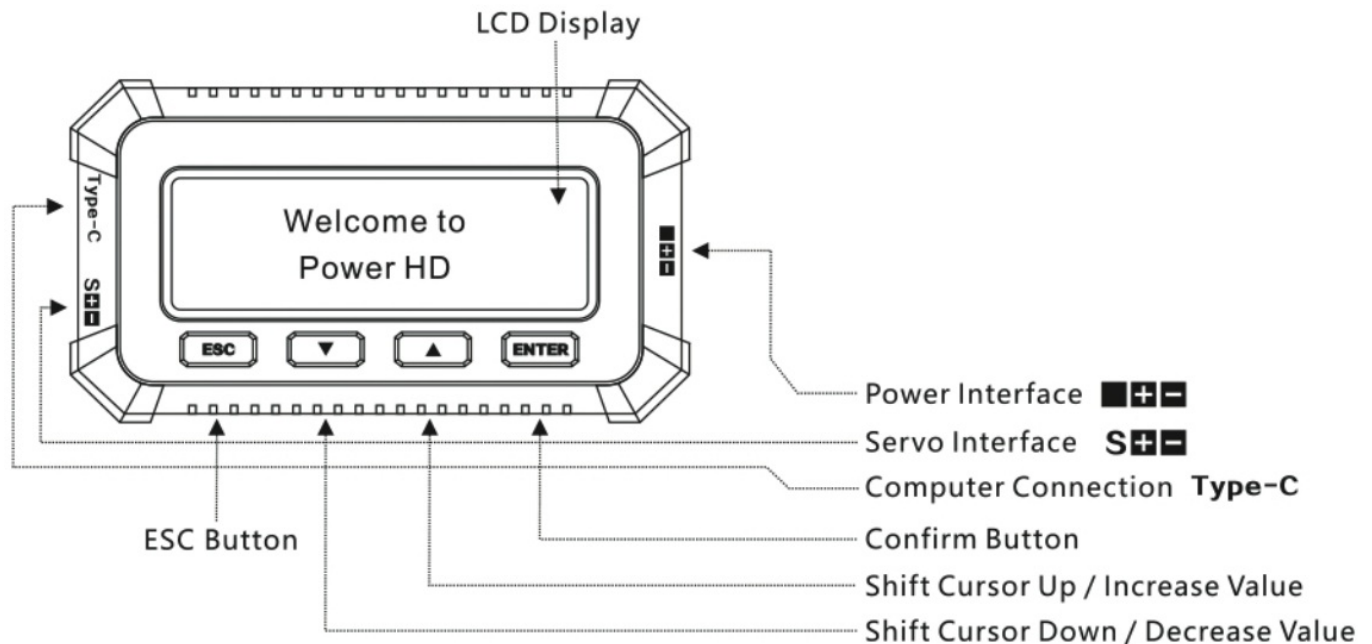

Contents

PG-CB63 Multi-Function Program Box

PG-CB63
P5-(1153 PG-CB63 is a multi-function program box with a built-in high-performance microprocessor and compact size for Power HD programmable servos.
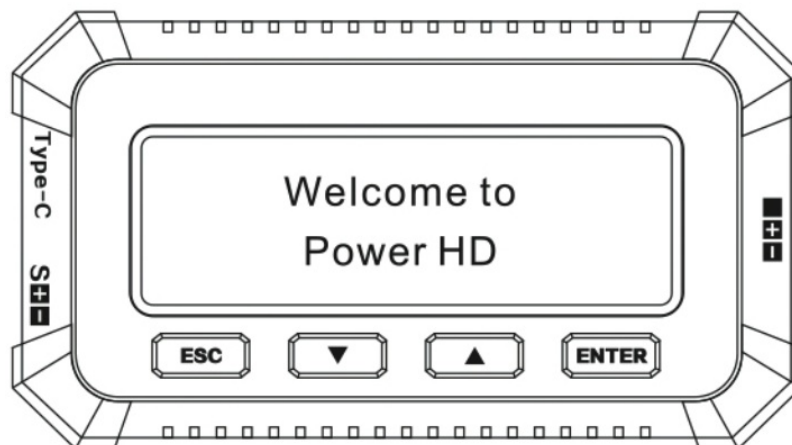
ProductFunction Introduction

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:89.0×49.0 x 12.3mm

Parameters

Settings	Value	Function
► 1.Max Power	[1 -10]	This option controls the final output of the servo. The higher value provides more torque and faster speed. Meanwhile consumes more power and produces more heat.

1 2.Boost	[1 -10]	This option controls the punch of the servo. The higher value provides better punch with more heat.
►3.Dead Band	[1 -1 0]	This option controls the no-operation signal zone. A higher value reduces undesired whipping but increases response time.
►4.Tension	[1 -03]	The higher value provides better control feeling but increases undesired whipping and heat.
►5.Force	[1 -10]	A higher value provides higher torque with more heat.
►6.Brake	[1 -10]	Drive motor brakes earlier at a higher value. A higher value reduces undesired whipping but lowers the speed.
1 7.Center	[L10-0-R10]	Adjust the neutral angle of the servo.
►8.Soft Start	[Y / N]	The servo moves to the center point very slowly if the servo is not at the center point when power-on.
►9. Write Data	/	Write Data (Servo / Memory)
►1 O.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 the 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 11		Value
►Broad Band	test broadband servo PWM signal angle	PWM:500ps-900ps-1500ps-2100ps-2500ps
►Narrow Band	test narrow band servo PWM signal angle	PWM:500ps-750ps-1000ps

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

Information

| ► GC-LCD-6033	The firmware version of program box.

Program Box Interface

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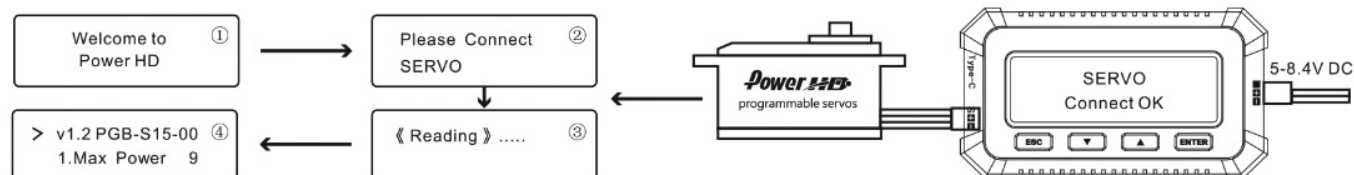

Setting procedures

- The program box will automatically enter the setting menu after each power is on. The user needs to press ESC in order to return to the main menu.
- On the main menu, the user can switch the cursor to Setting and press ENTER to enter the setting menu.
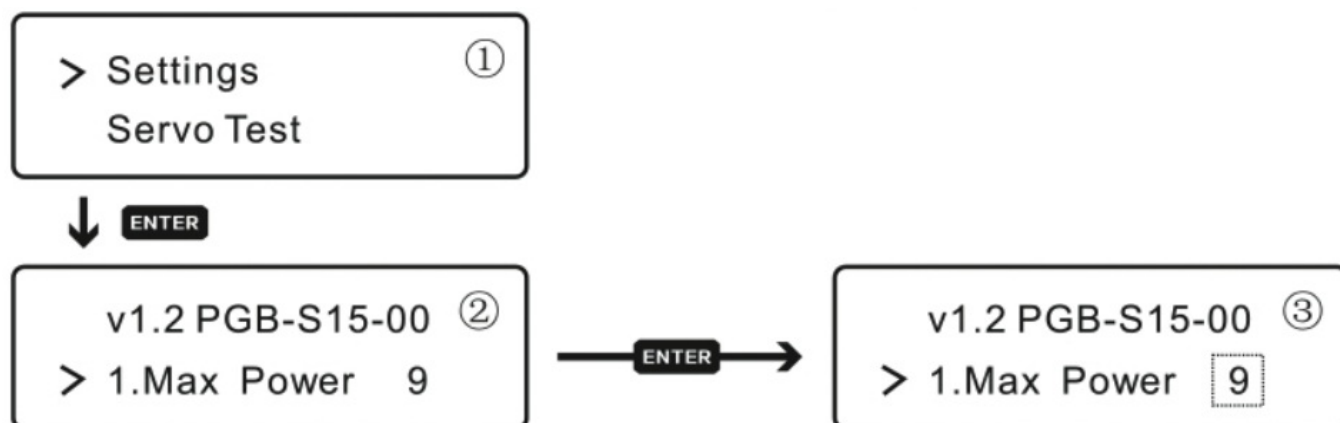
Press ▼ to switch to the next option
Press 0 to switch to the previous option
When the digit flashes, pre ▼ o ▲ decrease or increases the value. Press ENTER to confirm the setting.
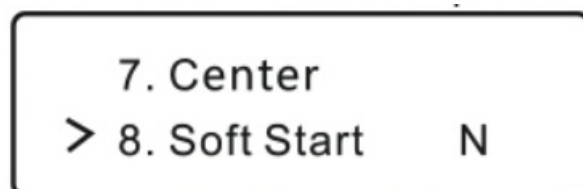
How to save settings

- 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 ▼ or ▲ 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.

> 9.Write Data
10. Read Data

ENTER →

> To servo
To Memory

Servo testing operation

> Servo Test ①
Information
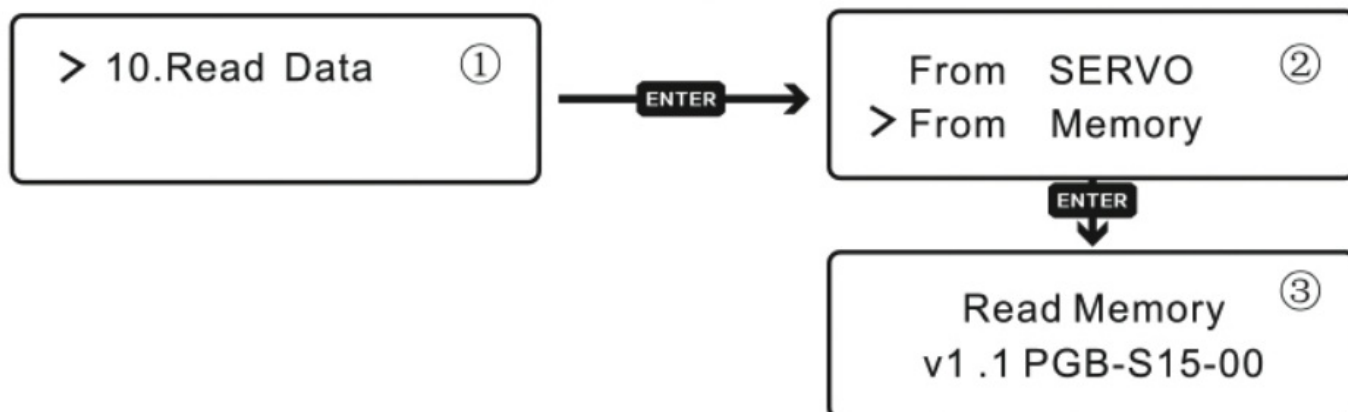
ENTER →

> Broad Band ②
Narrow Band

Notes: The default center point signal of the broadband servo is 1500ps. Test signal range: 500ps-900ps-1500ps-2100ps-2500ps. The default center point signal of narrow band servo is 750ps. Test signal range: 500ps-750ps-1000ps.

How to test: Press ▼ or ▲ to change the signal, servo angle may change accordingly.

*.When Soft Start is set to 'Y', the Servo Test function may not work properly.

How to read data and restore default settings

How to read from the memory of the program box:

> 10.Read Data ①

ENTER →

From SERVO ②
> From Memory

ENTER ↓
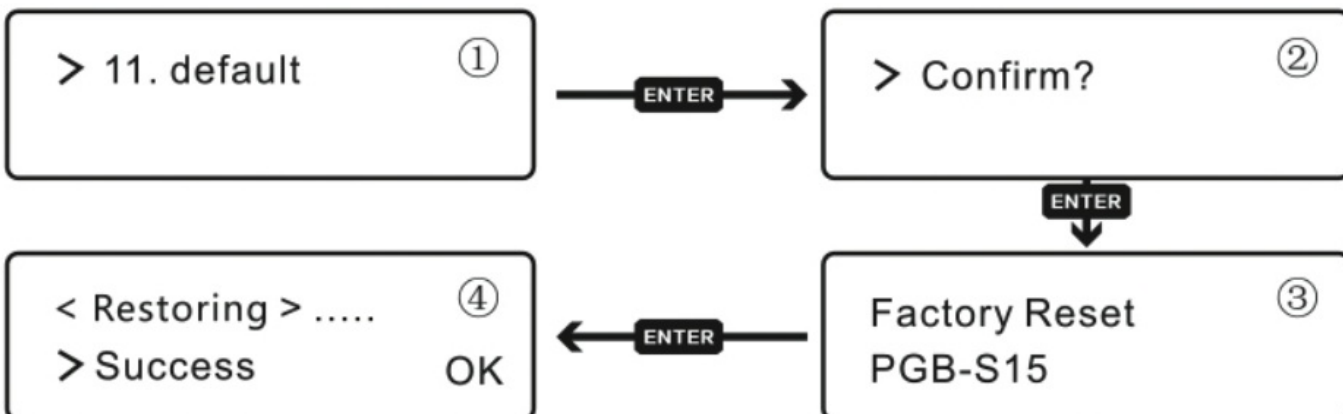
Read Memory ③
v1 .1 PGB-S15-00

On the setting menu, press ▼ or ▲ to switch the cursor to 10. Read data T

hen press ENTER to enter the Read data menu.

Switch the cursor to From Memory, then press ▼ or ▲ to switch to the data file you need.

How to restore default settings.

> 11. default ①

ENTER →

> Confirm? ②

ENTER ↓

< Restoring > ..... ④
> Success   OK

← ENTER

Factory Reset ③
PGB-S15

On the setting menu, press ▼ or ▲ to switch the cursor to 11. default.

Then press ENTER to enter the Restore default menu.

Press ENTER to confirm the restore default operation.

Connecting to PC

Users can use PC software to adjust settings or to update the firmware. Upgrade procedures: Connect the Program Box to the PC correctly, and power on. On Power HD PC software, press "Connect" to establish a connection to the 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 a one-year warranty service from the date of purchase. The warranty period starts 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 are not included in the free warranty:

- Failure caused by not following the operating 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.

Documents / Resources

Power HD PG-CB63 Multi Function Program Box [pdf] User Guide
PG-CB63 Multi Function Program Box, PG-CB63, Multi Function Program Box, Program Box

Manuals+,