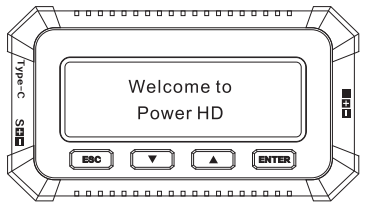
HuiDa RC International Limited.

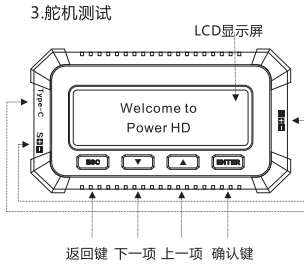
产品功能介绍:



PG-CB63

Power HD 舵机编程卡内置高性能微处理，体积小，操作简单方便。

功能：
1.舵机参数设置
2.电脑连接设置
3.舵机测试



型号：PG-CB63
- PGB PGC系列产品编程设定
- 输入电压:5-8.4V DC
- 空闲电流:<20毫安
- 工作温度:0-40°C
- 储存温度:-10-60°C
- 储存湿度:20-75%RH
- 重量:40g
- 尺寸:89.0×49.0×12.3mm

编程卡参数介绍:

Settings （舵机设置）	有效范围值	功能介绍
1.Max Power	[1-10]	最大输出——调节舵机的最大输出扭力与速度。数值越大，最终总输出扭力越大，速度越快，但耗电越高，发热越大。
2.Boost	[1-10]	启动爆发力——舵机开始摆动时的头段爆发力，数值越大，头段速度越快。
3.Dead Band	[1-10]	死区 ——动作的信号区间，越大的设定越容易抑制舵机抖动。
4.Tension	[1-03]	绷紧度 ——数值越大，舵机的响应速度越快，感觉会越跟手，但越容易引起舵机异常抖动与发热。
5.Force	[1-10]	力度——单独调节舵机输出扭力，主要影响静止以及再次摆动时的瞬时扭矩。
6.Brake	[1-10]	刹车 —— 越大的刹车设定会减缓舵机过冲，同时减慢摆动速度。
7.Center	[L10-0-R10]	中位调节——微调舵机的中位角度，可在有限范围内自行调节舵机的中位。
8.Soft Start	[Y / N]	缓启动 —— 当舵机通电前不在中位时，打开缓启动可使舵机在通电瞬间缓慢地回到中位。
9.Write Data	/	写入参数操作 （舵机 / 内存卡）
10.Read Data	/	读取参数操作 （舵机 / 内存卡）
11.Default	/	还原出厂参数设定

注：非专业车手建议设置不要超过原厂最大值，以免引起舵机性能不稳及发热过快；上述调参项目范围值 Boost，Tension，Force，Brake 选项在调参中会互相作用，需要注意合适设置。

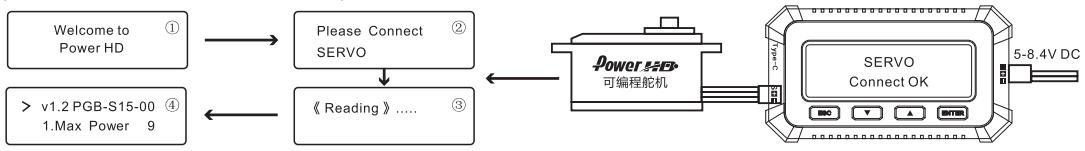
Servo Test （舵机测试）	功能介绍	有效范围值
Broad Band	测试宽频舵机PWM信号角度	PWM:500μs-900μs-1500μs-2100μs-2500μs
Narrow Band	测试窄频舵机PWM信号角度	PWM:500μs-750μs-1000μs

注：1. 车用主流舵机多数为Broad Band宽频舵机　2. 车用主流舵机在500μs~900μs以及2100μs~2500μs之间切换时可能不会有角度变化

Information （版本信息）	
PGC-LCD-6033	LCD编程卡的版本

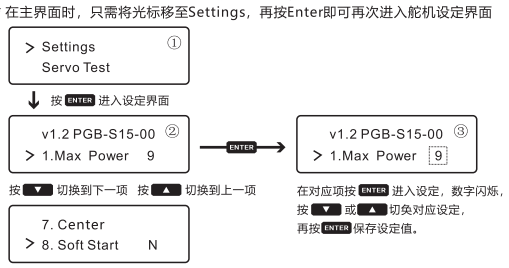
编程卡接线及界面

（注：需要连接PowerHD可编程舵机方可进行下述操作）



舵机调参操作步骤

* 编程卡每次通电后默认直接进入舵机设定界面，可按ESC返回主界面。
* 在主界面时，只需将光标移至Settings，再按Enter即可再次进入舵机设定界面



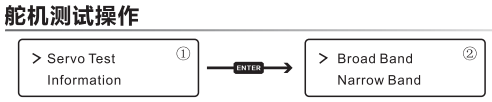
保存设定

* 设置完数据后，需要保存数据才会被保留。
* 设定数据可保存到舵机或编程卡内存中。
（只有保存到舵机中的数据才会使舵机新设定生效）

保存步骤

在设定界面按 ▼ 或 ▲ 移动光标至 9.Write Data,按下 ENTER 选择保存位置
To servo 保存到舵机中方可使新设定生效。
To Memory 仅保存到设定卡内存中，舵机不会生效该设定。

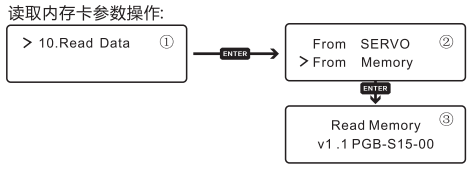
舵机测试操作



注：宽频舵机PWM默认中位是1500μs，测试信号范围（PWM900-1500-2100μs）和（PWM500-1500-2500μs）
窄频舵机PWM默认中位是750μs，测试信号范围（PWM500-750-1000μs）
摆动模式:用户手动按 ▼ ▲ 更改PWM信号值，检测舵机对于信号的走向及角度。

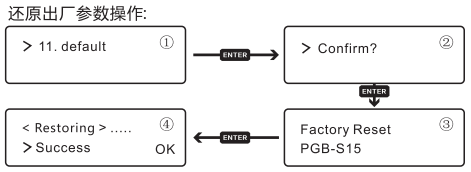
内存卡读取参数及还原出厂操作

读取内存卡参数操作:



注：进入舵机调参 10.Read data 按 ▼ ENTER 读取 From Memory 内存卡选项内，编程卡可以存储客户20组 Servo 参数值 DATA 01-20；

还原出厂参数操作:



注：进入舵机调参 11.Default，提示 Confirm，确认操作，对应回产品型号按 ENTER 后舵机还原出厂设置成功。

编程卡连接电脑

用户可以通过调参软件进行舵机调参或编程卡固件升级。

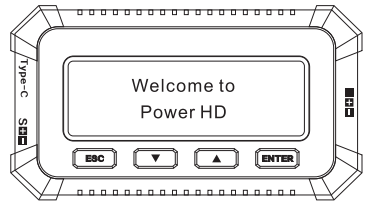
升级提示： 点击 Connect 口端连接后，以下界面点击 " Information "， " Load firmware " 打开升级固件文件，点击 "LCD Upgrade" 完成升级程序。

售后服务:

本公司产品自购买日起提供一年保修服务，保修期的起始日期以所购产品的发票/收据日期为准。在正常使用情况下，非人为导致的产品故障，购买者可以凭发票 / 收据和故障的产品联系经销商或我司售后部办理维修。
下列情况之一者，不属于免费维修范围:
•由于没按说明书上要求操作而造成的故障;
•由于跌落、碰撞等人为而造成的故障;
•由于自行装拆、修理而造成的故障;
•由于意外、误用、乱用、故意损坏而造成的故障;
对于超过保修期或不属于免费维修的产品,本公司售后部也会热情为您服务。
保修期外，我司可为在售产品提供维修;
我司有升级换代的权利,恕不另行通知。

HuiDa RC International Limited.

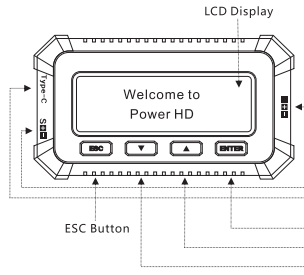
Product Function Introduction:



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:89.0×49.0×12.3mm

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.

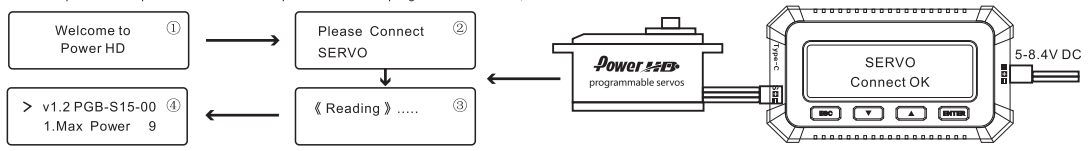
Servo Test	Functions	Value
Broad Band	test broad band servo PWM signal angle	PWM:500μs-900μs-1500μs-2100μs-2500μs
Narrow Band	test narrow band servo PWM signal angle	PWM:500μs-750μs-1000μs

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.

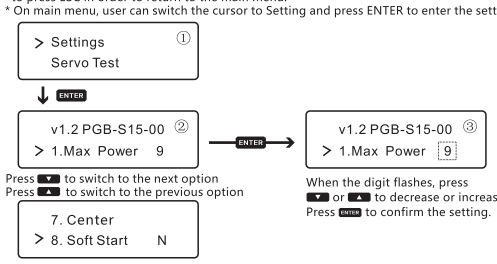
Program Box Interface

(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.

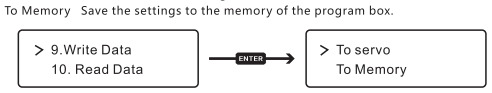


How to save settings

* 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.

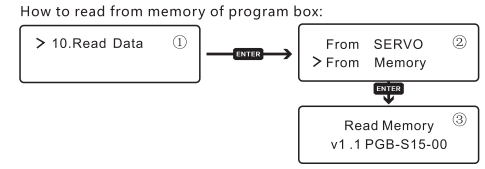


Servo testing operation

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 ▼ or ▲ to change the signal, servo angle may change accordingly.
*.When Soft Start is set to "Y", Servo Test function may not work properly.

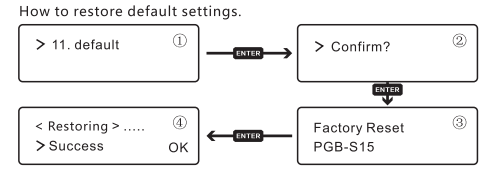
How to read data and restore default settings

How to read from memory of program box:



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

How to restore default settings.



On setting menu, press ▼ or ▲ 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.