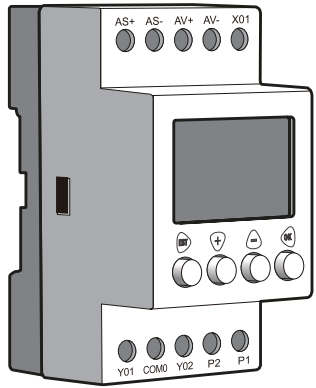




Edition 2024 V 2.0  
Item Code:801-160-013

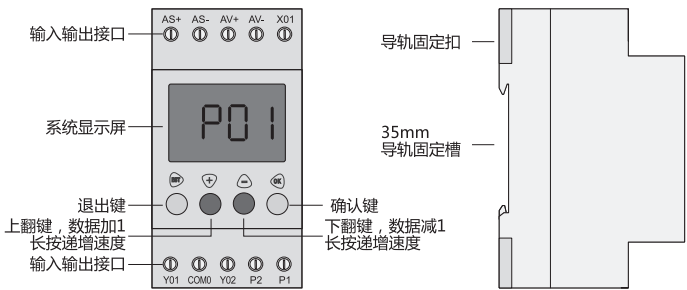


合格证

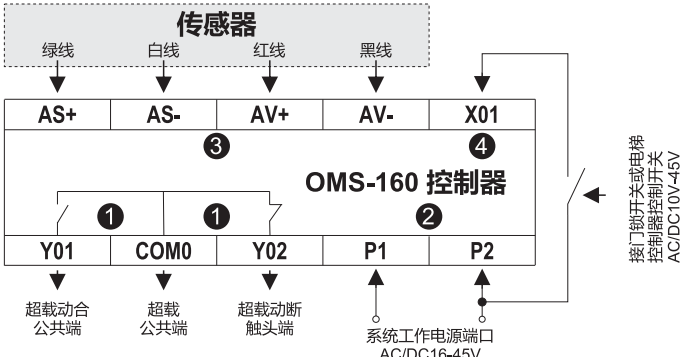
## OMS-160 电梯载荷测量装置 安装使用说明书

宁波赛姆特电气有限公司

### 主控制器外形简介



### 主控制器接口简介



- **备注**
  - 测定重量达到或超过设定的极限重量时继电器动作:测定重量>(1+P01%)×额定重量。
  - 系统正常运行前请务必确认工作电源电压是否在AC/DC16~45V范围内。
  - 控制器端口为AV-、AV+、AS-、AS+必须对应连接传感器上的黑、红、白、绿四根线；传感器与控制器之间的连线应避免与110V、220V等动力电源在同一布线槽中。
  - 此端口功能为:X01端保持信号有效时，虽然载荷发生变化，而继电器输出保持不变；X01端保持信号必须结合P03参数内的数值来确定是否有效；X01端保持信号使用AC/DC10~45V供电。（无此需求可不接）

### 主控制器代码及功能

显示代码	代码说明	运行状态
8888	等待密码输入	输入密码状态
8888	等待调试	调试状态
8888	参数选项	调试状态
8888	显示为Pn(n=1-16)参数内的数值	调试状态
8888	显示为10.80公斤重量	运行状态
8888	显示为额定载荷的101%	运行状态
8888	超载指示	运行状态
8888	等待空载自学习	调试状态
8888	空载自学习完成	调试状态
8888	等待额载自学习	调试状态
8888	额载自学习完成	调试状态
8888	错误代码指示	调试状态

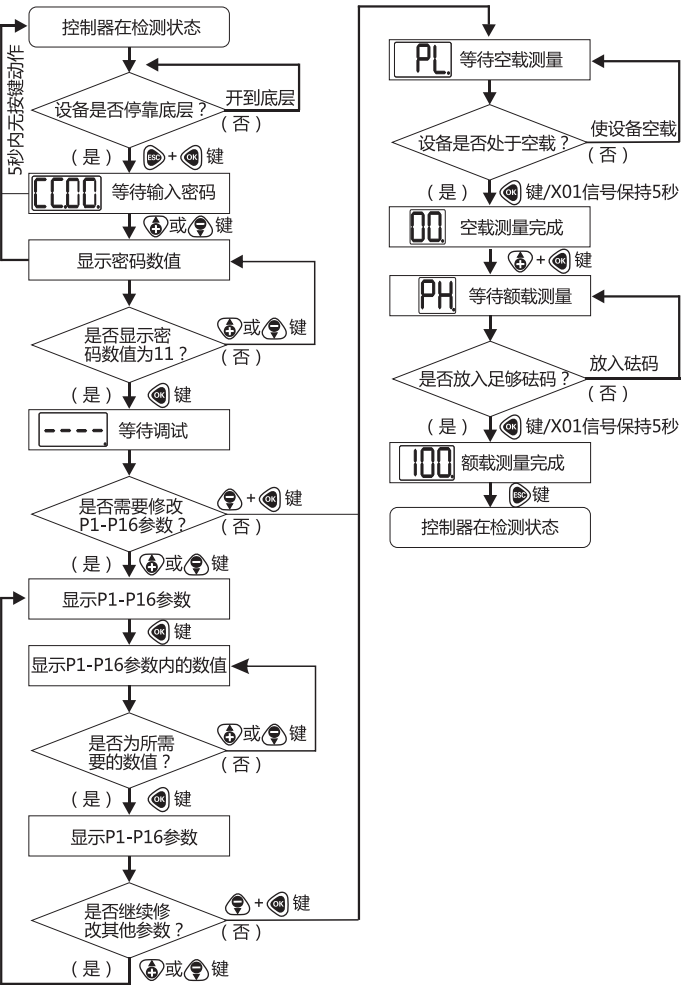
### 常见故障代码及故障解决

故障代码	故障原因	解决对策
8888	传感器安装不当、线路接错或断路，起吊的砝码过轻导致轻系统无法识别；	检查传感器安装是否恰当、传感器与控制器的连线是否接错，按[+]和[OK]键后起吊更重的砝码进行额载自学习；
8888	自学习调试期间缺少空载数据自学习；	在故障状态下按[+]和[OK]键后再按[-]和[OK]键重新对系统进行空载自学习和额载自学习操作；
8888	在无砝码调试模式下缺少对P12参数的校正码设定；	重启系统并在无砝码调试模式下设置P12参后数顺序完成自学习调试；
8888	在无砝码调试模式下缺少对P13参数的额定载荷设定；	重启系统并在无砝码调试模式下设置P13参后数顺序完成自学习调试；
8888	起吊的重物超过了传感器的最大量程；	请更换更大量程的传感器进行安装；

### 菜单结构、参数设置说明

参数名称	参数功能	参数数值范围及含义	默认值
8888	超载百分量设定	(00-20)→表示0-20%，当测定重量>(1+P01%)×额定重量时，超载继电器动作；	10
8888	设备启动瞬间去抖动设定	(00-10)→增大数值可降低超载动作灵敏度；	05
8888	X01端信号保持方式设定	00→信号保持方式为通电有效；01→信号保持方式为断电有效	00
8888	超载动作保持时间设定	(00-05)→表示0-5秒，增大数值为延长超载继电器动作后释放的时间；	02
8888	自学习调试模式选择	00→全额载重自学习；03→无砝码载重自学习；04→已知任意重量载重自学习；	00
8888	绳轮比系数或传感器分力比系数设定(只限于无砝码 调试方式下使用)	(01-10)→表示1\1-1\10，比值代表直接作用于传感器上的力和设备起吊重量之比；	01
8888	无砝码调试方式下传感器校正码的设定和已知任意重量调试方式下已知重量的设定	(05-75)→表示05-75%，当0%≤测定重量≤P07%×额定重量时，轻载继电器动作；	0.00
8888	额定载荷重量设定	(0.00-65.00)→表示0-65吨，输入不为0的额定载荷数值后，本系统可进行吨位显示；	0.00
8888	内置蜂鸣器开关	00→内置蜂鸣器关闭；01→内置蜂鸣器开启；	01
8888	版本号		

### 额定载重自学习调试流程图

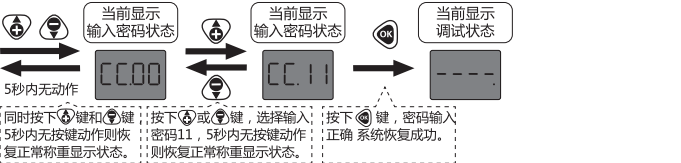


### 额定载重自学习调试范例详解

- 本系统拥有三种额定载重自学习调试方式:**
- ①全额载重自学习:现场有足够的砝码或重物，对精度要求很高的场合适用。
  - ②已知任意重量载重自学习:现场没有足够的砝码或重物，对精度要求高的场合适用。
  - ③无砝码载重自学习:现场没有砝码或重物，对精度要求一般的场合适用。

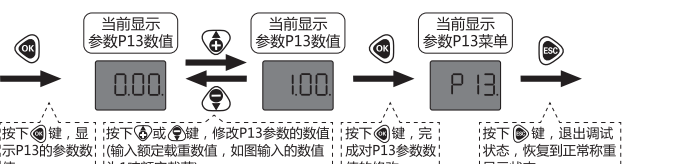
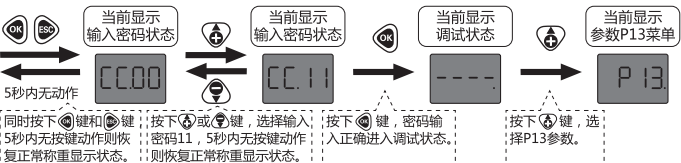
用户根据使用现场环境不同选择以下一种调试方式进行操作：

#### ● 恢复出厂设置步骤范例:



⚠ **警告:**当恢复出厂设置后，出厂后所有调试的数据将被清除，无法恢复，请谨慎使用。

#### ● 修改参数数值步骤范例:(本案例为单独修改P13参数数值的调试步骤)



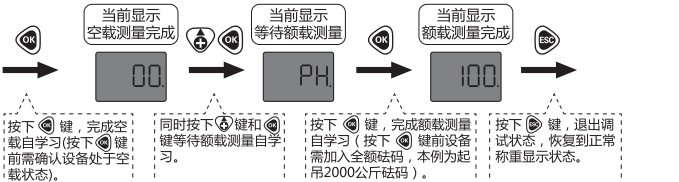
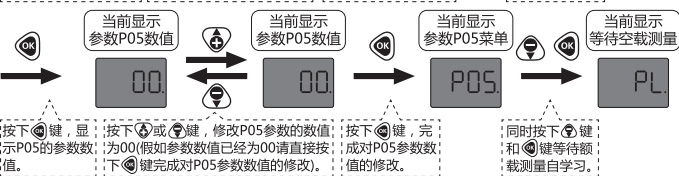
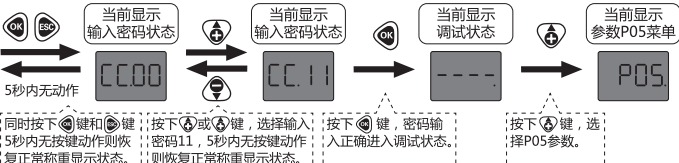
**备注：**修改其他参数数值方式与此相同，修改完成后按下[ESC]键退出调试状态后数据才被记录。

### OMS-160 电梯载荷测量装置 安装使用说明书(VER 2.0)

### 额定载重自学习调试范例详解

#### ● 全额载重自学习调试步骤范例

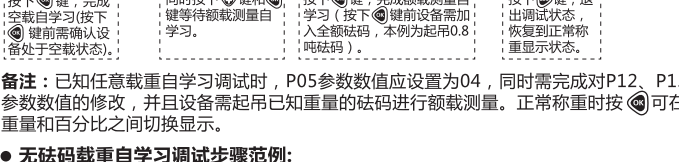
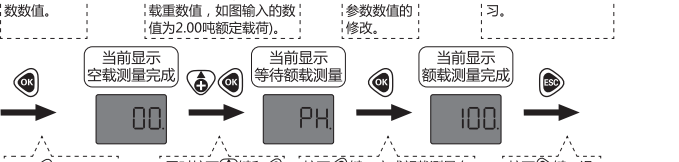
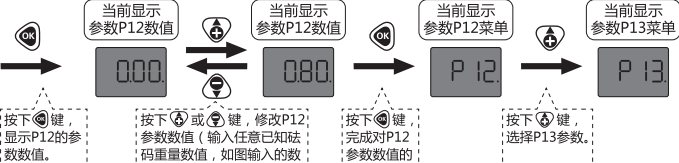
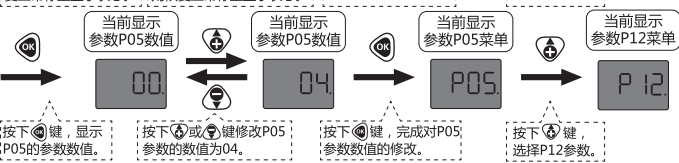
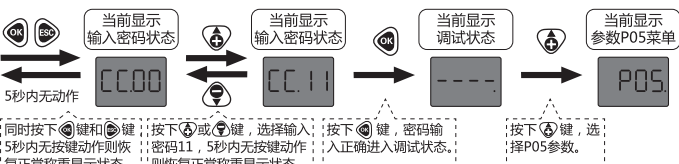
(本案例为利用2000KG砝码对额定载重为2000KG的设备进行自学习操作的步骤)



**备注：**全额载重自学习时，P05参数应设置为00，设备需要起吊额定载重的砝码或重物进行额载测量。当完成对P13参数数值的设置后，正常称重时按[OK]可在重量和百分比之间切换显示。

#### ● 已知任意重量载重自学习调试步骤范例:

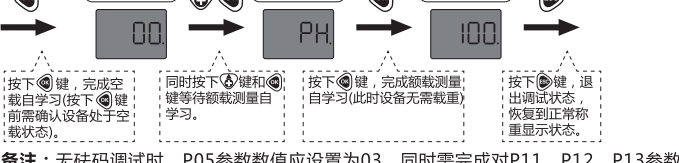
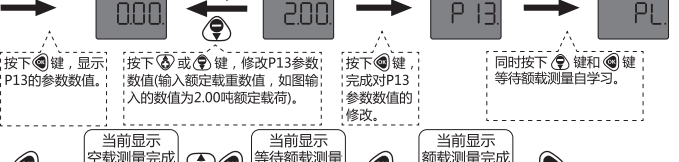
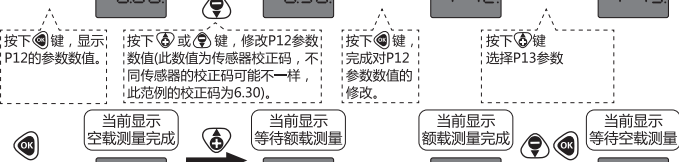
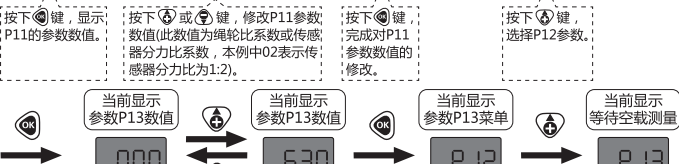
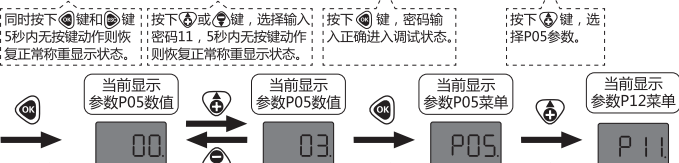
(本案例为利用800KG砝码对额定载重为2000KG的设备进行自学习操作的步骤)



**备注：**已知任意载重自学习调试时，P05参数数值应设置为04，同时需完成对P12、P13参数数值的修改，并且设备需起吊已知重量的砝码进行额载测量。正常称重时按[OK]可在重量和百分比之间切换显示。

#### ● 无砝码载重自学习调试步骤范例:

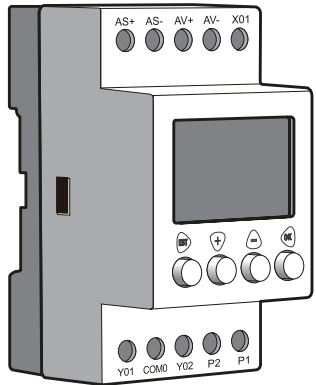
(由于每种传感器的校正码不同，如需要用此方式调试请联系我司确认校正码数值，本案例中校正码为6.30，利用无砝码方式对2000KG的额定载荷设备进行自学习操作的步骤)



**备注：**无砝码调试时，P05参数数值应设置为03，同时需完成对P11、P12、P13参数数值的修改，设备无需起吊砝码。正常称重时按[OK]可在重量和百分比之间切换显示。

2024年印刷



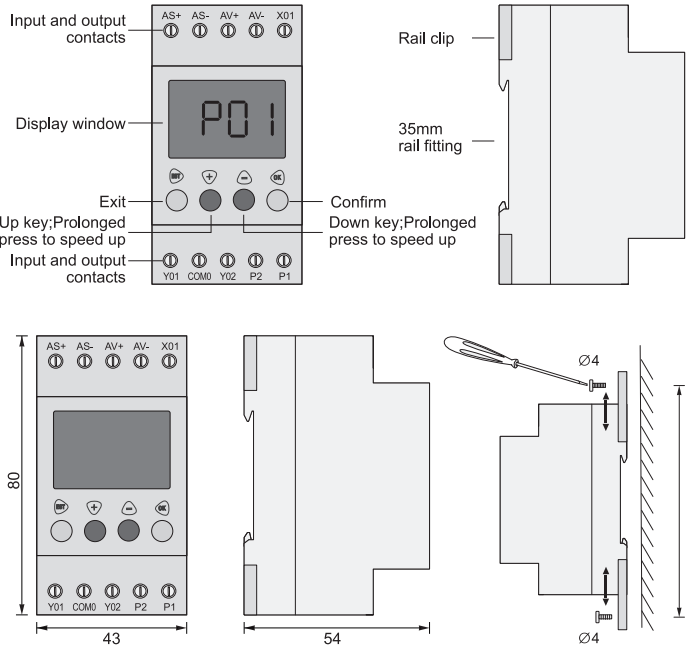


# OMS-160

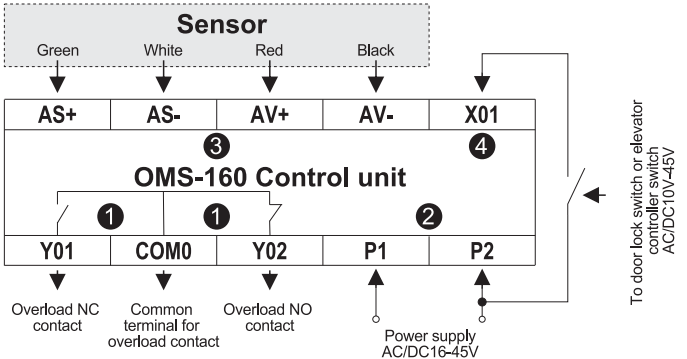
## USER MANUAL (VER 2.0)

NINGBO SUMMIT ELECTRONIC CO.,LTD

### Appearance And Installation Dimensions Of The Main Controller



### Interfaces of the main controller



- **NOTES:**
- ① Acts when measured weight>rated load\*(1+P01%);
  - ② Please make sure the working voltage is AC/DC16V~45V before normal operation;
  - ③ Contact AV-, AV+, AS-, AS+ shall be connected to black wire, red wire, white wire and green wire on sensor respectively, avoid placing the connection wires in the same wiring groove with 110V or 220V power supply wires;
  - ④ If X01 lock signal is effective, the relay output keeps the same even if the load changes; X01 signal is enabled or not based on the setting of parameter P03; Input voltage :AC/DC10V~45V ;( No connection if no special requirements.)

### The display codes and their meanings

Codes	Explanation	States
8888	Twinkle for code entrance;	Code entrance
8888	Twinkle for initialization;	Initialization state
8882	Parameter setting;	Initialization state
8888	Value of Pn (n = 01-16);	Initialization state
1088	Weight: 10.80 ton ;	Measuring state
8888	Percentage display of 101%;	Measuring state
8888	Overload;	Measuring state
8888	Ready for no load learning;	Initialization state
8888	No load learning complete;	Initialization state
8888	Ready for rated load learning;	Initialization state
8888	Rated load learning complete;	Initialization state
8888	Error code;	Initialization state

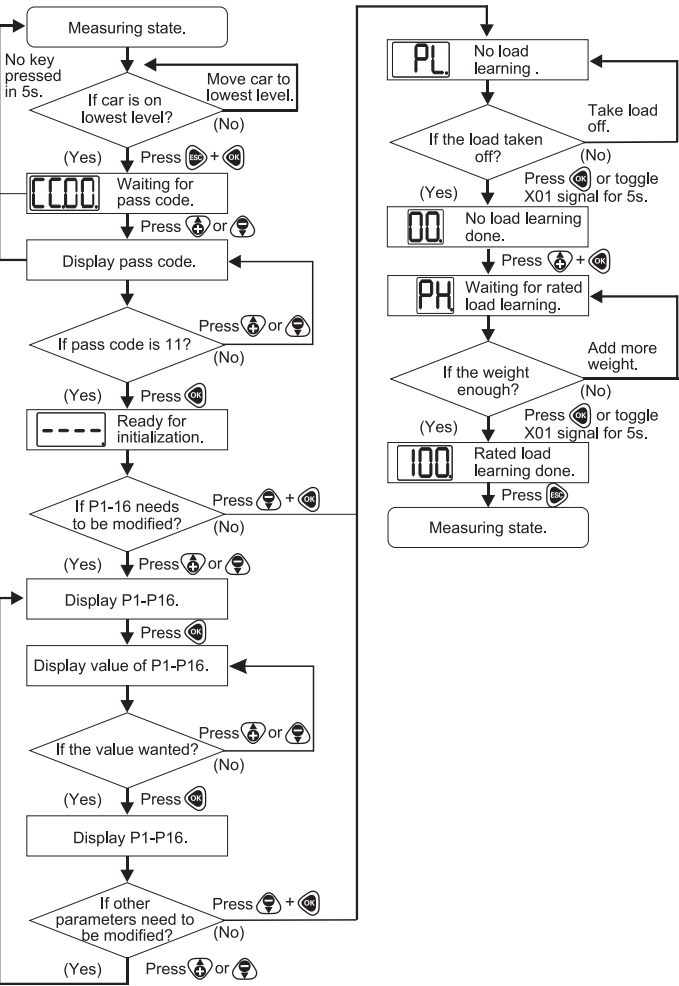
### Common trouble code and countermeasure to the trouble

Codes	Phenomena/explanation	Countermeasure
8888	Sensor not installed properly, wiring wrong, or used weight too light during initialization;	Check for installation or wiring error; use heavier weight on rated load learning;
8888	No no load learning performed during initialization process;	Perform no load learning before rated load learning process;
8888	Absence of correction code during rated load learning with no weight;	Restart initialization, and set P12 properly;
8888	Absence of rated load;	Restart initialization, and set P13 properly;
8888	Over sensor range;	Reduce the load or use larger range sensor;

### The menu structure and parameter setting

Parameter	Meanings	Parameter range	Default value
8888	Overload range Setting;	00~20 – Indicates 0~20%, overload relay acts when measuring load exceeds (1+P01%) rated load;	10
8888	Bouncing sensitivity setting;	00~10 – The sensitivity decreases with the value of P02 increasing;	05
8888	Output lock signal setting;	00 – Signal lock is effective when power on; 01– Signal lock is effective when power off;	00
8888	Delay time setting for overload relay release;	00~05 – Indicates 0~5 seconds;	02
8888	Mode setting for rated load learning;	00 – Learning with full weight load; 03 – Learning with no weight load; 04 – Learning with any known weight load;	00
8888	Rope and sheave ratio setting; (only good for rated load learning with no load)	01~10 – Indicates the ratio of 1/1~1/10, proportion the force sensor carried to actual load;	01
8888	Sensor's correction code or any known weight;	0.00~65.00 – Input correction code during rate load learning with no load or input weight during rated load learning with known weight in ton ;	0.00
8888	Rated load value setting;	0.00~65.00 – Input rated load in ton; In rated load learning with full weight, 0000 can be used to treat the full weight as rated load;	0.00
8888	Buzzer switch	00 – Buzzer close; 01– Buzzer open;	01
8888	Version		

### Flow chart for device initialization

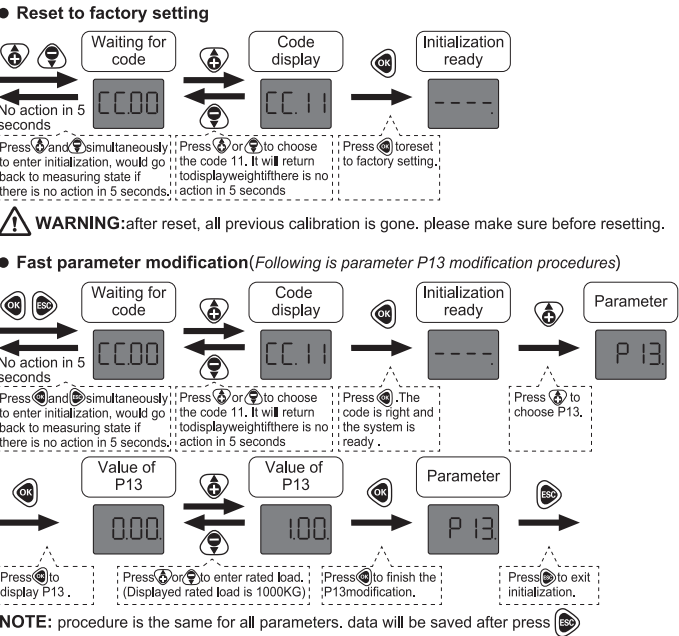


### Procedures for device initialization

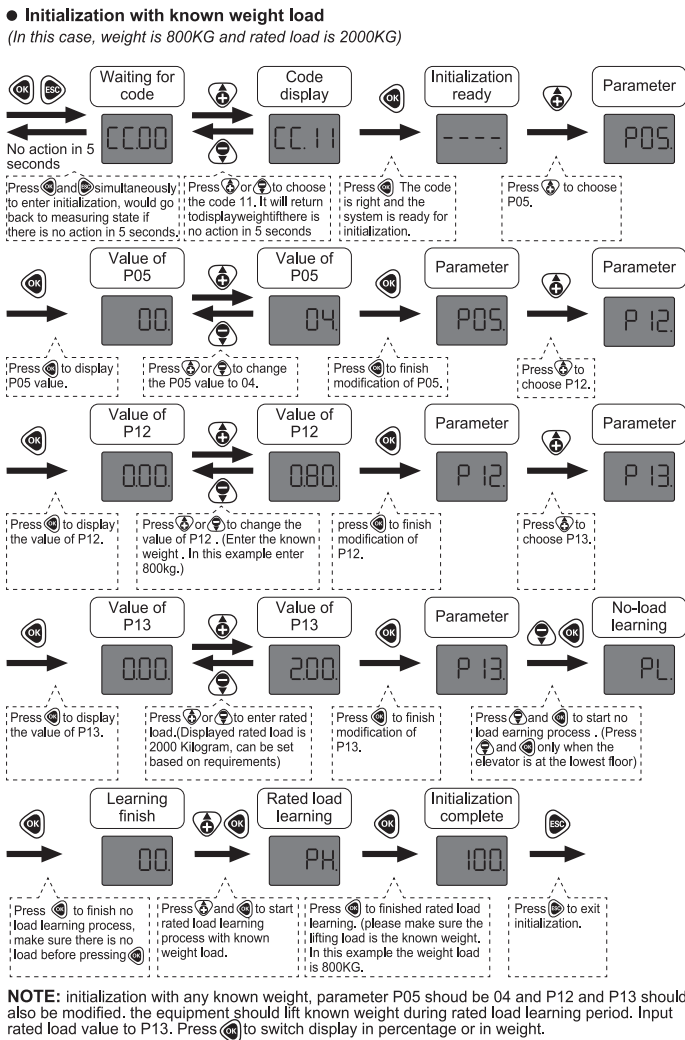
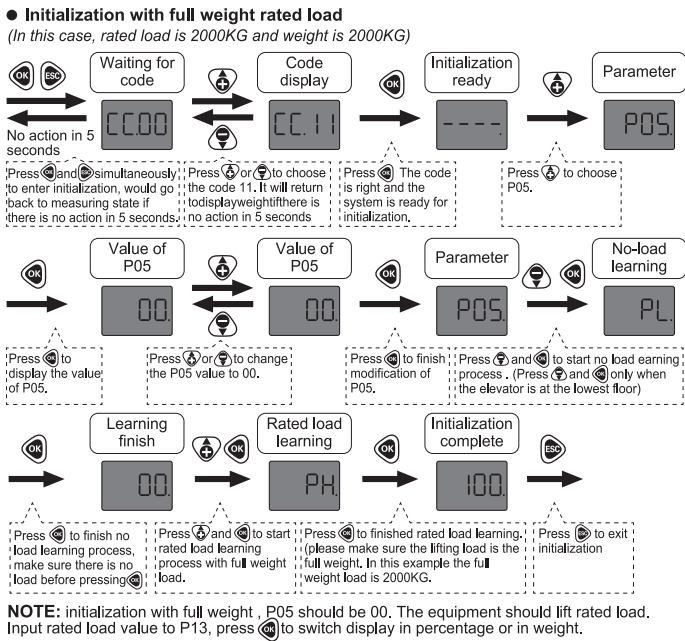
**This system provides 3 initialization methods:**

- ①Initialization with full weight load: if there is enough weight on site and high measurement precision required.
- ②Initialization with no load: if there is no weight on site and no special precision requirement.
- ③Initialization with any known weight load: if there is not enough weight on site and high measurement precision required.

According to on site situation, one of the following procedures can be used for Initialization, and following examples may be referred to accordingly.



### Procedures for device initialization



● **Initialization with no weight load**  
(Different sensor has different correction code. Please contact us if you need it. In this case, correction code is 6.30 and the equipment rated load is 2000 Kilogram)

