Synchronized Control Instruction Manual

Model: SC-800/1000

Revision A 2019-12-01

298005694

Contents

English Version

1. Introduction

The user can achieve the synchronous operation of the dust processors and the dust source equipment by using the synchronized control. After a simple installation and setup, the start and stop of the dust processors will automatically be in sync with the dust source equipment.

2. Working Principle

The synchronized control is connected between the main power supply and the dust source equipment. It inspects whether the dust source equipment has started and transmit the signal to the dust processor to initiate or stop the dust processor.

The synchronized control works as shown in Fig. 1:

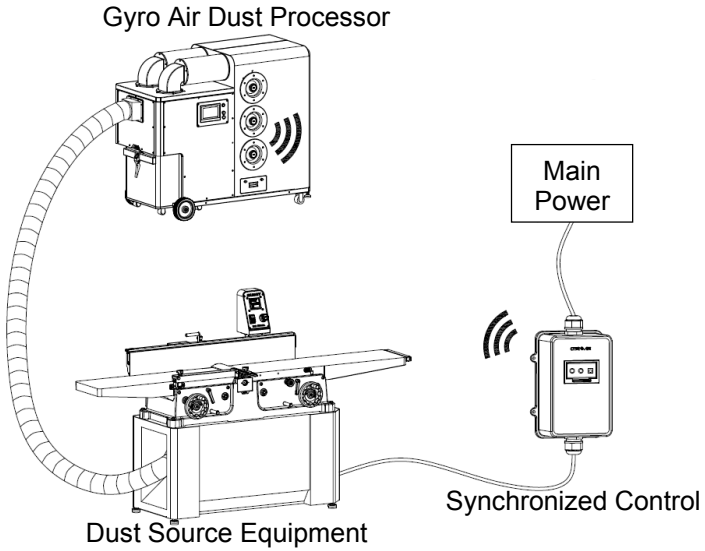

Fig. 1

⚠NOTICE

- **Only by pairing the synchronized control and the dust processor correctly and setting the control mode of the dust processor to the Linkage Mode will the synchronized start and stop of the dust processor be initiated.**
- **The maximum current of the synchronized control is 32 A.**

3. Panel Description

①Power Light: After the device is powered on, the power light (red) is always on.

② Running Light : When the dust source equipment is powered on, the running light (green) is always on.

③ Pairing Code Button: For pairing with the receiver of dust processor.

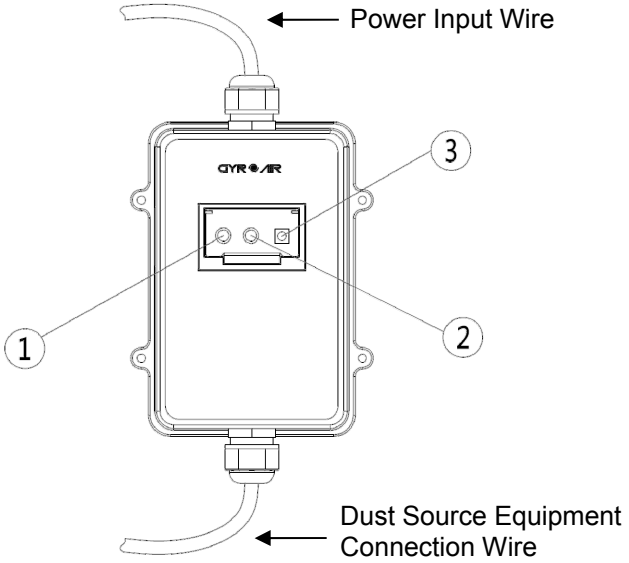

Fig. 2

4. Wiring

⚠WARNING

Before beginning the wiring operation, the power supply must be disconnected to avoid electric shock. The wiring must be completed by professionally trained electricians. The wiring differs in different power sources of dust processor.

4.1 380V, 3-phase, 5- wire system

1) As shown in Fig 3, remove the rear cover panel by removing the 6 bolts with a 2.5# hex key.

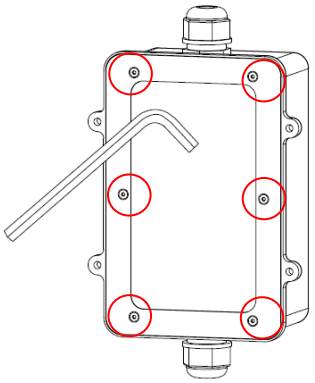

Fig. 3

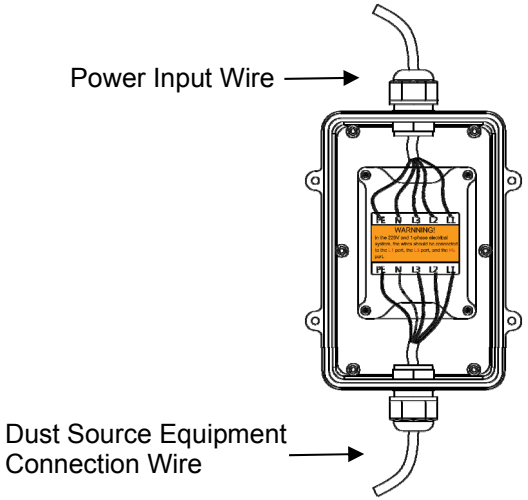

Fig. 4

2) Connect the synchronized control between the dust source equipment as shown in Fig. 4. The electrical phase wires should be connected to the L1, L2 and L3 ports. The grounding wire should be connected to the PE port and the neutral wire should be connected to the N Port.

3) After wiring is completed, re-install the rear cover panel with the rear cover bolts removed in step 1.

4.2 220V, 3-phase, 4- wire system & 440V , 3-phase,4-wire system

This wire system has no neutral wire. The electrical phase wires should connect to the L1, L2, and L3 ports. The grounding wire should connect to the PE port, as shown in Fig. 5.

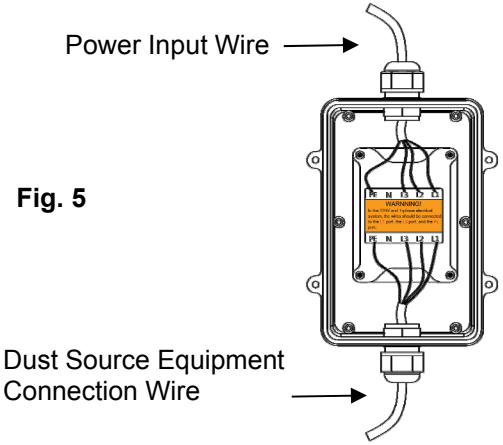

Fig. 5

4.3 220V, 1-phase, 3- wire system

The electrical phase wire should connect to the L1 and L3 ports. The grounding wire should connect to the PE port, as shown in Fig. 6.

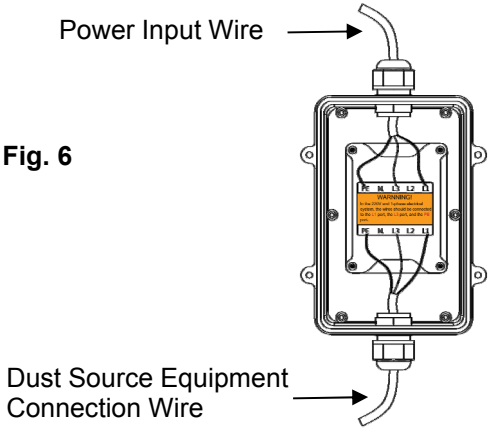

Fig. 6

⚠NOTICE

This wire must be 14 AWG or 2.5mm^2 .

5. Installation and Pairing & Setting

In general, the synchronized control is installed in three ways:

Installation Mode A: one dust processor + one synchronized control + multiple dust source equipment, as shown in Fig. 7;

Installation Mode B: one dust processor + multiple synchronized controls + multiple dust source equipment, as shown in Fig. 10;

Installation Mode C: multiple dust processors + multiple synchronized controls + multiple dust source equipment, as shown in Fig. 11.

5.1 Pairing & Setting of Installation Mode A

1) Connect the synchronized control to the system, as shown in Fig. 7.

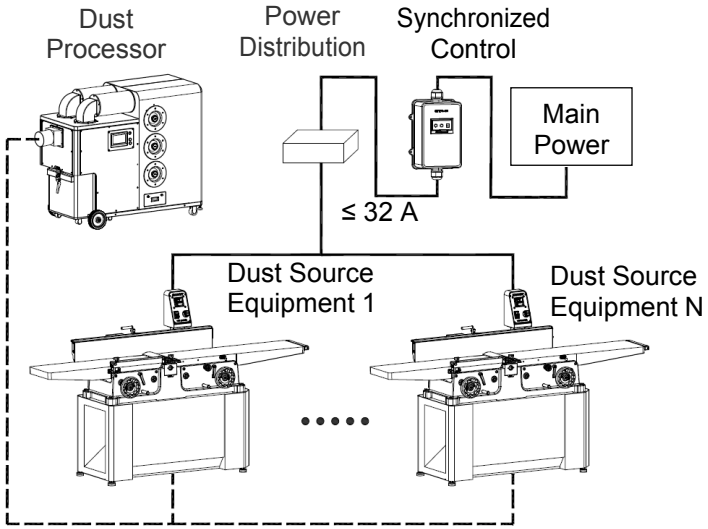

Fig. 7

⚠WARNING

Total working current of all the dust source equipments shall not exceed 32 A.

2) Set the control mode of the G-800 or G-1000 dust processor to the linkage mode (see the operation instruction of the dust processor for this setting);

3) Find out the receiver in the Electric Box of dust processor, as shown in Figure.8, and remove the receiver cover by hand. As shown in Fig. 9, short press the pairing code button of the receiver, the pairing code light of the receiver will be on indicating that it is pairing now;

Fig. 8

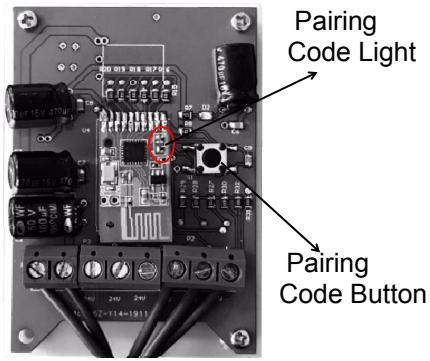

Fig. 9

4) When the receiver is pairing, short press the pairing code button (Fig. 2) on the synchronized control within 10 seconds and its running light (green) will be on. The paring code light on the receiver will flash when the pairing is succeeded, the receiver will quit pairing after 10 seconds and the dust processor can be synchronously controlled.

5.2 Pairing & Setting of Installation Mode B

1) Connect the synchronized control to the system, as shown in Fig. 12. The modules in the dashed frame can be expanded according to Mode A.

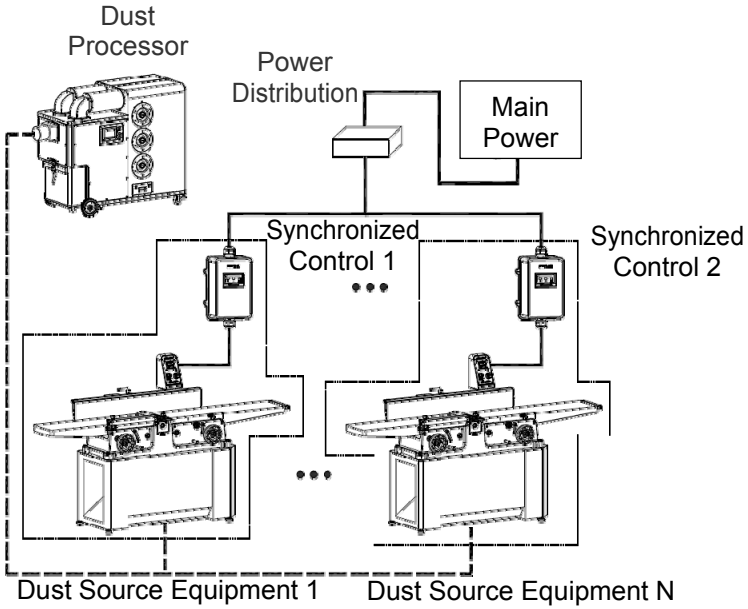

Fig. 10

2) Refer to 5.1 steps 2-4 for pairing and setting.

5.3 Pairing & Setting of Installation Mode C

1) Connect the synchronized control to the system, as shown in Fig. 14. The modules in the dashed frame can be expanded according to Mode A.

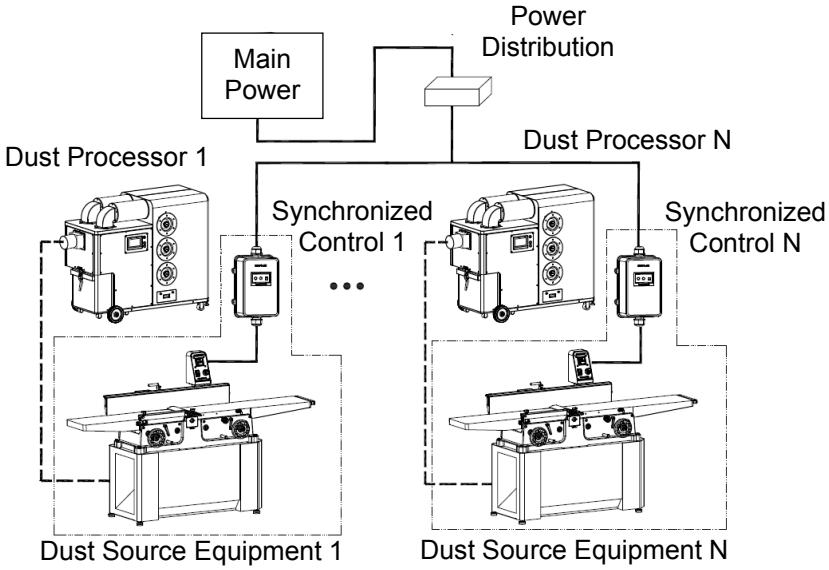

Fig. 9

2) Refer to steps 2-4 in Section 5.1 for pairing and setting.

中文版本

1. 产品介绍

用户可通过联动器实现集尘器与尘源设备的同步运作，简易地安装和设置后，尘源设备的启停将会自动关联集尘器的启停。

2. 工作原理

联动器接在供电电源和尘源设备之间，检测尘源设备的启停状态，发出启停信号，并将信号传输至集尘器，从而实现集尘器的联动启停。

联动器的工作原理如下图 1 所示：

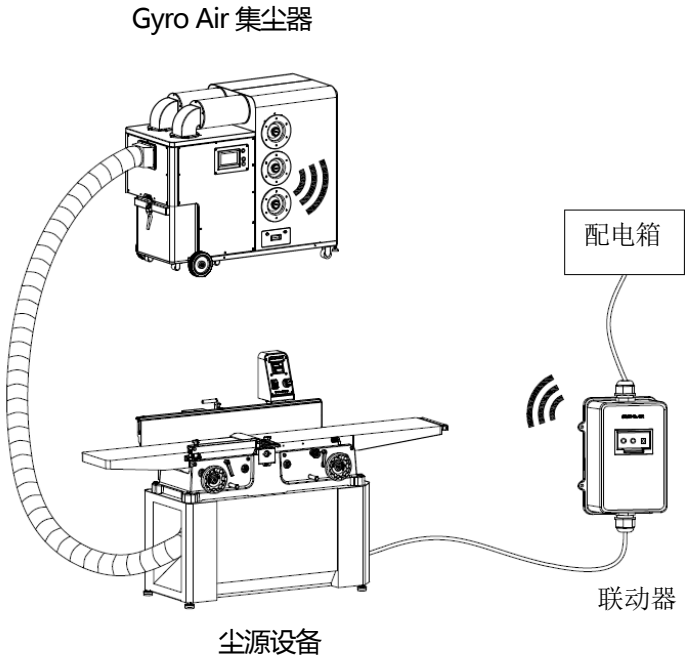

图 1

⚠NOTICE

- **只有将联动器和集尘器进行正确的配对，并将集尘器启停方式设置为联动模式，才能实现集尘器的联动启停。**
- **联动器最大允许通过电流为 32A。**

3. 面板说明

① 电源指示灯：联动器通电后，电源指示灯（红）常亮；

② 运行指示灯：尘源设备启动时，运行指示灯（绿）常亮；

③ 对码按键：用于与集尘器接收器的对码设置 。

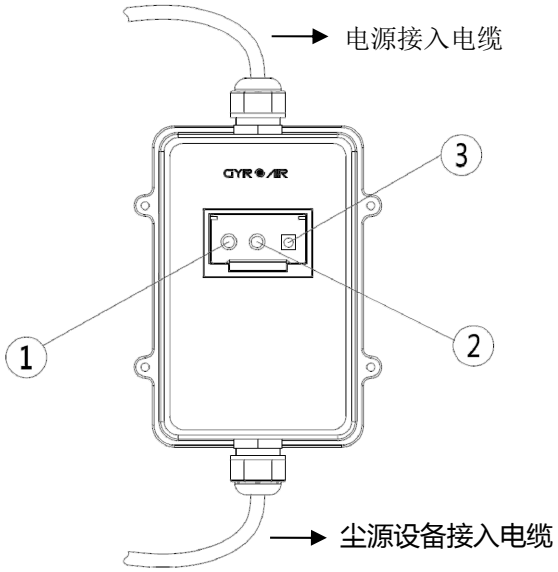

图 2

4. 联动器的接线

⚠WARNING

接线操作必须由受过专业培训的电工完成。

接线操作前，必须断开电缆电源，以免发生触电危险。

针对集尘器不同的供电，联动器的接线存在差异。

4.1 380V 三相五线制接线

1）如图 3 所示，使用 2.5#内六角扳手拆除后盖板螺栓。

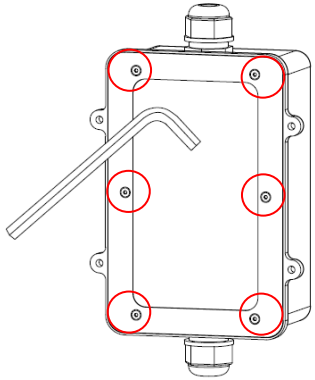

图 3

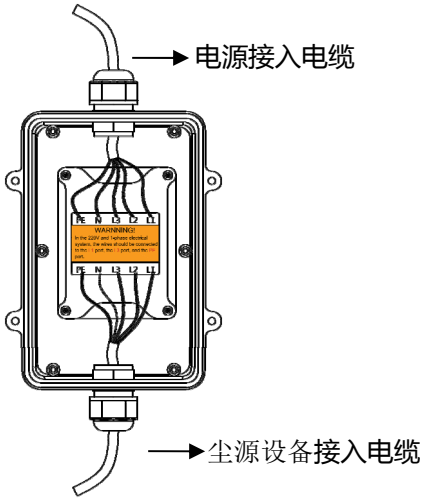

图 4

2）按图 4 的接线示意图， 将联动器接至总电源和尘源设备之间。相线接 L1、L2、L3 端口，地线接 PE 端口，零线接 N 端口。

3）接线完毕后，安装回后盖板。

4.2　220V 三相四线制& 440V 三相四线制接线

该线制无零线，相线接 L1，L2，L3 端口，地线接 PE 端口，如下图 5 所示。

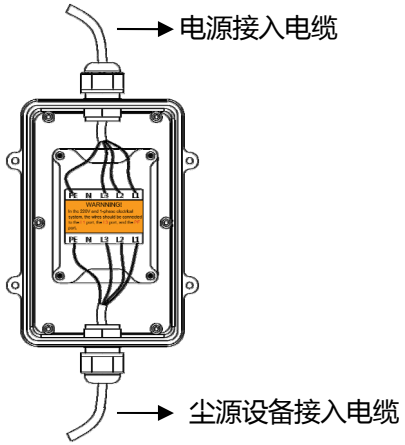

图 5

4.3　220V 单相三线制接线

相线接L1， L3 端口，地线接PE 端口，如下图 6 所示。

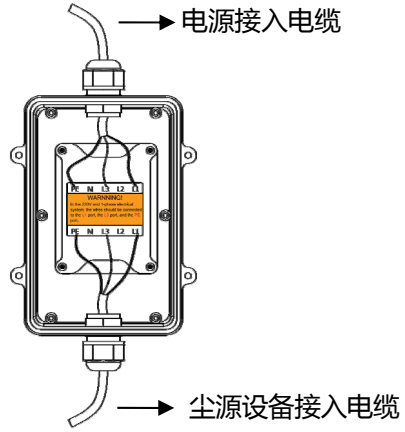

图 6

⚠NOTICE

电缆截面积为 2.5mm^2 或 14 AWG。

5. 安装方式及配对设置

通常情况下，联动器的安装有以下三种方式：

安装方式A：一台集尘器+一台联动器+多台尘源设备组合工作，见图7；

安装方式B：一台集尘器+多台联动器+多台尘源设备组合工作，见图10；

安装方式C：多台集尘器+多台联动器+多台尘源设备组合工作，见图11。

5.1 安装方式A的配对与设置

1） 如图 7 所示，将联动器接入系统中。

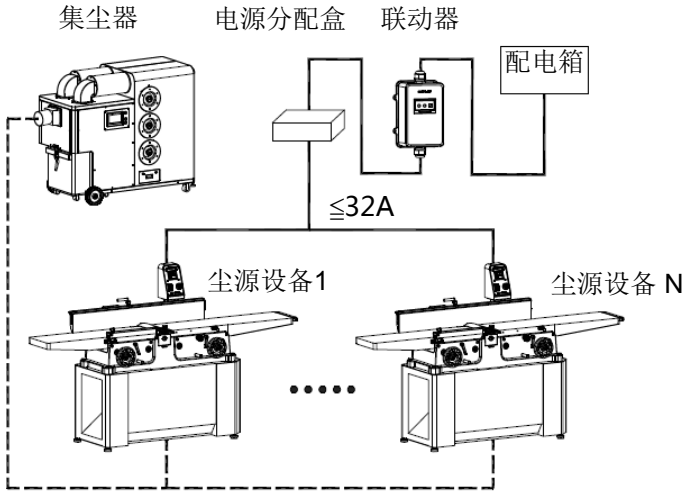

图 7

⚠NOTICE

所有尘源设备工作电流总和不得超过 32A。

2） 将 G800 或 G1000 集尘器的启停模式为联动模式（设置方法见集尘器使用说明书）；

3） 打开集尘器电器箱，找到接收器，如图8所示，移除盖板（直接拔出，无需工具）。如图9所示，短按接收器对码按键，接收器上的对码指示灯亮，接收器进入对码状态;

图8

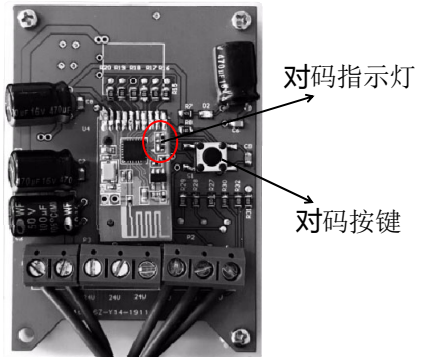

图9

4） 接收器处于对码状态10秒内，短按联动器对码按键（如图2），运行指示灯(绿灯)亮，接收器上的对码指示灯闪烁，配对成功，接收器在10 秒后将自动退出对码状态，集尘器进入联动工作状态。

5.2 安装方式B的配对与设置

1） 如图 10 所示，将联动器接入系统中。虚线框内的模块可按方式 A 拓展设计。

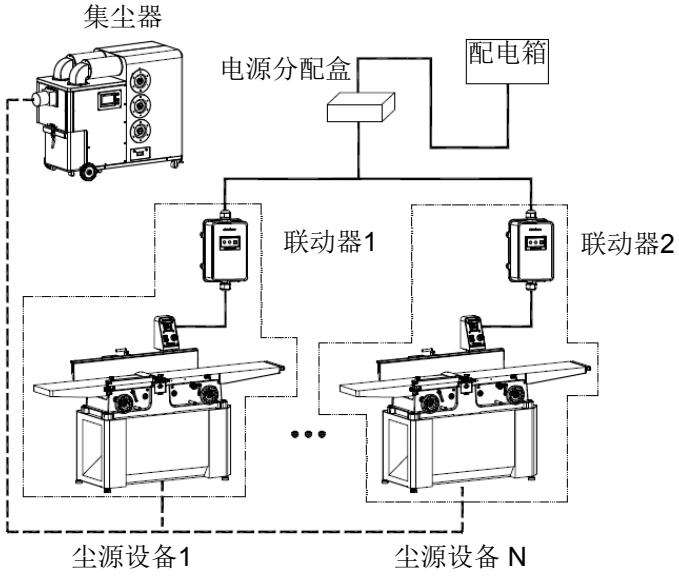

图 10

2） 参考 5.1 第 2-4 步骤进行对码设置。

5.3 安装方式C的配对与设置

1) 如图11所示，将联动器接入系统中。虚线框内的模块可按方式A拓展设计。

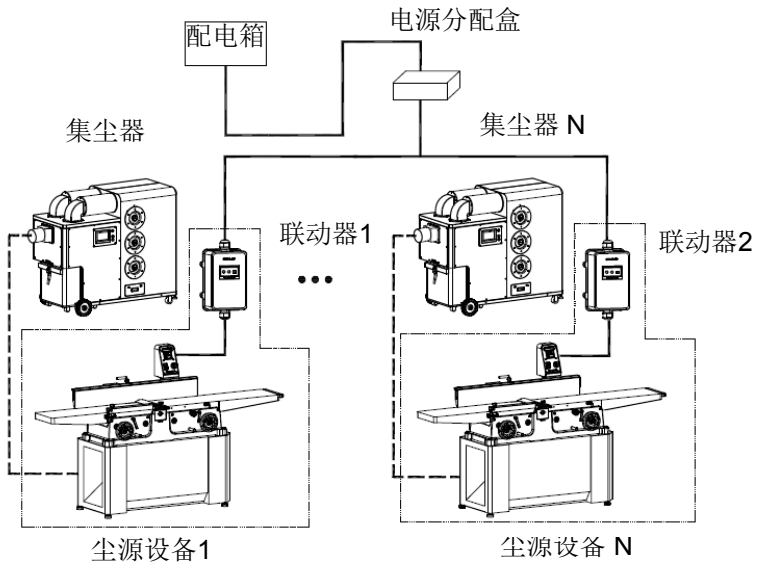

图 11

2 ）参考 5.1 第 2-4 步骤进行对码设置。

GYRO AIR®

Dust Processor

HARVEY®

Harvey Industries Co., Ltd

68-10 Suyuan Avenue, Jiangning District, Nanjing 211100, China
www.harvey.cn/ www.gyroair.cn

Harvey Industries International Inc.

10830 Ada Ave. Montclair, CA. 91763
TEL: 1-800-253-3332
E-mail: info@harveywoodworking.com