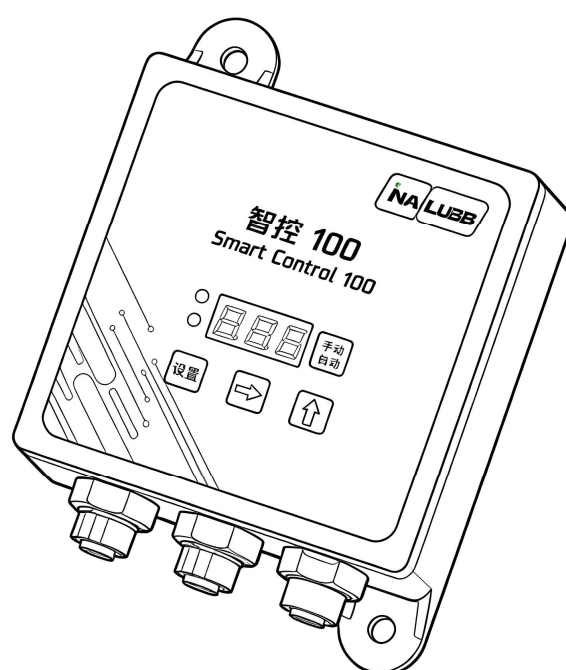


SC100 智能控制器操作手册



上海毅那机械科技有限公司

目录

安全.....	1
通用须知.....	2
安全说明.....	2
免责声明.....	2
概述.....	2
技术参数.....	3
控制器外形尺寸.....	4
电气连接.....	5
控制系统.....	7
参数设置.....	9
故障代码.....	13

安全

本装置仅可由熟悉本使用说明的人员进行安装、维护与维修作业。

设备闲置不用时，务必切断所有动力源（电力、气源或液压源）。

本设备会产生高压。操作设备时须极度谨慎，若零部件松动或破裂发生介质泄漏，高压流体可穿透皮肤进入人体。一旦发现有流体渗入皮肤，必须立即就医，切勿将伤情当作普通割伤处理，并需如实告知接诊医生侵入体内的流体类型。

凡未按本说明书规定进行违规使用，将自动丧失保修及追索索赔权利。

- 严禁违规使用、超压运行、私自改装零部件，禁止使用不相容的化学介质、流体，以及磨损或损坏的零部件。
- 不得超过设备额定最大工作压力，也不得超过系统中最低额定值部件的工作压力。
- 务必阅读并遵循制造商关于流体相容性、防护服装及防护用具使用的相关建议。
- 若未遵守上述要求，可能造成人身伤害和、或设备损坏。
- 必须严格遵守国家法律法规及各项安全防事故管理规定。

安全警示用语释义

须知

本项内容着重提供实用提示与建议，同时说明相关注意事项，用以防止财产损失，并保障设备高效、无故障平稳运行。

注意

表示若忽视防护措施，将可能引发出轻微人身伤害的危险状况。

警告

表示若忽视防护措施，将可能引发造成严重人身伤害的危险情形。

危险

表示若忽视防护措施，会导致造成死亡或重伤的危险状况。

警告

未阅读并完全理解安全警示及操作说明前，严禁操作本设备。



未遵守安全警示和操作说明，可能导致严重人身伤害。

注意

未佩戴个人防护装备，严禁操作设备。

必须佩戴护目镜。根据工况佩戴防尘口罩、防滑安全鞋、安全帽、听力防护用品等防护装备，可有效降低人身伤害风险。

未按要求执行，可能造成轻微人身伤害。



警告

严禁超过设备标定的最大工作压力，亦不得超过系统中额定等级最低部件的工作压力。



本设备会产生极高油脂压力，操作时务必格外谨慎。

若未遵守本要求，可能造成轻微人身伤害。

警告

严禁使用本设备输送、转运或存放危险物质及混合物。



通用须知

本手册所介绍产品为 INALUBE 集中润滑系统配套控制器, 适用于未预装集成控制器或可编程逻辑控制器 (PLC) 的设备, 作为自动润滑系统配套组件供货。 本款控制器属于基础机型, 可根据现场控制与监测需求进行定制改造, 由此衍生出多款功能各异的设备型号。

本集中润滑系统专用 INALUBE 控制器, 严格遵循通用公认技术规范、现行安全作业规程及事故防护标准设计制造。为保障设备无故障运行、规避安全风险, 请您仔细阅读本操作手册, 并严格遵守文中各项说明要求。

请注意: 本手册为设备不可分割的配套资料; 若设备转售, 需将对应语言版本的手册一并交付新使用方。

安全说明

本控制器仅适配直流电源供电, 禁止用于其他供电工况。

设备的安装与接线工作, 仅限具备专业资质、能够识别带电部件接触风险的持证技术人员操作, 作业时必须遵守当地接线规范及相关现行标准。

设备所有调试操作, 仅可由持证专业人员执行; 专业人员指经设备使用单位培训、交底, 并被专项授权开展此类作业的工作人员。

严禁私自改装设备, 不得使用未经原厂认证的备件及辅助配件。设备出现故障时, 请联系供应商处理。

免责声明

对于因下列情形造成的损坏, 我方不承担任何直接、间接及连带责任与相关义务:

- 供电电源选型错误造成的设备损坏
- 电气接线错误造成的设备损坏
- 配套润滑系统规格不匹配造成的设备损坏
- 安装、使用非原厂授权零配件造成的设备损坏
- 擅自改动控制器内部元器件造成的设备损坏
- 超出标准工况、违规使用造成的设备损坏
- 故障排查操作不当造成的设备损坏

概述

Smart Control 100 系列控制器专为各类常规润滑系统设计, 适用于单线式、双线式、递进式等润滑系统。该控制器配备高防护等级接线盒, 盒内集成控制电路板与操作按键面板。设备电源供电、与润滑执行元件之间的信号通讯均采用符合 IEC 61076-2-101 标准的航空插头实现连接。无论是全新配套润滑系统项

目，还是设备改造升级工程，本控制器均便于安装配套。

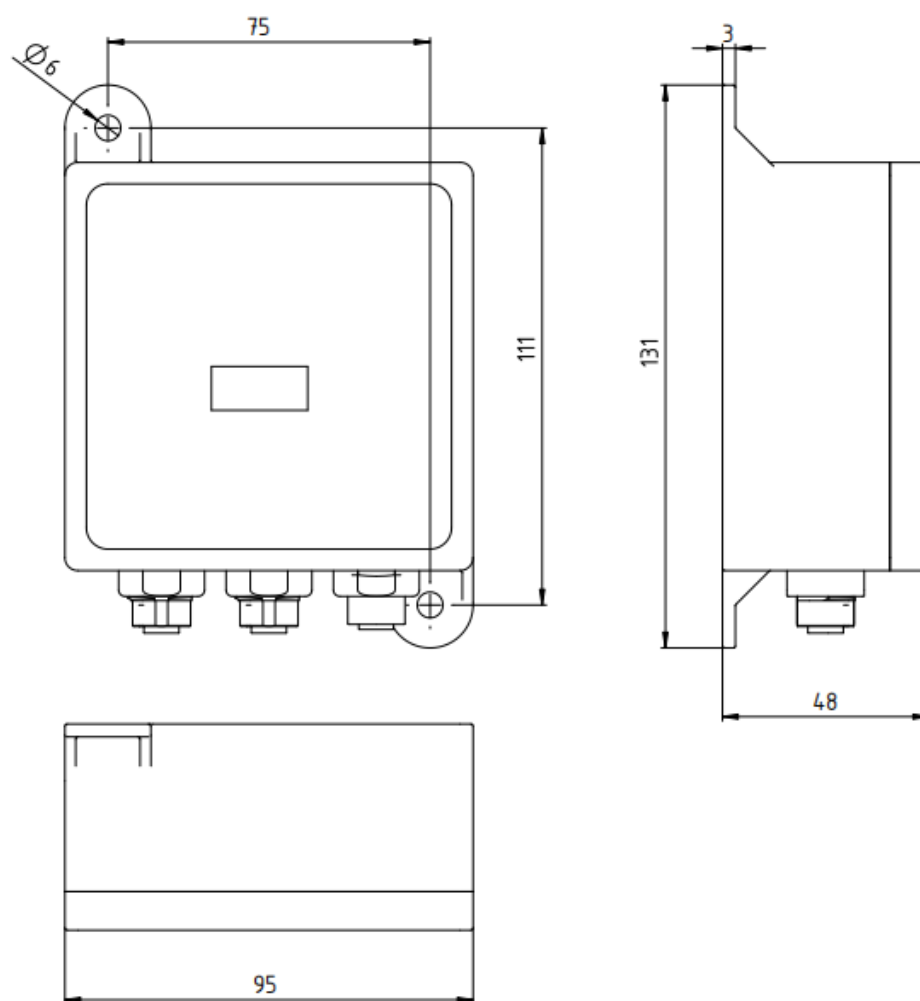


- ① 电源输入
- ② 供电输出
- ③ 信号交互

技术参数

工作电压	DC 24 V
最大工作电流	9 A
工作模式	时间，单线，递进
间歇时间单位	分钟，小时
液位传感器信号	PNP NC
压力开关 / 柱塞探测器信号	PNP NO
电气接口	IEC 61076-2-101
防护等级	IP 68

控制器外形尺寸



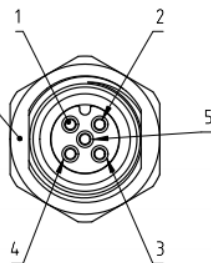
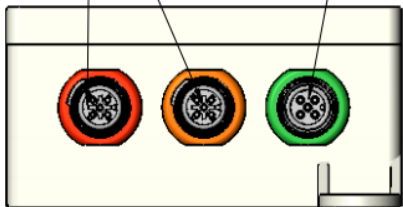
电气连接

■ 电气接口说明

电源输入, M12, 4孔
(IEC 61076-2-101)

供电输出, M12, 4孔
(IEC 61076-2-101)

信号交互, M12, 5孔
(IEC 61076-2)



信号交互	
标识	说明
1	24 V+
3	0 V
4	压力开关 / 柱塞 探测器 (PNP NO)
2	液位传感器 (PNP NC)



电源输入

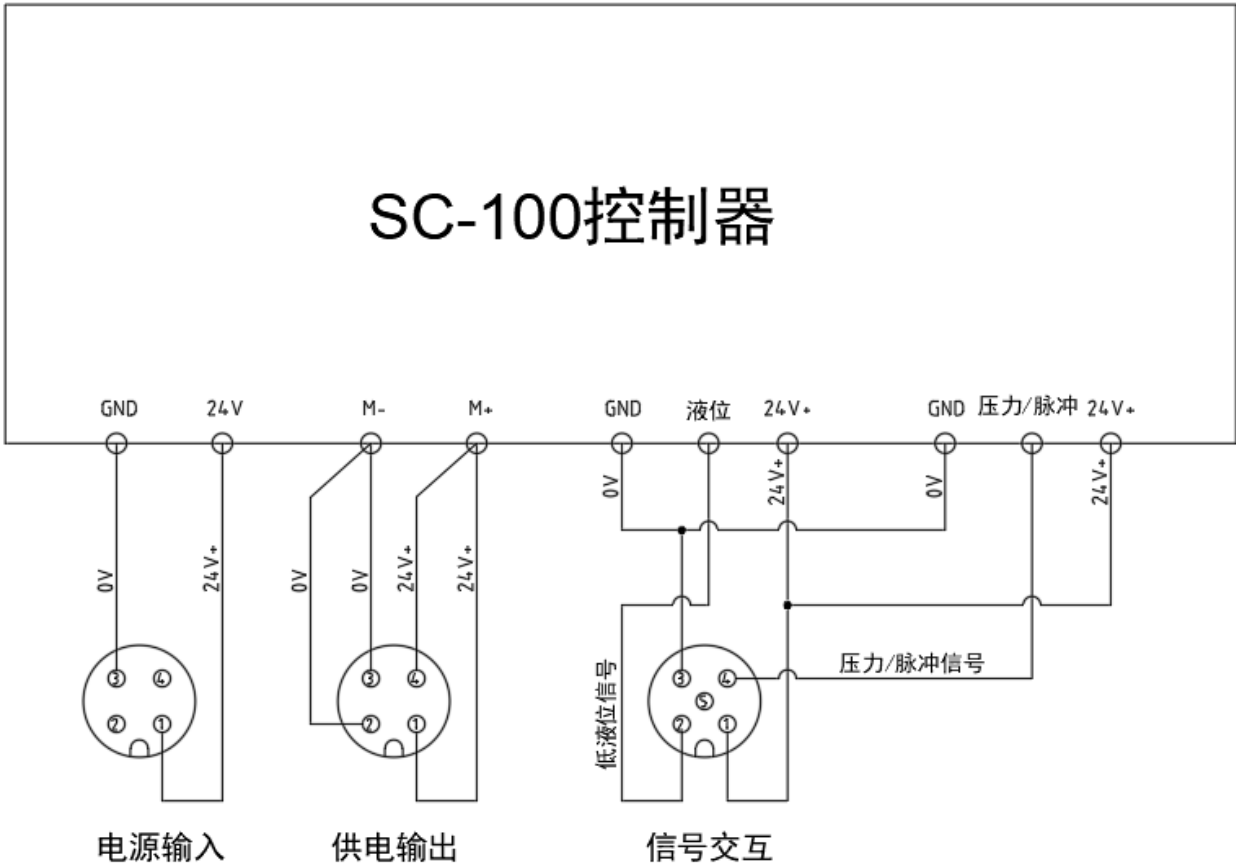


供电输出



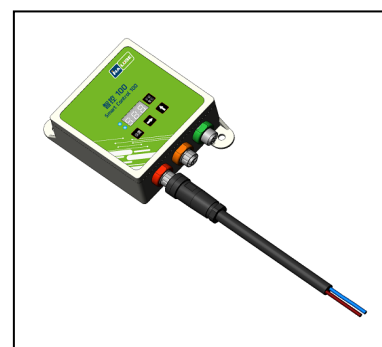
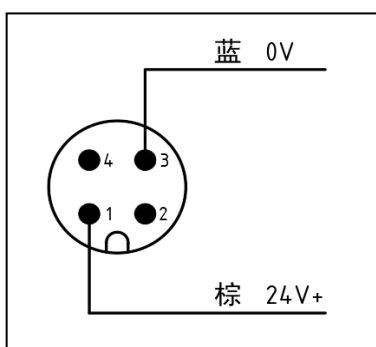
信号交互

■ 电气接线原理图



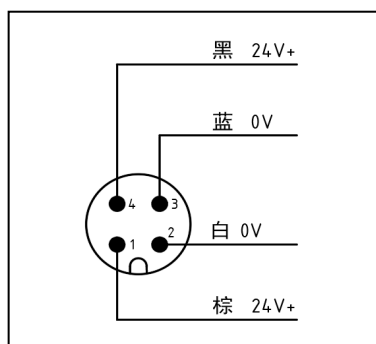
■ 电源输入线

针脚	电线颜色	连接
1	棕	24 V+
3	蓝	0V



■ 供电输出线

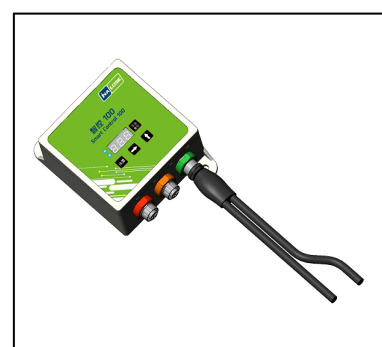
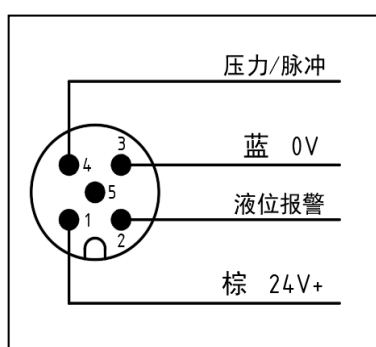
针脚 *	电线颜色	连接
1	棕	24 V+
3	蓝	0V
4	黑	24 V+
2	白	0V



* 在 d-2 模式下，4 个针脚全部用到。
在 d-1 和 d-3 模式下，只有 1、3 针脚会用到。

■ 信号交互线

针脚 *	电线颜色	连接
1	棕	24 V+
3	蓝	0V
4	黑	压力/脉冲 PNP
2	白	液位报警 PNP

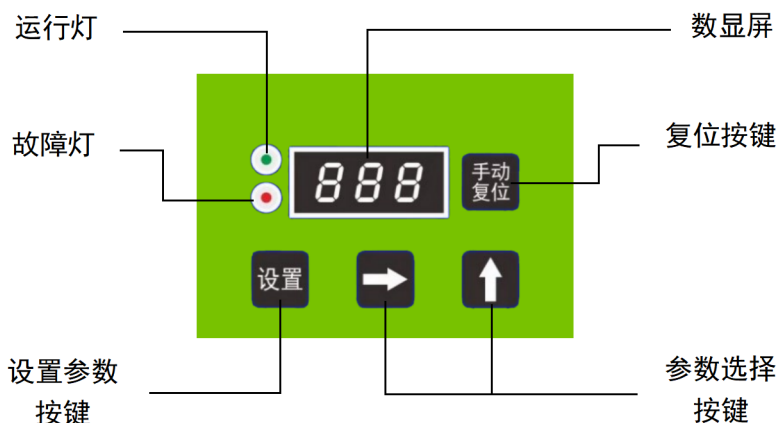


* 在 d-2 和 d-3 模式下，4 个针脚全部用到。
在 d-1 模式下，只有 1、3、2 针脚会用到。

控制系统

■ 数显按键控制器

控制器通过面板薄膜实现防潮、防杂质防护。



警告

请勿使用有机溶剂擦拭面板薄膜。如需清洁面板，可用软布蘸取中性洗涤剂擦拭。禁止用尖锐物品刮划，以免损坏面板薄膜。

■ 显示屏

 显示运行参数和运行状态。

■ 指示灯

指示灯常亮，代表指示灯持续稳定点亮。指示灯闪烁：以点亮 0.5 秒、熄灭 0.5 秒的频率循环闪烁。

■ 控制器按键

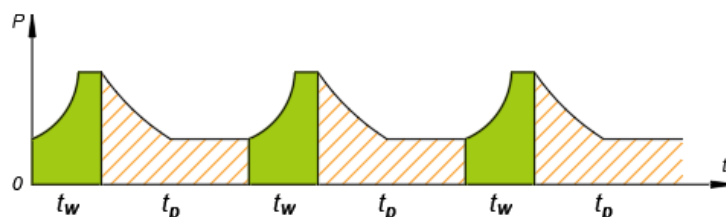
显示屏  以数字形式显示时间，单位为分钟或小时。工作时间可调范围：1-999 分钟；间隔时间可调范围：1-999 分钟或小时。当泵运行时，绿灯常亮；当泵停止运行时，红灯常亮；设置参数或报警状态时，红、绿灯同步闪烁。

■ 工作模式

本控制器设有三种工作模式：d-1、d-2、d-3，分别对应时间模式、单线模式与递进模式。

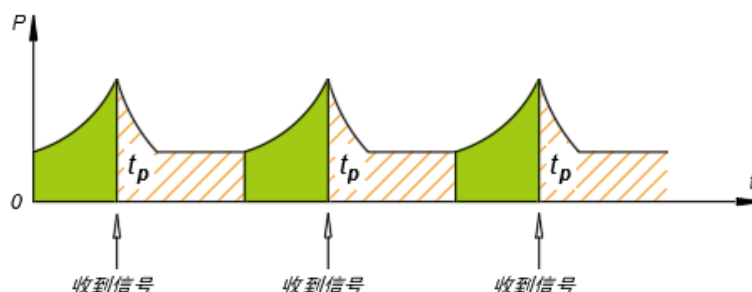
◇ 时间模式

标识 **d-1** 代表时间模式。该模式以润滑泵及整套系统的时间时序作为运行控制依据。 控制器根据预设的间歇时长与工作时长，循环执行 “间歇待机 / 润滑运行” 状态切换。



◇ 单线模式

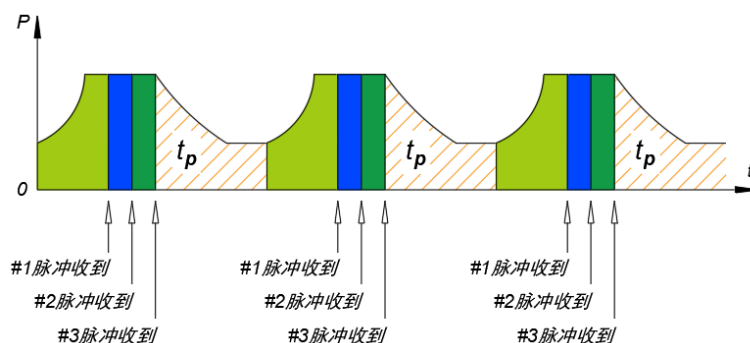
标识 **d-2** 为压力模式。润滑泵启动后，管路压力逐步上升，单线分配器向各润滑点输送油脂。全部分配器完成动作后，系统压力会持续升高，直至达到压力开关设定值。泵收到压力开关反馈信号随即停机，系统进入间歇待机时段 (t_p)。待机时长结束后，系统开启新一轮润滑循环。



◇ 递进模式

标识 **d-3** 为递进模式。递进模式下，间歇时长功能与时间模式保持一致，但润滑运行时长改为以接收柱塞探测器脉冲信号数量作为判定条件。润滑泵启动运行后，持续采集递进式分配器内置柱塞探测器触发的反馈信号。当控制器收到设定数量的脉冲信号后，泵停止运行，系统进入间歇待机阶段。

若泵运行 5 分钟内未采集到脉冲信号（该时长为出厂固定参数，不可修改），系统将触发报警。



■ 强制工作

按下控制面板上的复位键 **手动复位**，润滑泵将按照运行程序设定的工作模式，强制重新执行一次完整润滑流程。

■ 系统监控

控制器可外接柱塞探测器，用于监控递进分配器柱塞的动作状态。系统运行时，若柱塞感测器未检测到柱塞动作信号，系统将自动识别故障并予以显示。

■ 电源异常保护

控制器具备断电保护功能。若泵运行过程中断电，再次上电时，泵将从上次工作断点继续运行。若在间歇阶段断电，系统会记录断电时的剩余间歇时长，重新上电后，将接续上次未完成的间歇时间继续计时运行。

参数设置

设置键、移位键、加键用于参数设定。手动复位键用于强制启停控制。指示灯用于显示控制器工作状态，显示时间单位为分钟或小时。

■ 显示

泵运行中或设置泵运行时间时，显示屏指示灯为绿色。



泵处于停歇状态或设置泵停歇时间时，显示屏指示灯为红色。



按住 **设置**，红绿指示灯同时熄灭，显示屏进入工作模式选择状态。仅绿灯亮起时，显示屏为工作时间设置状态；仅红灯亮起时，显示屏为间歇时间设置状态。



按 **→**，可选择需要修改的数码管数位。再按 **↑**，对应位数数字可在 0-9 之间循环切换。



红绿指示灯同步闪烁时，系统触发故障报警，显示屏将显示报警代码（具体报警代码说明详见故障排查章节）。长按 **手动复位** 即可解除故障报警。



■ 时间模式设置

第 1 步:

长按 **设置** 进入润滑系统工作模式设置（红、绿灯同时熄灭），再按 **↑** 选择 **d-1** 时间工作模式。



第 2 步:

长按 **设置** 进入工作时间设置（绿灯闪烁）。按 **→** 选择调节数位，再按 **↑** 设置该数位数值。长按 **↑**，可在 0-9 之间快速循环切换数值。设置范围：**001-999** 分钟。



第 3 步:

长按 **设置** 进入间歇时间设置（红灯闪烁），按 **→** 选择调节数位，再按 **↑** 设置该数位数值。长按 **↑**，可在 0-9 之间快速循环切换数值。设置范围：**001-999** 分钟（或小时）。



第 4 步:

长按 **设置** 确认设置，显示屏将返回显示已设定的工作时长，设备开始正常运行。若 **30** 秒内无任何按键操作，本次设置将自动失效，系统恢复为原有设定参数。



■ 单线模式设置

第 1 步:

长按 **设置** 进入润滑系统工作模式设置（红、绿灯同时熄灭），再按 **↑** 选择 **d-2** 单线工作模式。



第 2 步:

长按 **设置** 键，进入压力开关信号最长接收时间设置模式（此时绿灯闪烁）。按 **→** 切换数位，按 **↑** 调整当前数位数字。长按 **↑** 可快速滚动数值，在 0-9 之间循环切换。设置取值范围：**001-999** 分钟。



第 3 步:

长按 **设置** 进入间歇时间设置（红灯闪烁），按 **→** 选择调节数位，再按 **↑** 设置该数位数值。长按 **↑**，可在 0-9 之间快速循环切换数值。设置范围：**001-999** 分钟（或小时）。



第 4 步:

长按 **设置** 确认设置，显示屏将返回显示已设定的压力开关信号最长接收时间，设备开始正常运行。若 **30** 秒内无任何按键操作，本次设置将自动失效，系统恢复为原有设定参数。



■ 递进模式设置

第 1 步:

长按 **设置** 进入润滑系统工作模式设置（红、绿灯同时熄灭），再按 **↑** 选择 **d-3** 递进工作模式。



第 2 步:

长按 **设置** 进入工作脉冲数量设置（绿灯闪烁）。按 **→** 选择调节数位，再按 **↑** 设置该数位数值。长按 **↑**，可在 0-9 之间快速循环切换数值。设置范围：**002-999** 脉冲。



第 3 步:

长按 **设置** 进入间歇时间设置（红灯闪烁），按 **→** 选择调节数位，再按 **↑** 设置该数位数值。长按 **↑**，可在 0-9 之间快速循环切换数值。设置范围：**001-999** 分钟（或小时）。



第 4 步:

长按 **设置** 确认设置，显示屏将返回显示已设定的工作脉冲数量，设备开始正常运行。若 **30** 秒内无任何按键操作，本次设置将自动失效，系统恢复为原有设定参数。



故障代码

■ 故障监控与处理

当控制器检测到系统故障时，控制面板上的红绿指示灯将同时闪烁，提醒用户润滑系统发生故障。此时润滑系统停止运行，等待用户进行故障处理，具体故障原因可通过显示屏查看。

◇ 故障代码含义

	润滑泵运行时，未收到压力开关（d-2 模式）或递进式分配器柱塞探测器（d-3 模式）反馈的脉冲信号。
	润滑泵运行时电机电流低于 0.2A。
	润滑泵运行时电机电流大于 5A。
	润滑泵运行时，润滑脂液位低于最低液位。
	输入电源供电不足或控制器存储容量不足。

◇ 清除故障信号

解决了故障后，按下复位键 ，控制器即可清除故障信号，重新进入运行状态。

声明:

未经许可，不得全部或部分引用、复制本说明书中的内容。我们已尽可能确保该说明书中的内容准确无误。对未经我司认可、使用本说明书中提及的任何技术和相关产品，我司不承担由此带来的任何直接、间接和连带责任。

出版物编号: INALUBE-SC100-02

版本号: 1.0

日期: 2026.03

上海毅那机械科技有限公司

地址: 上海市闵行区万芳路 555 号 D 栋 201 厂房

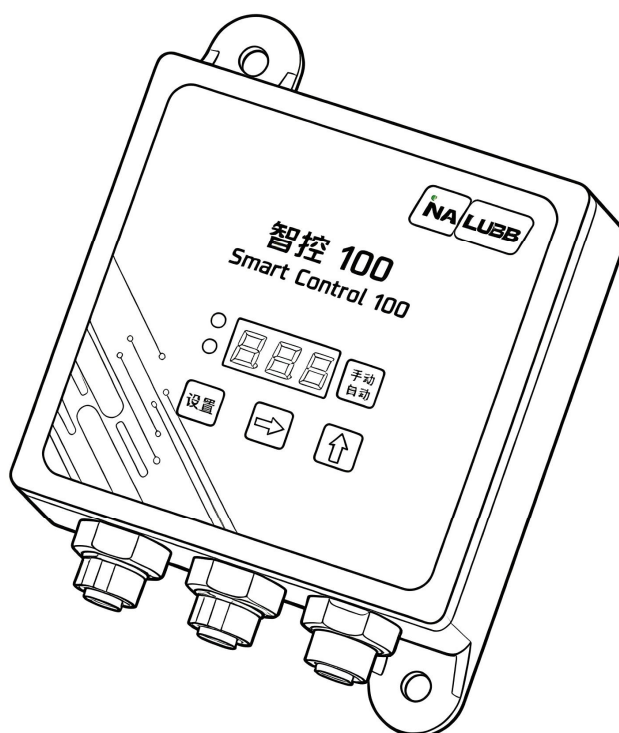
电话: +86 21 2042 2806

手机: +86 187 1781 3303

电邮: sales@inalube.com

网址: www.inalube.com / www.inalube.com.cn

Smart Control 100 Controller User Manual



Shanghai INA Machinery Science & Technology Co., Ltd

Content

Safety.....	1
General reminder.....	2
Safety instruction.....	2
Exemption from liability.....	3
Overview.....	5
Technical data.....	6
Controller dimension.....	6
Electric connection.....	7
Control system.....	9
Parameter setting.....	11
Malfunction code.....	16

Safety

The assembly must be installed, maintained and repaired exclusively by persons familiar with the instructions. Always disconnect power supply (electricity, air or hydraulic) from the equipment when it is not being used. This equipment generates high pressure. Extreme caution should be used when operating this equipment as material leaks from loose or ruptured components can inject fluid through the skin and into the body. If any fluid appears to penetrate the skin, seek attention from a doctor immediately. Do not treat injury as a simple cut. Tell attending doctor exactly what type of fluid was injected. Any other use not in accordance with instructions will result in loss of claim for warranty or liability.

- Do not misuse, over-pressurize, modify parts, use incompatible chemicals, fluids, or use worn and/or damaged parts.
- Do not exceed the stated maximum working pressure of the equipment or of the lowest rated component in your system.
- Always read and follow the manufacturer's recommendations regarding fluid compatibility, and the use of protective clothing and equipment.
- Failure to comply may result in personal injury and/or damage to equipment.
- Strictly follow National laws, regulations, and regulations on accident prevention.

Explanation of signal words for safety

NOTE

Emphasizes useful hints and recommendations as well as information to prevent property damage and ensure efficient trouble-free operation.

CAUTION

Indicates a dangerous situation that can lead to light injury if precautionary measures are ignored.

WARNING

Indicates a dangerous situation that can lead to serious injury if precautionary measures are ignored.

DANGER

Indicates a dangerous situation that can lead to death or serious injury if precautionary measures are ignored.

WARNING

Do not operate equipment without reading and fully understanding safety warnings and instructions. Failure to follow warnings and instructions may result in serious injury.



CAUTION

Do not operate equipment without wearing personal protective gear. Wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries. Failure to comply may result in light personal injury.



WARNING

Do not exceed the stated maximum working pressure of the equipment or of the lowest rated component in your system. Use extreme caution when operating equipment as equipment generates very high grease pressure. Failure to comply may result in light personal injury.



WARNING

Do not use this equipment to supply, transport, or store hazardous substances and mixture.



General reminder

The product described in this user manual is a controller for INALUBE centralized lubrication systems that no integrated controller or PLC installed. It is supplied as a component of automatic lubrication systems. The controller described is a basic unit, that may be modified to suit the control and monitoring task at hand. This results in different device types, that differ in function.

The INALUBE controller for devices in centralized lubrication systems has been made in conformity with the generally recognized rules of technology and the applicable safe working practices and the rules for accident prevention. To ensure trouble-free operation and prevent hazard, we kindly ask you to read the present owners manual carefully and observe the notes contained in it.

Please consider that this user manual is an integral part of the device and should be handed to the new owner in his language should the device be sold.

Safety instruction

The controller is designed for operation on DC current supply. Other applications are not allowed.

Only trained specialists capable of recognizing the hazard in connection with touching of live components are allowed to install and connect the device. The local connecting conditions and the applicable rules must be observed.

All adjustments on the device must be performed exclusively by qualified personnel. Qualified personnel has been trained, instructed and specifically ordered by the owner to perform the work.

Unauthorized alteration of the device and use of unapproved spare parts and auxiliaries are not allowed.

If the device is failing, turn to supplier.

Exemption from liability

Do not assume any direct or indirect, joint and several liabilities and obligations for the damage caused by the following circumstances:

- Damage caused by wrong power supply.
- Damage caused by wrong electrical connections.
- Damage caused by the use of inappropriate lubrication system.

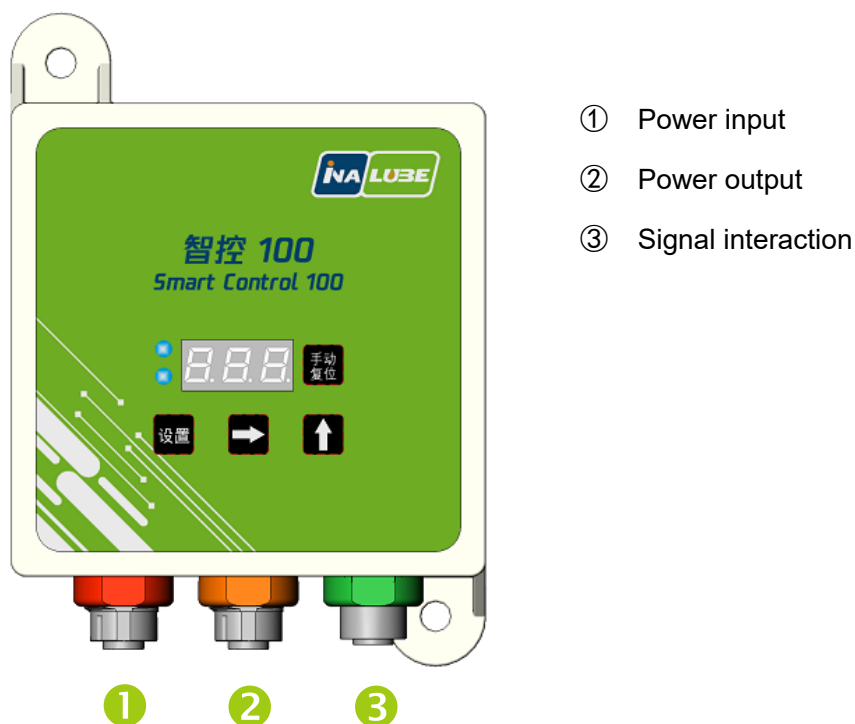
- Damage caused by installation and use of unauthorized parts.
- Damage caused by unauthorized modifications to controller parts.
- Damage caused by use not in accordance with normal use.
- Damage caused by misoperation of troubleshooting.

Overview

Smart Control 100 series controller is specially designed for typical lubrication systems, for example, single-line, dual-line, progressive, etc.

This controller has a terminal box with high protection class, in which the control PCB and keyboard are installed. Power supply and signal communication with lubrication functional components are realized via connectors complying with IEC 61076-2-101.

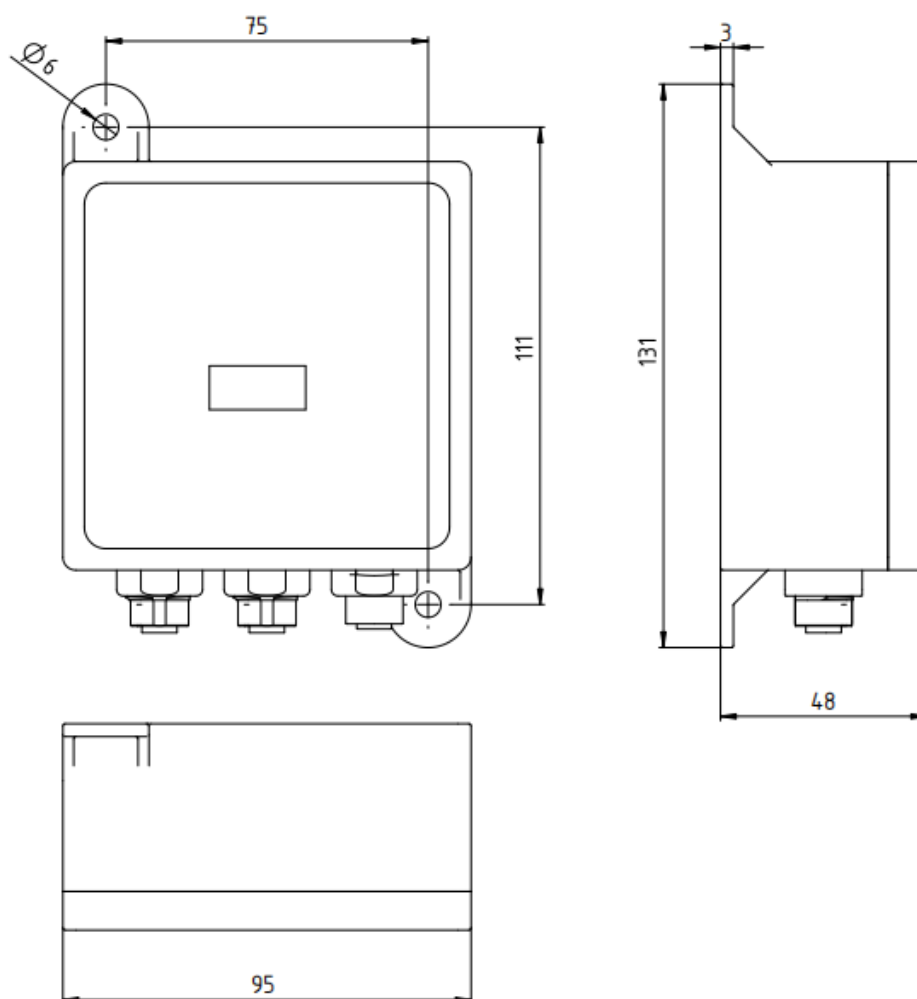
This controller is easily to installed in both new building lubrication system and retrofitting projects.



Technical data

Power Supply	DC 24 V
Max. Working Current	9 A
Working Mode	Time, Single-line,
Interval Time Unit	Minute, Hour
Level Sensor Signal	PNP NC
Pressure switch / Piston Detector Signal	PNP NO
Electric Socket	IEC 61076-2-101
Protection Class	IP 68

Controller dimension



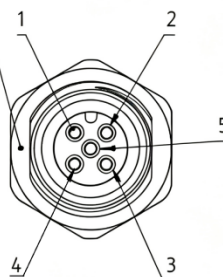
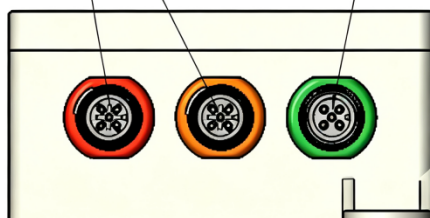
Electric connection

■ Electric Plug Description

Power Input,
M12, 4 pins, Female
(IEC 61076-2-101)

Power Output,
M12, 4 pins, Female
(IEC 61076-2-101)

Signal interaction,
M12, 5 pins, Female
(IEC 61076-2-101)



Signal Interaction	
Mark	Description
1	24 V+
3	0 V
4	Pressure Switch / Piston Detector (PNP NO)
2	Level Sensor (PNP NC)



Power input

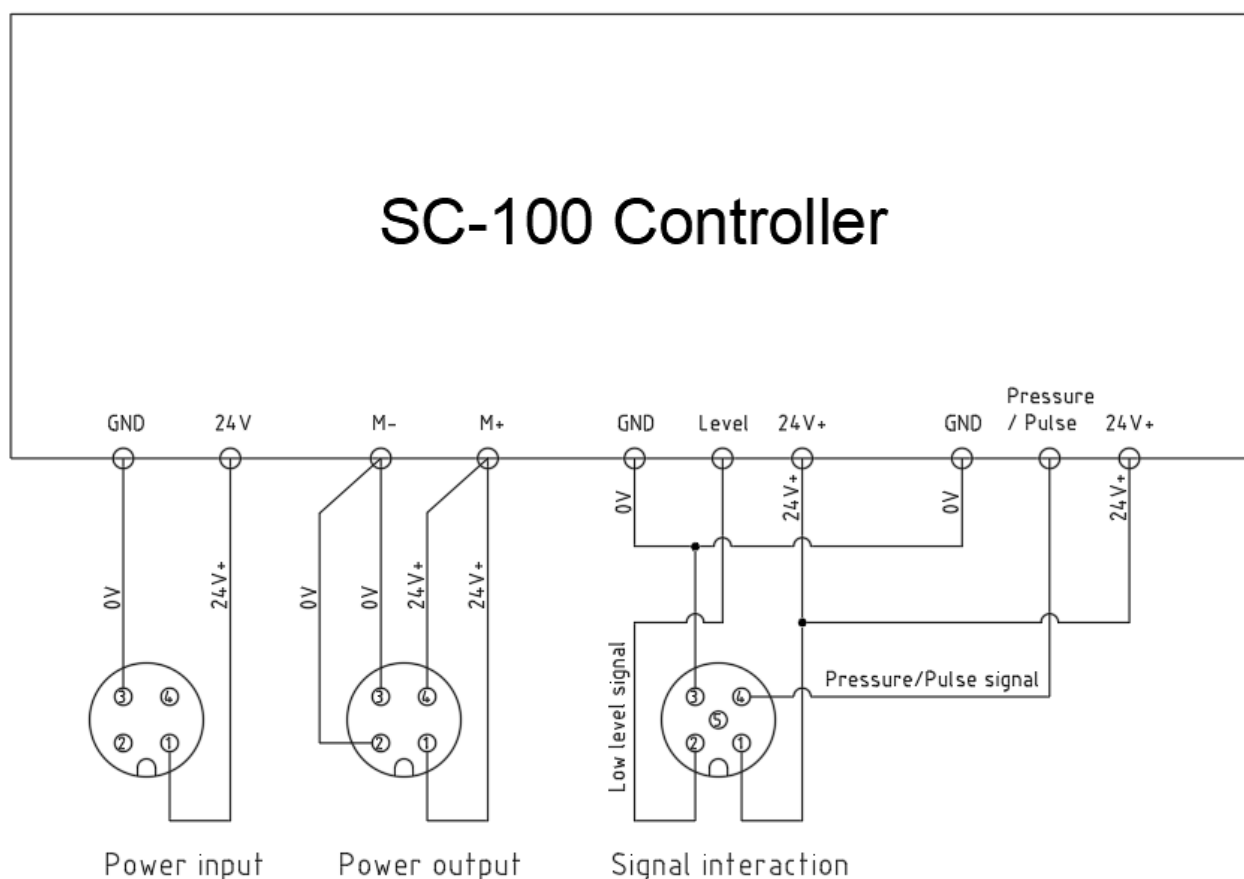


Power output



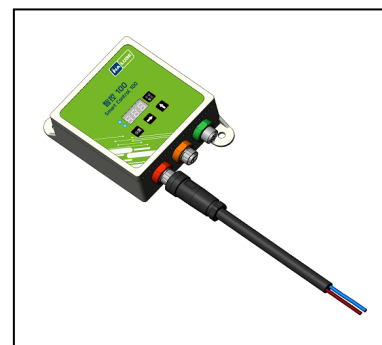
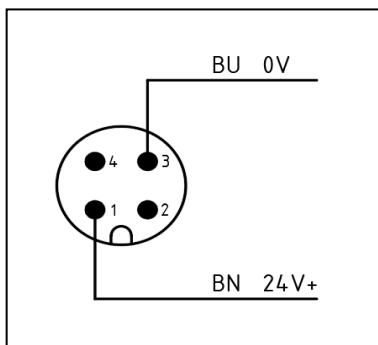
Signal interaction

■ Electrical Wiring Schematic Diagram



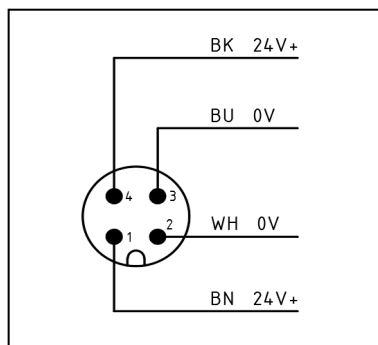
■ Cable connection for power input

Pin	Wire color	Connection
1	Brown	24 V+
3	Blue	0V



■ Cable connection for power output

Pin*	Wire color	Connection
1	Brown	24 V+
3	Blue	0V
4	Black	24 V+
2	White	0V

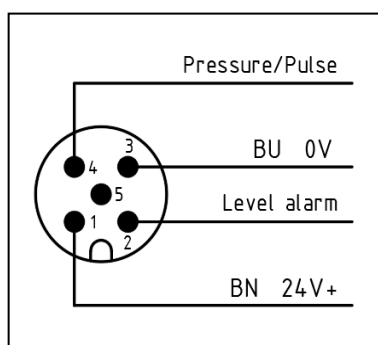


* In d-2 mode, use all 4 pins.

In d-1 and d-3 mode, only use 1 & 3 pins.

■ Cable connection for signal interaction

Pin*	Wire color	Connection
1	Brown	24 V+
3	Blue	0V
4	Black	Pressure / Pulse PNP
2	White	Level Alarm PNP



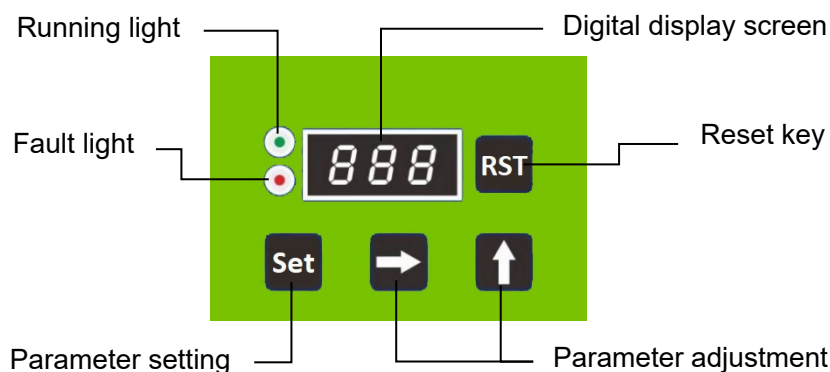
* In d-2 and d-3 mode, use all 4 pins.

In d-1 mode, only use 1, 3, 2 pins.

Control system

■ **Digital display key controller**

The controller is protected from moisture and contaminants by a membrane panel.



WARNING

Do not scrub the film panel with organic solvent. If you want to clean the panel, you can wipe it with a soft cloth dipped in neutral detergent. Do not scratch with sharp objects, so as not to damage the film panel.

■ **Display screen**

 Display working data and working status.

■ **Indication light**

The indication light is always on, which means that the indication light is on continuously and stably. The indication light flashes, which means that the indication light flashes at the frequency of 0.5 s when it lights up and 0.5 s when it goes out.

■ **Controller panel keys**

The display  shows the number as time, the unit is minutes or hours, the working time is 1-999 minutes adjustable, intermittent time is 1-999 minutes or hours adjustable. When the pump is running, the green light is on. When the pump is stop running, the red light is on. when setting or alarming, the green and red lights flashes at the same time.

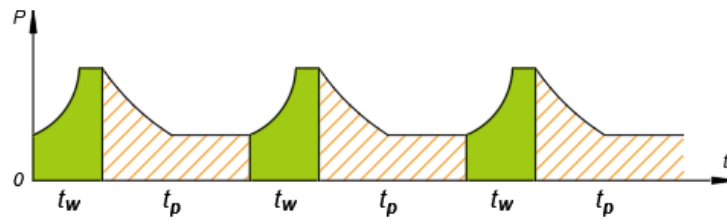
■ **Working mode**

The controller has three working modes: d-1, d-2, d-3 which are time mode, single-line mode and progressive mode respectively.

✧ **Time mode**

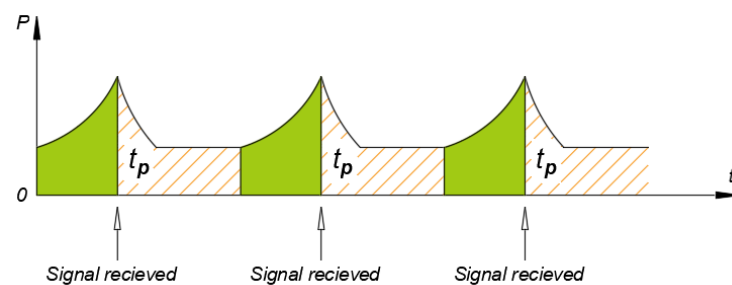
d-1 sign is time mode. Timing is working base of lubrication pump and system.

They repeat the "pause / working" status under management of controller according to the preset pause and working time.



✧ Single-line mode

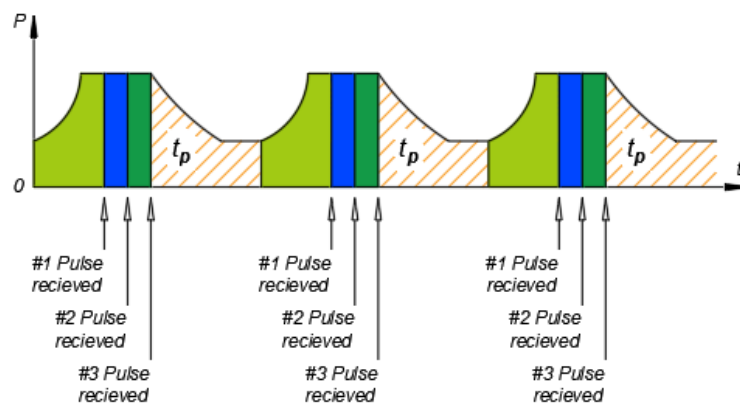
d-2 sign is time mode. When pump unit starts working, pressure in pipeline is increasing and single-line dividers deliver grease to lubrication point. After all dividers finished movement, then system pressure will continue increasing until reaching the set value of pressure switch. The pump unit received signal from pressure switch and stops working, the system goes into pause time (t_p). When pause time is over, the system starts next lubrication cycle.



✧ Progressive mode

d-3 sign is pulse mode. In pulse mode, the function of pause time is same as time mode, but the working time is replaced by quantity of pulse received. When pump unit starts working, it will receive the signal triggered by piston detector mounted in progressive divider. The pump will stop working and goes into pause time until the certain number of signals are received.

If the pump unit doesn't receive the pulse signal within 5 minutes (this is factory setting and can not be modified), the system will send alarm.



■ **Forced operation**

Press the key **RST** on the control panel, the lubrication pump is forced to re-perform the complete lubrication process in accordance with the working mode set by the operating program.

■ **System monitoring**

The controller can connect with pressure switch, and the pressure switch is used to monitor the pipe pressure. If the pressure switch does not detect the build-up of pressure in the pipe during lubrication, the fault can be automatically monitored and displayed. The controller can also connect with piston detector, which is used to monitor the plunger movement of the progressive distributor. If the piston detector does not send the signal of movement of the plunger during lubrication, the fault can be automatically monitored and displayed.

■ **Power fault protection**

The controller has power-off protection function. If power is off at work, then when power is on again, the pump will start working from the last working time. Record the intermittent time when the power is off during the intermittent time, and continue to the time from the last intermittent time when the power is on again.

Parameter setting

Setting key, displacement key and adding key are used to set parameters. The manual reset key is used to force start-stop control. The indication light is used to display the status of the controller, and the displayed time unit is minutes or hours.

■ **Display**

When the pump is running or the pump running time is set, the display signal light is green.



When the pump is in a suspended state or the pump pause time is set, the display signal light is red.



Press and hold the **Set** key, the green and red lights are off at the same time, the display screen displays the "working mode" selection status. If only the green light is lit, the display screen displays the "working time" setting status, and if the red light is lit, the display screen displays the "intermittent time" setting status.



Press the key  , select the digital screen location that you want to change.

Press the key  , the corresponding quantile digits jump from 0 to 9.



When the red and green light flash at the same time, the system will have a fault alarm, and the alarm code will be displayed on the display screen (for specific alarm code description, please refer to chapter of Troubleshooting), and long press the **RST** button to cancel the fault alarm.



■ Time mode setting

Step 1:

Press and hold the key **Set** to enter the lubrication system working mode setting (red and green light are off at the same time), press the key **↑** to select the **d-1** time working mode.



Step 2:

Press and hold the key **Set** to enter the working time setting (the green light flashes), press the key **→** to select the quantile, and the key **↑** to select the number of the quantile. Press and hold the key **↑** to quickly change the value of 0-9 cycle. The range can be set: **001-999** minutes.



Step 3:

Press and hold the key **Set** to enter the intermittent time setting (the red light flashes), press the key **→** to select the quantile, and the key **↑** to select the number of the quantile. Press and hold the key **↑** to quickly change the value of 0-9 cycle. The range can be set: **001-999** minutes (or hours).



Step 4:

Press and hold the key **Set** to confirm the setting, and the screen will display the previously set working time and start working normally. If there is no key operation within **30** seconds, the current setting will be invalid, and the parameters set before will be automatically restored.



■ Single-line mode setting

Step 1:

Press and hold the key **Set** to enter the lubrication system working mode setting (red and green light are off at the same time), press the key **↑** to select the **d-2** single-line working mode.



Step 2:

Press and hold the key **Set** to enter the max. time setting of pressure signal receiving (the green light flashes), press the key **→** to select the quantile, and the key **↑** to select the number of the quantile. Press and hold the key **↑** to quickly change the value of 0-9 cycle. The range can be set: **001-999** minutes.



Step 3:

Press and hold the key **Set** to enter the intermittent time setting (the red light flashes), press the key **→** to select the quantile, and the key **↑** to select the number of the quantile. Press and hold the key **↑** to quickly change the value of 0-9 cycle. The range can be set: **001-999** minutes (or hours).



Step 4:

Press and hold the key **Set** to confirm the setting, and the screen will display the previously set working hours and start working normally. If there is no key operation within **30** seconds, the current setting will be invalid, and the parameters set before will be automatically restored.



■ Progressive setting

Step 1:

Press and hold the key **Set** to enter the lubrication system working mode setting (red and green light are off at the same time), press the key **↑** to select the **d-3** progressive working mode.



Step 2:

Press and hold the key **Set** to enter the pulse quantity setting (the green light flashes), press the key **→** to select the quantile, and the key **↑** to select the number of the quantile. Press and hold the key **↑** to quickly change the value of 0-9 cycle. The range can be set: **002-999** pulses.



Step 3:

Press and hold the key **Set** to enter the intermittent time setting (the red light flashes), press the key **→** to select the quantile, and the key **↑** to select the number of the quantile. Press and hold the key **↑** to quickly change the value of 0-9 cycle. The range can be set: **001-999** minutes (or hours).



Step 4:

Press and hold the key **Set** to confirm the setting, and the screen will display the previously set pulse quantity and start working normally. If there is no key operation within **30** seconds, the current setting will be invalid, and the parameters set before will be automatically restored.

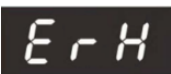
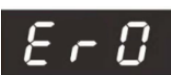


Malfunction code

■ Fault monitoring and handling

When the controller detects the system fault, the red and green indication lights on the control panel will flash at the same time to remind the user that the lubrication system has failed. The lubrication system stops working, waiting for the user to handle the fault. The specific fault cause can be viewed through the display screen.

✧ Meaning of fault message

	The pump does not receive pulse signal from the pressure switch (d-2) or piston detector of progressive divider (d-3) during operation
	The motor current is less than 0.2 A during the operation of the pump
	The motor current is greater than 5A during the operation of the pump
	When the pump is running, the grease level is lower than the lowest level
	Insufficient input power supply

✧ Clear the fault signal

After troubleshooting, press the reset key  , and the controller will clear the fault signal and return to the operating state.

Statement:

Without permission, all or part of the contents in this manual shall not be quoted or copied. We have tried our best to ensure that the contents in this manual are accurate. Our company does not assume any direct, indirect or joint liability for the use of any technology and related products mentioned in this manual without our approval.

Publication No.: INALUBE-SC100-02

Version: 1.0

Date: 2026.03

Shanghai INA Machinery Science & Technology Co., Ltd

Add.: Factory 201, Building D, No.555 Wanfang Road, Minhang District, Shanghai, China

Tel.: +86 21 2042 2806

Mobile: +86 187 1781 3303

Email: sales@inalube.com

Website: www.inalube.com / www.inalube.com.cn
