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注意事项

- 本产品出厂时测笔和放大器已按编号配对,不可交叉使用以免影响测量精度。
- 测笔自由状态下的测量值一致性存在差异,请勿将自由状态点作为基准。
- 请勿造成测笔的防尘套形变,否则测量轴运转时会造成防尘套破损。
- 请不要旋转测量轴,否则会影响测量精度。
- 本产品上电后需等待10分钟才能稳定工作。
- 检测目标物振动时可通过增加响应时间,从而获得更稳定的读数。
- 设置错误时请按操作说明进行复位。
- 施加在电源上的噪声可能导致故障,请使用有绝缘变压器的直流稳压电源。
- 请务必在切断电源的情况下进行接线作业。
- 本产品是精密机械设备,请勿敲击、挤压,否则会引起故障。
- 接线错误可能导致产品不能正常工作或损坏。
- 请勿将电缆线与高压线或动力线并行接线或使用同一电线管。
- 测笔易受磁场影响,应避免将测笔安装在发动机或其它强磁场源旁边。
- 对测笔和放大器插头热插拔可能导致产品不能正常工作,需重新上电进行复位。
- 请勿将本产品电缆线过度弯折、拉伸,以免造成电缆破损或内芯线断裂,测笔和放大器之间电缆的最小弯折半径标准为30mm,拉伸力应不超过50N,放大器输出电缆的最小弯折半径标准为45mm,放大器输出电缆的拉伸力应小于120N。
- 测笔和放大器之间电缆如果过长,可以S型弯折后固定,不允许剪开二次连接,以免破坏电缆线屏蔽层,影响产品性能。

安全警告

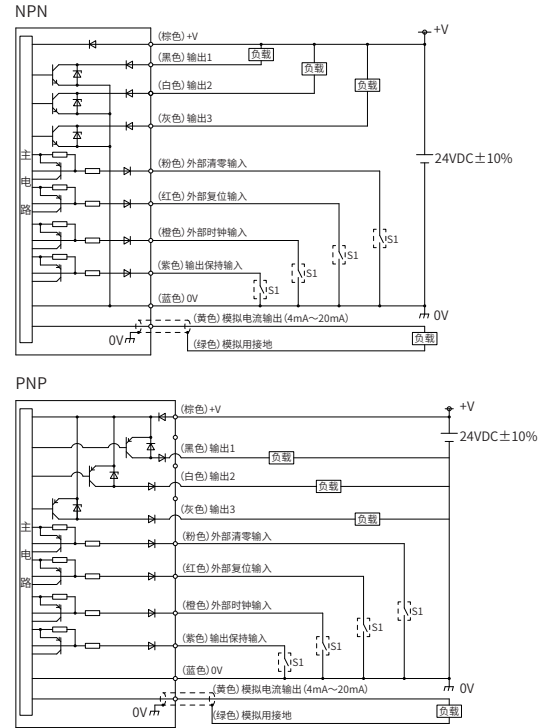
- 请勿在潮湿、多尘或通风不良的环境下使用。
- 请勿在高温(阳光直射场所)的环境下使用。
- 请勿在可燃或腐蚀性气体的环境条件下使用。
- 请勿在有振动或撞击的环境下使用。
- 请勿在水、油或化学品可能溅到的环境条件下使用。
- 请勿在有静电的环境条件下使用。
- 请勿擅自拆卸、修理、改造本产品。

产品规格

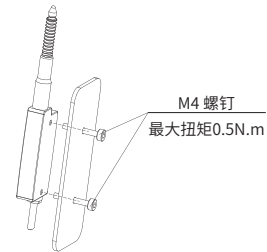
型号	测笔	LVR-VM15R01
	放大器	LVA-ESJBI4D1M
输出方式	4-20mA电流输出;负载阻抗250Ω MAX;三路开关输出	
测量范围Sn	0...15mm	
重复精度 ^①	8μm (25°C)	
显示分辨率	0.5μm	
模拟量输出线性度 ^②	±0.25%F.S. (25°C)	
电源电压	15...30V DC	
消耗电流	≤50mA	
操作频率	10Hz	
工作温度	0°C...+50°C	
环境温度	-10°C...+60°C	
环境湿度	35...85%RH (无结露)	
防护等级	IP65 (测笔) / IP40 (放大器)	
接线方式	11芯电缆线	

注:①环境温度为25°C时,响应式按键设为100ms时,读取中间测量位置的值。
②线性度为F.S.=16mA时,对于数字测量值的线性度。

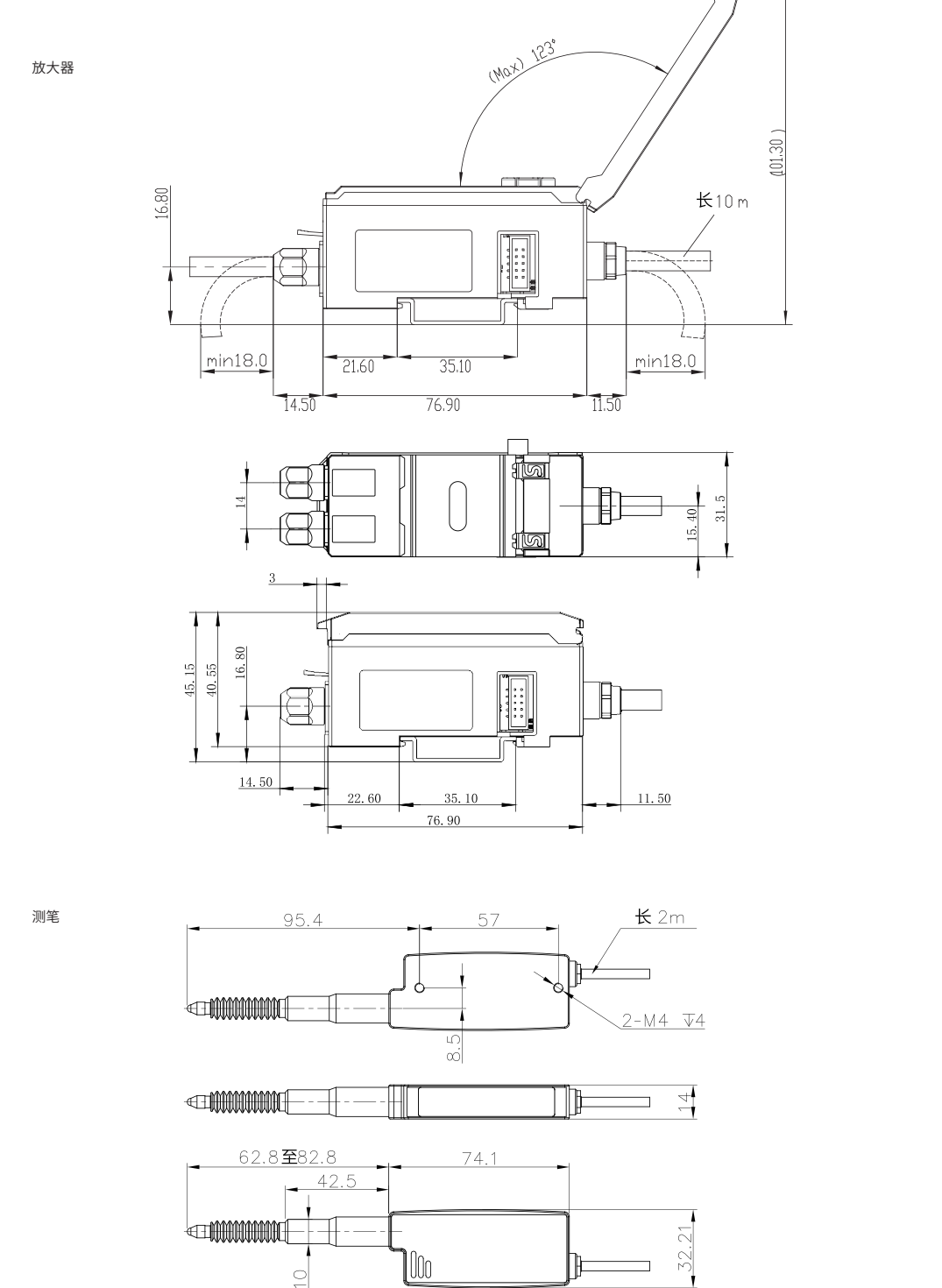
电气接线图



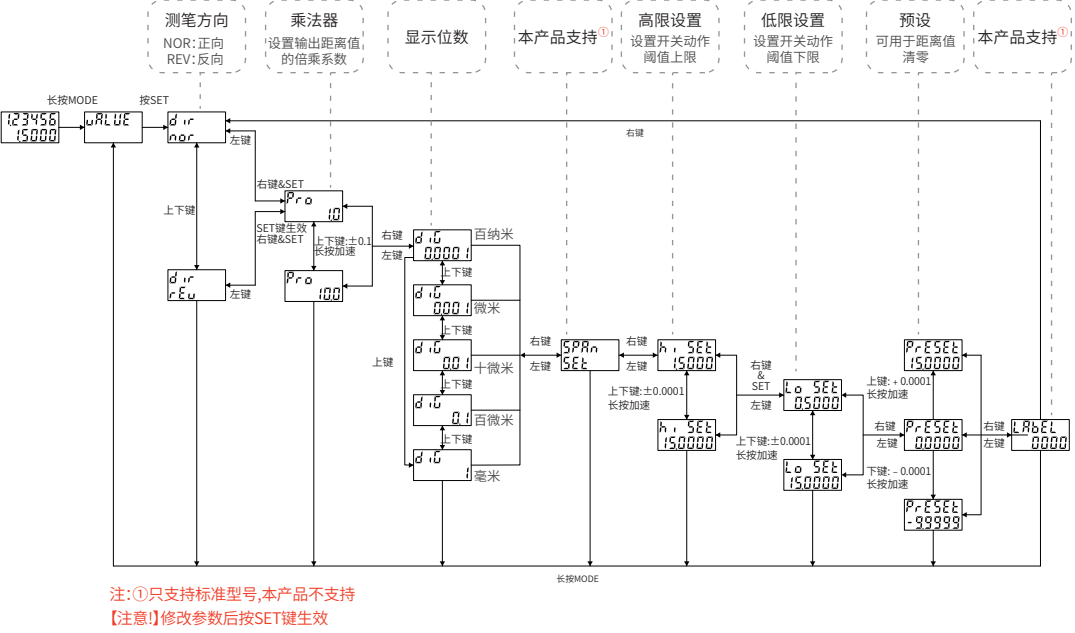
安装图



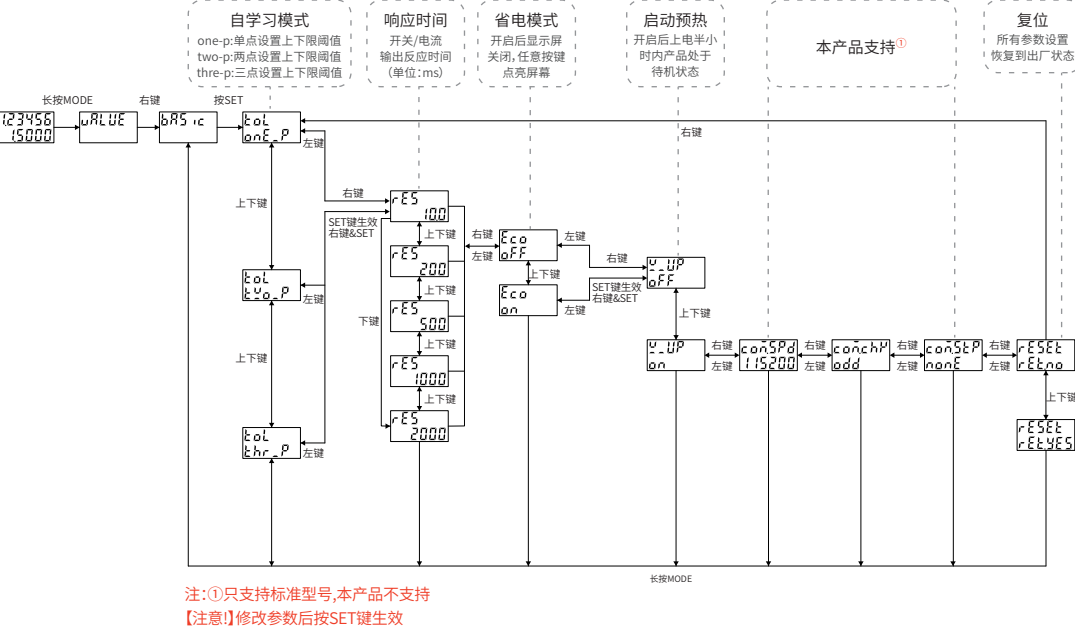
外形尺寸图



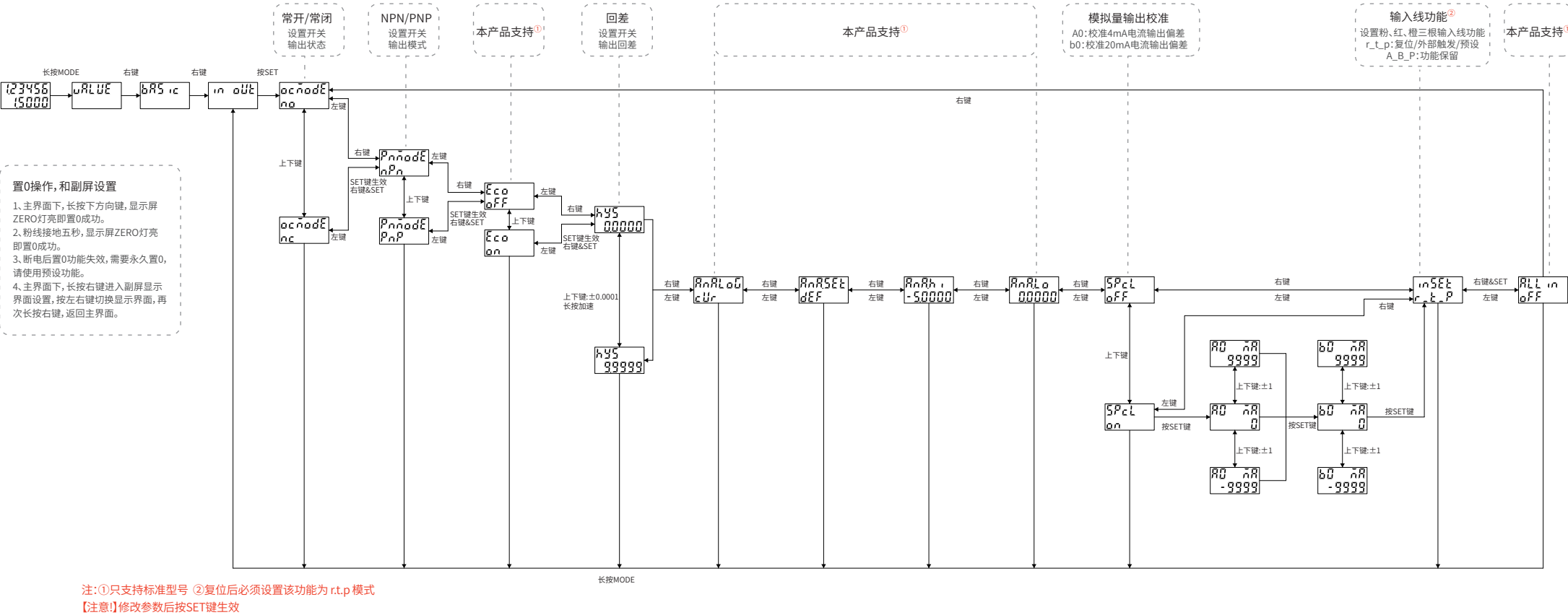
操作说明



注:①只支持标准型号,本产品不支持
【注意】修改参数后按SET键生效



注:①只支持标准型号,本产品不支持
【注意】修改参数后按SET键生效



注:①只支持标准型号 ②复位后必须设置该功能为 r.t.p 模式
【注意】修改参数后按SET键生效



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Precautions

- The measuring pen and amplifier of this product are paired according to the number when leaving the factory. Do not use them interchangeably to avoid affecting the measurement accuracy.
- There are differences in the consistency of the measured values of the measuring pen in the free state. Do not use the free state point as a reference.
- Do not deform the dust cover of the measuring pen, otherwise the dust cover will be damaged when the measuring axis is running.
- Do not rotate the measuring axis, otherwise it will affect the measurement accuracy.
- After powering on this product, wait for 10 minutes for stable operation.
- To achieve more stable readings when detecting target vibrations, increase the response time.
- For setup errors, reset according to the operating instructions.
- Noise applied to the power supply may cause faults; use a DC stabilized power supply with an isolation transformer.
- Ensure to perform wiring operations with the power off.
- This product is precision machinery; avoid striking or squeezing, as it may cause malfunctions.
- Incorrect wiring may prevent normal operation or damage the product.
- Do not run cables parallel to high-voltage lines or power lines, or use the same conduit.
- The probe is susceptible to magnetic fields; avoid installing it near engines or other strong magnetic sources.
- Hot-plugging of the probe and amplifier connectors may cause the product to malfunction; repower to reset.
- Avoid excessive bending or stretching of the cables to prevent damage or breakage: the minimum bend radius for the cable between the probe and amplifier is 30mm, with a tensile force not exceeding 50N. For the amplifier output cable, the minimum bend radius is 45mm, and the tensile force should be less than 120N.
- If the cable between the probe and amplifier is too long, it can be coiled in an S-shape and secured; do not cut and reconnect to avoid damaging the cable shielding, which may affect product performance.

Safety Warning

- Do not use in humid, dusty or poorly ventilated environments.
- Do not use in high temperature environments (direct sunlight).
- Do not use in environments with flammable or corrosive gases.
- Do not use in environments with vibration or impact.
- Do not use in environments where water, oil or chemicals may splash.
- Do not use in environments with static electricity.
- Do not disassemble, repair or modify this product without authorization.

LVDT Ver.1.1 Y1227

This specification doesn't relate to patent responsibility. Moreover, our company is always devoting to improving product quality, and reserves the right to improve products by changing pattern or size without prior notice. We have considered all the notes when compiling this specification, but for the wrong or clipped parts, and any loss caused by using this manual information, we bear no responsibility.

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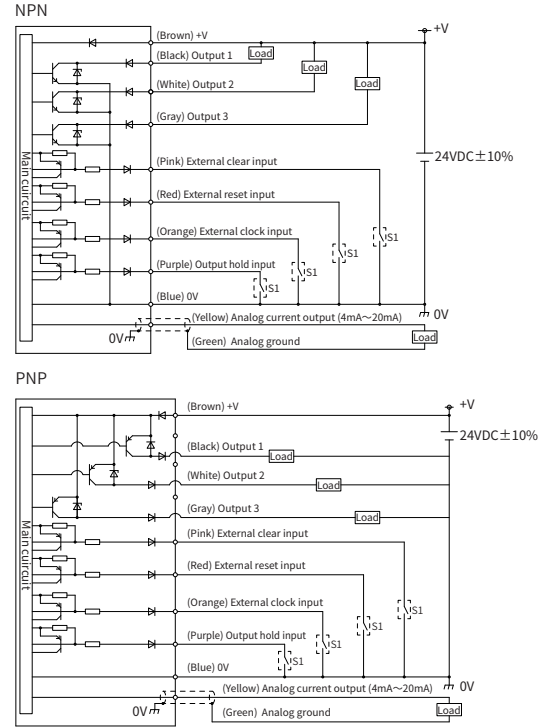
Technical specifications

Model	Probe	LVR-VM15R01
	Amplifier	LVA-ESJB14D1M
Output	4-20mA current output; load impedance 250Ω MAX; three-way digit output	
Measuring range	0...15mm	
Repeat accuracy ^①	8μm (25°C)	
Display resolution	0.5μm	
Analog output linearity ^②	±0.25%F.S. (25°C)	
Supply voltage	15...30V DC	
Consumption current	≤50mA	
Operating frequency	10Hz	
Operating temperature	0°C...+50°C	
Ambient temperature	-10°C...+60°C	
Ambient humidity	35...85%RH (no condensation)	
Protection degree	IP65 (Probe)/ IP40 (Amplifier)	
Connection	11-pins cable	

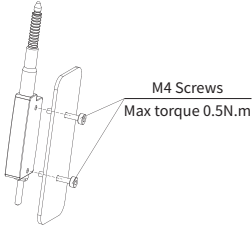
Note: ① When the ambient temperature is 25°C and the response time is set to 100ms, read the value at the intermediate measurement position.

② When the linearity is F.S. = 16mA, the linearity relative to the mathematical measurement value.

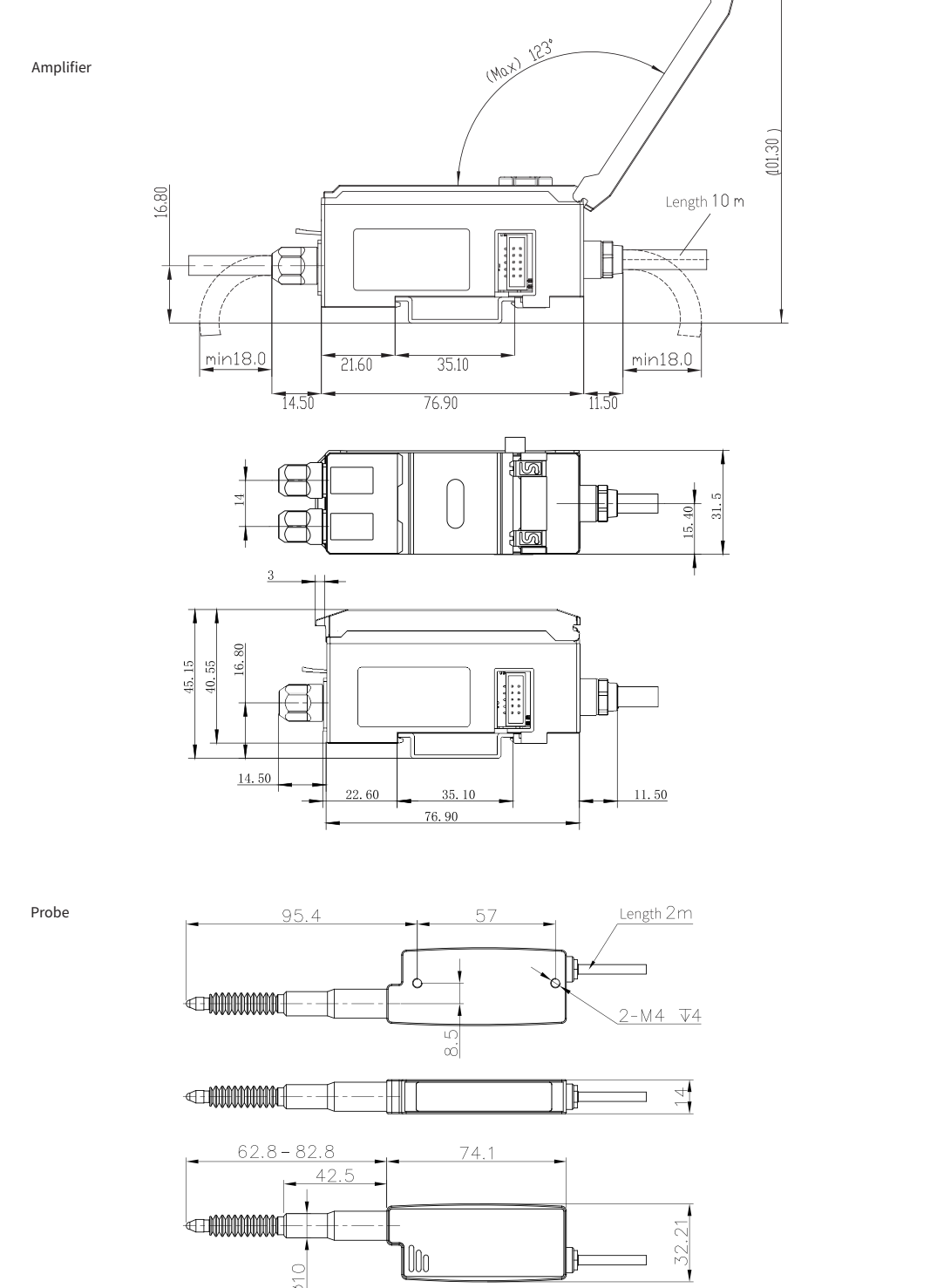
Wiring diagram



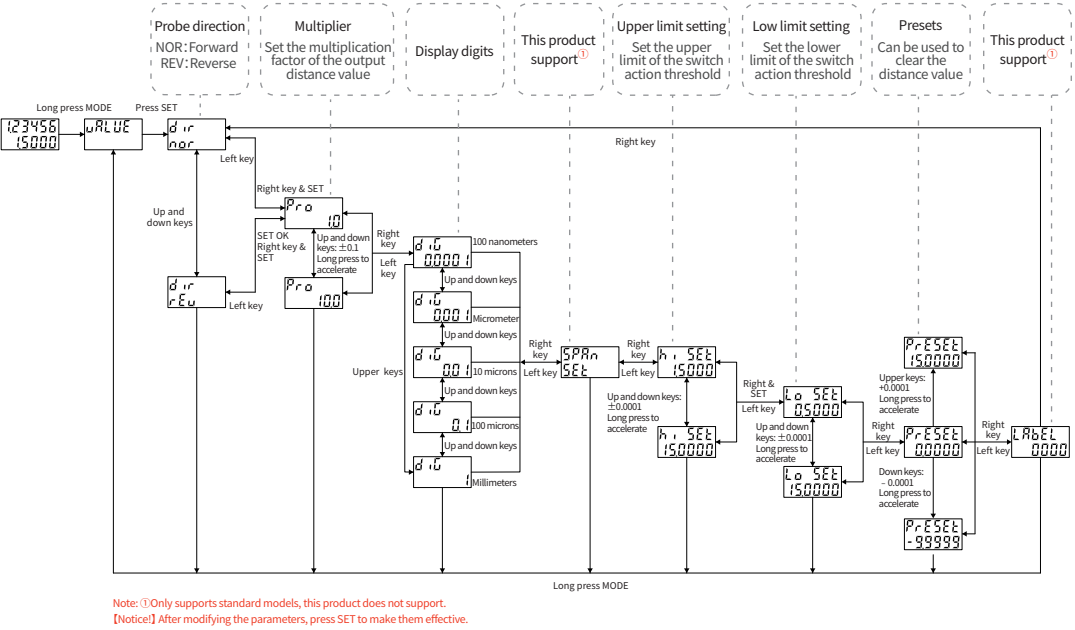
Installation



Dimensions

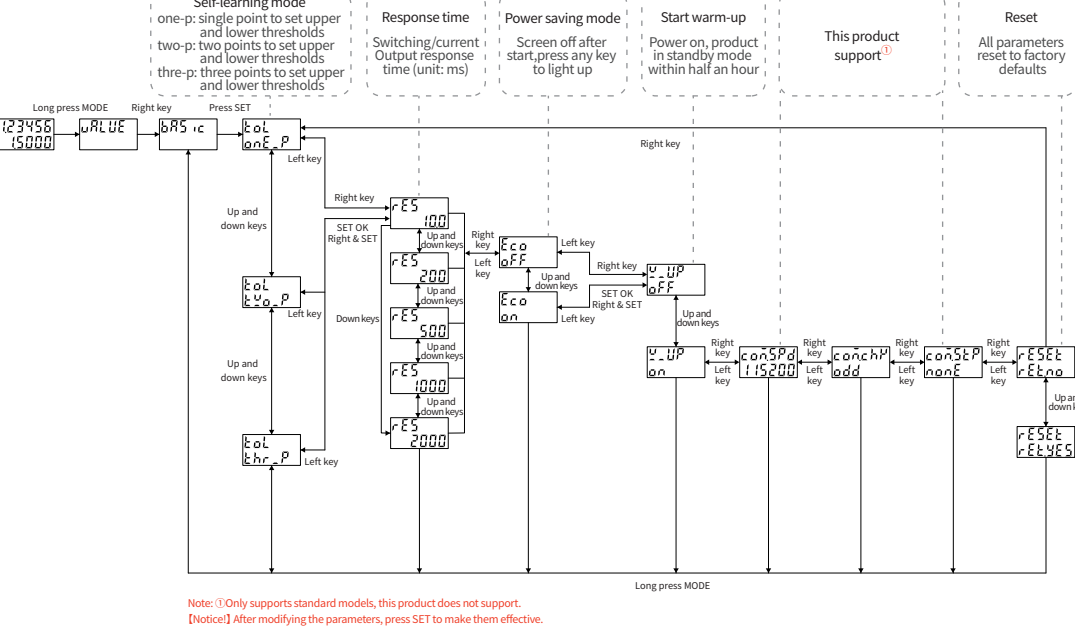


Instructions



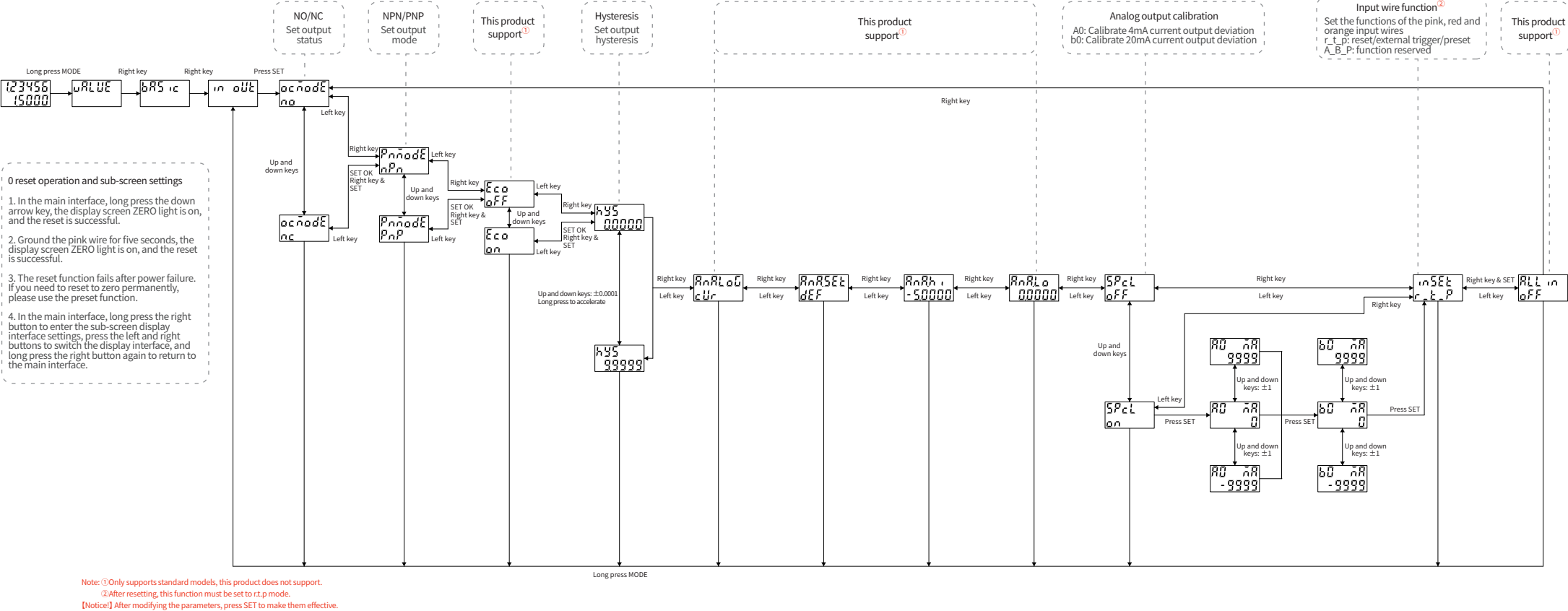
Note: ① Only supports standard models, this product does not support.

[Notice] After modifying the parameters, press SET to make them effective.



Note: ① Only supports standard models, this product does not support.

[Notice] After modifying the parameters, press SET to make them effective.



Note: ① Only supports standard models, this product does not support.

② After resetting, this function must be set to r.t.p. mode.

[Notice] After modifying the parameters, press SET to make them effective.