

BEFORE YOU BEGIN

- Please read these instructions carefully to familiarize yourself with the required tools, materials, and installation sequences. Follow the sections that pertain to your particular installation. This will help you avoid costly mistakes. In addition to proper installation, read all operation and safety instructions.
- All information in these instructions is based upon the latest product information available at the time of publication. Kohler China reserves the right to make changes in product characteristics, packaging, or availability at any time without notice.
- These instructions contain important care, cleaning, and warranty information - **please leave instructions for the consumer.**

安装之前

- 请通读本说明书，以便了解所需工具、材料及安装程序。请遵照相关章节进行安装，以避免由于安装不当而导致不必要的损失。除了有关正确的安装方法之外，还务请阅读所有操作及安全说明。
- 本说明书所含一切材料，均以印刷时所有的最新产品为准，科勒中国保留随时更改产品特性、包装或供应情况的权利，恕不另行通知。
- 本说明书也包含了有关护理、清洁及保养等重要资料 - 请交予用户保存。

RECOMMENDED TOOLS AND MATERIALS

- Open end/adjustable wrenches
- Tape measure
- Basin wrench
- Pipe wrench
- Square
- Level
- Socket wrench with sockets
- Screw driver
- Seal tape
- Connection wire
- Wire cutter
- Insulation tape
- Bushing

所需工具及材料

- 开口/活动板钳
- 卷尺
- 梅花板钳
- 管板手
- 直角尺
- 水平尺
- 管钳子
- 十字螺丝刀
- 生料带
- 连接线
- 剥线器
- 绝缘胶布
- 电工套管

SENSOR SPECIFICATION

| | |
|--------------------|--|
| Model | K-8872T-C01(DC) |
| | K-8872T-C03(AC) |
| Power | 2 "AAA" size alkaline batteries |
| | 220V AC 50/60Hz |
| Flushing mode | Dual-flushing |
| Liter per flushing | Water pressure at 0.18~0.55MPa: no more than 3.8L Water pressure at 0.1MPa: no more than 3L |
| Temperature | Environmental temperature: 1 to 55°C |
| Starting pressure | 0.05~0.86MPa |
| Sensing distance | 70cm away from sensing window (Automatic adjustment range: 50~70cm) |
| Testing time | (Automatic adjustment) About 2 seconds or 5 seconds |

Note: The sensing distance in the table is measured with a 30×30cm² white board as the reflecting surface.

感应器规格

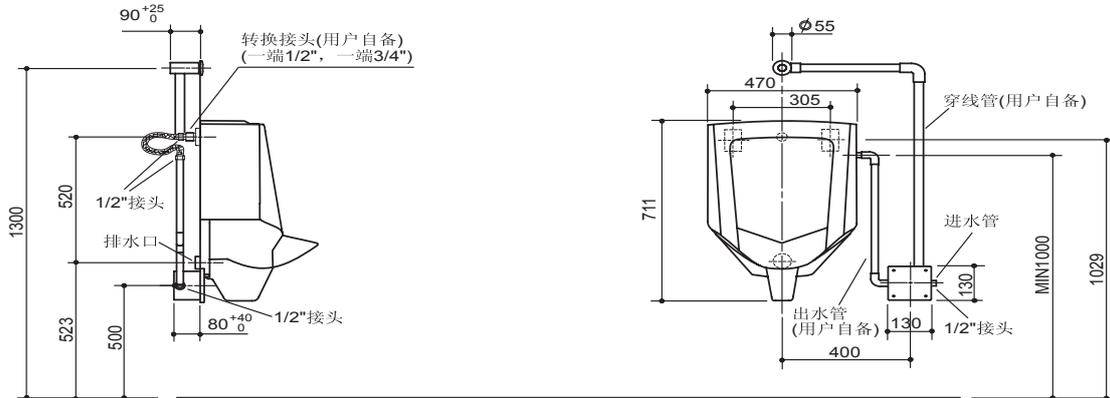
| | |
|------|---|
| 型 号 | K-8872T-C01(直流型) |
| | K-8872T-C03(交流型) |
| 电 源 | 2节7号碱性电池 |
| | 220V AC 50/60Hz |
| 冲洗方式 | 二段式冲洗 |
| 冲洗水量 | 水压为0.18~0.55MPa时， 不大于3.8L(二段式冲洗水量) 水压为0.1MPa时，不大于3L |
| 环境温度 | 1~55°C |
| 启动压力 | 0.05~0.86MPa |
| 感应范围 | 距感应窗口70cm以内 (自动调节范围约：50~70cm) |
| 检测时间 | 约2秒或5秒(自动调节) |

注意：表中感应范围距离的测定是以30×30cm² 白纸为反射平面。

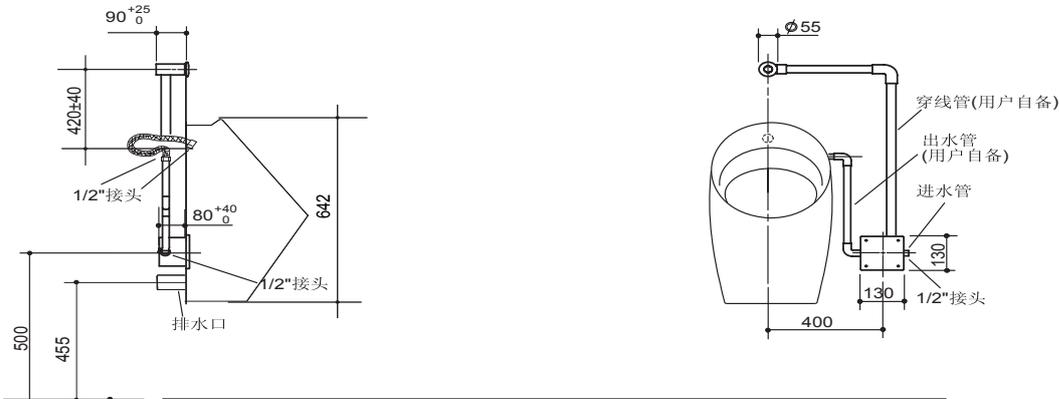
上海科勒电子科技有限公司
上海市浦东新区金滇路18号E幢 邮编：201206

UNIT: mm
单位: 毫米

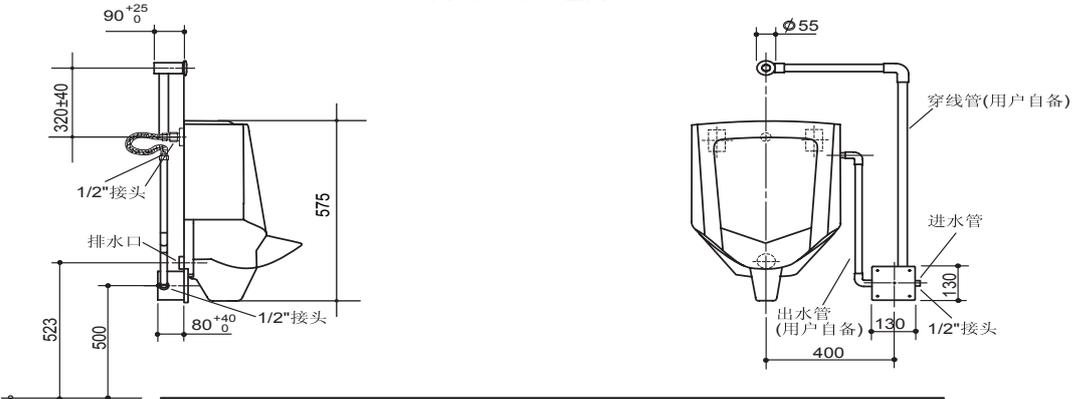
K-4960-ER



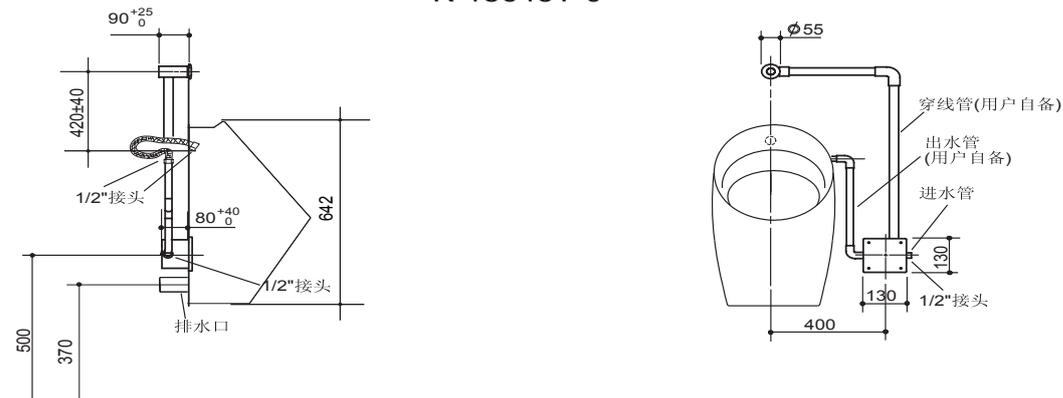
K-18645T-M-0



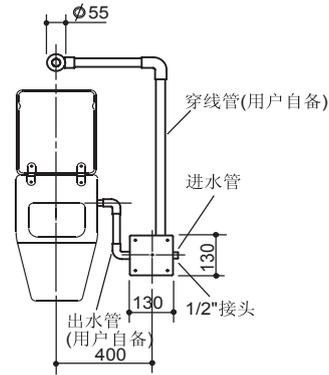
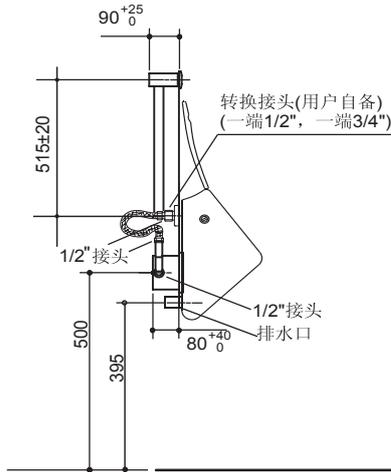
K-4978T-ER



K-18645T-0



K-19699



⚠ Notice:

- The dimensions above are just for reference, the valve should be mounted at the right side of the VC product, and the suggested distance between the C/L of the valve body and the ground should be 500mm.
- The connection take between the outlet connection and urinal is not supplied in this package.
- To ensure an effective flush performance, an urinal with corresponding flush volume is required. And the urinal should comply with ASME A112.19.2-2003. Siphon urinal is not recommended.
- Used with urinals: K-4960T-ER, K-4978T-ER, K-18645T, K-19699. No need to prepare adapter beforehand for K-18645T.
- The old-trap(white) used in K-18645T-0 had been discontinued since Nov 1, 2009.

Recommended working water pressure: 0.18MPa~0.55MPa

⚠ 注意:

- 以上尺寸仅供参考, 阀体应安装在陶瓷件右侧, 且阀体中心距离地面500mm为最佳。
- 出水配件需另行选配。
- 为保证有效冲洗, 需配相应冲水量要求的小便斗, 小便斗本身需符合ASME A112.19.2-2003, 不推荐配虹吸式小便斗。
- 可配小便斗型号为: K-4960T-ER、K-4978T-ER、K-18645T、K-19699, 其中配K-18645T时无需自备转换接头。
- K-18645T-0使用的是老版本排污管, 已于2009年11月1日起停产。

推荐工作压力: 0.18MPa~0.55MPa

INSTALLATION

安装步骤

- Determine the installation position per installation rough-in. Chisel out a slot and install the inlet pipe. Turn off the water supply temporarily. The depth of the slot should be no less than 90mm according to the dimension as shown in the right figure. Add AC bushing slot to install bushing for AC installation.

⚠ Note:

The installation position shall:

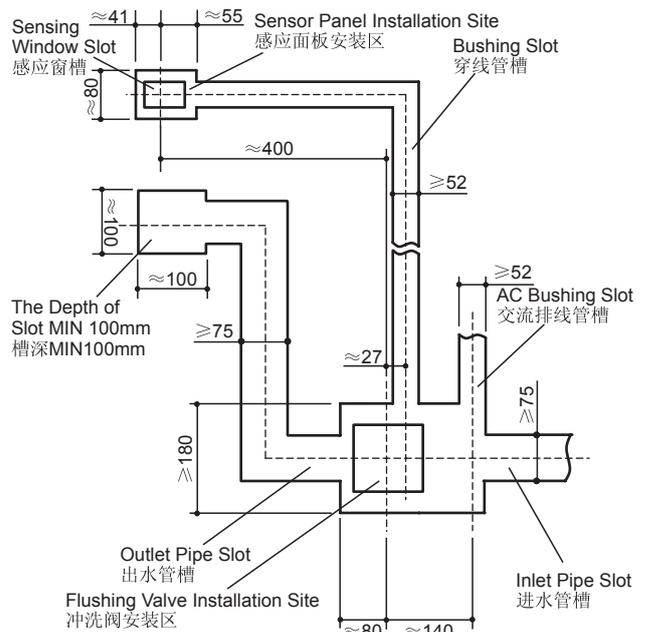
- No light shall enter directly or be reflected into the sensing window.
- No reflective objects in front of the sensor (E.g., mirror, polishing stainless steel and some other polished plate).
- No strong ultraviolet radiation or electromagnetic field nearby.

- 根据安装尺寸图确定安装位置, 凿出槽坑, 埋设供水管, 暂不供水。槽深不小于90mm, 尺寸参考右图。安装交流型时, 添加交流排线管槽用于安装排线管。

⚠ 注意:

安装位置:

- 不能有光源直射或反射进入感应窗口。
- 不能在感应器正对面装有易反射的物品(如镜子、光亮的不锈钢板及其它镜面物体)。
- 不能靠近强烈紫外线或电磁场。



2. Connect sensing window bushing with bracket assy. and flushing valve separately. Place them into the slot, connect inlet and outlet pipe. Secure the installed assy. with battens to make it flat and straight as shown in the right figure. Fill slurry into slot track and drill holes on tiles according to the figure. Lay the tiles.



Note:

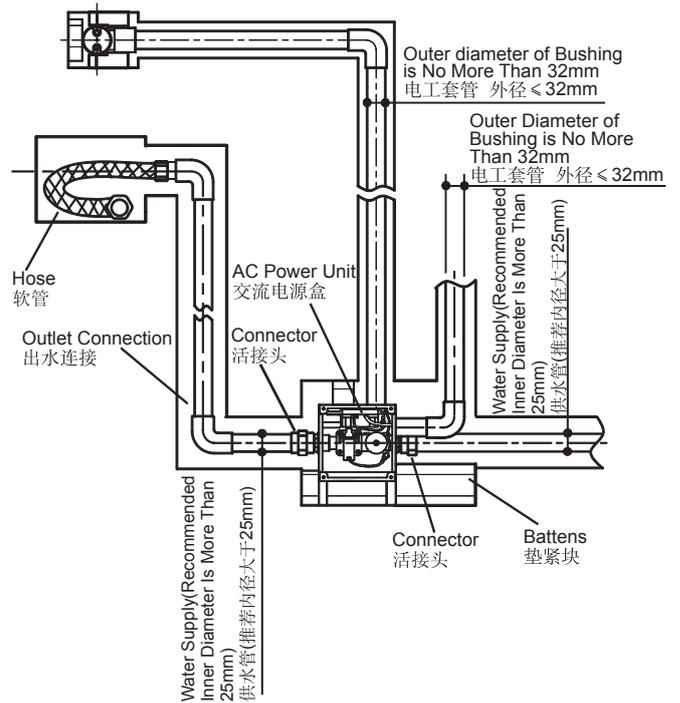
- a. Be careful not to use excessive force on bracket in order to avoid distortion when installing outlet pipe and bushing.
- b. After both ends of sensing window bushing are connected, make it vertical with the wall and avoid deflection.
- c. For hose installation, avoid over bended and distorted.
- d. please clean the inside of water supply pipe before connecting to the product.

2. 将感应窗排线管分别与暗装架、冲洗阀连接，并放入槽坑内，然后连接好进水管，出水管。用垫紧块将其固定平整、端正，如右图所示，用灰浆填埋槽道，在瓷砖上打孔如图所示，张贴瓷砖。



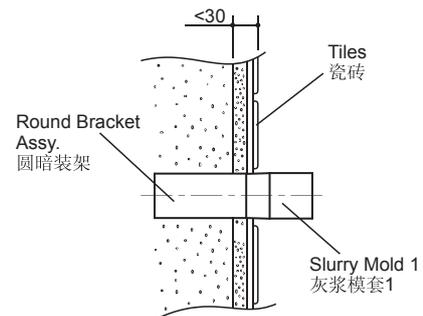
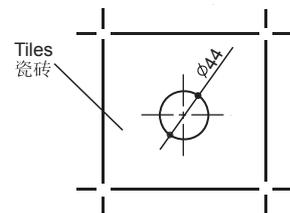
注意:

- a. 安装出水管和排线管时，注意不要对暗装架用力过大以免造成变形。
- b. 感应窗排线管两端接连好后，必须与墙面平行不得倾斜。
- c. 安装软管时，应防止其严重折弯、扭曲变形。
- d. 将本产品连接上供水管前，建议先冲洗干净供水管。



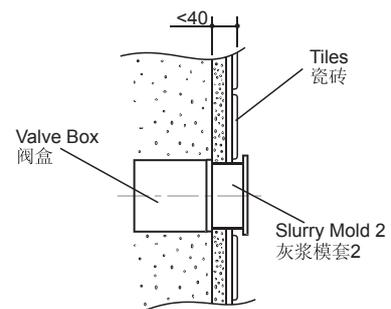
3. Tighten slurry mold 1 and bracket assy. with tapping screws, fill slurry into slot track around bracket assy., and lay the tiles.

3. 用自攻螺钉将灰浆模套1和暗装架拧紧，再用灰浆填埋暗装架四周槽道，张贴瓷砖。

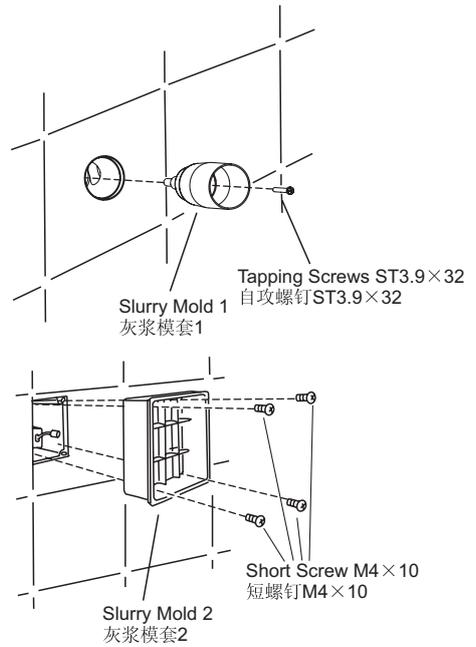


4. Tighten slurry mold 2 and flushing valve with 4 pcs of short screws, fill slurry into slot track around flushing valve, sensing window bushing, inlet and outlet pipe, and lay the tiles.

4. 用4个短螺钉将灰浆模套2和冲洗阀拧紧，再用灰浆填埋冲洗阀、感应窗排线管、进水管四周槽道，张贴瓷砖。



5. After slurry solidified, take off tapping screws and short screws, and remove two slurry molds separately.
5. 待灰浆固化后，取下自攻螺钉和短螺钉，分别揭去2个灰浆模套。

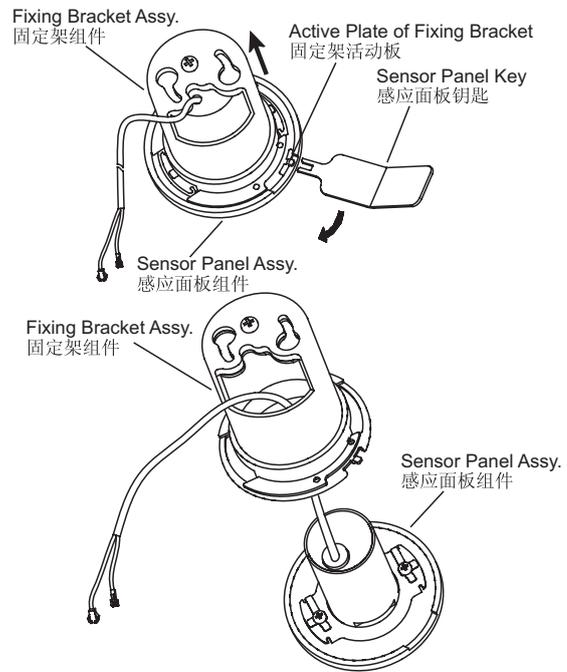


6. Take out sensor panel and fixing bracket assy., and loosen the signal wire enlaced on the outer circle of fixing bracket assy.. Move the active plate of fixing bracket with sensor panel key clockwise as shown in the figure. Separate the fixing bracket assy. with sensor panel assy. according to the direction shown in the figure after loosening.

- Note:**
- a. Avoid sensor window panel falls off when taking apart fixing bracket from sensor window panel.
 - b. Put on clean gloves during disassembly to avoid panel damage.

6. 取出感应面板、固定架组件，松开缠绕在固定架组件外圈的信号线，如图，用感应面板钥匙顺时针拨动固定架活动板，当松开后，按图示方向将固定架组件与感应面板组件分离。

- 注意:**
- a. 拆卸固定架组件与感应窗面板组件时，应防止感应窗面板脱落，以免损坏面板。
 - b. 拆卸时应戴上干净的手套，以免划伤面板。

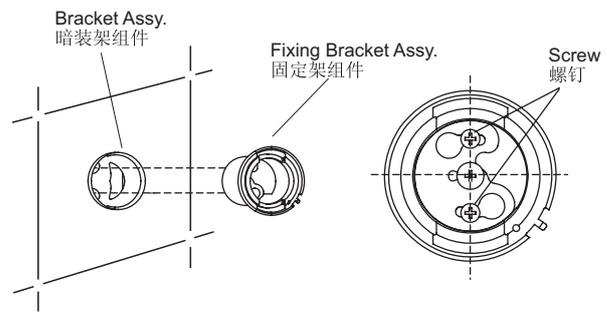


7. Loosen screws, remove slurry mold, place fixing bracket assy. into bracket assy., and turn screws counterclockwise after aligned. Tighten the screws after the slot in the fixing bracket is in vertical direction.

- Note:**
- Lock the screws with appropriate force in order to avoid damage to bracket.

7. 拧下螺钉，揭去灰浆模套，将固定架组件放入暗装架组件，对准螺钉后逆时针旋转，确认固定架上的槽为垂直向下后，再锁紧螺钉。

- 注意:**
- 锁紧螺钉时力度适中，不能拧得太紧以免损坏暗装架。

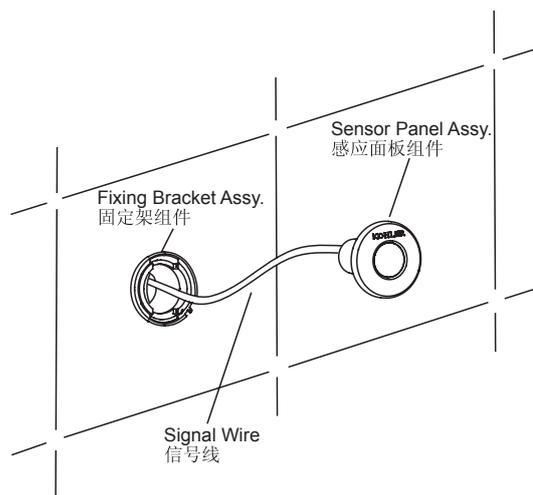


8. Make signal wires going through fixing bracket assy. into valve box via bushing. Install fixing bracket assy. into the gap of panel assy. rightwards. Adjust fixing bracket assy. vertically with sensing window, press down the panel, move the active panel of fixing bracket with sensor panel key counterclockwise to fix sensor panel assy.



Note:

- Excessive force should not be posed to avoid tearing to break.
- Put on clean gloves when installing sensor panel assy. to avoid surface damage caused by cement and sand.
- When sensing window of panel is not vertical with the horizontal plane, take out panel assy., loosen screw of fixing bracket, rotate fixing bracket assy. properly to make it vertical with sensing window, and then tighten the screws.

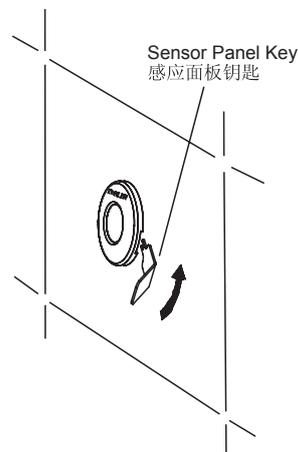


8. 将信号线穿过固定架组件，通过穿线管，进入阀盒里，面板组件缺口向右下装入固定架组件，调整至感应窗口垂直，如图所示，用手压住面板用感应面板钥匙逆时针拨动固定活动板，将感应面板组件固定。



注意:

- 穿信号线时不要用力过大以免扯断。
- 安装感应面板组件时应戴上干净的手套，以防水泥或沙粒损伤表面。
- 当面板感应窗口不垂直于水平面时，取下面板，松开固定架的螺钉，适当转动固定架，直到感应窗口垂直，再拧紧螺钉即可。



9. Install AC power unit (only for AC)

- Put AC power unit into cassette as shown in the right figure.
- Connect DC wiring terminal with solenoid terminal separately.
- Connect AC wiring terminal in the AC power unit with another one in AC bushing, and wrap with insulated tape.



Caution:

- Do not connect 220V AC power supply to DC wiring terminal.
- Do not damage the covering of AC power unit or remove screws to avoid leakage.

9. 安装交流电源盒(仅限于交流型)

- 将交流电源盒放入暗盒内，位置如右图所示；
- 分别连接直流接线端和电磁阀接线端；
- 将交流电源盒的交流接线端与交流排线管内的交流线连接，并用绝缘胶布包裹。



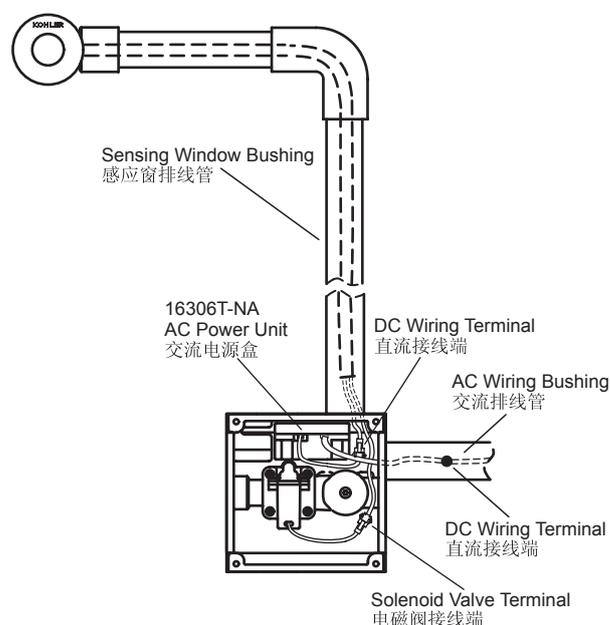
警告:

- 禁止将220V交流电源接入直流接线端；
- 安装时严禁损伤交流电源盒外壳或移开电源盒盖螺钉，以防止受潮漏电。



Note:

- Keep the connector away from water.
- Don't mistake the direction of inlet and outlet.
- Do not connect the DC output of AC power unit to AC power supply.

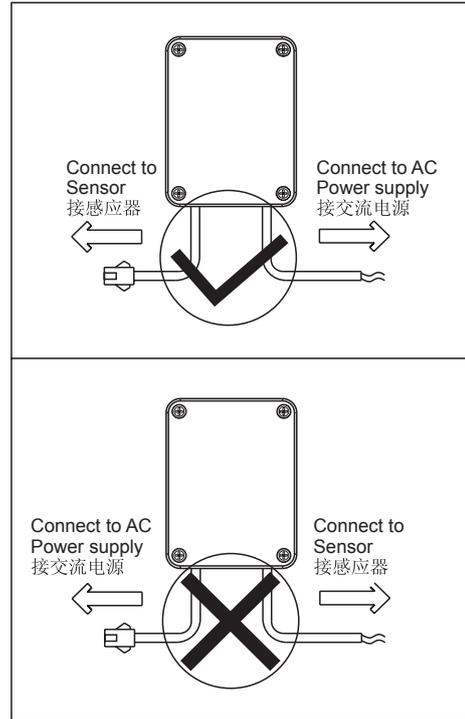


- d. Do not connect to power supply during installing process. Connection line is not supplied. It is recommended to use AC connection wire with insulating sleeve. It is recommended to use AC power cord with the nominal section area no less than 0.5mm^2 . For DC connection line, it is better to use wire with the nominal section area no less than 0.3mm^2 . The cord should be cut according to actual installation requirements (better less than 10m).
- e. The mains must be protected with appropriate fuse.
- f. Please confirm the power supply and water supply have been shut off before maintaining the products with AC power related.



注意:

- a. 不要让电线接插件接触水;
- b. 不要将出水方向弄错;
- c. 不可将交流电源盒的直流输出端与交流电连接;
- d. 安装时不要向电源盒供电。连接线请用户自备, 建议交流电源线采用导体标称截面积 $\geq 0.5\text{mm}^2$ 的电线, 直流连接线采用导体标准截面积 $\geq 0.3\text{mm}^2$ 的电线, 电线长度根据实际安装需要自行裁剪(建议连接线路长度小于10m)。
- e. 交流电的总电源必须有合适的熔断丝加以保护。
- f. 维修时必须断开交流电源并关闭水源。



10. Install Battery Holder (only for DC)

- a. Remove cover of battery holder, insert two alkaline batteries, and tighten screws.
- b. Insert battery holder into valve box slot as shown in the right figure.
- c. Connect DC wiring terminal with solenoid terminal separately.



Note:

Don't mistake the polar of the batteries and don't mix new and used batteries together. When the battery runs out, the indicator will flash every 2 seconds and the sensor will not work until new batteries are inserted. Put on clean gloves when installing sensor panel to avoid surface damage caused by cement or sand.

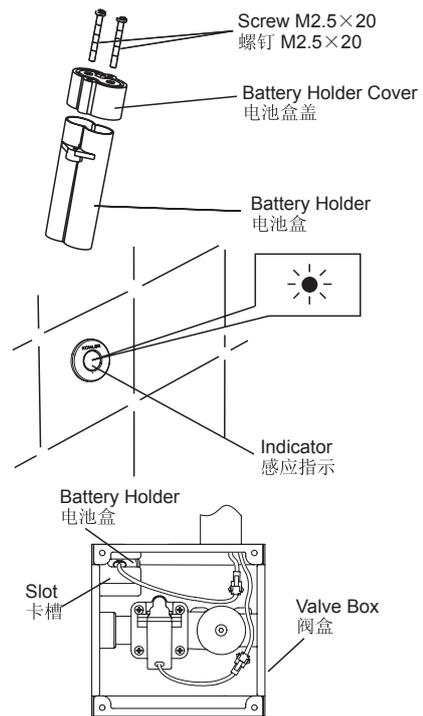
10. 安装电池盒(仅限于直流型)

- a. 取下电池盒盖, 装入2节碱性电池, 拧紧螺丝;
- b. 将电池盒放入阀盒卡槽内, 位置如右图所示;
- c. 分别连接直流接线端和电磁阀接线端。



注意:

电池极性不能装反, 新旧电池不能混用。电池耗尽时, 电池指示灯每隔2秒闪烁一次, 感应器停止工作, 直至更换电池。安装面板时应戴上干净的手套, 以防水泥或沙粒损伤表面。



11. Tighten panel with flush valve with 4 pcs of long screws.



Note:

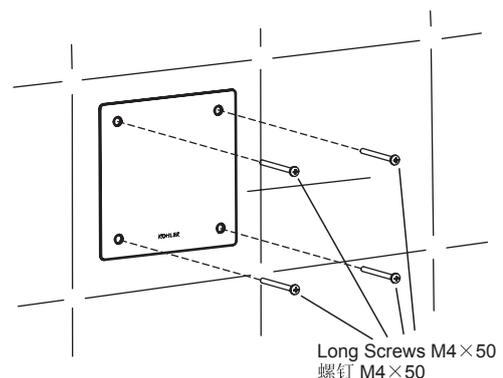
- a. Put on clean gloves during installation to avoid surface damage.
- b. Do not face the side with letters inwards or install in a reverse way.

11. 用4个长螺钉将面板与冲洗阀拧紧。



注意:

- a. 安装前应戴上干净的手套, 以免划伤面板;
- b. 安装时切勿将刻字的一面朝里安装或倒过来安装。



USER'S GUIDE

使用说明



Notice:

The first 10 minutes after it is powered is considered as the standby time for adjusting sensing distance. Humans or objects should avoid standing before the sensor during this period. The sensor will not flush during this time.



注意:

刚通电10分钟内为自动调节感应范围的待机状态，感应前方应避免有人站立或有其它物体，在该时间内感应器不冲水。

Eco-friendly flush mode

When the urinal is not used for a long term, it is set to flush with large volume of water automatically every 24 hours.

环境保护冲洗模式工作状态

小便器长期处于不使用状态时，每隔24小时以大水量自动冲洗一次。

Working Status

Before powering the system on, clear the unwanted objects in front of the sensor window lest shortening the sensing distance.

工作状态

此前务必清理感应冲洗器感应窗口前的杂物，以免影响自动调距，导致感应距离的缩短。

Set Working Status

The product comes our factory with:

1. The working status is set as dual-flush. If you want to cancel the first flushing function, place manual flush stick adjacent to right side of sensing window for more than 1 second during the 10-minute standby period (Human presence in sensing range would cause the indicator to flash fast).The sensor would generate a flushing cycle to indicate the setup of the sensor has been adjusted to after-use flushing. If the action is not completed during this 10 minute, or you need to restore the working status to dual-flush, plug off the power cord and reconnect the power supply until the indicator stops flashing and repeat the above procedures.
2. The detection time is set as 2s to avoid improper function in narrow toilets, the detection time is automatically set from 2s to 5s.

工作状态的设定

本产品出厂时设定为:

1. 工作状态为二段式冲洗状态，如需取消前冲功能,只需将手动冲洗棒在接上电源的10分钟待机状态内(在该状态下如有人在感应范围内，指示灯将快速闪烁)将手动冲洗棒贴近感应窗口右侧持续1秒钟以上，感应器将有一次冲水过程，即表示感应器已改为只使用后冲洗功能状态，如在10分钟内未完成此项目工作或需恢复二段冲洗状态，拔掉电源，待电池指示灯停止闪烁后重新接上电源，重复上述步骤即可。
2. 检测时间为2秒，当卫生间狭小时，为防止误动作，本产品将自动把检测时间由2秒变成5秒。

Sensing Distance

During the first 10 minutes, when powered on, the system is in the phase of automatic regulation, and no operation is required.

感应范围

接通电源10分钟内系统处于自动调节感应阶段，无需使用者操作。

Deodorizing Flushing

The urinal will take a flush automatically when it's used 3 or 4 times in 2 minutes.

防臭冲洗

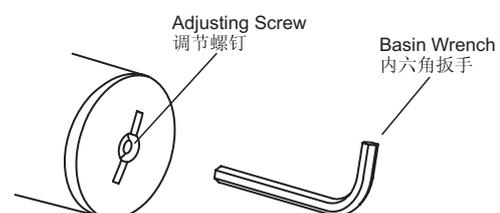
当2分钟内连续3-4人以上使用时，小便器自动冲洗一次。

Flushing Volume

If you need to regulate the flushing volume, you can take off the cover and turn the adjusting screw in the center of the stop valve to a proper place.

水流量

如需调节水流量，取下面板，旋动止水阀中心的水量调节螺钉，调节至适当即可。



Manual Flushing

Approach the supplied special magnetic stick (flushing control stick) to the left part of the sensor lens. The system is now at a manual status and the indicator will flash every 1 seconds. Approach the flushing control stick to the window, it'll start to flush; approach again, stopping flushing. This status will last for 8 minutes until it turns to the normal working status. (The flushing, if any, will be terminated when this status ends).



Notice:

The longest flushing time is 30 seconds once. If the flushing control stick keeps near to the sensing window, the manual status will be terminated automatically and reassume the normal working status.

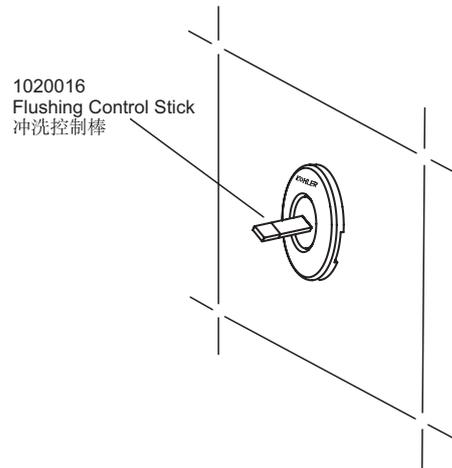


注意:

每次冲水时间最长为30秒。冲洗控制棒如持续超过30秒一直不离感应窗口，将自动解除手控冲洗状态回复到正常工作状态。

手控冲洗

用配备的专用磁棒(冲洗控制棒)靠近感应窗口左侧位置，此时系统进入手控状态，感应指示灯每1秒闪烁一次。用冲洗控制棒靠近指示灯即放水冲洗，再靠近则停止出水。此状态将维持8分钟，结束后转为正常工作状态(状态结束时，如正在冲水，将被自动关闭)。



MAINTENANCE

Urinal Repair

When repairing, you don't have to dismount the sensor. Cover the sensing window with tape and work with ease.



Notice:

Don't use very adhesive tape in case the scar will be hard to remove.

维护保养

修理小便器

修理小便器时，不必拆下感应器，只需用电工胶布粘住感应窗口，您便可放心修理设备。



注意:

不要用强力胶布，因为粘痕会难以清除，而产生误动作。

Clean the Filter Screen

If the flushing volume declines sharply after installation or used for a long time with no cause from water pressure, the filter may need a wash. Turn off the fixed cap with filter-key, take out the filter, clean with a brush and reinstall it.



Notice:

Turn off the water supply or tighten the adjusting bolt before cleaning.

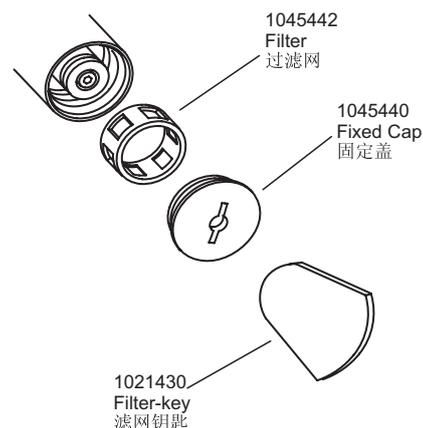
清洗过滤网

初装或使用较长时间后，如发现出水量明显变小，而非水压原因，可清洗阀体中的过滤网。用滤网钥匙旋下固定盖，取出滤网，刷洗后重新装入即可。



注意:

清洗前，请先关闭水源或拧紧调节栓。



Care & Clean

Keep the sensing window clean. Wipe with soft cloth and mild cleaner.



Notice:

- Do not use dust-removing powder, abrasive powder or cleaner containing oil, acid or alkaline ingredient.
- Do not spray air-refresher, disinfectant, or other deodorizing, cleaning solvent directly into the sensing window.
- Keep wire away from water.
- Don't attack the sensor window.

清洁保养

保持感应窗口清洁，可用蘸有中性清洁剂的软布擦洗。



注意：

- 禁止使用去污粉、研磨粉及油类、酸性类、碱性类清洁剂。
- 禁止直接对感应窗口喷洒空气清新剂、消毒液或其他除臭、清洁类有机溶剂。
- 避免水直接接触电线接插件。
- 勿撞击感应窗口。

TROUBLESHOOTING

Please make following checks before repair:

| Symptoms | Probable causes | Corrective actions |
|--|---|---|
| No flushing (Indicator not flashing) | 1. No power or mistake connected. 2. There is an mirror or some other reflectible objects within the sensing distance. 3. The sensing window needs cleaning. | 1. Check the power connect. 2. Remove the object. 3. Clean the window. |
| No flushing or poor flushing while the indicator can flash | 1. Still in the waiting status. 2. Adjusting bolt not fully open. 3. Low water pressure. 4. Filter is obstructed. 5. The connector is not connected well. | 1. Wait for 10 minutes. 2. Open the adjusting bolt. 3. Improve water supply. 4. Clean the filter. 5. Check the connector. |
| Keep flushing indicator not flashing | Dirt in valve unit | Repeat the sensing action several times after cleaning the filter |
| Battery indicating light keeps flashing and no flushing | Out of electricity (Only for K-8872T-C01) | Replace batteries (Only for K-8872T-C01) |

If the trouble remains after above-mentioned actions are taken, please contact with us via distributor.

简单故障排除

请在委托修理前做以下检查:

| 现象 | 可能原因 | 处理方法 |
|-----------------------|---|---|
| 不出水 (感应指示灯不亮) | 1. 无电源或接线有误 2. 感应范围内有镜子或其它易反射物体 3. 感应窗口较脏 | 1. 检查电源连接 2. 清理物体 3. 清洁窗口 |
| 感应指示灯闪烁 而无水流出或出水较差 | 1. 通电待机状态 2. 调节栓未完全打开 3. 水压太低 4. 过滤装置脏堵 5. 接线端未接好 | 1. 等待10分钟 2. 打开调节栓 3. 改善供水情况 4. 清洗过滤装置 5. 检查接线端 |
| 不停水 感应灯也不在闪烁 | 阀体部件内有脏物 | 清洗过滤装置后, 使感应器连续感应动作数次 |
| 电池指示灯连续 闪烁而不出水 | 电池耗尽(仅适用于安装K-8872T-C01的情况) | 更换新电池(仅适用于安装 K-8872T-C01的情况) |

如按以上操作仍未解除故障，请通过销售商与本公司联系。

Consumer Responsibilities

1. Do not attack the sensor.
2. Do not directly flush the sensor with water. The sensor is an electronic instrument.
3. Do not let sunlight or other light source enter or be reflected into Sensor Window.
4. Do not hang on the opposite wall any reflective items or install light/electronic sensor such as toilet flushing sensor.
5. Do not make Sensor Window near strong ultraviolet or electromagnetic field.
6. Keep the sensor window clean.
The sensor cover can be cleaned by soft rag with neutral liquid detergent.
Do not use eradicator, abrasive powder or oil, acid or alkali liquid detergent.
Do not spray air freshener, disinfectant or other kinds of odious removing, cleaning organic liquid to the sensor directly.
7. Urinal is designed for use with potable water.
Avoid water that includes a lot of contaminants or acid/alkali water and impure water.
8. When AC power unit is connected to 220V AC power supply, corresponding protective measures should be taken.
9. Please confirm no water penetration at the connection area of AC wire, and the connection area is not easy to be affected by damp.
10. Don't connect power unit to AC power supply until the sensor installation is finished.
11. The head AC power supply must be protected with appropriate fuse.
12. Please confirm the AC power supply and water supply should be shut off before maintaining the products with AC power related.
13. All electrical connection must be compliance with related regulation and codes.
14. All installation staff should be well familiar with installation instruction.

用户责任

1. 请勿敲击感应窗口。
2. 感应器为电子器具，请勿直接用水冲洗。
3. 避免阳光或其他光源直接或反射进入感应窗口。
4. 请勿在感应器正面墙壁上挂贴易反射的物体或安装光电感应器(如大便自动感应冲洗器)。
5. 请勿靠近强烈紫外线或电磁场。
6. 保持感应窗口清洁。
窗口外壳可用蘸有中性清洁剂的软布擦洗。

禁止使用去污粉、研磨粉及油类、酸性类、碱性类清洁剂。

禁止直接对感应窗口喷洒空气清新剂、消毒液或其他除臭、清洁类有机溶剂。
7. 使用水源为自来水或可供饮用井水。
避免使用含有杂质较多或带有酸、碱性的处理水或未加工处理的水。
8. 将交流电源盒接入220V电源时，应采取相应的防卫措施。
9. 应确保交流导线连接处无水渗入以及不易受潮。
10. 务必在感应器安装完毕后，才向交流电源盒供电。
11. 交流电的总电源必须有合适的熔断丝加以保护。
12. 维修交流供电型的产品时，必须首先断开交流电源并关闭水源。
13. 所有电路连接必须符合相关规范和条例要求。
14. 所有参与安装人员都必须熟知安装说明。