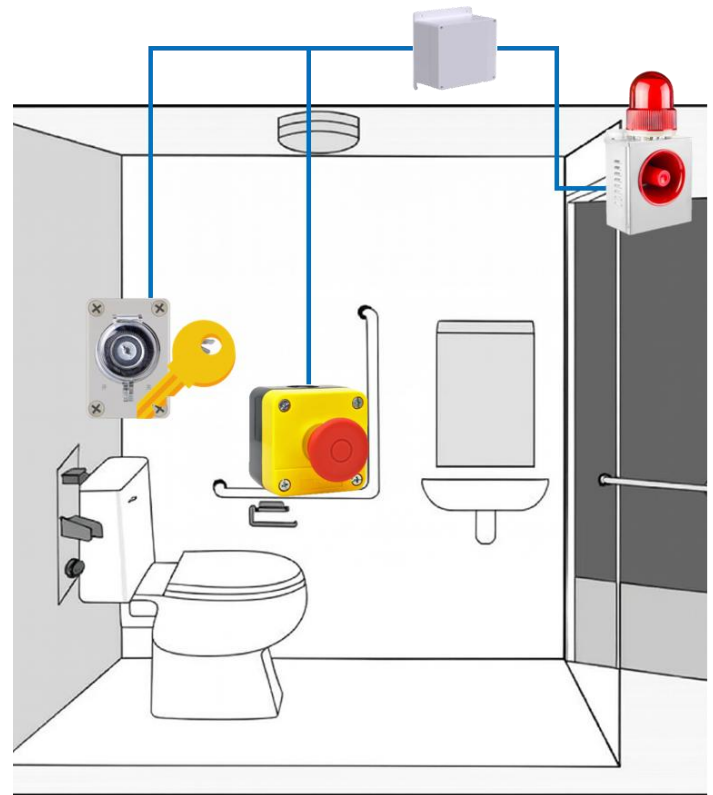


Call Bell System

The Toilet Call Bell System is a purpose-built emergency assistance solution designed for use in accessible toilets, hospitals, aged-care facilities, and public washrooms. The system ensures that users can request immediate help, while staff and caregivers receive clear, reliable alerts for rapid response.

The system is equipped with a default dry contact output for universal compatibility, allowing seamless interfacing with existing monitoring and building management systems.



This system integrates the following core components:

- Siren with combined light and sound for high-visibility alerting
- Call button for users to request help quickly and easily
- Reset button with key operation to ensure only authorized personnel can reset the alarm

While the above system is able to work standalone. The I/O module I designed in enabling cascading of multiple call bell units for centralized management. Dry-contact signal from IO Module for system integration and notification

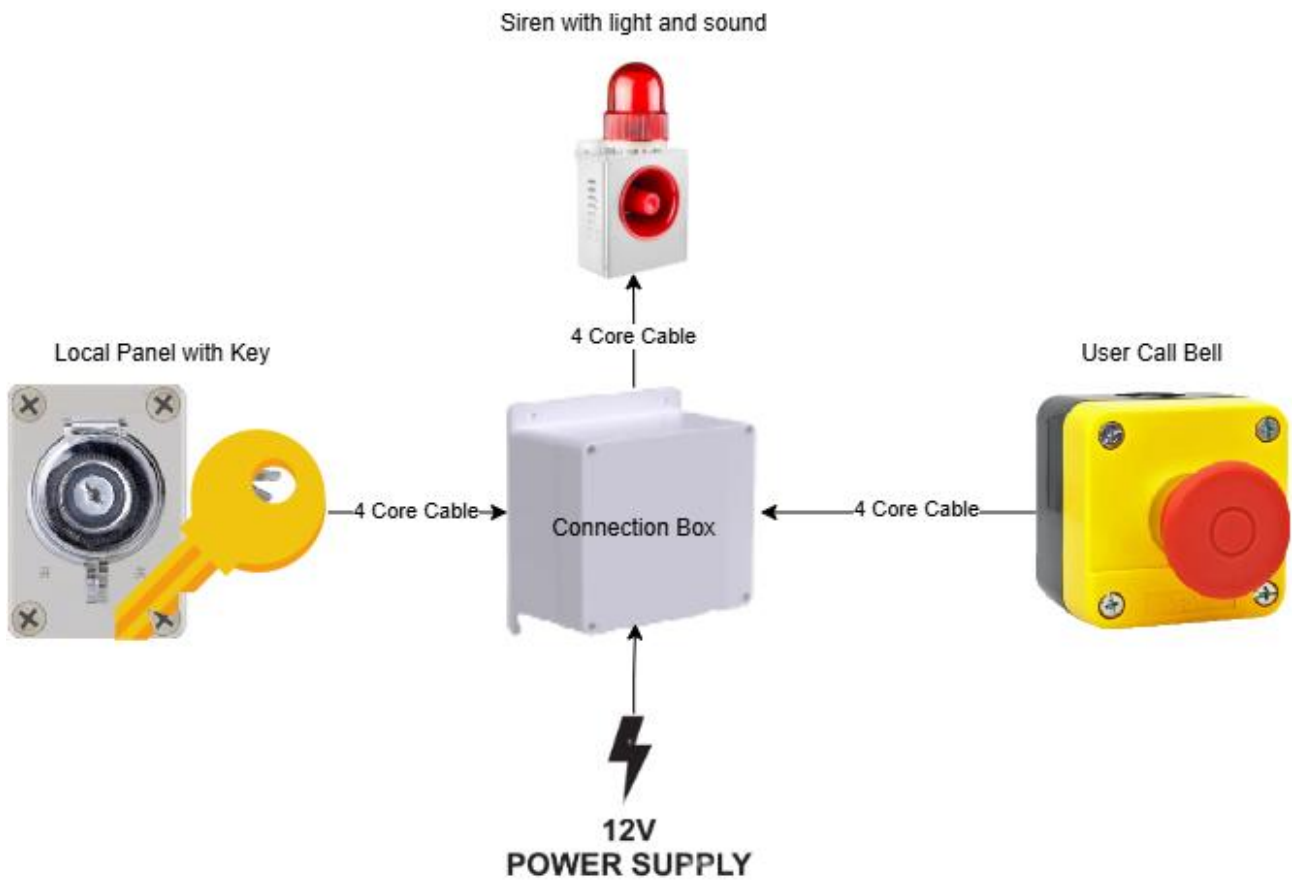
For advanced deployment scenarios, the system offers optional extensions:

- Connection of a monitor to the I/O module to access a local management portal
- Integration with the ChinoINT Edge Computing Gateway, making the system cloud-ready for remote supervision, data logging, and third-party system integration (e.g., BMS, security, or IoT platforms)

With modular design, secure reset functionality, and scalable expansion options, the Toilet Call Bell System provides a dependable, future-proof solution for safeguarding users and streamlining facility management.



Standalone Configuration



Equipment Specification - User Call Bell



Main

Range of product	Easy Harmony XB2
Product or component type	Complete emergency switching off push-button
Device short name	XB2
Device presentation	Complete product
Bezel material	Chromium plated metal
Fixing collar material	Zamak
Mounting diameter	22.5 mm
Head type	Mushroom
Sale per indivisible quantity	1

Complementary

Operating position	Any position
Device mounting	Fixing hole - diameter: 22.5 mm
Fixing center	>= 30 x 40 mm (1...6 mm thick panel) - thickness: 1...6 mm
Fixing mode	Fixing screw beneath head recommended torque: 0.8 N.m Fixing screw beneath head recommended torque: 1.0 N.m
Shape of signaling unit head	Round
Type of operator	push-pull
Reset	Push-pull
Operator profile	Red mushroom Ø 40 mm, unmarked
Terminals description ISO n°1	(11-12)NC
Cap/operator or lens colour	Red
Product compatibility	ZB2..C
Contacts type and composition	1 NC
Contact operation	Slow-break
Contacts usage	Standard contacts
Positive opening	With NC contact conforming to IEC 60947-5-1 appendix K
Operating travel	2.0 mm (NC changing electrical state) 4.15 mm (total travel)
Mechanical durability	300000 cycles



Connections - terminals	Screw clamp terminal, $\leq 2 \times 1.5 \text{ mm}^2$ with and without cable ends Screw clamp terminal, $\leq 1 \times 2.5 \text{ mm}^2$ with and without cable ends Screw clamp terminal, $> 1 \times 0.5 \text{ mm}^2$ with and without cable ends Faston terminals, connection size: 6.3 mm
Tightening torque	0.8...1.0 N.m
Shape of screw head	Cross compatible with Philips no 1 screwdriver Cross compatible with pozidriv No 1 screwdriver Slotted compatible with flat $\varnothing 4 \text{ mm}$ screwdriver Slotted compatible with flat $\varnothing 5.5 \text{ mm}$ screwdriver
Contacts material	Silver alloy (Ag/Ni)
Short-circuit protection	10 A gL fuse type gG conforming to IEC 60947-5-1
[Ith] conventional free air thermal current	10 A conforming to IEC 60947-5-1
[Ui] rated insulation voltage	600 V (pollution degree 3) conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-1
[Ie] rated operational current	3 A at 240 V, AC-15, A600 conforming to IEC 60947-5-1 0.27 A at 250 V, DC-13, Q600 conforming to EN/IEC 60974-5-1
Electrical durability	1000000 cycles, AC-15, 3 A at 240 V, operating rate $< 3600 \text{ cyc/h}$, load factor: 0.5 conforming to IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.27 A at 250 V, operating rate $< 3600 \text{ cyc/h}$, load factor: 0.5 conforming to IEC 60947-5-1 appendix C
Electrical reliability	$\Lambda < 10\text{exp}(-6)$ at 5 V, 1 mA in clean environment conforming to IEC 60947-5-4 $\Lambda < 10\text{exp}(-8)$ at 17 V, 5 mA in clean environment conforming to IEC 60947-5-4
Height	40 mm
Width	40 mm
Depth	73.5 mm
Product weight	0.115 kg
Customizable	No
Type of operator	Mechanical latching



Environment

Protective treatment	TC/TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-25...70 °C
Overvoltage category	Class I conforming to IEC 60536
Standards	IEC 60947-5-1 IEC 60947-5-4 IEC 60947-1 GB/T 14048.1 GB/T 14048.5
Product certifications	CE CCC
Marking	Unmarked
IP degree of protection	IP65
IK degree of protection	IK06
Vibration resistance	5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27

Equipment Specification - Local Panel with Key



Parameter	Specification
Dimension	86 x 88 x 78 mm
Security	Key operated

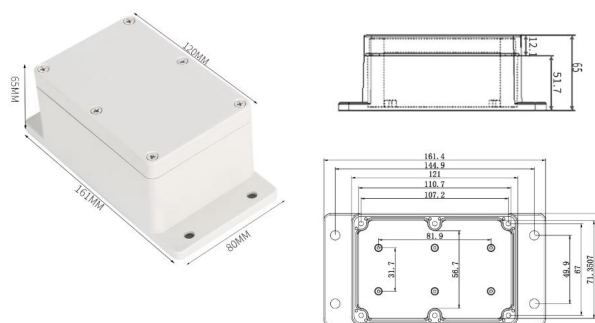


Equipment Specification - Siren with Light and Sound



Parameter	Specification
Dimension	190 x 120 x 370 mm
Sound	30W sound channel, MP3
Visual	flashing speed / always on / off
Weight	2100 g
Protection	IP65
Protocol	RS485
Operation Condition	0°C - 50°C

Equipment Specification - Connection Box

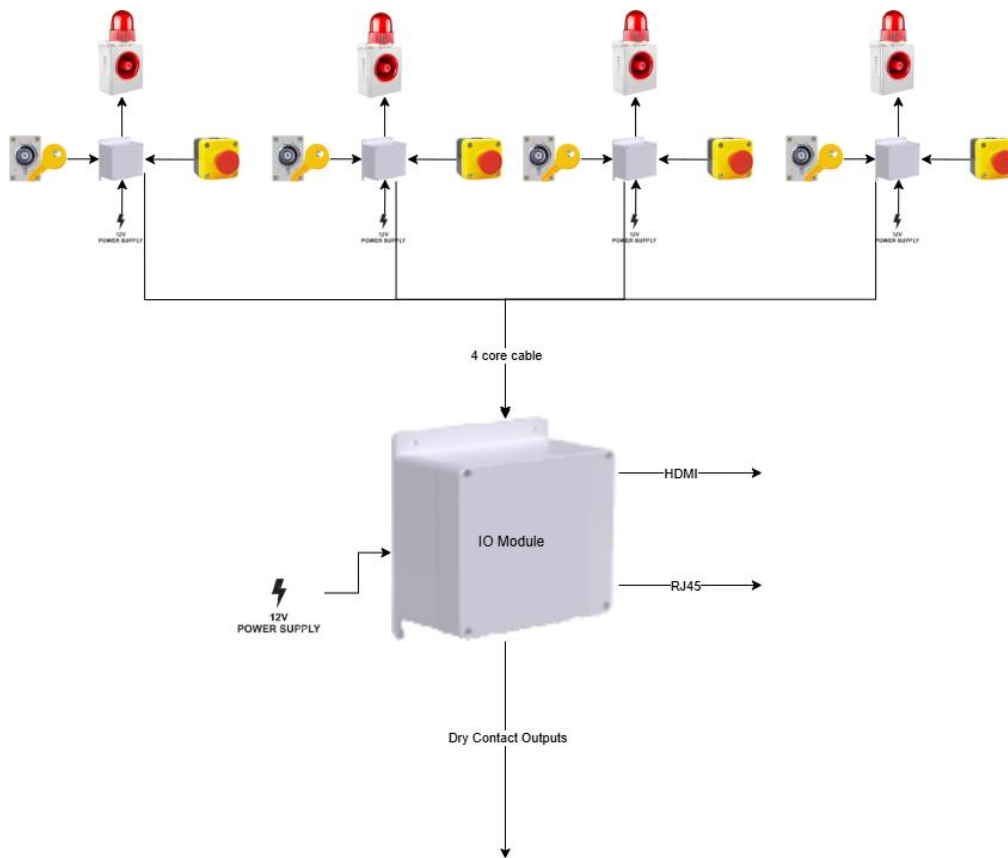


The connection box is for joining the signals of the Call bell System together. The waterproof housing gives a protected environment for the signals physically and logically to connect together.

Parameter	Specification
Dimension	120 x 81 x 65 mm
Power	12V DC



Cascading Configuration



Equipment Specification - IO Module

The IO Module is the connection hub of the Call Bell System. It supports up to 4 Call Bell Systems connecting together, reducing system complexity. The IO Module propagates the signals to the MCS. Each Call Bell System has 2 dry contact signals to MCS. Thus, each IO Module has maximum of 8 dry contacts to MCS, depending on the number of Call Bell Systems cascaded together. IO Module also provides an HDMI port. This allows connecting a compatible monitor for user interface display and configuring the system.

Parameter	Specification
Dimension	269 x 150 x 85 mm
Protection	IP65
Power	12V DC
Input	Up to 4 Call Bell System (Upgradable)
Output	2 Dry-contact signals per Call Bell System, HDMI, RJ45



Management Portal

The IO module has a management portal and dashboard running. This enables easy configuration and viewing of the system status.

In the AIOT era, the Call Bell System is ready to connect to Cloud dashboard, integration to other systems. The only thing you need is to connect the ChinoINT Edge Computing Gateway. This enables cloud connectivity, notifications, and other flexibility and interoperability.

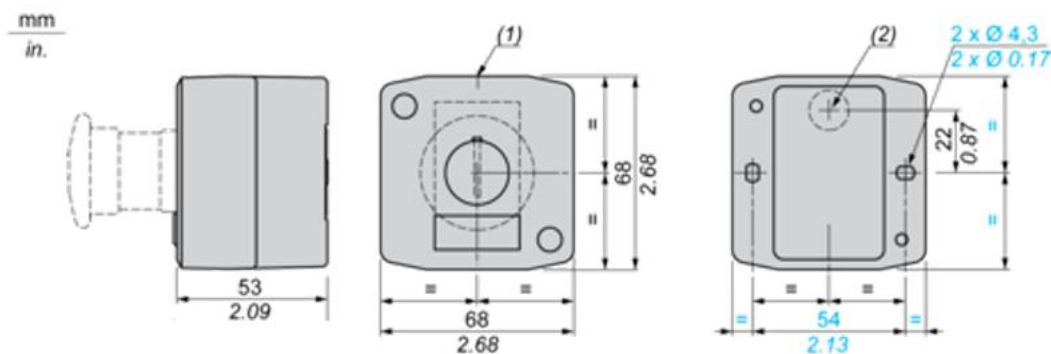
Installation

The Call Bell System is designed with easy screw mount on wall. Screw holes are designed with the housing in all components that could be wall-mounted.

Installation can be done only by the professional construction personnel or authorized engineering representative. Please use the professionally qualified installation tools to guarantee the safety of the construction personnel. Installation position must be far away from the fire source, strong electric field, magnetic field etc., otherwise damage will be resulted. ChinoINT reserves the interpretation of installation.

User Call Bell Installation

Shown below is the housing structure diagram. For wall-mount, follow the diagram to find the screw holes for mounting.



(1) 2 knock-outs for Pg 13.5 cable gland, maximum capacity 12 mm/0.47 in.

(2) Knock-out for cable entry, maximum capacity 14 mm/0.55 in.

Local Panel with Key Installation

Shown below is the dimension of the Panel with Key. Installation can be done using embedded housing (not included).





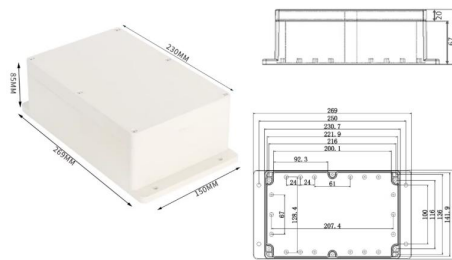
Siren with Light and Sound Installation

Shown below is the dimension and screw holes for the Siren. Wall-mount screw holes can be found at the bottom of the equipment.



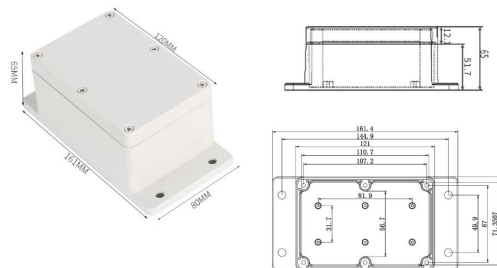
IO Module Installation

Shown below is the dimension and wall-mount screw hole location diagram.



Connection Box Installation

Shown below is the dimension and wall-mount screw hole location diagram.



Warning

Assumes no liability for any damage resulting from the use of this product. CHINOTECH INTERNATIONAL LIMITED reserves the right to change this data sheet at any time without notice. The information furnished by ChinoINT is believed to be accurate and reliable. However, no responsibility is assumed by ChinoINT for its use, not for any infringements of patents or other rights of third parties resulting from its use.

Product Warranty and Customer Support

ChinoINT warrants all products free from defects in material and workmanship for a period of one year from the date of shipping. During the warranty period, we will, at our position, either repair or replace any product that proves to be defective. To report any defect, please inquiry sales@chinoint.com

Unauthorized opening and improper repairs on the device may result in substantial damage to equipment or endanger the user. The product described in this documentation may be operated only by personnel qualified. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products. Always disconnect the power plug before you open the device.

Please have the model, serial number and a detailed problem description available when you call. If the problem concerns a particular reading, please have all meter readings available.

This warranty does not apply to defects resulting from unauthorized modification, misuse. If you install or exchange system expansion and damage your device, the warranty becomes void.

Product Warranty and Customer Support

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

