

EMERGENCY LIGHTING & EXIT SIGNS TESTING & MONITORING SYSTEM



INTRODUCTION:

The emergency lighting & exit signs testing and monitoring system is designed to test, maintain and manage independent powering emergency lights & exit signs. Capable of automatic testing, data analysis and result judgment,

FEATURES

- The Control Panel has a 7-inch colorful touch screen, offering excellent man-machine interaction experience.
- Controlled by sound and light, the integrated controller automatically conducts real-time and efficient testing and inspection of operating states and faults of emergency lights. Events will be recorded, and history can be retrieved.
- Logs can be displayed. History events can be viewed on the screen and imported into the computer.
- Timed automatic testing, which can test lights emergency functions according to the set period.

- Timed battery maintenance, which can charge and discharge batteries according to the set time period so as to prolong the battery life
- The Control Panel and interfaces are connected by CAN bus (The communication distance is up to 1Km). The interface and its subordinate devices are connected by RS485 bus (The communication distance is up to 1Km). The layout is simple, and the cost is low.
- Maximum 64 interfaces within a Emergency Lighting Monitoring Control Panel, with each interface connecting up to 254 devices, Up to 16,320 devices can be managed simultaneously.
- The emergency lighting & exit signs central monitoring panel provides three relay output interfaces (The device fault, the monitoring panel is disconnected from the power supply, The device is disconnected from the power supply), which can be applied by customers according to field requirements.
- The emergency lighting central monitoring panel can receive the external fire alarm signa or manually



this system improves the maintainability of emergency lights, thus increasing their reliability.





EMERGENCY LIGHTING & EXIT SIGNS TESTING & MONITORING SYSTEM

DISTRIBUTED **CONTROLLER**

(INTERFACE) -UL LISTED NO.E345524

It is responsible for information transfer within a certain area, thus increasing the number of subordinate devices and facilitating data.

Model	BG-INT01		
Voltage	AC120/0.035A		
	or		
	AC277/0.016A 50/60Hz		
AC Power	3W		
Battery	Ni-MH – AA		
J	660MAH/4.8V		
Emergency	3Hours		
Duration			
Communication	CAN BUS		
Bus	AND RS485 BUS		



ADDRESSABLE EMERGENCY LIGHTS

UL LISTED NO.E345524

Model	BG-T632L/BG-T604L			
Voltage	AC120/0.035A			
	or			
	AC277/0.016A 50/60Hz			
AC Power	5.5W			
Battery	Ni-MH – SC			
,	2200MAH/4.8V			
Emergency	3Hours			
Duration				
LED	20pcs SMD2835			
Communication	RS485 BUS			
Bus				

CORRESPONDING CONTROLLER

(RPEATER) -UL LISTED NO.E345524

It is responsible for extending an interface distance, thus increasing the coverage area with the same interface and facilitating data.

Model	BG-REP01		
Voltage	AC120/0.035A		
	or		
	AC277/0.016A 50/60Hz		
AC Power	3W		
Battery	Ni-MH – AA		
-	660MAH/4.8V		
Emergency	3Hours		
Duration			
Communication	RS485 BUS		
Bus			









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EMERGENCY LIGHTING & EXIT SIGNS TESTING & MONITORING SYSTEM

ADDRESSABLE EMERGENCY **EXIT SIGN**

Model	BG-T741R/G			
Voltage	AC120/0.038A			
	or			
	AC277/0.018A 50/60Hz			
AC Power	3.5W			
Battery	Ni-MH Battery: AA			
	600MAH/4.8V			
Emergency	3Hours			
Duration				
LED	8 pcs Φ5 Red or Green			
Communication	RS485 BUS			
Bus				



ADDRESSABLE EMERGENCY **EXIT SIGN**

Model	BG-T705			
Voltage	AC120/0.038A			
	or			
	AC277/0.018A 50/60Hz			
AC Power	3.5W			
Battery	Ni-MH – Battery: AA			
	600MAH/4.8V			
Emergency	3Hours			
Duration				
LED	14 pcs SMD2835			
Communication	RS485 BUS			
Bus				



ADDRESSABLE EMERGENCY **EXIT SIGN.**

Model	BG-T740R/G		
Voltage	AC120/0.038A		
	or		
	AC277/0.018A 50/60Hz		
AC Power	3.5W		
Battery	Ni-MH Battery: AA		
	600MAH/4.8V		
Emergency	3Hours		
Duration			
LED	12 pcs Φ5 Red or Green		
Communication	RS485 BUS		
Bus			



ADDRESSABLE EMERGENCY **EXIT SIGN.**

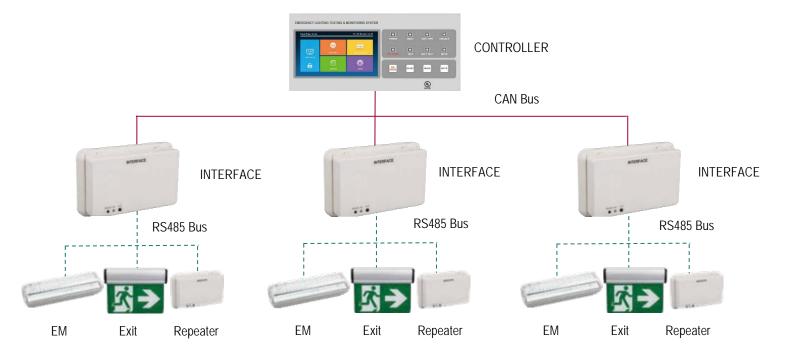
Model	BG-T741		
Voltage	AC120/0.038A		
	or		
	AC277/0.018A 50/60Hz		
AC Power	3.5W		
Battery	Ni-MH – Battery: AA		
•	600MAH/4.8V		
Emergency	3Hours		
Duration			
LED	14 pcs SMD2835		
Communication	RS485 BUS		
Bus			







SYSTEM ARCHITECTURE OF **TESTING & MONITORING SYSTEM**



The area controller uses CAN bus to communicate with interfaces, which communicate with fire emergency lights by RS485 bus. Another repeater will be added to increase the communication distance when devices are too far from the interface.

DEVICES	FUNCTION	
Area Controller	Act as the brain of this system, it gathers and processes the information and automatically controls subordinate devices to test and maintain themselves. It will warn users by the screen, LED and the buzzer when accidents occur. With a user-friendly man-machine interaction interface, it can maximally free users.	
Interface	As an extension of the area controller, it is responsible for information transfer within a certain area, thus increasing the number of subordinate devices and facilitating data processing and management.	
Repeater	It can lengthen the communication distance between two devices and increase bu entries.	
Emergency Light (EM)	It is automatically on in times of emergency to ensure lighting. It will report its faults and prompt a warning using its own LED.	
Exit Indicator	It is constantly on to provide indications, and will report its faults and prompt a warning using its own LED	



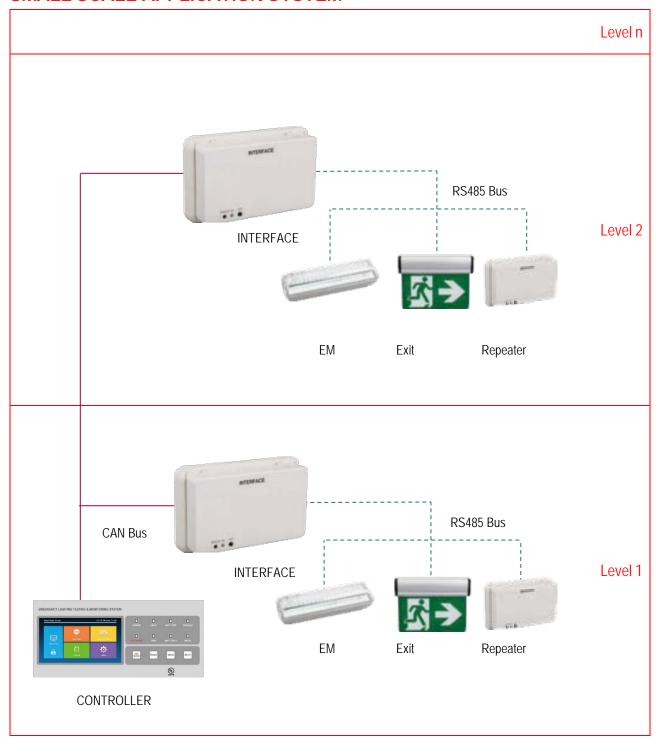


SYSTEM TYPES FOR

TESTING & MONITORING SYSTEM

Installation and connecting methods should be chosen according to different scales, roughly, small-scale, large-scale and remote systems. A small-scale system regards a single building as a unit; a large-scale system covers a wider area, such as a large supermarket and a shopping mall; a remote system regards an area with multiply buildings as a unit. Users can choose system types accordingly.

SMALL SCALE APPLICATION SYSTEM



ATTENTION:

- 1. Emergency light address and other light address under a certain interface can be randomly selected as long as they are different from one another, but the address value should be below 254.
- 2. Fire emergency light addresses under different interfaces are independent from each other, thus can overlap.

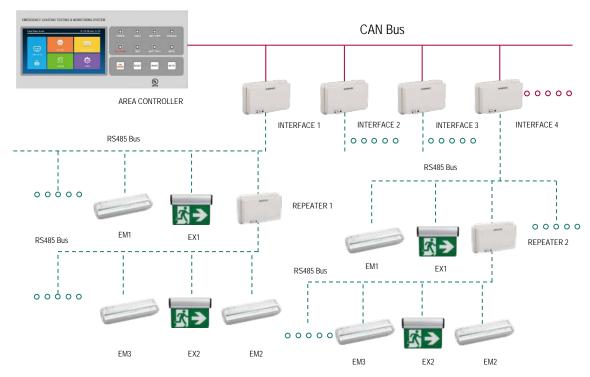




SYSTEM TYPES FOR

TESTING & MONITORING SYSTEM

LARGE SCALE APPLICATION SYSTEM

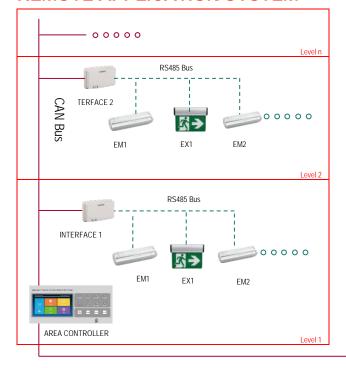


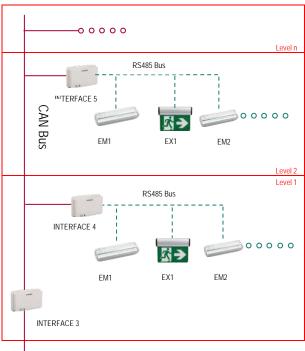
ATTENTION:

A repeater should be added to increase 485 communication distance or entries be added in the same 485 bus because a large-scale system covers so wide an area that communication signals cannot reach certain distances.

Each repeater occupies one of 254 addresses allocable in one interface, thus should be different from any fire emergency light address under the same interface.

REMOTE APPLICATION SYSTEM





CAN Bus







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ENHANCE SYSTEM USING REPEATER INTERFACE:

A repeater should be added to increase RS485 communication distance or entries be added in the same RS485 bus because a largescale system covers so wide an area that communication signals cannot reach certain distances.

Each repeater occupies one of 254 addresses allocable in one interface, thus should be different from any fire emergency light address under the same interface.

An interface should be added to increase the communication distance because the area controller is so distant from interfaces that communication signals cannot reach certain areas. In order to distinguish this interface's function from that of other interfaces, it is signaled as a repeater, but its nature as an interface shall not change.

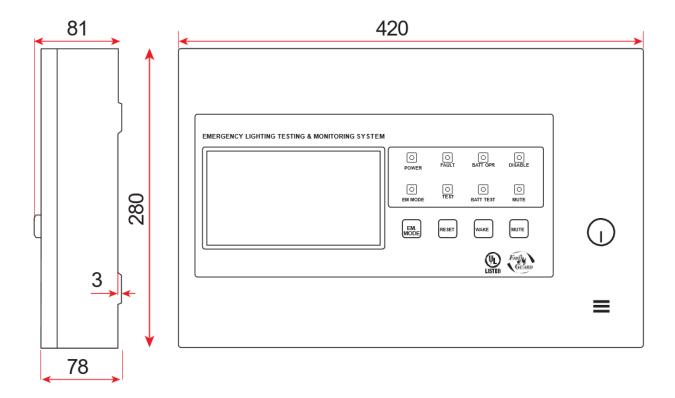
Control Unit and Addressable Emergency Light and Accessories Selection:

MODEL	DESCRIPTION	LISTING	VOLTAGE	SPECIFICATION
BG-T101	Central Monitoring Panel (including remote controller)	UL	Input Voltage AC100-240V 50/60Hz AC Power: 10W Lead-acid Battery: 2* 1.4AH/12V Emergency Duration: 3Hours	Anti-rusting metal case 7- inch colorful touch screen can connect max.64 interfaces
BG-INT01	Interface	UL	AC120V/0.035A or AC277/0.016A	Interface, an extension of the area controller, transfer information.
BG-REP01	Repeater	UL	AC120V/0.035A or AC277/0.016A	Repeater is used to increase the length of the circuit to cover more distance.
BG-T632L	Addressable Emergency Light	UL	Battery: Ni-MH SC 600MAH/4.8V Emergency Duration:3Hours Universal wall or Ceiling mounting	Addressable, self- contained battery- AC Power 3.5W
BG-T604L	Addressable Emergency Light	UL	Battery: Ni-MH SC 2200MAH/4.8V Emergency Duration:3Hours Universal wall or Ceiling mounting	Addressable, self- contained battery- AC Power 5.5 W
BG-T603L	Addressable Emergency Light	UL	Battery: Ni-MH SC 2200MAH/4.8V Emergency Duration:3Hours Recessed Mounting	Addressable, self- contained battery- AC Power 5.5 W
BG-T605L	Addressable Emergency Light	UL	Battery: Ni-MH SC 2200MAH/4.8V Emergency Duration:3Hours Recessed Mounting. Φ 144mm×H111mm	Addressable, self- contained battery- AC Power 5.5 W
BG-T741G/RT 741 Running man	Addressable Emergency Light	UL	Battery: Ni-MH SC 600MAH/4.8V Emergency Duration: 3 Hours Universal wall , side or ceiling mounting	Addressable, self- contained battery AC Power: 3.5W
BG-T740G/R	Addressable Exit Sign	UL	Battery: Ni-MH SC 600MAH/4.8V Emergency Duration:3Hours. Universal wall ,side or ceiling mounting	Addressable, self- contained battery- AC Power 3.5W
BG-T705	Addressable Exit Sign	UL	Battery: Ni-MH SC 600MAH/4.8V Emergency Duration:3Hours. Recessed Mounting	Addressable, self- contained battery- AC Power 3.5W
BG-T708	Addressable Exit Sign	UL	Battery: Ni-MH SC 600MAH/4.8V Emergency Duration:3Hours. Recessed Mounting. Unit price for 1-graphic only, available graphics for option	Addressable, self- contained battery- AC Power 3.5W





DIMENSIONS



WE THRIVE ON USING MODERN TECHNOLOGY, INNOVATION AND MARKET- LEADING DESIGNS TO ENSURE THAT OUR SYSTEMS ALWAYS PROVIDE COST-EFFECTIVE AND RELIABLE SOLUTIONS TO A WIDE RANGE OF FIRE DETECTION AND PROTECTION APPLICATIONS.







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