

VG-6765
Graphic Fire Repeater
Installation Manual

(Ver 1.00, Mar. 2020)



Table of Contents

Chapter I Overview	1
Chapter II Technical Parameters	1
Chapter III Working Principle	1
Chapter IV Programming	1
Chapter V Connection Schematic Diagram.....	3
Chapter VI Panel Introduction.....	4
Chapter VII Case size	6
Chapter VIII Operation Procedures	6
Chapter IX Troubleshooting	7
Chapter X Precautions.....	7

Chapter I Overview

VG-6765 Graphic Repeater is developed as a mimic display unit of V-GREAT Digital System. It is housed in customized enclosure with high quality graphic layout which is tailored for the individual floor drawing of the project. In case of fire, the programmed LEDs on mimic layout provide a clear and geographical indication of fire alarm or other system activation enabling speedy identification of the source of an alarm or other event. VG-6765 is considered as an ideal customized solution in wide applications, such as hotel, apartment, hospital, office-building, etc.

Chapter II Technical Data

2.1 Operating current: Standby current $\leq 1\text{mA}$ Alarm current $\leq 70\text{mA}$

2.2 Operating environment: T temperature: $0\text{ }^{\circ}\text{C} \sim +45\text{ }^{\circ}\text{C}$ Humidity: $\leq 95\%$

2.3 Addressing range: 0~255

2.4 Power voltage: DC20~28V Loop voltage: DC15V- DC28V modulation pulse

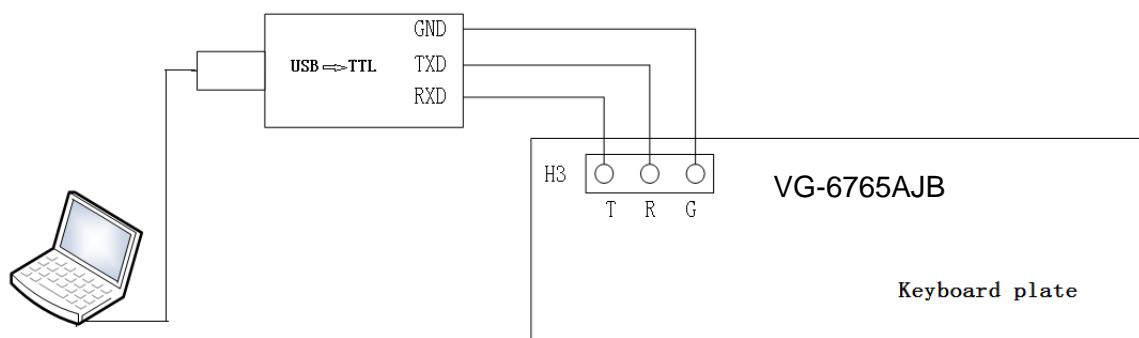
2.5 The length of wiring to the digital panel is limited to 1500m, via Twisted-pair fire cable above 1.0mm^2 .

2.6 Installation: Wall-mount

Chapter III Working Principle

Based on Microprocessor, the Fire Repeater is designed and developed as a mimic unit of graphic display of fire alarm. Upon a fire, the digital panel will receive the location of alarmed device, and share with the Fire Repeater. Via loop communication, the Repeater can receive the fire info and light-on the indicator on the flooring drawing, where shows the location of alarmed device. All of the indicators can be individually configured to operate upon any event type and at point, zone or group level via V-GREAT Commission Software. Furthermore, the positions of the indicators can be freely moved anywhere on the layout and new indicators can be added as well. This repeater is connected into the digital detection loop and up to 16 units per panel, so totally 1600 indicators available. Chapter IV Programming

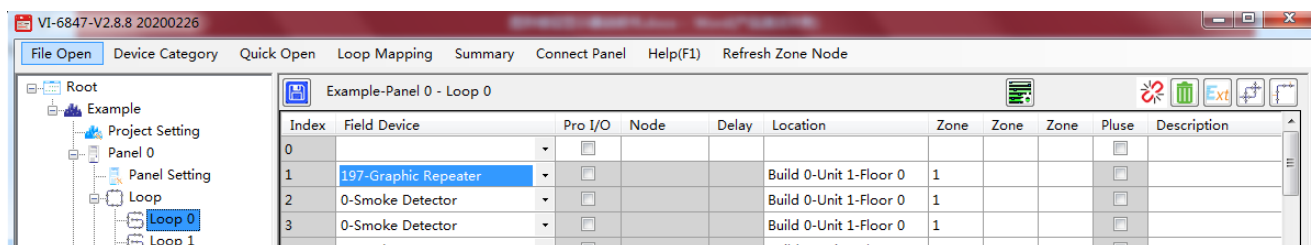
4.1 Connection to PC



4.2 Open V-GREAT Commission Software to configure the device with the LED indicator of the Repeater. The specific operation steps are as follows:

1) Configure the Repeater

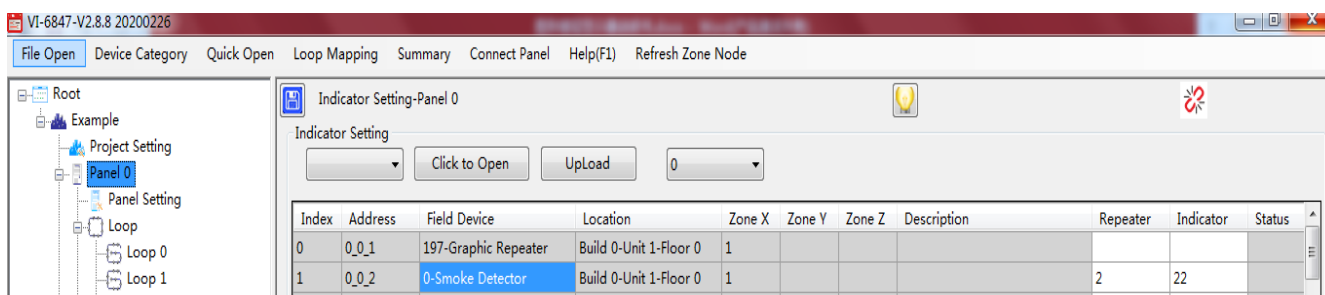
First of all, configure the Repeater, in regard of panel, loop, address and zone.



The figure shows that the Repeater is set as Panel 0, Loop 0, Address 001 and Zone 1.

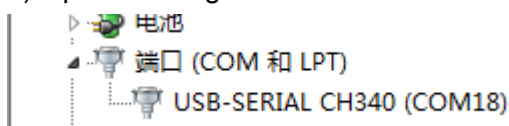
2) Configure the LED indicator

In the Panel Window, click “Indicator” button to open the Page of Indicator Setting. In that Page of setting, enter the number of Repeater and Indicator to match with the corresponding device.



The figure shows that the LED 22 of Repeater 2 is set with the smoke detector of Panel 0, Loop 0 and Address 002.

3) Upload configure data

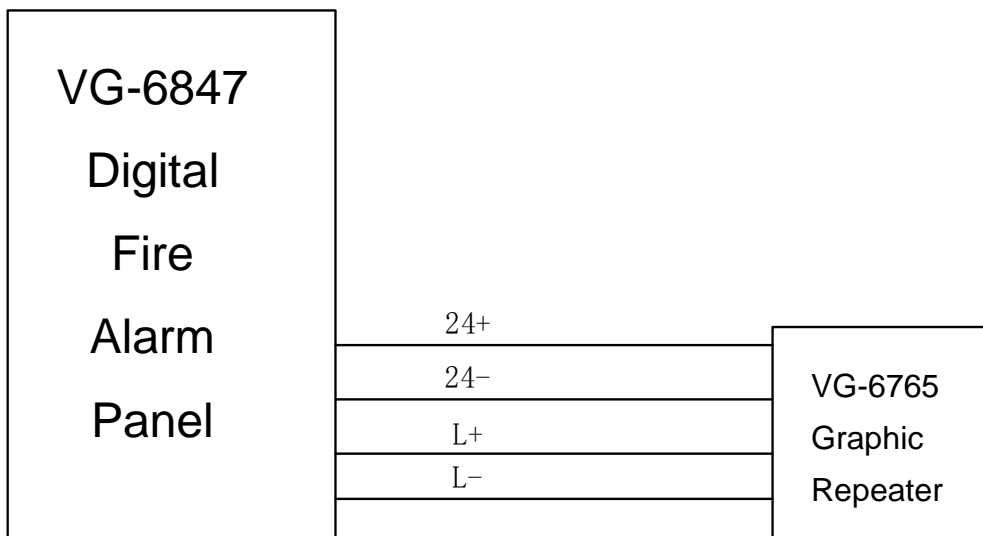


On PC, check with the serial port occupied by the Repeater at first. Afterwards, in the Com-soft, click “Click to Open” button to select the field correct serial port, and then click “Upload” button to transmit data.

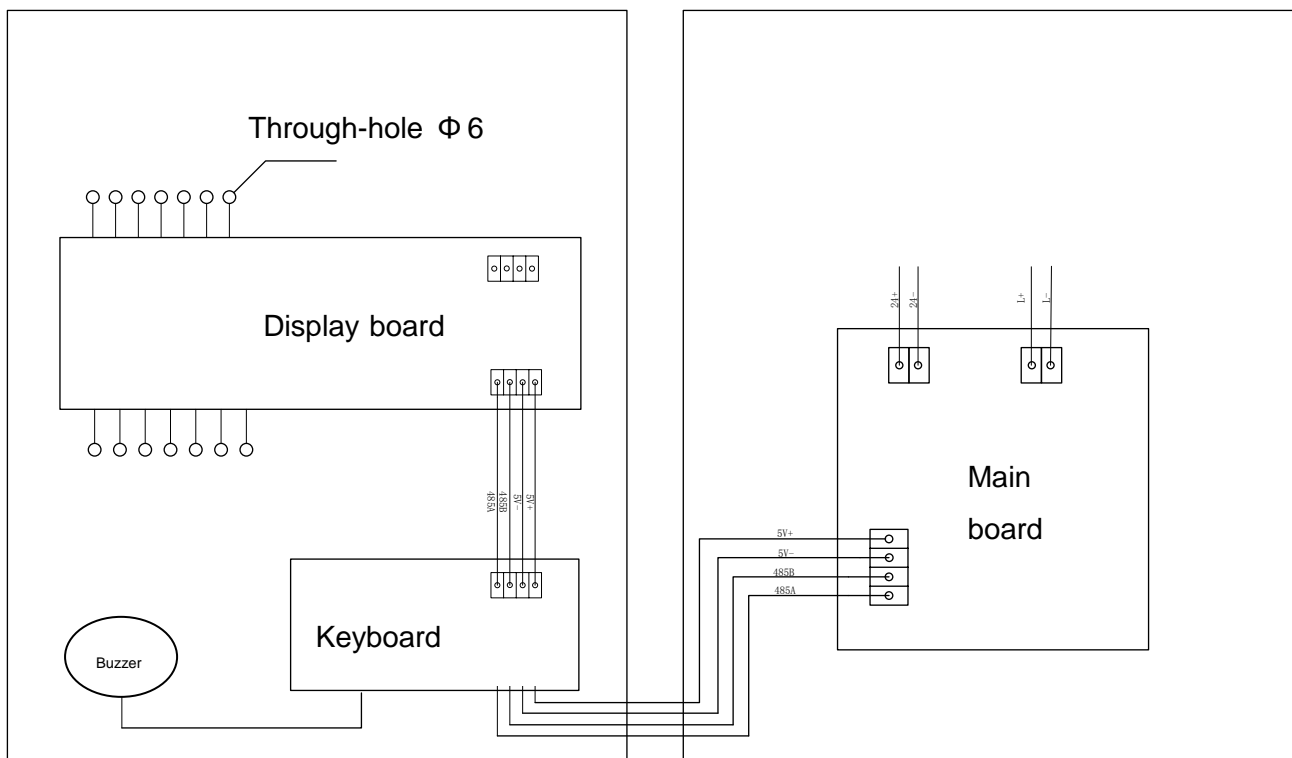
Note: Device of Address 0_0_1 is the Repeater (197-Graphic Repeater), no need to configure itself.

Chapter V Connection Schematic Diagram

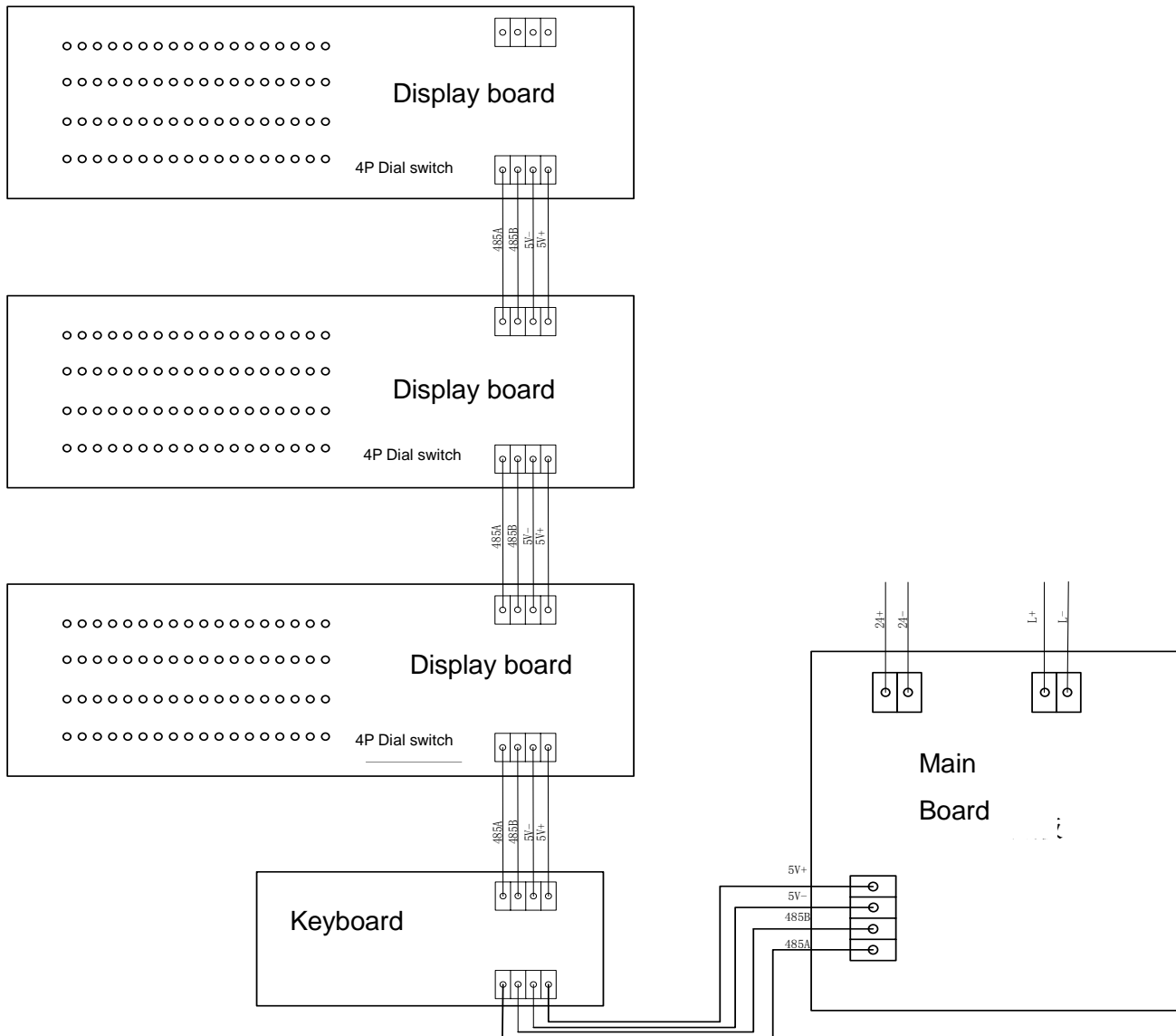
5.1 Wiring with Panel:



5.2 Wiring of Boards:



5.3 Wiring of multiple Display Boards:



Chapter VI Panel Introduction

6.1. Keyboard

Indications:

Operating: Green, illuminating during normal operation

Alarm: Red, illuminating when a fire alarm occurred

Fault: Yellow, illuminating when there is a faulty device

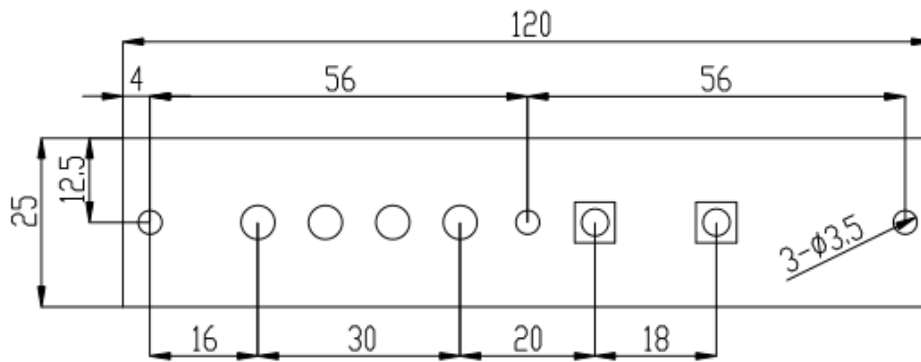
Mute: Yellow, illuminating when press “Mute” button or receive command of salience from the panel

Buttons:

Self-test: When standby, press this button, all the LED indicators flash and the buzzer sound.

Mute: In case of fire alarm, press this button to silence the Repeater.

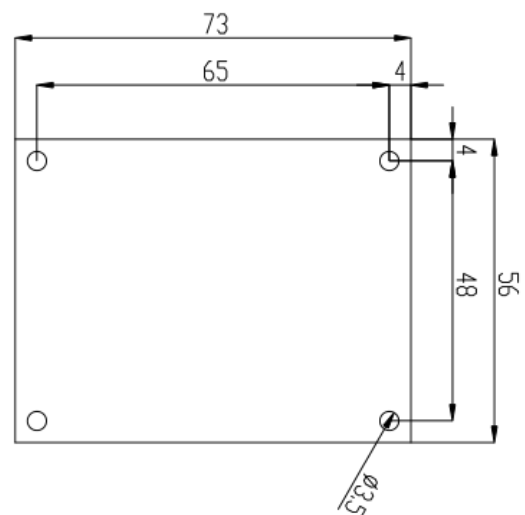
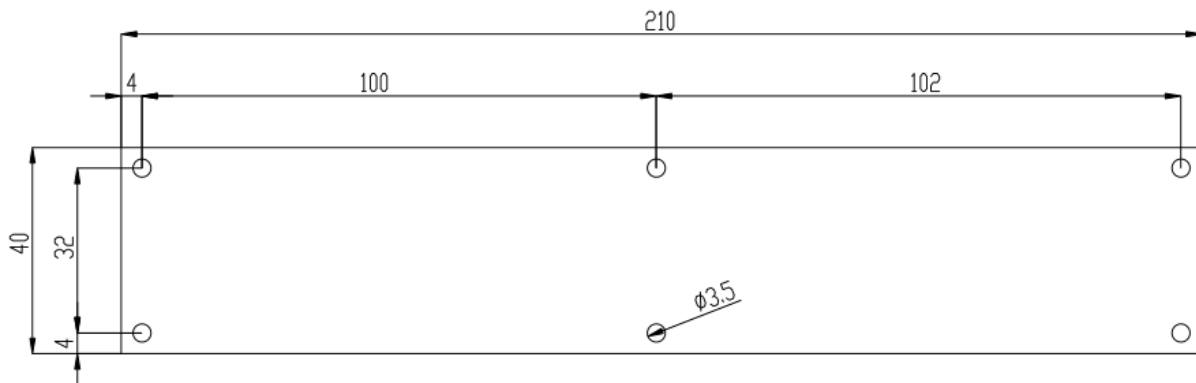
Size of Keyboard and dimension of Indicators and Buttons (mm):



6.2 Display board

Each Repeater has one Display board as default, which is equipped with 100 LED indicators. Via DIP switch, the Repeater is extendable to Max. 16 Display Boards.

Dimension of Display Board (mm):



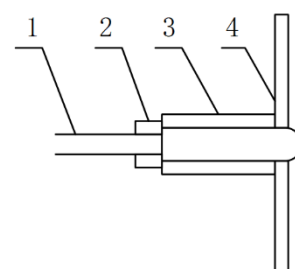
6.3 Main board

Connect and communicate with the digital panel, as well as power supply.

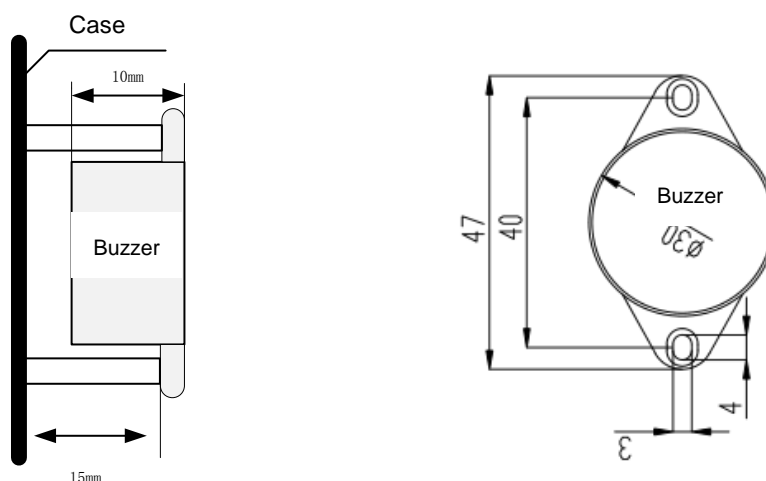
Dimension of Main board (mm):

6.4 LED indicator

1. Indicator diode
2. Plastic housing of diode
3. Nylon housing
4. Housing cover



6.5 Buzzer (mm):



Chapter VII Operation Procedures

Turn on the power and the system performs a self-TEST: the buzzer sounds and all the indicators will flash. Afterwards, it enters into the standby mode with “Operate” indicator is on Green.

During Standby, press the “self-test” button, the buzzer sounds, and the LED indicator on the repeater starts to flash.

When a fire alarm occurs, the corresponding indicator of alarmed device is on Red, as well as buzzer sounds. Press the “Mute” button to silence the buzzer. If another fire alarm occurs, the Repeater goes out of mute mode and buzzer sounds again.

	Fault indication	Possible causes	Solutions
1	There is no indication on the panel or the “Operating” indicator is off after power on	1. Faulty wiring to the panel. 2. The connection to the display board is loose. 3. No 5V or signal output from main board 4. The keyboard is damaged	1. Check voltage value of loop input or power supply 2. Check the cable connection 3. Replace the keyboard
2	The indicator is not illuminating upon a fire alarm	1. Display board or LED is damaged 2. No software configuration	1. Reweld or replace the LED 2. Configure with dedicated software
3	Fault of Repeater on panel	No software configuration	Configure with corresponding software
4	No buzzer sound during fire alarm or self-check	1. Keyboard buzzer drive failure 2. Buzzer is damaged	1. Replace the keyboard 2. Replace the buzzer
5	Unsuccessful	1. Failed to open the serial	Open the correct serial port

	software configuration	port 2. Flash read and write times are already the maximum	2. Replace CPU
--	------------------------	---	----------------

When there is fault happened on device, the “Fault” indicator will be on Yellow. After the fault was cleared, the “Fault” indicator will go off.

Chapter VIII Precautions

Before powering on, check all cable problems such as short circuits, open circuits, and incorrect connections.

This panel is a precision electronic product and must be maintained by qualified personnel.

We are responsible for repairing the image display. For any questions, please contact us in time. The user should be responsible for any results of repairs without our permission.



Company: V-GREAT GLOBAL CORPORATION

Add.: Second Floor, Capital City, Independence Avenue,

P.O. Box 1008, Victoria, Mahe, Seychelles

Web: <http://www.vgreatglobal.com>

Email: tech@vgreatglobal.com