VG-6762
Digital Fire Repeater
Installation and Operation Manual

(Ver 1.03)

CONTENTS

Chapter 1   Product Overview

Matching Digital FD&A Panel, VG-6762 Digital Fire Repeater is designed to monitor and indicate fire alarm messages. The fire repeater has a TFT display, LEDs for indicating messages of critical conditions, which can display directly fire and fault messages from digital control panels.

VG-6762 Digital Fire repeater communicates with the Digital FD&A Panel through loop line. It can be mixed with detectors and modules to program the addressable points ranging from 0 to 255. The local address is set on the fire repeater. Each fire repeater can be set to four display range. Addresses of the detectors can be not only individual, but also continuous. The repeater panel can display conditions of detectors whose addresses are included in the preset range. Those conditions of detectors outside the range are not displayed on the repeater panel.

Each fire repeater can display maximum 100 fire messages or 100 fault messages. The messages exceed 100 are not displayed.

VG-6762 Digital Fire Repeater has functional keys on its own, which can be used to scan received fire alarm and fault messages. The Fire repeater can also be communicated and controlled by the intelligent fire alarm control panel. When the intelligent fire alarm control panel is silenced and is reset, the messages can be sent to the fire repeater to make it silence and reset, so that the system can be centralize-controlled.

Chapter 2   Technical Specifications

2.1 Technical Parameters
1. VG-6762 Digital Fire Repeater is powered by V68-sereis intelligent fire alarm control panel. The power is 24VDC.
2. Operating Voltage：
    Power voltage: 24VDC
    Loop voltage: 15VDC ~ 28VDC
3. Operating Current ≤ 40mA
4. The cable connected to the host is less than 1500m, using 0.75mm^2 twisted pair.
5. Ambient Temperature：-10℃～50℃
6. Ambient Humidity ≤93±2%RH（25℃-40℃），non-condensing.

2.2 Appearance and Mounting Dimension
1. Dimension：171mm x 140mm x 28mm
2. Mounting Spacing： 70mm
3. Weight：250g

2.3 Appearance
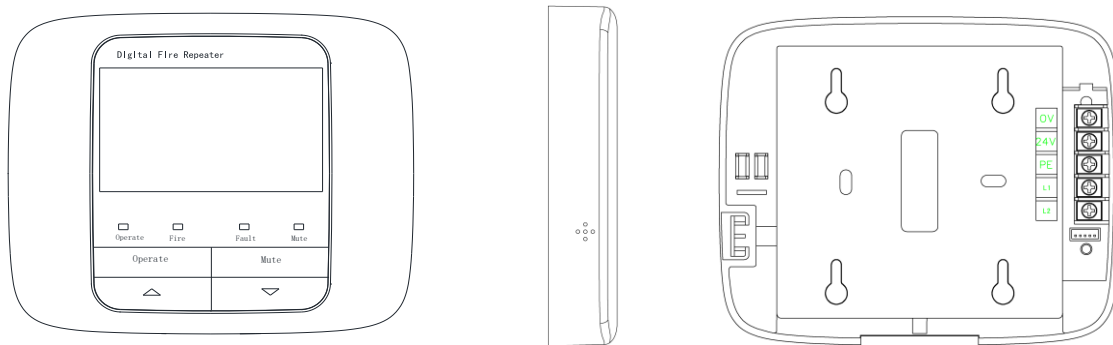Appearance of VG-6762 Digital Fire Repeater is shown in Fig. 1 (unit：mm).

Fig. 1

VG-6762 critical conditions are indicated through LEDs, the functions are shown below.

- Fire（Red）：It lights when the fire repeater receives fire message from the intelligent fire alarm control panel.
- Fault（Amber）：It lights when the fire repeater receives fault message from the intelligent fire alarm control panel.
- Mute（Green）：It light when the fire repeater receives silence message from the intelligent fire alarm control panel or from itself.
- Operate（Green）：It flashes when the fire repeater receives data from the intelligent fire alarm control panel.

VG-6762 Digital Fire Repeater has a touch screen and functional keys, those keys are shown below.

- Mute：Pressing this key can silence the sound given by the fire repeater. It is used as Enter key in configure state.
- ▲：Pressing this key can turn page up to view fire and fault messages from different addressable points under search screen.
- ▼：Pressing this key can move the cursor to the right, or turn page down to view fire and fault messages from different addressable points under search screen.

Chapter 3   Operation

3.1 Power on Screen

After power on, the screen is shown in Fig. 2.

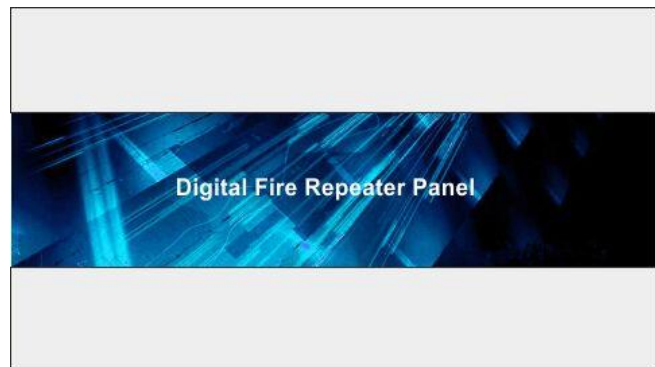This screen is displayed when the fire repeater is energized without any fire or fault messages.

3.2 Entering Function Selection Menu

Pressing touch screen once under the cover screen, or pressing " ▼ " can enter function selection menu, as shown in Fig. 3.

Touching the corresponding icons can enter the related function menus.

- Pressing " ▼ " key can move the cursor to the right.
- Pressing "Menu" key can switch between function selection menu and main monitor screen.

Fig. 2

Fig. 3

- Pressing "Mute" key can silence the sound, and the Mute LED lights.

3.3   Main Monitor Screen

The screen will automatically turn to the following screen if there is fire or fault.

Touching the corresponding icons can enter the related functions menus.

Fire MSG	Code	Addr	Type	Installation	
	002	000-007	Smoke DET	4F Office	↑
	002	000-006	Heat DET	3F Office	
					↓

Intitial fire:000-007   Fire total: 002

Type:Smoke DET   Installation:4F Office

Fault MSG	Code	Addr	Type	Installation	
		000-003	Smoke DET	1F Office	↑
	002	000-004	Heat DET	2F Office	
					↓
					↵

Fault total:002

- Number：The series number for received events.
- Address：The address of received events, the first three digits is loop number, the last   three is the address.
- Device type：The device type of alarming device giving the events.
- Mounting Position：The specific position where the alarming device is.
- Touching " ↵ " or operating nothing within 50s can return to the cover menu. It returns to main monitor screen after 50s if fire or fault occurs here.
- Pressing " ↑ " key on the fire message area can turn the page up if there are more than 3 pieces of fire messages. Pressing this key once, one piece of fire message is updated until the first fire alarm is turned up.
- Pressing " ↓ " key on the fire message area can turn the page down if there are more than 3 pieces of fire messages. Pressing this key once, one piece of fire message is updated until the first fire alarm is turned up.
- Pressing " ↑ " key on the fault warning message area can turn the page up if there are more than 3 pieces of fault messages. Pressing this key once, one piece of fault message is updated until the first fault warning is turned up.
- Pressing " ↓ " key on the fault warning message area can turn the page down if there are more than 3 pieces of fault warning messages. Pressing this key once, one piece of fire message is updated until the firs fault warning is turned up.

Pressing "Mute" key can silence the sound, and the Mute LED lights.

3.4   Fire Search Message

Pressing " 🔔 " enters fire message menu. In this menu, the current received fire messages can be displayed as shown in Fig. 4.

Code	Event	Addr	Type	Installation
001	Fire	001-002	MCP	B1 Garage West

Intitial fire:001-002   Fire total:1   ↑   ↓   ↵

Fig. 4

- Number：The series number for received events.
- Address ：The address of received events, the first three digits is loop number, the last three is the address.

- Device type：The device type of alarming device giving the events.
- Mounting Position：The position where the alarming device is.
- Touching " ![icon] " or operating nothing within 50s can return to the cover menu. It returns   to main monitor screen after 50s if fire or fault occurs here.
- Pressing " ▼ " key or touching " ![icon] " icon can turn the page down if the total number of fire alarms is over 10.
- Pressing " ▲ " key or touching " ![icon] " key can display the previous page.
- Pressing "Mute" key can silence the sound, and the Mute LED lights.

3.5   Fault Message

Pressing " ![icon] " enters fault menu. In this menu, the current received fault messages can be displayed as shown in Fig. 5.

Code	Event	Addr	Type	Installation
001	Fault	001-002	MCP	B1 Garage West

Fault total:1   ⬆   ⬇   ↵

Fig. 5

- Touching " ![icon] " or operating nothing within 50s can return to the cover menu. It returns to main monitor screen after 50s if fire or fault occurred here.
- Pressing " ▼ " key or touching " ![icon] " icon can turn the page down if the total number of faults is over 10.
- Pressing " ▲ " key or touching " ![icon] " key can display the previous page.
  Pressing "Mute" key can silence the fault sound, and the Mute LED lights.

3.6   Self-Test

Clicking " ![icon] " icon enters password input screen, inputting password "0，0，0" and clicking "enter" icon enters self-test menu. Under this menu, clicking " ![icon] " icon enters self-test condition, all LEDs are turned on and off in turns, the buzzer gives a beeping sound.（Note：The fire repeater can't be self-tested if there is fire.）
Touching " ![icon] " or operating nothing within 50s can return to the cover menu. It returns to main monitor screen after 50s if fire or fault occurred here.

3.7   Communication Debugging

Clicking " ![icon] " icon enters password input menu. Inputting password of "7, 8, 9" and then clicking " enter " enters communication debugging menu. Under this menu, the person who is responsible for debugging can check if communication with the intelligent fire alarm control panel is normal.

3.8 System Setup

Clicking "" icon enters password input menu as shown in Fig. 6.

It shows the current address of fire repeater, the current address ranges. There are two methods to display ranges, four range and general display.

Inputting the password of "7, 8, 9" and then pressing "enter" key can enter setup menu to modify the current configuration as shown in Fig. 7

Clicking the grey editable box, the system will prompt up a dialogue box with a keypad as shown in Fig. 8.

Inputting the new data instead of the previous one, pressing "Enter" key can edit revise the corresponding contents. Clicking "" icon can save the modified message.

Touching "" or operating nothing within 50s can return to the cover menu. It returns to main monitor screen after 50s if fire or fault occurred here.

Local address:123

Address range:Four

Enter password:

Fig. 6

Fig. 7

Fig. 8

Note:
- Addresses of fire repeaters can be programmed together with detectors and modules connected on the system.
- When the display mode is general display, it will display any messages of points from the intelligent fire alarm control panel.
- When the display mode is four ranges, a single range can only display one range of the same loop, and the starting address should be smaller than the ending one.
- When the addresses are less than four range, both starting address and ending address of the other ranges that are not used should be set to 255.

3.9 Data Update

Clicking "" icon enters password input menu. Inputting password of "7, 8, 9", then clicking "enter" enters Data Update menu. Under this menu, data on the intelligent fire alarm control panel can be transmitted into this fire repeater through a U drive, as shown in Fig. 9.

Insert Flash-disk!

Write DTXT.DATA

Write DEVC.TXT

Return
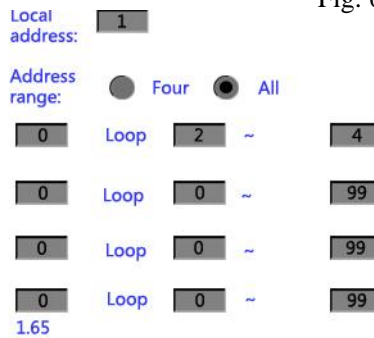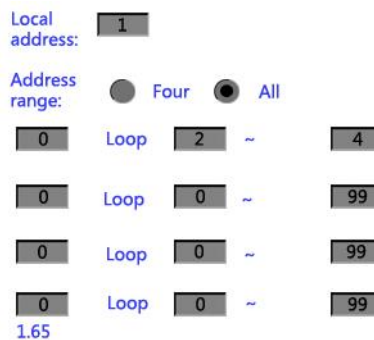
43 3E 01 06 05 14 0D 08 16 0F 1E
01 04 0D 04 14

Fig. 9

"Write DTXT.DAT" key is used to update messages such as installation position of devices and so on.
"Write DEVC.TXT" key is used to update messages such as types of devices and so on.

After inserting U drive to USB port, the system can recognize the messages. At the moment, pressing the corresponding key can update the corresponding data.

Terminals are shown in Fig. 10.
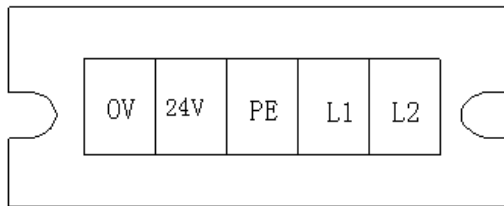
0V: 24VDC -
24V: 24VDC +
L1：detection circuit termina （non-polar）
L2：detection circuit termina （non-polar）

Fig. 10.

Chapter 4   Storage and Transportation

4.1   Package and Transportation
The Fire repeaters are packed by materials with vibration reduction, damp proof, withstand compression. They are transported using by common vehicles to avoid awful weather such as rain and snow as much as possible. Mechanical impact should be avoided too. Box for control panel shouldn't be reversed.

4.2   Storage
Before installation, those fire repeaters should be placed in a warehouse. There should have 1 meter at minimum distance far from four walls. In the warehouse, it is dry and ventilated without corrosion gas such as acid or alkali. Strong impact should be avoide