▼▼VIGILANT

LT0114 - FP0539 Paging Console
Operating & Installation Instructions

1. General

The Vigilant FP0539 Paging Console provides up to 30 push buttons and LEDs for controlling voice paging announcements to zones of a QE20 or QE90 Emergency Warning System (EWS).

2. Operation of the Paging Console

Power LED

Ensure that the POWER LED on the Paging Console is on, and the microphone is plugged into the Paging Console.

Individual Zone Keys

Individual zone keys may be used for selecting zones for paging from the paging console, selecting zones which are to receive background music, calling and answering WIP phones, or some keys may be disabled and their LEDs used for indication of special conditions. Some keys may also be totally unused. The function of the various keys will be described by the system installer.

To select a zone, press the numbered key of the desired zone once, so that the LED illuminates. More than one zone may be selected at the same time. To de-select a zone, press the key again so that the LED goes out.

WIP controls, when provided, may be used to call and answer field WIPs. A dedicated WIP phone will need to be situated beside the paging console to use in conjunction with it. To call a field WIP press the required key. The corresponding LED will flash with a flash-flash-pause cadence. When the field WIP answers, the LED will become steady. You may then converse with the field WIP. To cancel the call before it is answered, press the key again. The LED will go out. When a field WIP calls, the phone at the console (and all ECPs) will ring and the associated paging console LED will flash continuously. Answer the call by pressing the associated key. Once any call is connected, it is cancelled by the field WIP hanging up. If the associated key is pressed for a connected call with the field WIP still off hook, then the field WIP will revert to calling the ECP / Paging Console.

Group Keys

If the zone keys 31 and 32 are not needed as zone keys, then these keys can each be programmed to operate a group of zones. To carry out this programming, refer to "Setup of the Paging Console" following. Pressing a group key when its LED is off, will turn on its LED along with the LEDs of all the members of the group. Pressing a group key, when its LED is on, will turn off its LED and also turn off the LEDs of all the members of the group. Note that when a group is selected, individual zone keys can still be operated, and also that both group keys can be operated together.

A group key will not operate if the group has no members programmed.

ALL Keys

The ALL key has two modes of operation. To program the required mode, refer to "Setup of the Paging Console" following.

Latching Mode

Latching mode is typically used with a microphone which has its own TALK button. The ALL key, pressed momentarily, turns on all enabled zones.

If required, individual zone keys and the group keys can then be used to turn some zones off. The TALK button on the microphone or the PTT key must then be pressed to activate the microphone - see section 6 below.

Non-Latching Mode

Non-latching mode is typically used with a microphone which does not have a TALK button. In this mode the ALL key must be pressed and held down: this selects all valid zones and activates the microphone - it is not necessary to use the PTT key. Wait approximately 0.5 seconds after pressing ALL for the ACTIVE LED to turn on before

speaking. In this mode, when the ALL key is released any zones which were previously selected will remain selected.

Clear Key

Press the CLEAR key to deselect all zones.

2.8   PTT (Press To Talk) Key and Active LED

If non-latching mode is selected for the ALL key, it is not necessary to use the PTT key when the ALL key is held down. Otherwise, the PTT key must be held down to activate the microphone and the amplifiers for the selected zones. If there is a PTT or TALK button on the microphone, this should be used instead. After operating the key, you must wait approximately 0.5 seconds for the ACTIVE LED to turn on before speaking.

Note that the ACTIVE LED will also be on if someone else is using the Evacuation Control Panel or any other Paging Consoles. You should not attempt to operate the Paging Console if the ACTIVE LED is already on.

3.   Setup of the Paging Console

3.1   Programming the Group Keys

3.1.1   Entering Programming Keys

Hold the CLEAR, Zone 1, and Zone 2 keys down all at the same time. The Zone 31 (Group 1) LED will begin to flash. Release the CLEAR, Zone 1 and Zone 2 keys.

3.1.2   Selecting Group 1 or Group 2

The group selected for programming is indicated by the flashing LED, ie Zone 31 for Group 1 and Zone 32 for Group 2. You can press the Zone 31 or Zone 32 keys at any time to switch to the desired group.

3.1.3   Selecting Zones for a Group

With either group selected, the zones belonging to that group will be identified by their LEDs being on. The individual Zone keys, ALL key and CLEAR keys can all be used to select or deselect zones as members of the group.

3.1.4   Exiting Programming Mode

Press the PTT key briefly. The flashing group key will go out, and the programmed group settings will be saved in non-volatile memory, so that they are retained even if the power to the Paging Console is turned off.

3.2   Programming of ALL Key: Latching or Non-Latching

The ALL key can be programmed to either latch all zones on when it is pressed momentarily, or to be non-latching and to also carry out the PTT function when it is held down.

You can easily test the current mode of operation by momentarily pressing the key.

To select the other mode, press the CLEAR, Zone 9, and Zone 10 keys all at the same time. All the zone LEDs, 1-32, will illuminate to verify that the selection has been made. Release the 3 keys. The new setting will be saved in non-volatile memory, so that it is retained even if the power to the Paging Console is turned off.

3.3   Programming of Keys which are not qualified by PTT.

By default, selected zones are not transmitted to the EWS until PTT is pressed. This is what is required for zones which are to be used as paging controls. However, some zone keys may be required to perform **other** immediate functions on the EWS and cannot be qualified by the PTT key. For example, to select background music.

These keys are selected as follows:

Hold the CLEAR, Zone 3, and Zone 4 keys down all at the same time. The Active LED will begin to flash. Release the CLEAR, Zone 3, and Zone 4 keys. Select the zones which operate without PTT, so that their LED is ON. Exit this mode by pressing PTT briefly.

Note that any keys that have been programmed as WIP controls will show in the list of keys not qualified by PTT.

3.4   Programming of Keys which are used for WIP Controls

Hold the CLEAR, Zone 5, and Zone 6 keys down all at the same time. The Active LED will begin a flash-flash-pause cadence. Release the CLEAR, Zone 5, and Zone 6 keys. Select the keys which are to be used as WIP

controls, so that their LED is ON. Exit this mode by pressing PTT briefly.

3.5   Programming of Keys which are Uncontrollable from the Keyboard

Some keys on the paging console may be used for indication only (with the LED controlled by the EWS). These zones are selected as follows:

Hold the CLEAR, Zone 7, and Zone 8 keys down all at the same time. The Active LED will begin a flash long pause cadence. Release the CLEAR, Zone 7, and Zone 8 keys. Select the keys which are to be disabled, so that their LED is ON. Exit this mode by pressing PTT briefly.

3.6   Volume Control

There is a volume control VR1 located inside the paging console that may be adjusted to control the volume of the microphone.

4.   Connection to QE20

Remove the top cover of the Paging Console to gain access to the connections. There may be wires already connected to some of the terminals - these would have been used for factory testing and should be removed.

1. Connect the 0V and 24V terminals of the Paging Console PCB to a 24V supply. It may be convenient to use the QE20. If you do, then install a FP2027 QE20 Fuse Distribution Board on to the selected 27A PSE to provide a separately fused output. Refer to LT0727 for instructions on fitting the fuse board. If you use an alternative supply, make sure that the output is isolated from earth (otherwise an earth fault may be generated on the QE20).

2. Connect the BUS+ and BUS– terminals on the Paging Console PCB to the QE COMMS+ and – terminals on the QE20 Controller Module. Refer to Drawing 2001-2 Sheet 205. Connect + to + and – to –. Use shielded cable with the shield earthed at the QE20. Note that on the Paging Console the two BUS+ terminals are connected together and the two BUS– terminals are connected together, to facilitate daisy chaining of the wiring to another paging console.

3. Connect the two AUDIO OUT terminals on the Paging Console PCB to the appropriate AUDIO INPUT x + and – terminals on the QE20. Refer to the QE20 site configuration to determine which audio input to use. Refer to Drawing 2001-2 Sheet 205 for wiring information. Use shielded cable with the shield earthed at the QE20, and connected at the other end to the Paging Console chassis.

4. Note that if a second Paging Console is being connected, its AUDIO OUT terminals should be wired to the REM SPCH IN terminals of the first Paging Console. The power and communications can be connected to the QE20 as above, or daisy-chained from the first Paging Console. Refer to Drawing 2001-2 Sheet 205.

5. Set the address dipswitch inside the Paging Console to correspond to the paging console number assigned into the QE20 Site Configuration. The first paging console needs to be Address 0, and so on.

Paging Console Address	SW 8	SW 7	SW 6	SW 5	SW 4	SW 3	SW 2	SW 1
0	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
1	OFF	ON	ON	ON	OFF	OFF	OFF	ON
2	OFF	ON	ON	ON	OFF	OFF	ON	OFF
3	OFF	ON	ON	ON	OFF	OFF	ON	ON
4	OFF	ON	ON	ON	OFF	ON	OFF	OFF
5	OFF	ON	ON	ON	OFF	ON	OFF	ON
6	OFF	ON	ON	ON	OFF	ON	ON	OFF
7	OFF	ON	ON	ON	OFF	ON	ON	ON
8	OFF	ON	ON	ON	ON	OFF	OFF	OFF
9	OFF	ON	ON	ON	ON	OFF	OFF	ON

6. If desired, you can remove the top cover plate of the Paging Console and attach zone labels which are visible through the mylar film.

7. If a gooseneck microphone (SU0168) is to be used, fit the bracket and microphone socket provided to the

centre rear of the paging console using the screws provided. Plug the DIN plug into the microphone DIN socket on the rear of the paging console. Plug the microphone into its socket.

8. Adjust the paging volume, if necessary, using VR1 inside the paging console or the Audio Input volume setting in the QE20 site configuration.

5. Connection to QE90

Remove the top cover of the Paging Console to gain access to the connections. There may be wires already connected to some of the terminals - these would have been used for factory testing and should be removed.

1. Connect the 0V and 24V terminals on the Paging Console PCB to a 24V supply. It may be convenient to use the QE90 supply - if you do, install a 2 Amp in-line fuse at the QE90 in the +24Volt lead. If you use an alternative supply, make sure the output is isolated from earth.

2. Connect the BUS+ and BUS– terminals on the Paging Console PCB to the QE90 SIGNALS INTERFACE MODULE : EVAC BUS1 terminals on the SE9004 or MEXP9103, or COMMS BUS terminals on the SPIF9506 or SPIF9709. Connect + to + and – to –. Use shielded cable with the shield earthed at the QE90. To comply with AS 1670.4 this cable should be fire rated. Note that the two BUS+ terminals are connected together and the two BUS– terminals are connected together on the paging console PCB, to facilitate daisy chaining of the wiring to another paging console.

3. Connect the two AUDIO OUT terminals on the Paging Console PCB to the PABX- and PABX+ terminals on the QE90 SIGNALS INTERFACE MODULE - SPIF9506, SPIF9709, SE9004, or MEXP9103. Use shielded cable with the shield earthed at the QE90, and connected at the other end to the Paging Console chassis.

4. Note that if a second Paging Console is being installed, its AUDIO OUT terminals should be wired to the REM SPCH IN terminals of the first Paging Console. The power and communications can be connected to the QE90 as above, or daisy-chained from the first Paging Console. Refer to Chapter 10 of LT0088 "QE90 Installation and Commissioning Manual".

5. Set the address dipswitch inside the Paging Console to correspond to the paging console number assigned into the QE90 Site Configuration. The first paging console needs to be Address 0, and so on.

Paging Console Address	SW 8	SW 7	SW 6	SW 5	SW 4	SW 3	SW 2	SW 1
0	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
1	OFF	ON	ON	ON	OFF	OFF	OFF	ON
2	OFF	ON	ON	ON	OFF	OFF	ON	OFF
3	OFF	ON	ON	ON	OFF	OFF	ON	ON
4	OFF	ON	ON	ON	OFF	ON	OFF	OFF
5	OFF	ON	ON	ON	OFF	ON	OFF	ON
6	OFF	ON	ON	ON	OFF	ON	ON	OFF
7	OFF	ON	ON	ON	OFF	ON	ON	ON
8	OFF	ON	ON	ON	ON	OFF	OFF	OFF
9	OFF	ON	ON	ON	ON	OFF	OFF	ON

6. If desired, you can remove the top cover plate of the Paging Console and attach zone labels which are visible through the mylar film.

7. If a gooseneck microphone (SU0168) is to be used, fit the bracket and microphone socket provided to the centre rear of the paging console using the screws provided. Plug the DIN plug into the microphone DIN socket on the rear of the paging console. Plug the microphone into its socket.

8. Install new software in the QE90 panel if this is an upgrade to an existing system.

9. Adjust the paging volume, if necessary, using VR1 inside the paging console or the PABX control on each EMUX9002 / EMUX9601 board in the QE90 panel.

6. Paging Console Specifications

Size	410mm W x 210mm D x 80mm H
Shipping Weight	4kg
Mounting	Desk Mounting
Supply Voltage	24Vdc (19-28Vdc)
Current Consumption	50mA @ 24V no zones active, 150mA @ 24V all zones active
Operating Temperature Range	-5°C to +45°C; 10% to 93% RH non-condensing
Microphone	5 Pin DIN Socket for Microphone and PTT
Output Voltage	300-700mV
Microphone Voltage	1-100mV
Frequency Response	100Hz-10kHz, ±3dB
Distortion	10mV input : <2%
Switches	32 Zones or 30 Zones + 2 Groups; ALL, CLEAR and PTT switches
LEDs	32 Zones / Groups; Active LED, Power LED

NOTICE

WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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