

Q-MUX[™] Modules: Q-EOL & Q1R

Features

- Range 5,000ft. from System 3505 to node; additional 5,000ft. from node to contact
- Addressable and Programmable
- Low cost multiplex system
- High noise immunity
- Permits numerous inputs and outputs to share a single pair of wires
- UL & FM approved
- NFPA 72 Compliant

Specifications

Buss Duty Cycle: 50%-100%

Buss Current: 15u typical @7v; 60u@10v

Sub-Loop Current: 0 - 15mA@10v

Module Wire Length: 8.0in. (+/- .5in.)

Buss Max Line Resistance: 150 Ohms

*See cut-sheet 750273 for Q-Mux[™] Node details



Product Description

The Q-Mux[™] modules are compatible with the Digitize Q-Mux[™] multiplex system. All M Q-Mux[™] ID modules connect to the Q-Mux[™] buss and to the contact that is to be monitored or controlled.

The Q-Mux[™] buss is Digitize, Inc.'s low-cost multiplex system. Two twisted pairs of wire are used to power the ID Modules, to send commands to the modules and to receive their data. The commands from the central polling controller to the ID modules take the form of modulating the Q-Mux[™] buss voltage between 0 and 10v. The data returned from the modules is in the form of increased Q-Mux[™] buss current.

The Input Module

The Q-EOL module provides a direct interface between variable resistance inputs and the Q-Mux controller. The module is used to monitor fire alarm and security devices. A 1.43K Ohm EOL resistor is included with the Q-EOL module.

The Output Module

Module Q-1R provides a NO relay contact output under control of the Q-Mux[™] Central Buss Driver. A contact monitoring signal is sent back to the System 3505* indicating relay contact open, relay contact closed, or trouble (malfunction).

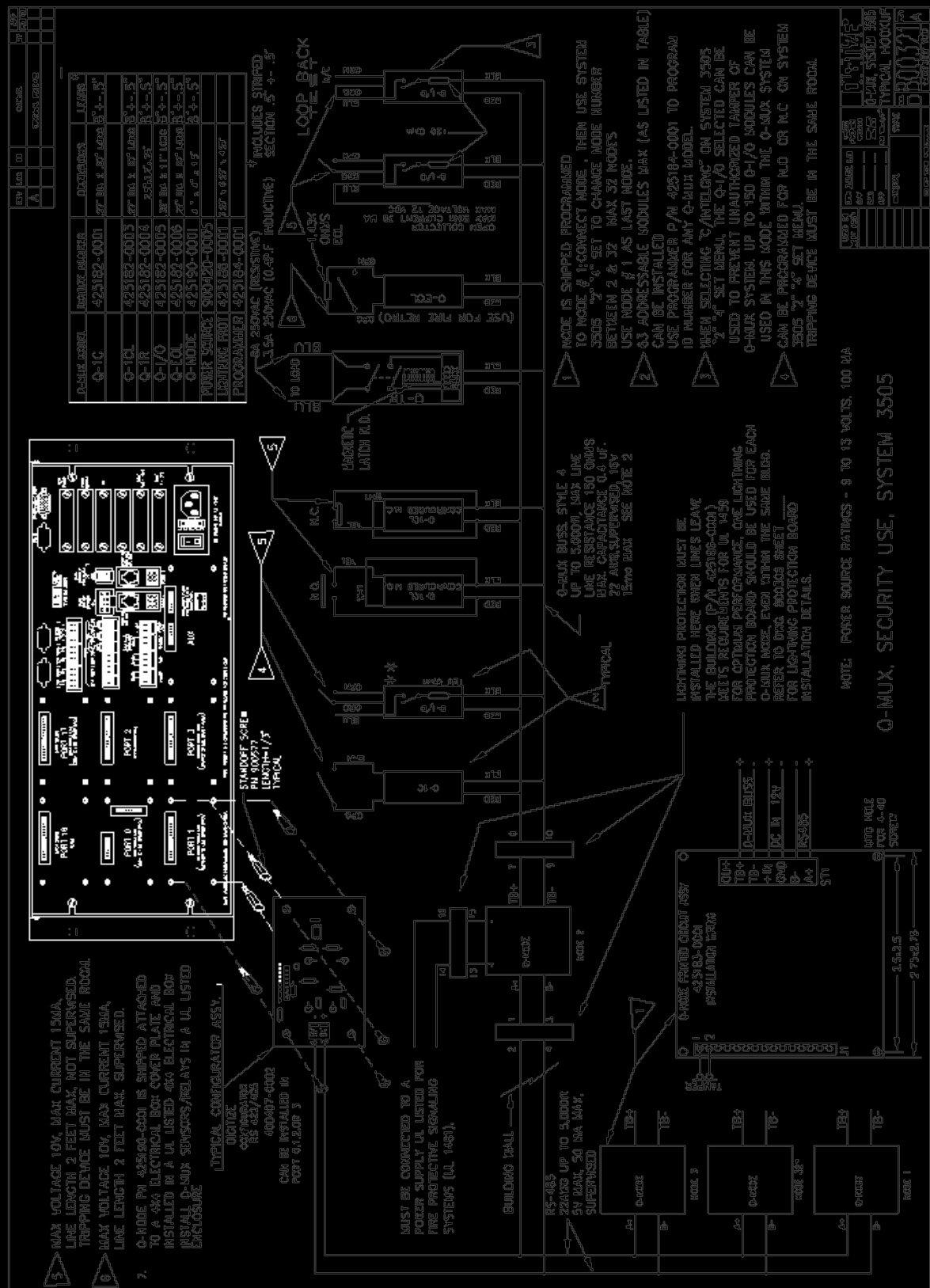
Programming

The Modules can be set to any address from one to 63. The address is stored internally in an EEPROM and can be changed via the Q-Mux[™] Programmer and 24 SET menu on the System 3505.

Backwards Compatibility

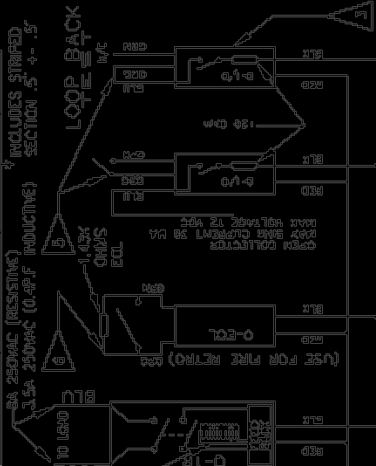
The Q-Mux[™] Q-EOL and Q-1R modules remain backward-compatible currently with the Digitize System 3500/3000.



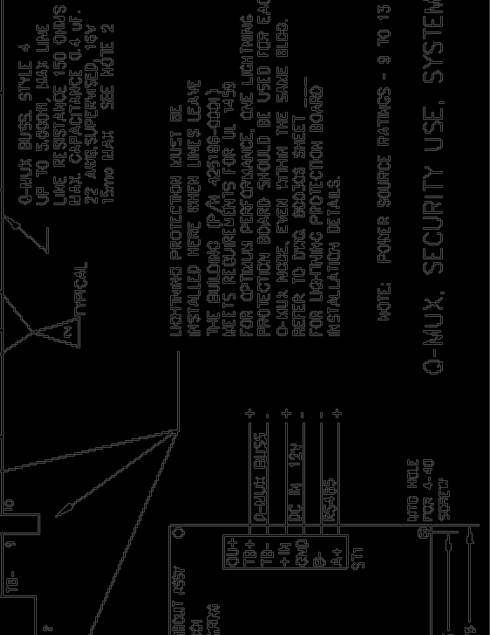
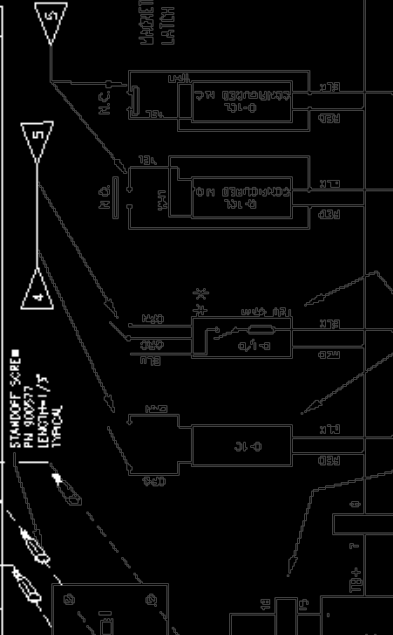
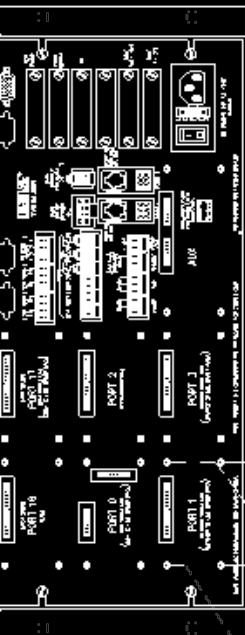


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MODEL NUMBER	DESCRIPTION	LEADS
Q-1C	425182-0001	27 MIL. X .50" LEAD
Q-1CL	425182-0003	27 MIL. X .50" LEAD
Q-1R	425182-0004	27 MIL. X .50" LEAD
Q-1O	425182-0005	27 MIL. X .50" LEAD
Q-1UL	425182-0006	27 MIL. X .50" LEAD
Q-MODE	425190-0001	0.5" X 1.5" X 2.5"
POWER SOURCE	300420-0005	0.5" X 1.5" X 2.5"
LIGHTING PROT	425184-0001	2.5" X 0.875" X 0.5"
PROGRAMMER	425184-0001	2.5" X 0.875" X 0.5"



- 1 MODE IS SHIPPED PROGRAMMED TO MODE 8. TO CORRECT MODE, THEN USE SYSTEM 3505 '2' & '3' SET TO CHANGE MODE NUMBER BETWEEN 2 & 32 MAX. 32 MODES USE MODE # 1 AS LAST MODE.
- 2 63 ADDRESSABLE MODULES MAX (AS LISTED IN TABLE) CAN BE INSTALLED USE PROGRAMMER P/N 425184-0001 TO PROGRAM ID NUMBER FOR ANY Q-MUX MODEL.
- 3 WHEN SELECTING 'RELAY' ON SYSTEM 3505 '2' & '3' SET MENU, THE Q-1/O SELECTED CAN BE USED TO PREVENT UNAUTHORIZED TAMPER OF Q-MUX SYSTEM. UP TO 150 Q-1/O MODULES CAN BE USED IN THIS MODE WITHIN THE Q-MUX SYSTEM CAN BE PROGRAMMED FOR N.O. OR N.C. ON SYSTEM 3505 '2' & '3' SET MENU. TRIPPING DEVICE MUST BE IN THE SAME ROOM.



- 3 MAX VOLTAGE 10V, MAX CURRENT 15MA, LINE LENGTH 2 FEET MAX, NOT SUPERSEDED. TRIPPING DEVICE MUST BE IN THE SAME ROOM.
- 6 MAX VOLTAGE 10V, MAX CURRENT 15MA, LINE LENGTH 2 FEET MAX, SUPERSEDED.
- 7 Q-MODE P/N 425190-0001 IS SHIPPED ATTACHED TO A 4X4 ELECTRICAL BOX COVER PLATE AND INSTALLED IN A UL LISTED 4X4 ELECTRICAL BOX. INSTALL Q-MUX RELAYS/RELAYS IN A UL LISTED ENCLOSURE.

Q-MUX BUSS, STYLE 4 UP TO 5,000V MAX LINE LIKE RESISTANCE 150 OHMS MAX, CAPACITANCE 0.4 U.F., 22 AWG SUPERSEDED, 18V, 15MA MAX. SEE NOTE 2.

LIGHTNING PROTECTION MUST BE INSTALLED HERE WHEN LINES LEAVE THE BUILDING (P/N 425186-0001) MEETS REQUIREMENTS FOR UL 1459 FOR OPTIMUM PERFORMANCE. ONE LIGHTNING PROTECTION BOARD SHOULD BE USED FOR EACH Q-MUX MODE. EVER WITHIN THE SAME BLDG. REFER TO DATA SHEET FOR LIGHTNING PROTECTION BOARD INSTALLATION DETAILS.

NOTE: POWER SOURCE RATINGS - 9 TO 13 VOLTS, 100 MA

Q-MUX, SECURITY USE, SYSTEM 3505

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