

## Report of Materials and Equipment Acceptance Division

NYC Department of Buildings 280 Broadway, New York, NY 10007 Patricia Lancaster, FAIA, Commissioner (212) 566-5000, TTY: (212) 566-4769

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

## MEA 43-05-E

Manufacturer: Harrington Signal Inc, 2519 4th Ave., Moline, Illinois 61265

Trade Name(s): Harrington Signal Inc.

**Product:** Fire alarm control panel

Pertinent Code Section(s): Reference Standard RS-17

Prescribed Test(s): UL864

**Laboratory:** Underwriters Laboratories, Inc.

Test Report(s): UL File S1411, Project 04NK27393, issued November 15,

2004.

**Description** – The T8000 fire alarm control unit is designed for non-coded and voice evacuation systems in commercial, industrial and institutional applications, with the capability of system networking. Up to (15) annunciator control units, (4) initiating circuit modules, (6) conventional zone modules and (35) relay modules may be networked with the master control unit. The system is field programmable at the master control unit, which contains the system processor, programming port, printer port and non-volatile memory for system firmware. Custom software is installed to provide special relay function, zone LED annunciation, custom zone and device read-out messages, etc.

The T8000 conventional module allows configuration of (10) Class B or (5) Class A circuits per module with up to (6) modules per panel. The addressable module allows configuration of Class B (Style 4) or Class A (Style 6 or 7) analog addressable loops with up to (126) devices per loop up to (2) loops per module and up to (4) modules per panel.

The T8000 units provide (4) supervised output notification circuits for Class B (Style Y) or Class A (Style Z) horns, horn/strobes, bells or chimes, and each is rated 3.0 amps @ 24VDC, with the internal power supply limited to total of 7.0 amps. The internal unit power supply also provides a built-in battery charger with battery supervision circuitry. Total notification circuit loading must be calculated to assure adequate power supply and battery capacity based on standby requirement (hrs.) and alarm (mins). When required, additional approved notification power expander units must be used.

The T8000 control unit has a 160 (8x20) character LCD alphanumeric display that provides access to functions, zone indication, history display, device alarm, custom messages, etc. Two form C relays provide programmable functions and (1) form C relay provides system trouble-indication. The form C relays are each rated 10A @ 30VDC/240VAC resistive or 3A@240VAC (0.4 power factor). The notification circuits may be configured as auxiliary output circuits, either resettable or nonresettable, rated 3.0 amps @ 24VDC each.

The T8000 control unit is compatible with the Model 5104B digital communicator manufactured by Silent Knight to provide capability of DACT signaling to Central and Remote Station services.

The following is the minimum configuration to meet the NFPA requirements.

TABLE IIA - 120V Version

Module	Description	Local	Remote Station	Central Station
T8000-MBC	Chassis with MCC, PDC-UL,	Υ	Y	Υ
	FPC, RL980 (Note 1, 5)			
T8000-CM	Conventional Module	0	0	0
	(Note 2, 5, 8)			
T8000-LC	Addressable Module	0	Υ	Υ
	(Note 2, 5, 9)			
T8000-RC	Relay Card (Note 3, 5)	0	Υ	Υ
T8000-RAN	Remote Console (Note 5)	0	0	0
T8000-CAB	Main Cabinet Enclosure (Note 4)	Υ	Υ	Υ
T8000-EXP	Remote Card Enclosure, Small	0	0	0
T8000-EXP5	Remote Card Enclosure, Large	0	0	0
HS-SBC	Small Battery Box (Note 5, 6)	0	0	0
HS-LBC	Large Battery Box (Note 5, 7)	0	0	0
T8000-DACT-R	DACT Relay Connector (Note 5)	N	Υ	Υ
Mini-Module	Apollo Mini-Module (Note 5)	N	Υ	Υ
EOL	End-of-Line Resistors (Note 5)	0	0	0
5104B	Silent Knight Digital Alarm	N	Υ	Υ
	Communicator (Note 5)			

- Note 1 = The RL980 is a Separately Recognized Component Power Supply.
- Note 2 = A minimum of one initiating circuit (from either the T8000-CM or T8000-LC) must be employed per installation for Local Service.
- Note 3 = A minimum of one of these devices must be employed per installation for Remote Station Service and for Central Station Service.
- Note 4 = One Main Enclosure must be used.
- Note 5 = Separately Listed.
- Note 6 = The HS-SBC must be used for battery sizes between 15 and 20 Ah).
- Note 7 = The HS-LBC must be used for battery sizes above 20 Ah up to 40Ah).
- Note 8 = A maximum of six T8000-CM may be employed per system.
- Note 9 = A maximum of four T8000-LC may be employed per system.

Part No.	The following two wire conventional detectors are intended to be used with the T8000-CM conventional module.			
Harrington Signal Bases (the compatibility identifier is the same as the model number)				
CS831 .	C-SPY Standard Base			
CS832	C-SPY 6" E-Z Fit Base			
CS827	C-SPY Standard Relay Base			
CS828	C-SPY Auxiliary Relay Base			
CS829	C-SPY End-of Line 12V Relay Base			
CS830	C-SPY End-of-Line 24V EOL			
Harrington Signal [	Detectors (the compatibility identifier is the same as the model number)			
CS822	C-SPY Photoelectric Smoke Detector			
CS823	C-SPY Ionization Smoke Detector			
CS824	C-SPY 135F Heat with Flashing LED and Reed Switch			
CS825	C-SPY 170F Heat Detector			
CS826	C-SPY 200F Intermediate Heat Detector			
Apollo Bases (the	compatibility identifier is the same as the model number)			
45681-200	Series 60A 4" Mounting Base			
45681-220	Series 60A 6" Mounting Base			
45681-227	Series 60A 6" Relay Mounting Base			
45681-230	Series 60A 6" Mounting Base with Red. Flashing LED			
45681-231	Series 60A 6" Mounting Base with Green Flashing LED			
45681-232	Series 60A 6" Low Profile Mounting Base			
45681-251	Series 60A E-Z Fit Mounting Base			
45681-252	Series 60A E-Z Fit Mounting Base with Flashing LED			
45681-255	Series 65A 4" relay Mounting Base			
45681-256	Series 65A 4" Auxiliary Relay Mounting Base			
45681-257	Series 65A 4" 12V EOL Mounting Base			
45681-258	Series 65A 4" 24V EOL Mounting Base			
Apollo Detectors (the compatibility identifier is the same as the model number)				
55000-150	Series 60A Heat detector -low (115F)			
55000-151	Series 60A Heat ordinary (160F)			
55000-152	Series 60A Heat intermediate (210F)			
55000-153	Series 60A Heat ordinary (135F)			
55000-250	Series 60A Ionization smoke detector			
55000-350	Series 60A Optical smoke detector			
55000-380	Series 60A Combination Heat/Optical detector			
55000-138	Series 65A Heat detector 135F - Ordinary - Flashing LED / Reed Switch			
55000-139	Series 65A Heat detector 135F - Ordinary - Flashing LED			
55000-140	Series 65A Heat detector.135FOrdinary - Standard			
55000-141	Series 65A Heat detector 170F - Ordinary - Flashing LED / Reed Switch			
55000-142	Series 65A Heat detector 170F - Ordinary - Flashing LED			
55000-143	Series 65A Heat detector 170F - Ordinary - Standard			
55000-144	Series 65A Heat detector 200F - Intermediate - Flashing LED / Reed Switch			
55000-145	Series 65A Heat detector 200F - Intermediate - Flashing LED			
55000-146	Series 65A Heat detector 200F - Intermediate - Standard			

55000-225	Series 65A Ionization detector - Flashing LED / Reed Switch
55000-226	Series 65A Ionization detector - Flashing LED
55000-227	Series 65A Ionization detector - Standard
55000-325	Series 65A Optical detector - Flashing LED / Reed Switch
55000-326	Series 65A Optical detector - Flashing LED
55000-327	Series 65A Optical detector – Standard
55000-328	Series 65A Optical detector – High Sensitivity Flashing LED / Reed Switch

## Compatible SLC Addressable Devices

Part No. The following SLC devices are intended to be used with the T8000-LC

addressable module.

Harrington Signal Base

IS804 I-SPY 4" Mounting Base

IS805 I-SPY Short-Circuit Isolator Mounting Base IS806 I-SPY 6" Low Profile Mounting Base

IS807 I-SPY Relay Mounting Base

IS808 I-SPY Short-Circuit Isolator Mounting Base

IS809 I-SPY 6" E-Z Fit Mounting Base

Harrington Signal Detectors

IS800 I-SPY Heat Detector

IS801 I-SPY Ionization Smoke Detector IS802 I-SPY Photo Smoke Detector IS803 I-SPY MultiSensor Detector

Harrington Signal Modules

IS810 I-SPY Short Circuit Isolator IS811 I-SPY Switch Monitor Module

IS812 I-SPY Priority Switch Monitor Module
IS813 I-SPY Switch Monitor Input-Output Module

IS814 I-SPY Sounder Control Module

IS815 I-SPY Mini Priority Switch Monitor Module

IS816 I-SPY Mini Switch Monitor Unit

Apollo Bases

45681-210 XP95A 4" Mounting Base

45681-211 XP95A Short-Circuit Isolator Mounting Base

45681-225 XP95A 6" Mounting Base

45681-234 XP95A 6" Low Profile Mounting Base

45681-242 XP95A 4" Low Power Relay Mounting Base

45681-250 XP95A E-Z Fit Mounting Base

45681-321 XP95A Short-Circuit Isolating Mounting Base

Apollo Detectors

55000-450 XP95A Heat Detector

55000-550 XP95A Ionization Smoke Detector 55000-650 XP95A Optical Smoke Detector

55000-266 XP95A Beam Detector 55000-886 XP95A Multisensor Detector 58000-450 Discovery Heat Detector

58000-550 Discovery Ionization Smoke Detector 58000-650 Discovery Optical Smoke Detector 58000-750 Discovery Multisensor Detector

Apollo Modules	
55000-750	XP95A Short-Circuit Isolator
55000-805	Switch Monitor Module
55000-806	Priory Switch Monitor Module
55000-820	Switch Monitor Input-Output Module
55000-825	Sounder Control Module
55000-831	Mini Switch Monitor Unit
55000-830	Mini Priority Switch Monitor Module

Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992, the Bureau of Fire Prevention has no objections letter dated May 13, 2005, F.P. Index No. 0502044A and e-mail correspondence dated September 9, 2005.

## **Terms and Conditions:** That the above units be accepted on condition that:

1. Fire Alarm Control Unit Model T8000 must provide for a fail-safe operation. This feature must assure that control of doors, locks, ventilation fans, and elevator recall will not be rendered inoperable in the event of a fire or power failure.

When used with central office communicator or transmitter, the installation and operation of the equipment and devices shall comply with 3RCNY §17-01. It shall have the capability of transmitting separate and distinct signals to indicate manual pull station alarm, automatic detection alarm, sprinkler waterflow alarm, supervisory signal indications and trouble indications.

- 2. The connection of security/burglar devices and equipment to this fire alarm panel is prohibited. A sign must be provided to indicate same.
- 3. Installation of pre recorded evacuation messages in the fire alarm control panel would require a prior approval from the Department.
- 4. The above referenced fire alarm equipment shall be used only with listed and MEA approved accessories with which the compatibility has been determined by the Engineer of Record or a UL test report.
- 5. All uses, configurations, arrangements and functions, application and installations shall comply with the provisions of New York City Buildings Code, specifically Subchapter 17, and Reference Standard 17-3, 17-3A, 17-3B, 17-3C and 17-5. Further, the installation shall be in accordance with the manufacturer's recommendation, NFPA 72 and UL Standard.

All shipments and deliveries of such equipment shall be provided with a metal tag suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance

Evamined by