Mechanically Installing the Monitor ZAM

Install the Monitor ZAM into a grounded 4-inch UL Listed back box (not supplied) using Figure 4: Monitor ZAM Back Box Installation on page 4 as a reference. Mount the ZAM to the back box as follows:

1. Loosen the two screws on the square back box.
2. Mount the ZAM to the back box using the teardrop holes on the mounting bracket.
3. Secure the ZAM to the back box using the two #8/32 panhead screws.

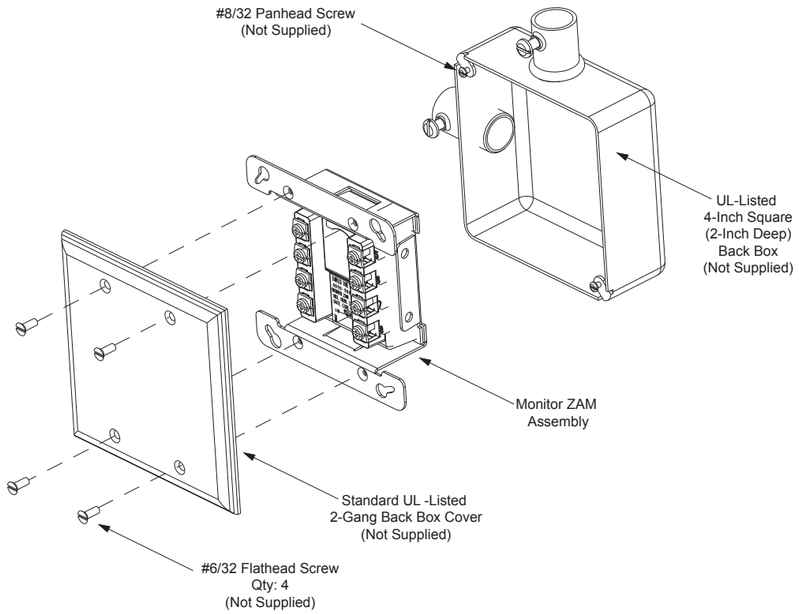


Fig 4: Monitor ZAM Back Box Installation

NOTE: Simplex offers semi-flush and surface covers (ordered separately) with a light pipe. The cover(s) with light pipe allow viewing of the communications LED without taking the cover off. Installation of the 4090-9801 semi-flush cover and 4090-9802 surface cover are detailed in publication *4090 IDNet™ Semi-Flush/Surface Covers and IAM Bracket Installation Instruction (574-796).*

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Cautions, Warnings, and Regulatory Information

READ AND SAVE THESE INSTRUCTIONS Follow the instructions in this installation manual. These instructions must be followed to avoid damage to this product and associated equipment. Product operation and reliability depend upon proper installation.

DO NOT INSTALL ANY SIMPLEX™ PRODUCT THAT APPEARS DAMAGED Upon unpacking your Simplex product, inspect the contents of the carton for shipping damage. If damage is apparent, immediately file a claim with the carrier and notify an authorized Simplex product supplier.

ELECTRICAL HAZARD Disconnect electrical field power when making any internal adjustments or repairs. All repairs should be performed by a representative or an authorized agent of your local Simplex product supplier.

STATIC HAZARD Static electricity can damage components. Handle as follows:

- Ground yourself before opening or installing components.
- Prior to installation, keep components wrapped in anti-static material at all times.

Introduction

Use the procedure below to install the following Monitor Zone Adapter Modules (ZAMs):

- Class A Monitor ZAM (4090-9106)
- Class B Monitor ZAM (4090-9101) which supports either 2-wire or 4-wire devices

IDNet™

Monitor ZAMs are connected to a 4008, 4010, 4100U, 4100ES, 4010ES or 4007ES Fire Alarm Control Panel (FACP) via the IDNet™ channel. Monitor ZAMs provide four-state status information (NORMAL, OPEN, CURRENT-LIMITED, and SHORT) to the FACP via the IDNet channel.

MAPNET II®

Monitor ZAMs are connected to the 4100/4120/4020 FACP via the MAPNET II channel. Monitor ZAMs provide three-state status information (NORMAL, OPEN, ALARM) to the host FACP via the MAPNET II channel.

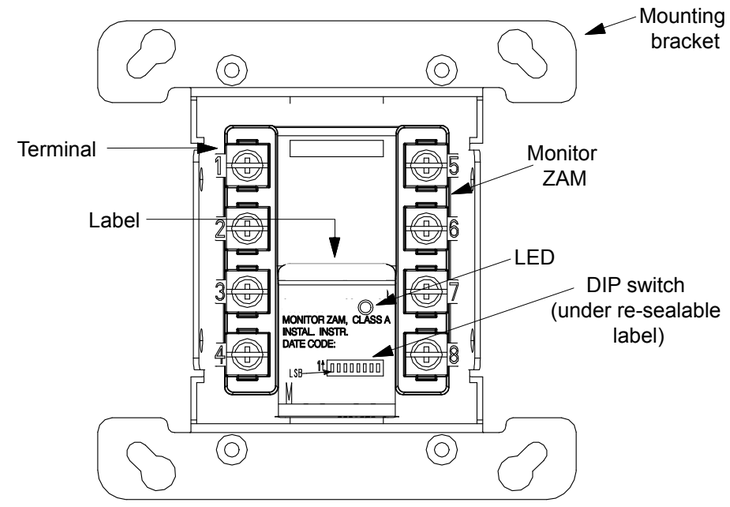


Fig 1: Monitor ZAM installation

NOTE: The LED flashes approximately once every three seconds to indicate valid communications with the FACP.

Installation

Monitor ZAM installation consists of the following:

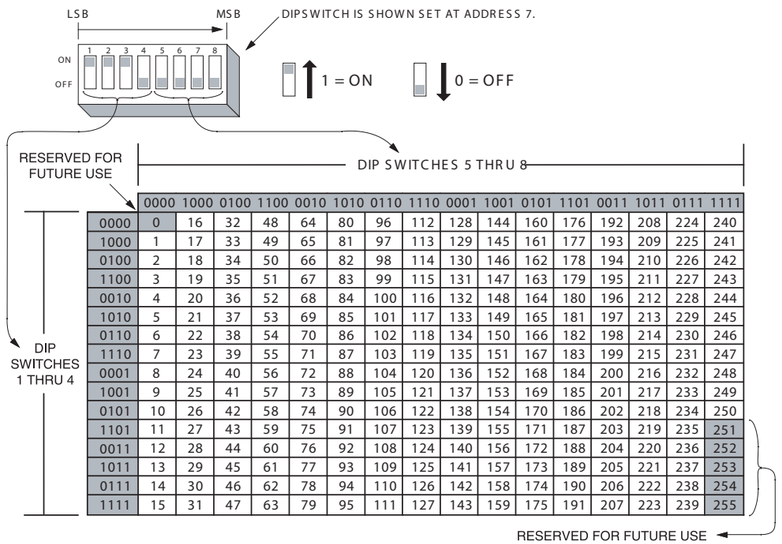
- Setting the Monitor ZAMs address
- Making electrical connections to the Monitor ZAM
- Mechanically installing the Monitor ZAM

Setting the Monitor ZAM's address

NOTE: The IDNet channel supports address codes 1 through 250. The MAPNET II channel (4100, or 4120, or 4020 FACP) supports address codes 1 through 127.

Each Monitor ZAM has a unique address. The address of the ZAM is set via an eight-position DIP switch. See Figure 1: Monitor ZAM installation on page 1. DIP switch position 1 is the least significant bit (LSB) and position 8 is the most significant bit (MSB). Set the ZAM's address using Figure 2: Monitor ZAM address chart on page 2 as reference. Use a small screwdriver or pen to set the switches. The device address for the Monitor ZAM should be written on the re-sealable label. This information provides an aid in troubleshooting the system.

NOTE: DIP switch in "1" position is "ON" while DIP switch in "0" position is "OFF."



	0000	1000	0100	1100	0010	1010	0110	1110	0001	1001	0101	1101	0011	1011	0111	1111
0000	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
1000	1	17	33	49	65	81	97	113	129	145	161	177	193	209	225	241
0100	2	18	34	50	66	82	98	114	130	146	162	178	194	210	226	242
1100	3	19	35	51	67	83	99	115	131	147	163	179	195	211	227	243
0010	4	20	36	52	68	84	100	116	132	148	164	180	196	212	228	244
1010	5	21	37	53	69	85	101	117	133	149	165	181	197	213	229	245
0110	6	22	38	54	70	86	102	118	134	150	166	182	198	214	230	246
1110	7	23	39	55	71	87	103	119	135	151	167	183	199	215	231	247
0001	8	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248
1001	9	25	41	57	73	89	105	121	137	153	169	185	201	217	233	249
0101	10	26	42	58	74	90	106	122	138	154	170	186	202	218	234	250
1101	11	27	43	59	75	91	107	123	139	155	171	187	203	219	235	251
0011	12	28	44	60	76	92	108	124	140	156	172	188	204	220	236	252
1011	13	29	45	61	77	93	109	125	141	157	173	189	205	221	237	253
0111	14	30	46	62	78	94	110	126	142	158	174	190	206	222	238	254
1111	15	31	47	63	79	95	111	127	143	159	175	191	207	223	239	255

Fig 2: Monitor ZAM address chart

MAPNET II supports address codes 1 through 127 only.

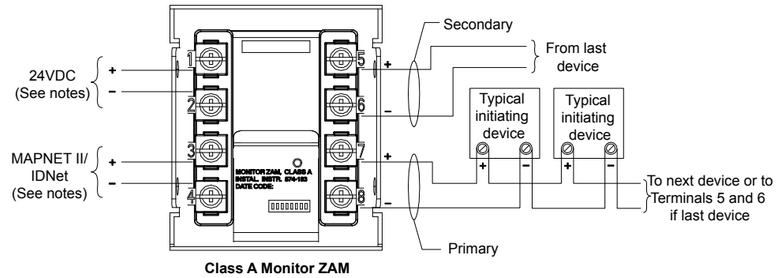
FACP configuration

Configure the monitor ZAM to the host FACP using the Programmer's Report. The monitor ZAM's address and location must match up with the address listed in the specification sheet.

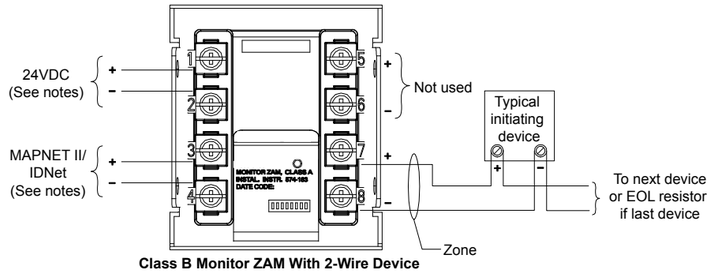
Making electrical connections to the Monitor ZAM

Input and output signals connect to the Monitor ZAM via the terminals (1-8) as illustrated in Figure 1: Monitor ZAM installation on page 1. Terminal connections for the ZAM are illustrated in Figure 3: Monitor ZAM connections for Class A ZAM 4090-9106, 2-wire Class B ZAM 4090-9101, and 4-wire Class B ZAM 4090-9101 on page 3.

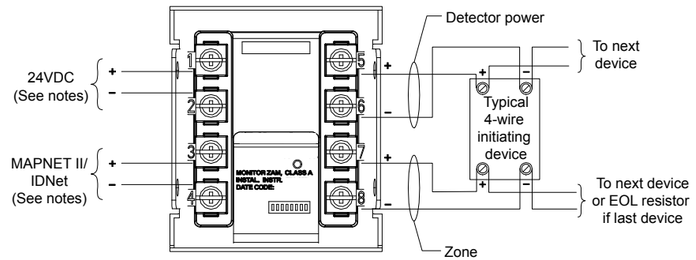
CAUTION: Do not loop wire under terminals. Break wire runs to provide supervision.



Class A Monitor ZAM



Class B Monitor ZAM With 2-Wire Device



Class B Monitor ZAM with 4-wire device

Fig 3: Monitor ZAM connections for Class A ZAM 4090-9106, 2-wire Class B ZAM 4090-9101, and 4-wire Class B ZAM 4090-9101

NOTE:

1. When connecting two wires to one terminal, position one wire on each side of the terminal screw.
2. IDNet and MAPNET II lines are 18 AWG twisted pair (shield recommended).
3. Maximum allowable run from FACP to farthest device not to exceed 2500 feet.
4. Power must be provided from FACP, 4009, or regulated Power-Limited 24VDC supply that is listed for Fire-Protective signaling use, except for some detectors which require the 4100-5130 voltage regulator. Refer to ***579-832 Two-Wire Detector Compatibility chart*** for the model numbers for those detectors.
5. Refer to Field Wiring Diagram 842-073 for further information on wiring Monitor ZAMs to IDNet. Refer to Field Wiring Diagrams 841-804 or 841-996 for further information on wiring Monitor ZAMs to MAPNET II. IDNet and MAPNET II wiring are supervised and power-limited.