

CHAPTER 1 System Overview

1.1 SYSTEM MODULES

The CHEETAH is available in multiple hardware configurations, depending on the input power source and enclosure color. Compatible input power sources are 120VAC, 208VAC, or 240 VAC. Battery selections are 7 A-H (Amp-Hours), 17 A-H, 33 A-H or 65 A-H. The 21.125" X 14.625" by 4.0" enclosure includes the transformer assembly and is available in red or gray.

Available system modules (or systems) to be ordered include:

10-2200	CHEETAH System Controller- CSC	
10-2201-p	Supplemental Power Supply- SPS	p: (1=120VAC, 2=208VAC or 240VAC)
10-2203	Supplemental Loop Module- SLM	
10-2204	Cheetah Relay Module- CRM4	
10-2254	Cheetah Reverse Polarity Module	
10-2260	485 to 232 Converter	
10-2217-c-p	Enclosure, with Transformer	c: (R=Red, G=gray) p: (1=120V, 2=208 or 240V)
10-2190-b	Battery Assembly, A-H selection	b: (1=7AH, 2 =17AH)
10-2154-c	33AH Battery Assembly & Enclosure	c: (R=Red, G=Gray)
10-2236-c	65AH Battery Assembly & Enclosure	c: (R=Red, G=Gray)
10-052-c-p	CHEETAH System, including Enclosure, CSC.	

For example, a red 120 volt system could be procured as 10-052-R-1.

1.2 ADDRESSABLE DEVICES

Available addressable devices to be ordered include:

55-019	FRCM	Fast Response Contact Monitor, mounted to 4" cover plate
55-020	FRCM	Fast Response Contact Monitor, shrink wrapped
55-021	SOM	Supervised Output Module
55-022	SRM	Solenoid Releasing Module
55-023	R2M	Dual Relay Module
63-1020	YBN-R/2NA	Base, 4", NS Sensor
63-1023	HSB-NSA-6	Base, 6", NS Sensor
60-1028	ATG-EA	Sensor, Thermal
63-1021	ALG-EA	Sensor, Photoelectric
67-1032	AIE-EA	Sensor, Ionization

1.3 FIKE RELEASE INTERFACE DEVICE

10-1832	ARM-III	Agent Release Module-III
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1.4 FIKE PROGRAMMER

55-026	TCH-B100	Addressable Device Programmer
02-4464	Programmer Cable, 4 position (for 55-019, 55-021, 55-022, 55-023)	
02-4465	Programmer Cable, 2 wire (for 55-020)	

1.5 FIKE CONFIGURATION SOFTWARE

06-144	Cheetah Tracker
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1.6 NOTIFICATION APPLIANCES

FIKE P/N	DESCRIPTION	24V CUR. (Amps)	MFG P/N	WORKS WITH MODULATION	AGENT LABEL P/N
20-110	Bell, 6" 92dBA @ 10'	0.03	MB-G6-24-R	N/A	N/A
20-111	Bell, 10" 92dBA @ 10'	0.03	MB-G10-24-R	N/A	N/A
C02-1244	Bell, 10" Explosion Proof Outdoor	0.5	CSXG10-24DC-R	N/A	N/A
C02-1338	Bell, 10" Explosion Proof Indoor	0.5	CSX10-24DC-R	N/A	N/A
20-089A	Strobe (15cd,non-sync)	0.05	RS-2415W-FR	NO	02-3977
20-091A	Strobe (15/75cd,non-sync)	0.065	RS-241575W-FR	NO	02-3977
20-091-SA	Strobe (15/75cd,sync/non-sync)	0.065	RSS-241575W-FR	NO	02-3977
20-093A	Strobe (75cd,sync/non-sync)	0.133	RSS-2475W-FR	NO	02-3977
20-095-FA	Strobe (110cd,sync/non-sync)	0.161	RSS-24110W-FR	NO	02-3977
C02-1245	Strobe, Explosion Proof	1.3-6	225XST-012-024R	NO	N/A
20-102	Horn-Multitone, Flush	0.048 max. (varies)	MT-12/24-R	YES	N/A
20-104	Horn-Multitone, 2 Input, Flush	0.048 max. (varies)	AMT-12/24-R	YES	N/A
20-117	Horn 12/24VDC	.013 max.	NH-12/24-R	NO	N/A
C02-1243	Horn, Explosion Proof	0.5	ASHX-24SMR	NO	N/A
20-096	Horn-Strobe (15cd)	0.122 max. (varies)	MT-24-LS-VNR	YES	02-4356
20-098	Horn-Strobe (15/75cd)	0.148 max. (varies)	MT-24-LSM-VNR	YES	02-4356
20-100	Horn-Strobe (75cd)	0.248 max. (varies)	MT-24-IS-VNR	YES	02-4356
20-118	Horn-Strobe (15/75cd)	0.091 max.	NS-241575W-FR	NO	02-4341
20-109	Synchronizer, Single	0.025	SM-12/24	N/A	N/A
20-119	Synchronizer, Dual	0.038	DSM-12/24	N/A	N/A
20-105A	Sync Horn Strobe(15cd)	0.064 0.072 0.087	AS2415W-FR	NO	02-3976
20-106A	Sync Horn Strobe(15/75cd)	0.077 0.083 0.102	AS241575W-FR	NO	02-3976
20-107A	Sync Horn Strobe(75cd)	0.149 0.156 0.177	AS2475W-FR	NO	02-3976
20-108A	Sync Horn Strobe(110cd)	0.177 0.183 0.202	AS24110W-FR	NO	02-3976

1.7 FACTORY MUTUAL APPROVED SOLENOIDS AND INITIATORS

If utilizing pre-action or deluge sprinkler operation, the following requirements must be met:

- 1) 90 hours of battery backup are required, refer to Appendix 3 – Cheetah Current and Battery Calculation form.
- 2) Signaling Line Circuits are to be wired Class A (Style 6), refer to wiring diagram 14.1.4, Style 6.

The following solenoids are FM approved for pre-action and deluge sprinkler action. The maximum allowed wire resistance for the solenoids is 1.0 ohm.

Compatible Solenoids:

Manufacturer	Manufacturer's Part Number	Voltage	Current
Skinner	LV2L BX25	24V	0.458A
Skinner	73218BN4UNLVNOC111C2	24V	0.458A
Skinner	X5H65100 12Volt	12V	0.800A
Skinner	X5H65100 24Volt	24V	0.400A
ASCO	T8210A107	24V	0.700A
ASCO	R8210A107	24V	0.700A
ASCO	8210A107	24V	0.700A
ASCO	8210G107	24V	0.440A

Compatible Initiators with Fike Agent Release Module 10-1832:

Part Number	Description
70-1651	Gas Cartridge Actuator
70-1058	Initiator Assy, E106 type
70-1336	Initiator Assy, E1A-8 type

1.8 FIKE DIGITAL ALARM COMMUNICATOR TRANSMITTER

10-2256	Digital Alarm Communicator Transmitter (DACT)
10-2257	DACT Programmer / Annunciator
10-2258	DACT Interface Cable
10-2259	Configuration Modem
06-151	Configuration Software, DACT

1.9 SPECIAL NOTES

This section covers special notes and items of interest pertaining to installing and programming a Cheetah control panel. Although these notes may appear in other places in this manual, due to their importance, they are presented here as a reminder:

1. It is Fike's intention to have all specifications correct and matching throughout this document, however, errors may occur. Specifications found in chapter 13 of this document override any conflicting specifications that may be found in other places within this document.
2. The index positions and opcodes used to program the SOM's present a powerful programming tool. If used correctly they give the Cheetah a great amount of system flexibility, if used incorrectly they can be a source of programming difficulty. When using opcodes 1,2 and 3 (and/or functions) ONLY use these functions to link adjacent index positions. CORRECT: index position 2 "or" index position 3. Do not use opcodes to link index positions which are not adjacent to each other or to create a series of logically connected index positions. INCORRECT: index position 2 "and" index position 5. INCORRECT: index position 2 "or" index position 3 "or" index position 4.
3. Opcodes may be used to link adjacent index positions for the R2M as described above for the SOM. The R2M is a latching device, once a relay is turned "on" it will not restore to normal condition until the Cheetah panel has been "reset".
4. When experiencing "configuration faults" try using the "To Dev" function to correct them. Downloading of configurations to addressable devices, especially SOM's, takes several seconds for each device. If this download is interrupted or corrupted, the complete configuration may not have been received by the device(s) resulting in configuration mismatches between the panel and device(s).
5. This manual and faceplate programming makes reference to a WMST or Watermist function. This feature was added as a development tool and associated hardware is not yet available.
6. When a new photo or ion smoke detector is added to a Cheetah communication loop or anytime detector(s) change address(es), the "calibrate sensitivity" function must be used. This allows the Cheetah to correctly calibrate the detector(s) for alarm level.
7. When using the "learn" function, default values are programmed for each device configured. If a device has been custom programmed, and the "learn" function is used, the device will be reprogrammed with default values.
8. Cheetah Relay Module (10-2204) relays may energize for a few milliseconds on power up. For non-resettable type devices, be aware that this could occur on power up or power down. Use a disconnect/disable switch with the CRM4 or an R2M when controlling non-resettable type devices.

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