

///TECHNICAL INFORMATION BULLETIN\\

KIDDE INTELLIGENT INTERCONNECT (I/O) SYSTEM

This bulletin provides information on the Kidde multiple station interconnect system and covers the following models and products.

All of the alarms and accessories on this list can be interconnected on with each other.**

ALARM TYPE	MODEL	SENSOR	SPECIFICATIONS
Smoke Alarm	Model 1235**	Ion	120 VAC with I/O
Smoke Alarm	Model 1275**	Ion	120 VAC / 9V Backup with I/O
Smoke Alarm	Model 1276**	Ion	120 VAC / 9V Backup with I/O
Smoke Alarm	Model 1285**	Ion	120 VAC / 9V Backup with I/O
Smoke Alarm	Model PE120**	Photo	120 VAC / 9V Backup with I/O
Smoke Alarm	Model PI2000**	Photo/ion	120 VAC / 9V Backup with I/O
Smoke/CO Alarm	Model KN-COSM-IB**	ion /EC*	120 VAC / 9V Backup with I/O
Smoke/CO Alarm	Model KN-COSM-I**	ion /EC*	120 VAC with I/O
CO alarm	Model KN-COB-IC	EC*	120 VAC / 9V Backup with I/O
CO alarm with Digital display	Model KN-COP-IC	EC*	120 VAC / 9V Backup with I/O
Heat Alarm	Model HD135F**	Fixed	120 VAC / 9V Backup with I/O
Relay module	Model 120X***	SP/DT	120 VAC (Form "C" dry / Isolated)
Relay / Power Supply module	Model SM120X	SP/DT	120 VAC (Form "C" dry / Isolated)
Relay module	Model CO120X	SP/DT	120 VAC (Form "C" dry / Isolated)
Strobe Light	Model SL177***	177 CD	120 VAC (smoke only)
Strobe Light/Dual mode	Model SL177I	177 CD	120 VAC (smoke / CO)

* (EC) Electro Chemical CO sensor

** Canadian Model has "CA" suffix (i.e.: 1235CA)

*** (NOTE: The 120X relay module and the SL177 strobe light are not compatible with Model KN-COSM-IB, KN-COSM-I, KN-COB-IC, or KN-COP-IC Alarms).

Caution!

Kidde alarms and accessories CAN ONLY BE interconnected with other Kidde alarms and accessories as well as specified brands and models of interconnect compatible alarms. Connection of Kidde products to a non-specified manufacturer's interconnect system, or connection with non-specified equipment from another manufacturer into an existing Kidde system could result in nuisance alarming, failure to alarm, or damage to one or all of the devices in the interconnect system. Refer to User's Guide supplied with each Kidde product for lists of interconnect compatible models, brands, and devices.

All interconnected alarms and accessories must receive their power from the same 120 volt circuit. The interconnect circuit is not isolated from the AC power source. All wiring must conform to Article 760 of the NEC. It must be 600 volt jacketed cable (Romex[®]), BX, or wire in conduit. If plastic jacketed cabling is being used (Romex[®]) it must have 3 insulated conductors.

If battery backup alarms and non-battery backup alarms and accessories are mixed in an

interconnect system, all devices without battery backup will not operate during an AC power failure

During a smoke alarm event, all interconnected models which are equipped with smoke sensing capabilities, will transmit or respond to a constant 9V DC (+/-2V) voltage on the interconnect line. (Interconnect signal return path and reference is the AC neutral)

During a CO alarm event, all of the models which are equipped with CO sensing capabilities, will transmit or respond to a series of 9V DC (+/-2V) pulses on the interconnect line (Interconnect signal return path and reference is the AC neutral line)

Smoke alarms that are interconnected with CO alarms will ignore the CO interconnect signal.

CO alarm models KN-COB-IC, and KN-COP-IC will also respond to the smoke alarm interconnect signal (constant 9V DC) and will sound the smoke alarm temporal pattern. Model KN-COP-IC will display "FIRE" on the digital display.

The maximum number of Kidde alarms and accessories that can be interconnected is 24.

According to NFPA (National Fire Protection Agency) 72; No more than 18 initiating devices (alarms) can be interconnected in a multiple station system, of these 18 alarms no more than 12 can be smoke alarms. A 24 station interconnect system could contain the following: 12 Smoke Alarms and 6 Heat and / or CO alarms. This equals the 18-alarm limit allowed by the NFPA.

With the 18-alarm limit achieved, you can still interconnect 6 non-alarm devices such as the 120X, SM120X, CO120X relay modules or the SL177I strobe light.

If the interconnected group contain both smoke and CO alarms or a combination Smoke / CO alarms, and relay output capability is needed, you must use the SM120X relay / Power supply module for smoke alarm functions, and the CO 120X relay module for CO alarm functions.

Relay Modules may be used to connect a group of interconnected alarms to a fire alarm / security panels (NFPA 11.9 2002 edition). When an interconnected relay is connected to an alarm / security panel, the panel will know the alarms have sounded, but will not know which alarm in the interconnected group originated the signal. If you wish to send both smoke and CO information to the panel you will need to use both the SM 120X and the CO120X relay modules in the interconnect system.

If a strobe light is interconnected with a group of alarms that contains both smoke and CO alarms or a combination Smoke / CO alarms, you must use the SL177I Dual mode strobe light. The dual mode strobe light will exhibit a continuous 1 flash per second in a smoke alarm event and an interrupted flash pattern (5 seconds on / 5 seconds off) in a CO alarm event.

Relay modules and strobe lights do not have battery backup and will not function during an AC power failure

All battery backup alarms maintain their detection and interconnect capabilities without AC power, providing each alarm has the proper battery installed and the battery is in good operating condition