Alarm com ADC SEM300 Communicator Installation Guide

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Alarm com ADC SEM300 Communicator

Product Information

Specifications:

- Product Name: SEM300
- Default Keypad Address: Keypad 8 Device Address 23

Product Usage Instructions

Addressing the Keypad:

The default keypad address for the SEM is Keypad 8 Device Address 23. To enable or change the keypad address:

1. Access VISTA programming mode.
2. Enter the corresponding command based on the desired addresssetting (e.g., *196 for Keypad Address 23).
3. Adjust the DIP switches on the SEM accordingly to match the desired address.
4. Exit programming mode by entering *99.

GATEWAY LED Reference:

The enclosure gateway LEDs provide information on communication errors, panel communication, network communication, and signal strength. For advanced troubleshooting, check the Alarm.com module LEDs by

opening the cover.

TROUBLE LED:

The TROUBLE LED flashes in specific patterns to indicate error conditions. Here are some common flash patterns and their descriptions:

- **Flash Pattern 1:** Communication issue between Alarm.com module and panel. Perform a power cycle and re-insert the module if needed.
- **Flash Pattern 2 then 4:** Provisioning process error. Contact Alarm.com CORE Technical Support if issue persists.

PATH LED:

The PATH LED flashes to show the active communication path to Alarm.com (cellular, broadband, or both). Different flash patterns indicate different paths.

Frequently Asked Questions

- **Q: What should I do if I encounter a TROUBLE LED flash pattern that is not listed in the manual?**
  - A: For any TROUBLE LED flash pattern not listed, please contact Alarm.com CORE Technical Support for assistance.
- **Q: How can I check the signal strength of the cellular network for the SEM?**
  - A: To check the signal strength, monitor the L4 signal level on the SEM. If it's lower than 2 bars, consider changing the panel's location or using a remote antenna option.

ADDRESSING THE KEYPAD

The default keypad address the SEM uses is Keypad 8 Device Address 23. If this keypad address is disabled, the SEM and panel will not communicate properly. However, at first power-up, the SEM will attempt to enable this address automatically. If unsuccessful, the address must be enabled manually via programming *196.

Keypad address	DIP switch setting	VISTA programming command
17	None—all OFF	*190
18	Switch 4 ON, others OFF	*191
19	Switch 3 ON, others OFF	*192
20	Switch 3 and 4 ON, others OFF	*193
21	Switch 2 ON, others OFF	*194
22	Switch 2 and 4 ON, others OFF	*195
23	Switch 2 and 3 ON, others OFF	*196

If another keypad is occupying this address already, a different address must be selected for the SEM. To select a different keypad address, manually adjust the dual in-line package DIP switches on the SEM to match the desired keypad address listed below. Then, exit programming via *99.

GATEWAY LED REFERENCE

The enclosure gateway LEDs can be used to indicate communication errors, panel communication, network communication, and signal strength.

Note: For advanced troubleshooting, open the cover to look at the Alarm.com module LEDs.

TROUBLE LED

The TROUBLE LED flashes 1 to 8 times in a four-second interval to indicate specific error conditions.

Flash pattern	Description
1	The Alarm.com module cannot communicate with the panel. Perform a power cycle on the panel. If the error persists, lift the Alarm.com module out of the SEM circuit board and re-insert it while power is disconnected from the system.
2 then 4	The Alarm.com module provisioning process could not be completed. Power-cycle the system. If the error persists, see Alarm.com CORE Technical Support.
2 then 5	The Alarm.com module provisioning process could not be completed because the module is currently roaming off the carrier's primary network.
3	The Alarm.com module is trying to register on the cellular network. If it persists for more than a few minutes, the module is having problems registering. Check L4 for signal level. If signal level is lower than 2 bars, change the panel's location or use a remote antenna option.
4	The Alarm.com module is registered on the cellular network but could not connect with Alarm.com. If the error persists, see Alarm.com CORE Technical Support.
5	The radio on the module is not working correctly. If this persists for more than a few minutes, the module may need to be replaced. This error is extremely rare, so please verify that the module is flashing 5 times.

6	This indicates an error only if it persists for more than a minute. Otherwise, it's an indication that the module is resolving an unusual condition regarding communication with the cellular network.
7	The SEM is unable to access panel programming. Check the panel wiring and installer code.

8 Email cs@alarmsystemstore.com or call Alarm System Store for assistance: 888-811-0727

PATH LED

The PATH LED flashes to indicate the active communication path (cellular, broadband, or both) to Alarm.com.

Flash pattern	Description
Steady long flash (~2 sec)	The cellular communication path is active.
Long flash (~2 sec) followed by a short flash (~0.5 sec)	Both cellular and broadband communication paths are active.
Steady short flash (~0.5 sec)	The broadband communication path is active. This should also accompany an error LED flash.
No flash	Both communication paths are not communicating. This should also accompany an error LED flash.

SIGNAL LED

The SIGNAL LED flashes to indicate the cellular signal strength (0 to 6 bars).

PANEL LED

The PANEL LED flashes with every communication to the panel.

POWER LED

The POWER LED illuminates solid when power is supplied.

SPECIFICATIONS

Power requirements	13.6 V nominal, 125 mA nominal (continuous), 230 mA maximum
Cellular network	4G LTE with 3G HSPA, 2G GSM fallback
Panel interfaces	Two keypad BUS connections, 12 V power and ground
	Five LEDs (red, yellow, or green)
	Five LEDs (red, green, yellow, or blue)
Operating temperature	14 to 131°F (-10 to 55°C)
Storage temperature	-30 to 140°F (-34 to 60°C)
Humidity	90% relative humidity non-condensing
Enclosure dimensions	(L x W x D) 7.66 x 4.35 x 1.65 in. (19.46 x 11.05 x 4.19 cm)
Enclosure color	White
Case material	Fire-retardant PC/ABS, PC

Documents / Resources

	Alarm com ADC SEM300 Communicator [pdf] Installation Guide ADC SEM300 Communicator, ADC SEM300, Communicator

References

- Alarm.com | Best Smart Security Alarm & Monitoring Systems
- User Manual