

KP04AE/ KP04AET Keypad



KP04AE/ KP04AET

The KP04AE/KP04AET Keypad has a 2 line x 16 character LCD which shows alarms, Zones/Inputs, Warnings, Temperature, Humidity and other sensor readings for CM9001-EMS Environmental Monitoring System. KP04AET has a built-in Temperature sensor while KP04AE does not include the Temperature sensor.

Specifications

- Dim: 89 x 160 x 31 mm. Carton 92 x165 x45 mm
- Weight: 177 g
- 2 Lines by 16 character LCD. adjustable backlight.
- Power Supply: 12V DC from CM9001-EMS
- Current Consumption: 50 mA idle (No voice)
- Speaker for announcements
- Up to 15 Keypads (KP04, KP05, KP06/, KT05)
- Sensor Display Resolution: 0.1 deg c
- KP04AET Temperature Sensor 0 to 45 deg C, Accuracy 1 deg C

System Requirements

- KP04AE/KP04AET EMS sensor display mode works with CM9001-EMS firmware 7.153 & above

Contents

- KP04AE or KP04AET keypad
- 2 wall plugs and screws for mounting.
- 3 x 2 way removable terminal blocks

Connections to Comfort

- JP1 – 12V/COM Connected to 12V/COM (Comfort)
- JP2 – KA/KB. Connected to KA/KB (Comfort.)
- JP3 – VOICE/MIC Connected to KP VOICE/MIC (CM9001)

LEDs on PCB

- D15 (Red) - RS485 reply to poll.
 - D16 (Green) - RS485 Poll by Comfort
- Both D15 and D16 should be blinking when communicating with Comfort.

Cables

Shielded twisted 4-pair cable advised for wiring between Comfort and keypads to avoid interference from mains wiring and electrical appliances to Microphone signals.

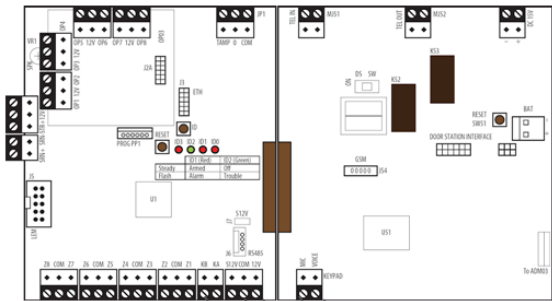
Jumper Settings

None - all settings using Setup (Pres/Hold * Key)

Front Housing LED Indications

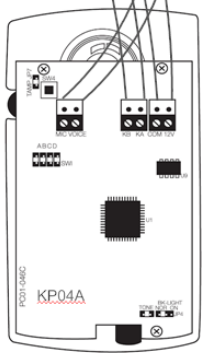
Off (Green)	
Steady	Security Off, all conditions Normal (no trouble)
Blinking	Trouble e.g. Phone line cut, RS485 comms failure. Trouble Condition is displayed
Arm (Red)	
Steady	System armed, No alarm
Blinking	Alarm / Alert condition.
AC (Red)	
Steady	Mains Power failure.
Blinking	CM9001 Battery voltage low due to prolonged power failure. Battery may need to be replaced.
Msg (Green)	
-	Not in Use
Mic (Red)	
-	Not in Use

Installation



CM9001

Use 4 pair Multistranded Twisted pair cable



Connections

KP04AE/KP04AET should be installed in an indoor location, not outside the premises for security reasons.

1. Remove the screw at the base, hold the bottom of the Front Housing pull the front housing from the back housing.
2. Mount the back housing on the wall using the screws supplied.
3. Connect the 6 wires from the terminal blocks (JP1, JP2 , JP3) to the Comfort PCB according to the signal name. Note the 12V should be connected to the 12V terminal on Comfort, **not** S12V
4. If more than one Keypad is used, connect their 12V and ground wires back to Comfort individually, not in series to avoid excessive voltage drop along the cable.

CM9001 Text Synchronisation

If the LCD displays "Wrong Text. Press *1 to sync". press and hold the "*" followed by "1" keys to sync the KP04 text with Comfort. The screen shows "Downloading" with status bar. After the process completes, the keypad will reset and "beep". If this does not work, sign in on the keypad and check if the Voice menu is heard.

KP04A Settings

- The KP04A has ID set to 1 as default. There are no shunts for configuration or setting in KP04A as all setting is done through the Settings Menu.
- Since the keypad is supplied as ID=1 by default, if there is another Keypad with the same ID in the system, this will cause a clash of Ids when the new keypad is connected. To change the ID, wait for 20 seconds before trying to go into the Settings menu.
- Press and hold the * key for 4 seconds until "Enter Engineer Code" is seen. If Engineer Code has NOT been enabled, a message "Engineer Sign in Option is OFF". Press F0 on the keypad and try again. The following keys have the functions shown;

Key	Function
*	Next Page
#	Previous Page
8	Option Up
0	Option Down
F	Go to Save Menu

The KP04A Settings are shown below;

Settings	Options	Comment
Keypad ID	1* to 15	ID of this keypad
Key Beep	Soft */ Loud/ Disable	Volume of key beeps
Alert Beep	Soft/ * Loud/ Disable	Volume of KP beeps e.g. Error Long beep
Backlight	Automatic */ Always On/ Always Off	LCD & Keyboard Backlight setting
IR Receiver	Enable* / Disable	IR Receiver
Voice Broadcast	Enable*/ Disable	Broadcast Voice /siren
Keypad Tamper	Enable*/ Disable	Internal Tamper
Date Format	DD-MM-YY * etc	Select date format
Time Format	12 Hr* / 24 Hr	Select Time format
LCD Contrast	0-63 (def 37*)	LCD Contrast
Backlight Off	0-31 (def 1*)	LCD level for backlight OFF
Factory Default	Yes/No*	Reset to Factory default
Save Menu	Yes/ No*	Save Changes

* indicates default setting

In any settings menu, press * for next page, or # for previous page, 8 or 0 to change options or F for Confirm Menu

Keypad ID

CM9001 is able to support up to 15 keypads, either KP03, KP04A, KP05A, KP06A, KT05 in any combination. KP04A shares the same ID space as other keypads. Do not set any keypad with the same ID as another keypad as this will cause a conflict and lead to a "communication failure" trouble alarm, and both keypads will not be able to work.

If the ID is not correctly set or if there is a clash of IDs, and if the message "Engineer Sign in Option is OFF" appears, wait for 20 seconds and try again. F0 on the keypad is not needed in this case.

Key Beep

This determines the volume of the key beep when any key is pressed. Select Soft, Loud or Disable (default Soft)

Alert Beep

This determines the volume of Alert tones generated by the KP04A e.g. Error beep, short beeps. Continuous beeps. Select Soft, Loud or Disable (default Soft)

Backlight

This determines the behaviour of the LCD and Keyboard Backlight. Select Automatic, Always On or Always Off (default Automatic).

Automatic means the backlight will turn on when there is an alarm or a key is pressed and will turn off after some time.

IR Receiver

This determines if the IR Receiver is enabled. This is normally not used in CM9001.

Voice Broadcast

This determines if the KP04A broadcast Voice messages from CM9001, e.g. Announcements of Security Off, Away Mode, beeping and siren tones, alarm and zone announcements. This can be turned off when the KP04A is installed in a bedroom or rooms where people are not to be disturbed.

Keypad Tamper

This determines if the Tamper alarm is activated when the Front housing is removed from the base. Also you can remove the Front housing without Tamper alarm by going to Security Check Mode (F3,2 on the keypad), which announces zones and tamper events without causing alarms.

Date Format

Select between various date formats

Time Format

Select between various time formats

LCD Contrast

Select LCD Contrast 0 to 63

BackLight Off

Select the brightness of the backlight when it is in the off state (after timeout). Values 0 to 31 . Higher value allows the LCD to be read even when backlight is off.

Save Menu

Save and Apply - Yes, No (default NO)

"Yes" causes settings to be saved and KP04AT to reset

"No" causes changes to be lost and exit from Settings menu

Press F again to confirm the selection (Yes/No).

The settings menu will exit without changes after 25 seconds without any key pressed.

To discard any changes you must press F in settings to go to Save Menu and select NO.

KP04A Settings in Comfigurator

The KP04 settings can also be changed in Comfigurator, and can also be read from the KP04A to Comfigurator.

In Configurator, go to the Modules Tab, right Click and select Scan for all Modules.

Comfort

Modules

Controller

UCM's

ETH03

GSM4

Keypads

Key

KT

Key

DoorSt

Do

Slaves

Scan For All Modules

Scan For Keypads

Add Keypad

Write Modules & Settings to Comfort

Keypads

Id	Name	Type	Volume	V
1	Keypad01	KP06	50	6
2	KT03	KT03	46	7
				7

This will detect that KP04A is connected. if all keypads have unique IDs. Select the KP04A on the left pane. Note that KP04AT will be displayed as KP04A in Configurator. Configurator does not distinguish between the two products. The right pane shows the display below;

Comfort

Modules

Controller

UCMs

UCM01

Keypads

Keypad01

DoorStations

Slaves

Sensors

SCS/RIO/IRIOs

HIOs

Write to Keypad

Read from Keypad

Reset to

Keypad01

Keypad Properties	
Id	1
Name	Keypad01
Type	KP04A
Volume	50
Partition	0
Version	Unknown
Latest Version	Unknown
Serial Number	Unknown
User Comments	

KP0x Properties	
Key Beep	Soft
Alert Beep	Soft
Backlight	Automatic
IR Receiver	Enable
Voice Broadcast	Enable
Keypad Tamper	Disable
Date Format	DD-MM-YY
Time Format	12 Hour
LCD Contrast	37
Backlight Off	1

KP04A Properties	
Alarm/EMS Mode	Alarm

Alarm/EMS Mode: If CM9001-EMS Controller is installed (instead of CM9001-ULT) set to EMS Mode to display up to 8 Sensor values including the built-in Temperature Sensor.

Keypad01



Write to Keypad



Read from Keypad

Reset to

Backlight	Automatic
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IR Receiver	Enable
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Voice Broadcast	Enable
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Keypad Tamper	Disable
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Date Format	DD-MM-YY
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Time Format	12 Hour
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LCD Contrast	37
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Backlight Off	1
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☐ KP04A Properties

Alarm/EMS Mode	EMS
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Prevent Changes	False
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Internal Temp Sensor Number	255
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Internal Temp Sensor Name	
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Sensor 1 Number	1
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Sensor 1 Name	S01TEMP
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Sensor 2 Number	2
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Sensor 2 Name	S02Humidity
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Sensor 3 Number	255
-----------------	-----

Sensor 3 Name	
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Sensor 4 Number	255
-----------------	-----

Sensor 4 Name	
---------------	--

Sensor 5 Number	255
-----------------	-----

Sensor 5 Name	
---------------	--

Sensor 6 Number	255
-----------------	-----

Sensor 6 Name	
---------------	--

Sensor 7 Number	255
-----------------	-----

Sensor 7 Name	
---------------	--

Sensor 8 Number	255
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Sensor 8 Name	
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☐ Sensor 1 Properties

Sensor Number	1
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“Internal Sensor Name” assigns a CM9001 Sensor Register to the built-in Temperature sensor in KP04AT

Refer to CM9001-EMS Manual for details of EMS Mode.

“Write to Keypad” will write the settings to the KP04AT.
“Read from Keypad” will read the settings from KP04AT.

90 x 150 mm PR02-0051
Revised Sept 2019