ATS1136 Keypad Installation Sheet

EN CS DA DE ES FI FR HU IT NL NO PL PT SK SV TR

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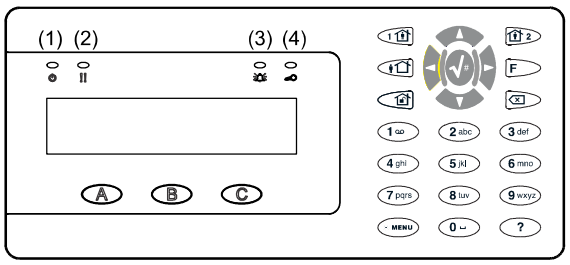

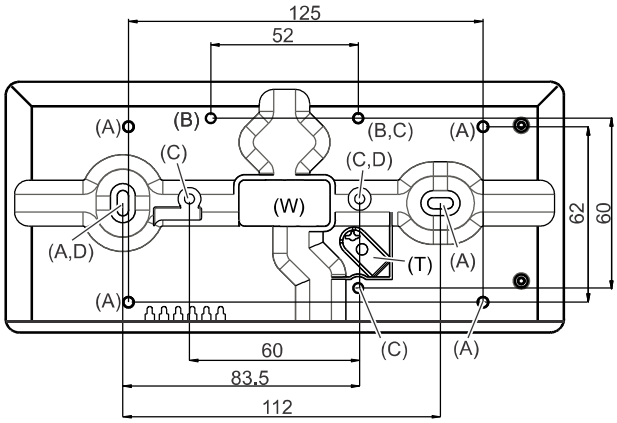

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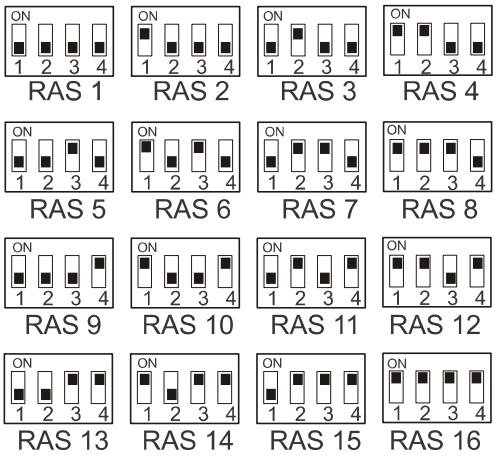

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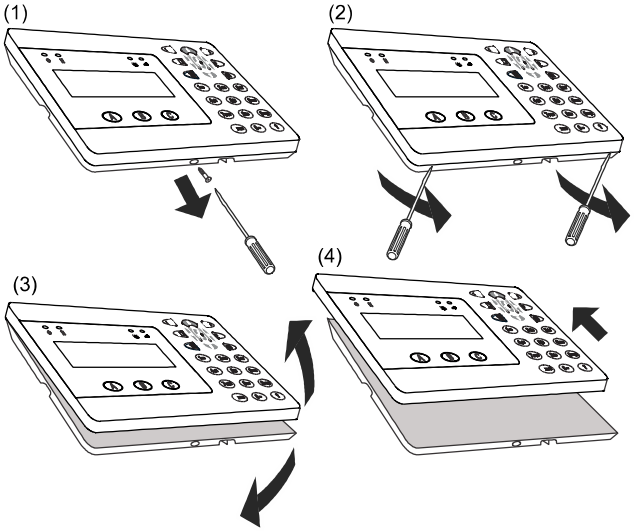

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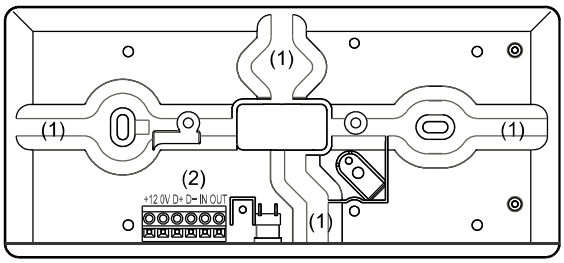

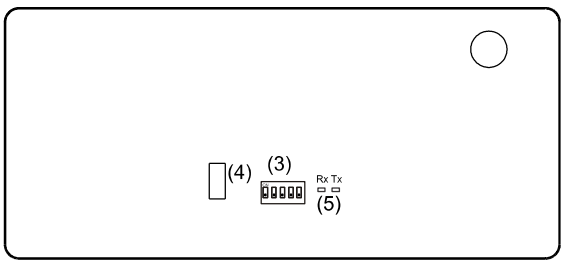

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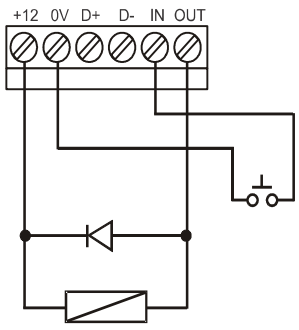

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6

```
01>Nightlight option
                  On

02>Backlight option
                  On

03>Egress mode
            Disabled

04>SysFault beep
                Auto

05>Default config
                 >>>
```

>

```
Default config
                >No<
```

```
06>Card flash
              Enable

07>Card beep option
              Enable

10>Last card
0,0,0,0,0,0

11>Firmware version
ATS1136.03BC MR1
```

EN: Installation Sheet

Description

ATS1136 Keypad is a remote arming station (RAS) with built-in Mifare card reader for Advisor Advanced series control panels.

Caution: Read this manual before any operations with the equipment, especially before installation and first power up.

Mounting the keypad

WARNING: Electrocution hazard. To avoid personal injury or death from electrocution, remove all sources of power and allow stored energy to discharge before installing or removing equipment.

Cautions

- Due to safety reasons it is not allowed to install the product in any location outside the building where the corresponding control panel is placed (unless a proper RS485 line insulation module is used). Network to network insulation is required as no proper separation might interact with alarm system signal integrity and cause unexpected results.
- Any overhead lines are strictly prohibited.
- It is not recommended to use bottom cable duct directly below keypad as installation cable signal may interfere with RFID cards antenna field and could decrease access cards identification range.
- Due to safety reasons it is not allowed to wall-mount the device higher that 2 meters from the floor, and in reach of children.
- It is prohibited to perform any installation operations by non-instructed person, in EN 62386 meaning.

Open the keypad, following the steps shown in Figure 3. Unscrew the locking screw. Using a screwdriver, carefully prise open the keypad near to the housing bottom corners. Open the housing bottom first, top next.

Connect cable to keypad back plate. See also “Connections” on page 3.

Figure 1: Keypad base

(A) ATS1136 mounting points
(B) ATS111X mounting points
(C) BOX502E mounting points
(D) BOX503E mounting points
(T) Pry-off tamper element
(W) Cable window entry

Attach the base to mounting surface using provided screws, including pry-off tamper screw, which fixes the pry-off tamper element (Figure 1, item T). If rear cable entry window is used or blocked (through the base), cut or drill a hole in the mounting surface for cable access.

Note: VdS compliant installations require the keypad to be mounted with 6 fixing screws in mounting points A (see Figure 1). The pry-off tamper is required for VdS Class C compliance.

Set the keypad address using DIP switches 1 through 4 (see “Keypad DIP switch settings” below). Set the bus termination switch (DIP switch 5), if required.

Place the keypad cover onto the base, top first, and snap in place. Tighten the locking screw at the base until the keypad cover is firm. Do not overtighten.

Figure 4: Open keypad housing

(1) Cable entry
(2) Bus terminals
(3) DIP switches
(4) Tamper switch
(5) Rx and Tx LEDs

Connecting control panel to keypad

Refer to the appropriate ATS control panel installation guide for instructions.

Tamper switch

Tamper switch is shown in Figure 4 as item 4.

The tamper switch must be inactive (sealed) for the system to work correctly. The tamper switch is sealed by mounting the keypad onto the mounting plate. In operation, the LCD display will show “RAS Tamper” when active (unsealed).

Keypad DIP switch settings

A row of DIP switches is located on the rear of the keypad (Figure 4, item 3) and is used for setting the keypad address

and the bus termination (TERM) condition. These settings are described in the following sections.

- TERM switch: To terminate the bus, set DIP switch 5 to On, if needed. There must be no more than two TERM switches or links set to On for any bus. Refer to the control panel installation guide for details about the use of TERM switches or links.
- Keypad address: Set the keypad address using switches 1 to 4. See Figure 2.

Connections

See Figure 3.

- +12 V, 0 V: The keypad can be powered using the bus "+" and "−" power from the control panel (PS2 class PSU), if the distance between the keypad and the control panel does not exceed 100 m (328 ft.) Otherwise the keypad can be powered by AUX PWR from a DGP, or by an auxiliary power supply (PS2 class is required, 8.5 to 13.8 VDC, recommended 12 VDC).
- D+/D−: D+ is the data positive connection and D− is the data negative connection of the data bus.

  The keypad is connected to the ATS panel via the RS485 data bus, up to 1.5 km from the control panel. It is recommended to use two-pair twisted, shielded data cable (WCAT 52/54). D+/D- should be connected by one twisted wire pair. The shield of any bus cable must be connected to system ground at one end only. The ATS1136 keypad does not provide an earth connection for this purpose. If the bus is daisy-chained to the keypad, ensure that the shield of the cable is jointed to provide continuity of data cable shield. Isolate the wires and the shield of the cable correctly to prevent any short circuit on the keypad.
- IN: A request to exit button (normally open, momentary push-button switch) can be connected across "IN" and "0V" terminals. When pressed, this button controls the request to exit function.
- OUT: Open collector output. For maximum allowed current, see "Specifications" on page 5. Refer to the control panel programming manual for details.

Status LED indications

Figure 1

(1) Green: The Power LED is on when the control panel is powered by the AC supply.
(2) Yellow: The Fault LED illuminates to indicate detection of a system fault.
(3) Red: The Alarm LED illuminates when there is a system tamper or an area assigned to the keypad is in alarm state.
(4) Blue: The Access LED flashes when a card is presented.

Operating features

Keypad shortcuts

Use keypad shortcuts to adjust the following keypad settings.

- LCD contrast: Menu + ▲ or ▼
- LCD backlight intensity: Menu + ◄ or ►
- Keypad backlight intensity: 0 + ▲ or ▼
- Keypad nightlight intensity: 0 + ◄ or ►
- Buzzer volume: X + ◄ or ►
- Buzzer tone: X + ▲ or ▼

Key backlight and nightlight

The default key backlight and nightlight settings are as follows:

- Key backlight on (bright) for approximately 240 s following a key press.
- Nightlight on (dim).

These functions can be changed from the keypad menu.

LCD contrast

The LCD contrast may be adjusted by pressing and holding the Menu key while momentarily pressing the ▲ or ▼ arrow keys to change the LCD contrast. The default setting is 3. The allowed range is 0 to 6.

LCD backlight

The LCD backlight illuminates for 30 seconds following a key press.

LCD backlight intensity

The LCD backlight intensity may be adjusted by pressing and holding the Menu key while momentarily pressing the ◄ or ► arrow keys to change the LCD backlight intensity. The default setting is 6. The allowed range is 0 to 8, 0 is displayed as Off.

Keypad backlight intensity

The keypad backlight intensity may be adjusted by pressing and holding the 0 key while momentarily pressing the ▲ or ▼ arrow keys to change the keypad backlight intensity. The default setting is 6. The allowed range is 0 to 8, 0 is displayed as Off.

Keypad nightlight intensity

The keypad nightlight intensity may be adjusted by pressing and holding the 0 key while momentarily pressing the ◄ or ► arrow keys to change the keypad nightlight intensity. The default setting is 6. The allowed range is 0 to 8, 0 is displayed as Off.

Buzzer volume

The buzzer volume may be adjusted by pressing and holding the X key while momentarily pressing the ◄ or ►arrow keys to change the buzzer volume. The default setting is 15. The allowed range is 0 to 15, 0 is displayed as Off.

Note: In particular cases the buzzer cannot be muted and 0 volume is not allowed for security reasons.

Buzzer tone

The buzzer tone may be adjusted by pressing and holding the X key while momentarily pressing the ▲ or ▼ arrow keys to change the buzzer tone. The default setting is 14. The allowed range is 0 to 15.

Secure channel

This device can communicate with the panel using an encrypted connection. When the secure connection to a control panel is established, the device will be locked in this system, so that it will work only via secure channel and only with this panel. Any other communication modes will be disabled.

This device will not work if you reconnect it to another system, replacing an equivalent device.

Removing the device from the panel configuration will make impossible reconnecting this device to this system.

This functionality protects the system against cyberattacks.

To unlock the device and use it in any system, follow these steps:

1. Turn the device power off.
2. Change the device address using DIP switches.
3. Turn the power on.

The device is now unlocked, and can be connected to any system.

Power up

Upon initial power up, the buzzer will sound two beeps.

All areas must be disarmed in order to enable access to the installer programming menu options.

Troubleshooting

General faults

No LED or LCD indication:

- Ensure that the LCD contrast is appropriate. Press Menu + ▲a few times.
- Verify the +12 V and 0 V wire connections on both the keypad and the power supply.
- Verify power output on the DGP or external power supply.

Status LEDs are flashing and the LCD display reads System Fault:

- Verify the D+ and D− wire connections (may be reversed or open circuit).
- Verify the address DIP switches of the keypad is set to the proper address.

  Note: When commissioning a new system, the control panel is only programmed to communicate with keypad 1 (RAS 1 address in Figure 2).
- Verify that the control panel is polling the keypad address.
- Reset communication key in the Advisor Advanced control panel, if the secure mode is on. See *Advisor Advanced Installation and Programming manual* for more information on secure mode.

Single or multiple status LEDs are flashing and the LCD display is blank:

- Check if there are two beeps on power up. If there are no beeps, the keypad is damaged and needs to be serviced or replaced.

Keypad does not react on a key press:

- Verify if address DIP switches of the keypad are set to the proper address (the address may be already occupied by another keypad). Enable the new address polling in the control panel.

Rx and Tx LEDs

Rx and Tx LEDs (Figure 4, item 5) are provided on the keypad PCB to assist in fault diagnosis.

- Rx: The yellow Rx LED flashes to indicate polling data is being received on the system bus from the panel. If the LED does not flash, the control panel is not operational or the bus is faulty (usually cabling).
- Tx: The red Tx LED flashes to indicate the keypad is replying to polling from the control panel. If the Rx LED flashes but the Tx LED does not, the keypad is not programmed to be polled in the control panel or is addressed incorrectly.

Programming options

ATS1136 provide for a menu through which a number of options can be set.

See Programming Map in Figure 6.

Note: Only level 3 user (installer) is allowed to adjust the keypad programming options.

To enter the programming menu for the ATS1136 keypads:

1. Enter the Advisor Advanced installer programming menu. See *Advisor Advanced Installation and Programming Manual* for more details.
2. Press (or select) 2: Bus devices
3. Press 2: Edit devices
4. Press 1: Keypad devices
5. Press 0 to add a keypad device, or select an added keypad to edit it.
6. When editing a keypad device, press the keypad menu option to enter the keypad menu.

Menu 1, Nightlight option

A dimly lit keypad backlight provides the night-light to easily locate the keypad in dark locations. The default setting is On.

Menu 2, Backlight option

The keypad backlight turns on bright for night time illumination of the key labels. If the keypad backlight is not required, it may be disabled. The default setting is On.

Menu 3, Egress mode

The keypad is fitted with a request to exit (RTE) control port (labelled IN) on the wiring connector. The OUT (open collector terminal) may be used to control a door relay.

There are the following options available:

- Enabled: This option requires a simple push button to be connected to the IN terminal. A press of the button will release the door lock relay. Used for a quick exit from an area.
- Disabled: When the “IN” terminal is not used, it is recommended that it be disabled. This is the default setting.

Note: The menu option is not available if the keypad is connected directly to an Advisor Advanced ATSx500A control panel with firmware version 4.2 and higher.

Menu 4, System fault beep

In case a system fault occurs (no communication with the control panel) the text “System Fault” appears on the display and the buzzer will be activated until any key is pressed. The setting Auto is used to enable this VdS required feature automatically, if the language set in the control panel corresponds with the countries, where VdS regulations are obligatory. The setting can also be set to On or Off. The default setting is Auto.

Menu 5, Defaults config

This option returns all keypad settings to the factory default condition.

Menu 6, Card flash

This option enables and disables the blue LED flash when a valid card is badged on the ATS1136 reader. The default setting is Enable.

Menu 7, Card beep option

This option enables the beep sounded when a card is badged on the reader and disables the beep. The default setting is Enable.

Menus 8 and 9: Reserved for future use

Menu 10, Last card

This option displays the number of the last card badged on an ATS1136 keypad.

Menu 11, Firmware version

This informational screen shows the keypad firmware version.

Specifications

Supply voltage	8.5 to 13.8 VDC
Maximum operating current	190 mA at 13.8 VDC
Normal operating current	30 mA at 13.8 VDC
Input (IN terminal)	Normally open (NO) contact. Max. appearing voltage 13.8 VDC
Open collector output (OUT terminal)	13.8 V max. at 100 mA max.
Wireless operating frequency	Mifare 13.560 ±0.007 MHz
RF power output	Less than 1 mW
Code combinations [1]: 5 digits 10 digits	 100 000 10 000 000 000
ACE type (tamper protection)	B
Supported cards	Unsecure mode: Mifare Unique ID (Classic 1K/4K, Desfire EV1, EV2) Secure mode: Mifare Desfire EV1, EV2
Dimensions (W x H x D)	200 x 90 x 24 mm (7.8 x 3.5 x 0.95 in.)
Weight	350 g
Operating temperature	−10 to +55°C (22 to 127°F)
IP rating	IP30
Maximum relative humidity	95% noncondensing
Security rating (EN62368)	ES1, PS2, TS1

[1] Notes

- When Duress functionality is enabled, 6 digits codes are required
- There are no invalid code combinations

Notification

When printing or adding a customer logo on the ATS1136 keypad or its lens, take care to make use of RoHS compliant materials and printing processes only.

Regulatory information

Manufacturer	PLACED ON THE MARKET BY: Carrier Fire & Security Americas Corporation Inc. 13995 Pasteur Blvd Palm Beach Gardens, FL 33418, USA AUTHORIZED EU REPRESENTATIVE: Carrier Fire & Security B.V. Kelvinstraat 7, 6003 DH Weert, Netherlands
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Certification	CE
EN 50131	EN 50131-1 System requirements EN 50131-3 Control and indicating equipment Security Grade 3, Environmental class II Tested and certified by Telefication B.V.
	VdS 2252 – Class C (G 120006)
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