

1. General Information

Thank you for choosing the Visonic Technologies AXS-100 proximity access control system. We are confident that this product will serve your needs for years to come. The Visonic Technologies AXS-100 is an electronic access control system for controlling two doors. Eight controllers can be networked together to control a total of 16 doors.

The AXS-100 access control system can be used to control the entry and exit of parking lots that includes entry & exit barriers. In addition, the system can count the number of cars that are inside the parking area in real time, and to prevent the entry of additional cars when the number of the cars in the parking lot exceeds a predefined limit. This application note will guide you, step by step, in the simple programming sequence of the AXS-100 controller. For general installation information, please see the AXS-100 Installation Instruction document.

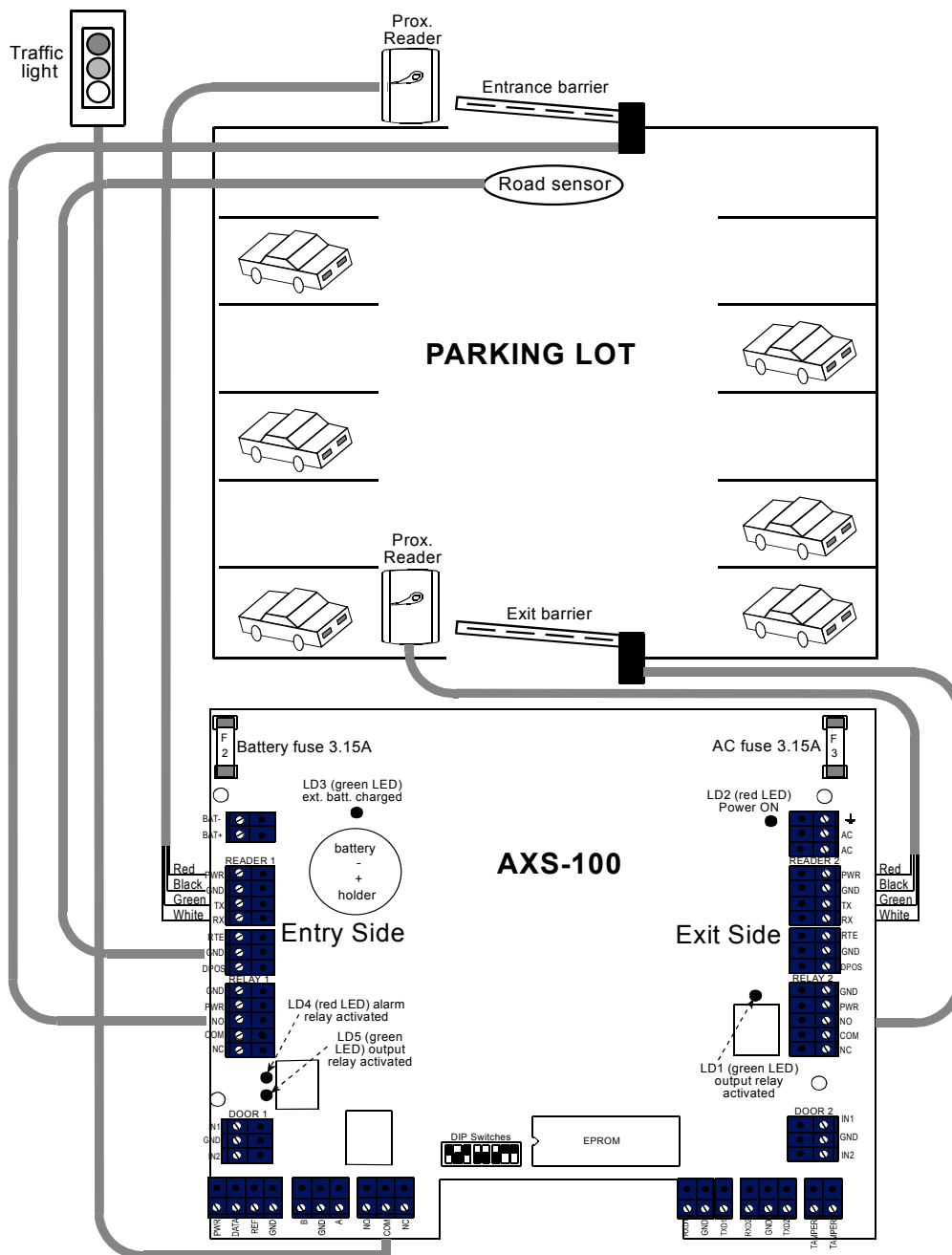


Figure 1 – Parking Lot Application

2. Operation Modes

The AXS-100 can work in one of three relevant modes for the parking lot application.

Mode-1: Two barriers and two readers with hard Anti Pass-Back. (Figure 1)

Hard anti pass-back means that if a tag is presented to the entrance reader, this tag cannot be represented to the entrance reader again until this tag is presented to the exit reader, and vice versa.

Mode-3: Two barriers and two readers with soft Anti Pass-Back. (Figure 1)

Soft anti-pass-back means that if a tag is presented to the entrance reader, this tag cannot be represented to the entrance reader again until this tag is presented to the exit reader. The quantity of tag presentation to the exit reader is not limited.

Mode-4: One barrier and two readers with soft Anti Pass-Back.

This mode is useful for small parking lots, where the same barrier serves both entry and exit. In this mode the soft anti-pass-back is active.

Other modes of operation may be used for different configurations. See the AXS-100 User Guide for more details.

3. Basic Programming

In order to program the Operation Mode, please follow the following steps:

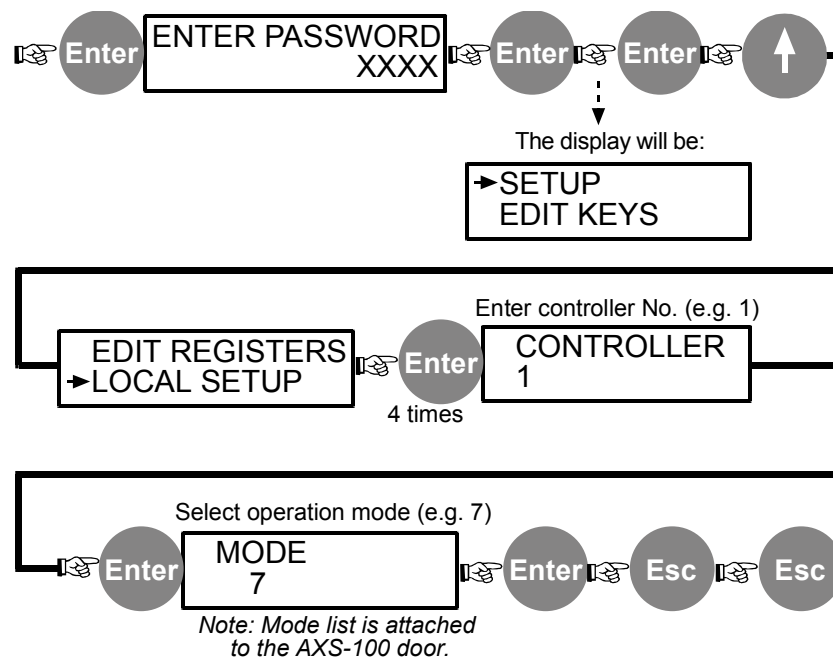


Figure 2 – Setting Address and Operation Mode

To check the controller's operation mode and address, press the "9" button while the controller is in idle mode (while the controller LCD screen shows only the date and time, as shown below).

2 7 / 0 1 0 8 : 3 1 : 1 7

4. Counting and Limiting Cars Number

The AXS-100 enables to count and limit the number of cars in the parking. Each entry and exit is counted, and when the number of cars reaches a predefined number, "threshold", the controller will prevent additional entry. An entry will be possible only after a car is exit.

4.1 Counters

Two registers (counters) should be set:

Register "0": Counts the number of cars in the parking. Each entry increases the counter by one and each exit decreases the counter by one.

Register "1": Capacity threshold. Maximum number of cars allowed in the parking.

To set these registers, perform the following steps on the controller keypad:

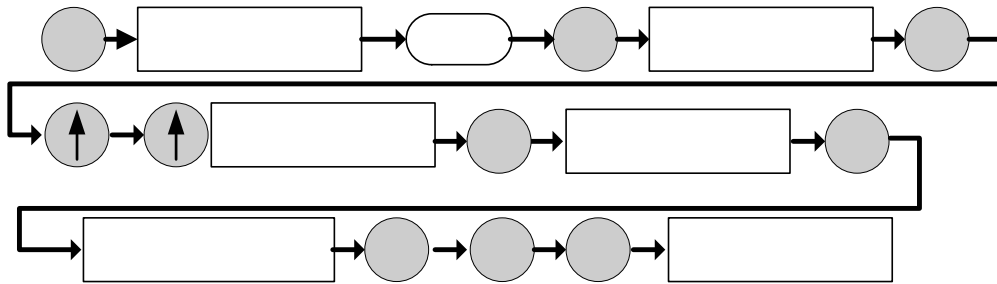


Figure 3 – Registers Setup

4.2 Traffic Lights

A traffic light can be added to this application for letting the drivers know when parking is full. To activate this traffic light utility, two flags must be set:

1. Flag-7 in flags setup-1 (must be "off")
2. Flag-6 in flags setup-4 (must be "on")

The traffic-lights control should be connected in the Auxiliary output (Figure1).

To set these flags, perform the following actions:

Flag-7 in flags setup-1:

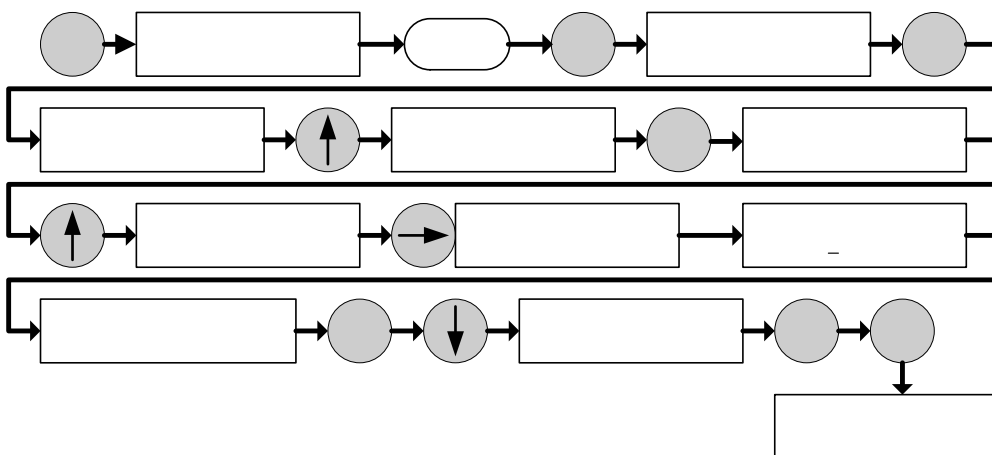


Figure 4 – Setting Flag 7 in Flags Setup 1

Enter

ENTER PAS

Flag-6 in flags setup-4:

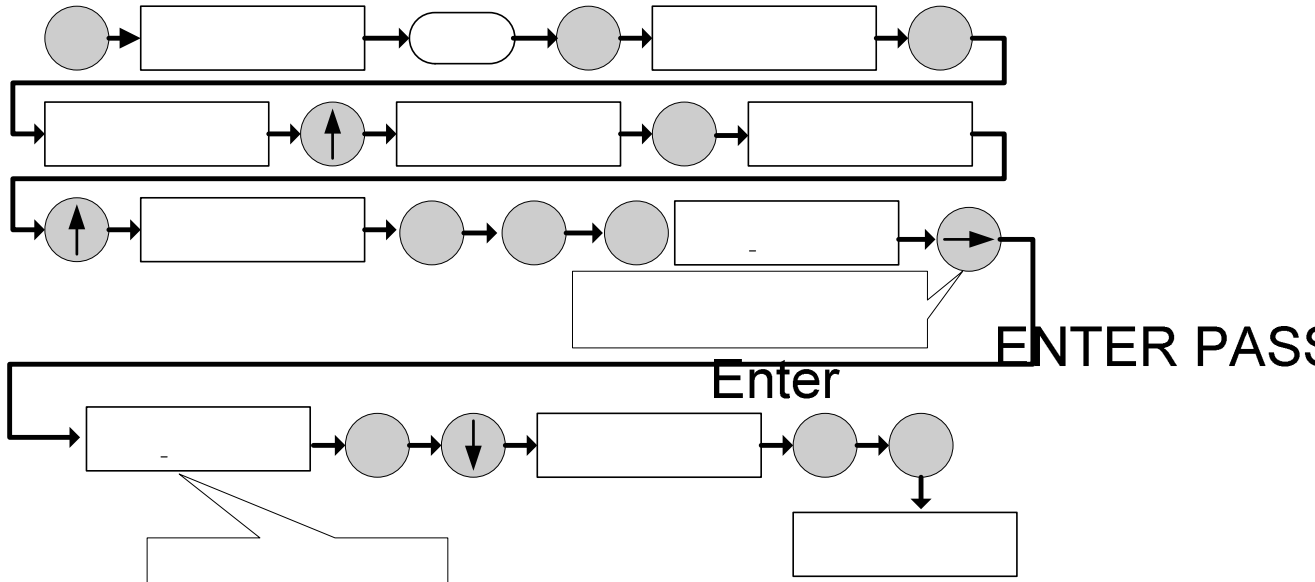


Figure 5 – Setting Flag 6 in Flags Setup 4

4.3 Road Sensor

In some cases, there is a need to know if a car is actually entered the parking and not just a card was presented to the reader. In this kind of application, "Road Sensor" can be used for counting the vehicles. The road sensor needs to be installed after the barrier (see figure 1). In this case the vehicle will be counted and marked in the anti Pass-Back table only after it crossed the barrier.

To activate this function, flag-2 in flags setup-3 need to be "on". Setting this flag is performed as follows:

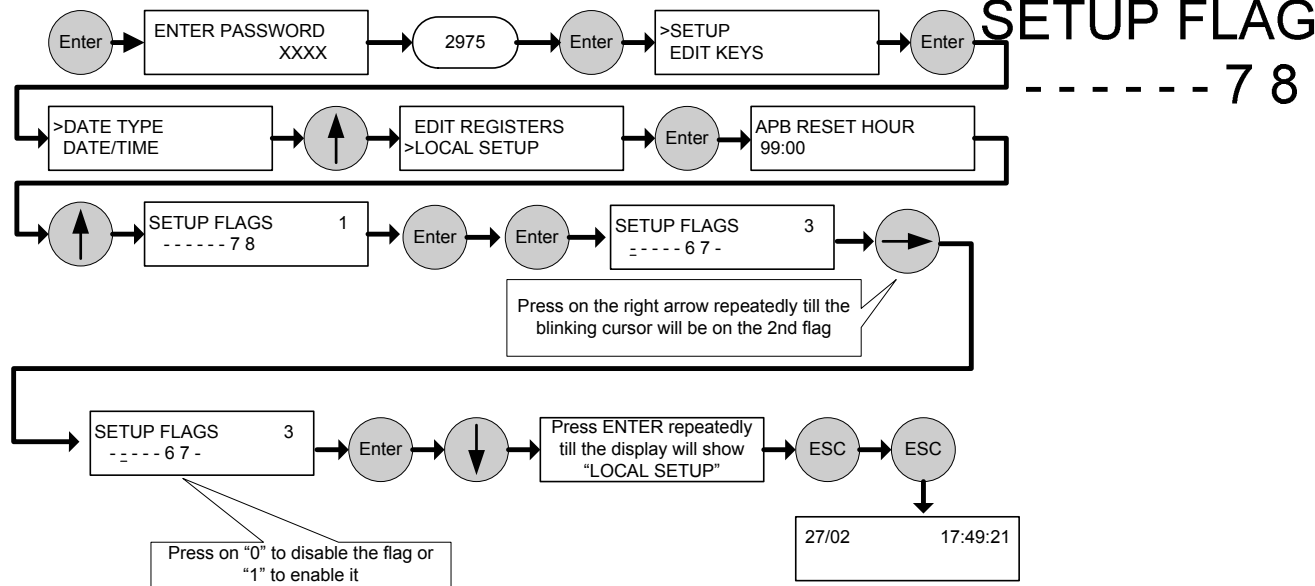


Figure 6 – Setting Flag 2 in Flags Setup 3



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