

ALGO 3106 Door Control Module

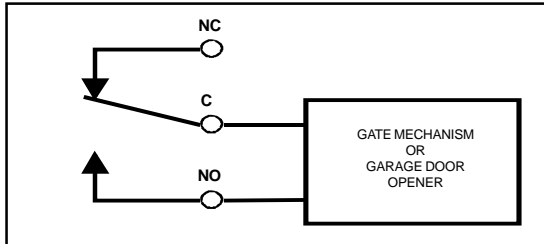


Figure 1 - Dry Contact Closure

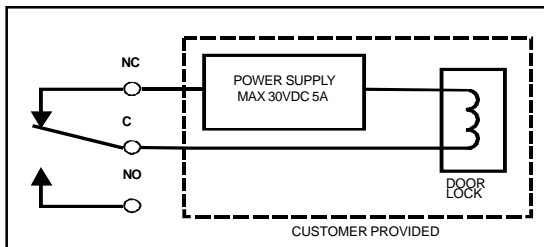


Figure 2 - Normally Energized Mechanism

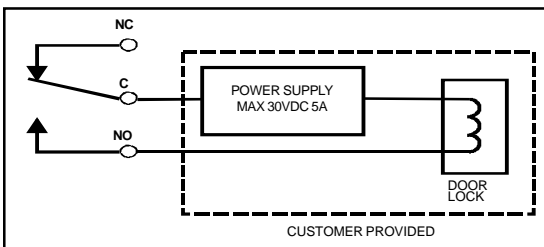


Figure 3 - Normally De-energized Mechanism

About the 3106 Door Control Module (DCM)

The DCM connects to an Algo 3005 (trunk port) or 3007 (station port) doorphone control unit to provide DTMF activated door control. The DCM output relay provides Common, Normally Open, and Normally Closed contacts rated at 30 Volts 5 Amps.

By adjusting switch settings inside the unit, function provided is one of the following:

- Default:** Relay activation from single 0-9, '*', or '#' digit, for 1/4 to 15 seconds.
- OPT1:** Relay activation ON from digit '7', OFF from digit '8', or momentary ON for 3 sec from digit '6'.
- OPT2:** Relay activation ON/OFF/MOMENTARY from one of 16 preset 4 digit codes.

Multiple units may be installed in series using by connecting the DATA OUT terminals of the first unit to the DATA IN terminals of the next unit to provide multiple door control.

Installation

The DCM connects to a 3005 or 3007 Doorphone control unit AUX jack using the supplied 6 wire modular cord (See Fig. 7). This requires that the DCM be installed immediately beside the control unit. If for any reason a different modular cord is used ensure that it contains all 6 conductors, does not exceed 45 cm (18 in), and provides 1 to 1 connectivity (no polarity reversal between plugs).

DO NOT CONNECT THE DCM MODULAR CORD TO ANYTHING OTHER THAN AN ALGO 3005 OR 3007 DOORPHONE AUX JACK.

The DCM that connects to a Doorphone control unit AUX jack is powered by the Doorphone control unit.

If multiple DCMs are installed on one Doorphone then each unit other than the first unit requires an external power supply (Algo 1223 22V 350 mA) which can power up to 5 units. Additional DCMs are wired together by connecting the DATA OUTPUT terminals of the last device installed to the DATA INPUT terminals of the next unit.

There is no limit to the number of DCMs that can be connected together, however they are designed to be installed in close proximity to one another.

Operation

If the DCM is programmed for single digit activation (Default is '6') then the relay will activate for the selected time whenever the digit is pressed during conversation. See Figure 4.

If the DCM is programmed for OPT1: ON/OFF/ MOMENTARY (OFF) then a digit '6' will activate the relay for the time selected, a digit '7' will activate the relay indefinitely and a digit '8' will de-activate the relay indefinitely. See Figure 4.

If the DCM is programmed for OPT2 then digits must be pressed within 2 seconds of each other. Otherwise a time out feature will require re-entry of the entire sequence. See Figure 4 & 5.

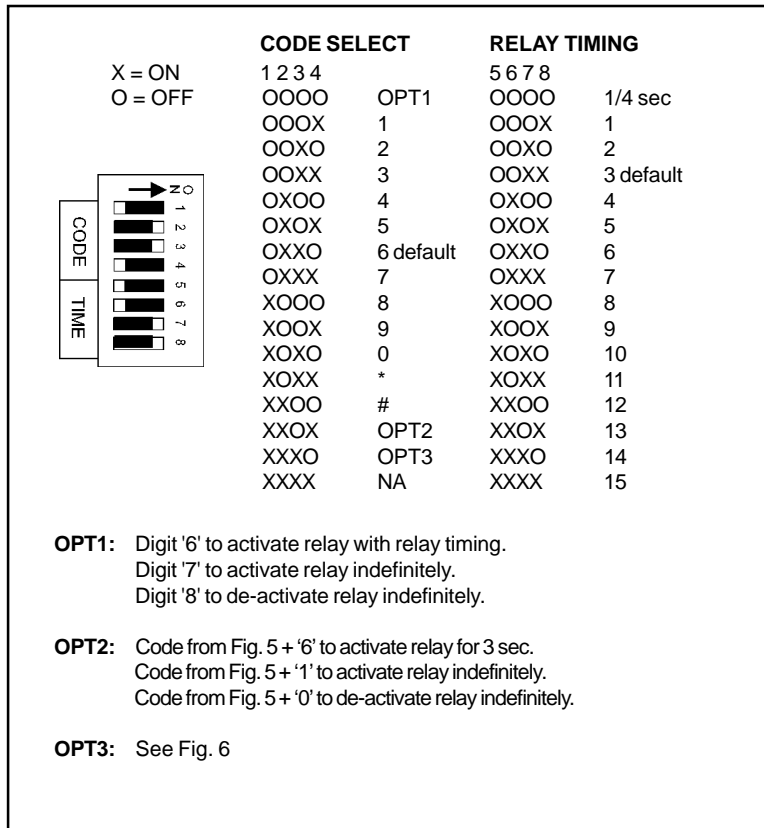


Figure 4 - 3106 DCM Dip-Switch Setting

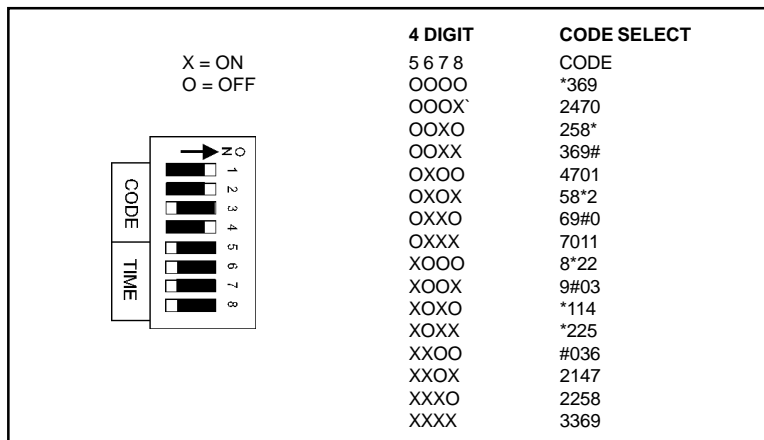


Figure 5 - 3106 DCM Digit Code Selection

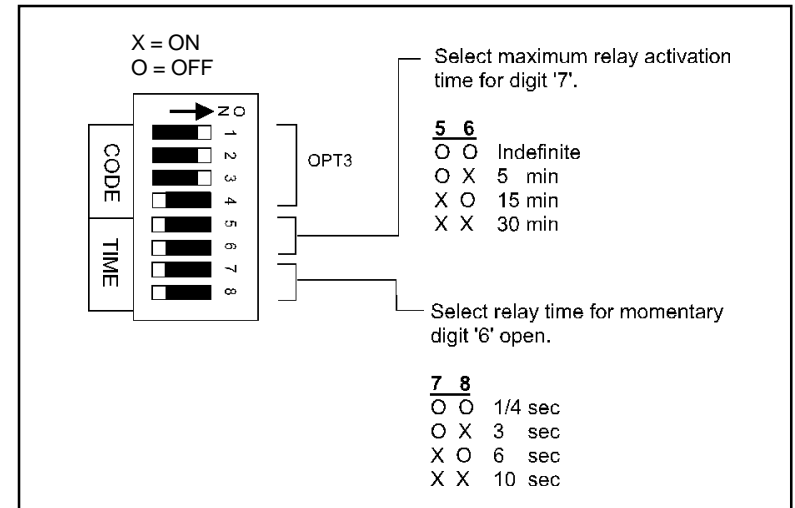


Figure 6 - 3106 DCM Dip-Switch Setting for OPTION3

Operation (cond't)

If the DCM is programmed for OPT3: ON/OFF/ MOMENTARY (OFF) then a digit '6' will activate the relay for the time selected, a digit '7' will activate the relay indefinitely or momentary and a digit '8' will de-activate the relay indefinitely. See Figure 6.

About Electric Locks

There is such a variety of electric door locking and release mechanisms for different applications that it would be impossible to supply them with the DCM. There are three common interfaces to customer provided equipment, all of which can be controlled by the dry contact relay output of the DCM.

Dry Contact Closure

For systems such as gate mechanisms that require just an activation switch. See Figure 1.

Normally Energized

For electric locks (solenoid or magnetic) that normally have power applied and allow a door to open when power is removed by activation of a series normally closed relay contact or power failure. See Figure 2.

Normally De-energized

For electric locks (solenoid) that are in a lock mode until power is applied by activation of a normally open relay contact. See Figure 3.

Electric lock devices require a wide variety of voltages and currents and it would be difficult to provide source power from the DCM. Therefore, the DCM relay contacts are used as a switch between a customer provided power supply and customer provided lock mechanism. Contact ratings are 30 Volts or 5 Amps.

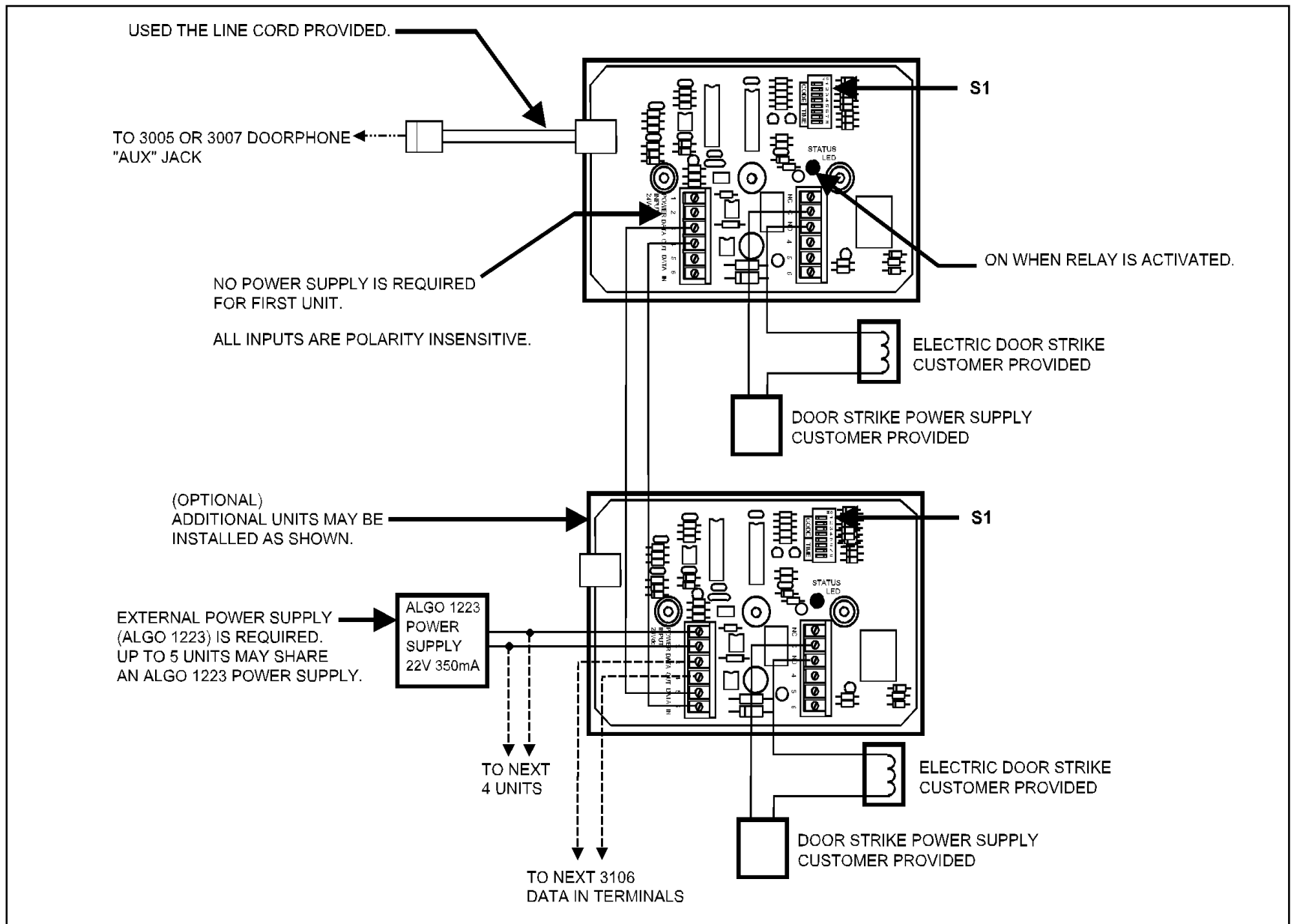


Fig. 7 - 3106 Door Control Module Wiring Diagram