

# ARCHITECTURAL SPECIFICATIONS

## CAT IV Controlled Access Technology

### General Requirements.

The unit shall be a micro-processor controlled telephone entry device housed in a weather resistant aluminum cabinet with a stainless steel front panel that allows entering from 1—6 digits on the front keypad. The unit shall have a four line, 20 character LED backlit Liquid Crystal Display (LCD) capable of being read in direct sunlight, or in total darkness. The display will show the resident's name to be at least thirteen characters in length. Names shall appear in alphabetical order. It shall be possible to scroll forward, pressing and holding down the # key and backward by pressing and holding the \* key.

The unit shall have a gasketed chrome plated marine zinc metallic touch keypad. The speaker shall have a Mylar cone and shall be sealed from the environment. The unit shall incorporate Personal Identification Numbers (PINs), at least one per programmed telephone number, providing an electronic means of opening entrance utilizing the unit's own keypad. The unit shall allow the programming of a strike-out feature making the keypad inoperative for sixty seconds after the programmed number of invalid PINs are attempted.

The unit shall be configurable with memory capacities (Phone numbers, PIN codes and 6 cards per memory location) in increments of 30, 50, 75, 100, 150, 250, 500, 750, 1000, 2000, 2700 residents' names and phone numbers. These codes, as well as the PINs may be set for the system to be 1-6 digits in length, programmable on site. The called party may activate either of the two door control relays in the unit by dialing a system programmed Touch-Tone™ number, 1-9 for the appropriate relay, on their own phone.

The unit shall be capable of operating in either AC or DC mode. The unit shall provide form C dry contacts for the relay mechanisms. The unit shall be able to withstand at least 20,000 volts of electrostatic discharge without damage to its functions. The unit shall further possess integral transient voltage protection as part of its power supply circuits, phone line interface and relay contacts.

The unit shall provide an integral battery charging circuit for an optional battery. Said battery shall allow communication to be maintained for minimum of one hour in the event of a power failure. The memory type shall be non-volatile, and shall retain stored data including buffer information without external power for a minimum of ten years.

### Functional Specifications:

The unit shall be capable of either rotary or TouchTone™ dial out, field programmable. The unit shall mute tones during dialout sequence and shall not accept TouchTone™ through its microphone. The unit shall allow open keypad for voice mail capabilities of the called telephone number. The unit shall allow latching of relays through a TouchTone™ phone using a two digit control code, and a command code.

Automatic activation and de-activation of relays may be made to follow specified time zones, using the integral clock/calendar feature. Programming functions require a six digit pass code be entered on the unit's keypad. When required, the unit shall allow alpha characters to be programmed via the keypad. The unit shall be capable of dialing telephone numbers of up to 14 digits in length. These numbers may be local or long distance. A pause may be inserted in place of any digit. The unit shall allow dialing extension in a telephone switch or an outside line from the switch.

CAT system unit shall accommodate 16 holidays and 16 Time Zones for flexible user configuration and operation of relays.

Optional card-readers conforming to industry standard wiegand signals, may be added to CAT series units. Up to 6 cards per code location may be programmed, for a total of up to 16,200 cards.

Programming shall be possible from any of the following methods:

the unit's keypad, a terminal, a personal computer in terminal emulation mode, a personal computer equipped with modem (using optional Selcom 2002 software).

The unit's standard and two optional second and third door control modules shall each have two inputs and two outputs. This will allow each to: 1. Unlock entrance, 2. Shunt alarm, 3. Sense door position and 4. Allow a request to exit or egress. The optional third relay package shall be capable of being configured to activate another device; such as a camera or light, or to activate an alarm or other device, during a forced door condition.



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## CAT IV Controlled Access Technology

### (Continued)

#### Functional Specifications (Continued).

The unit shall be equipped with at least a minimum 14,400 baud modem as standard equipment for the transfer of data including, but not limited to, configuration, directory data and logging functions

The unit shall have a logging transaction buffer greater than 12,000 transactions in length.

All data stored in CAT system unit may be uploaded for storage as an auxiliary data file on a computer, utilizing optional Selcom 2002 software; comprising configuration, customer data and logging data. All customer and configuration data shall be capable of being downloaded to the CAT system unit at any time.

The unit shall be capable of adding to the two standard card reader modules, for a total capacity of 16 card readers per CAT system. These shall be industry-standard wiegand format readers.

The unit shall be capable of controlling up to 255 relay points for such functions as elevator control, or any function requiring relay actuation during an access control requirement, such as phone Touch-Tone™, card read, or PIN (Personal Identification Number) code. Each phone code and any cards assigned to that code, shall be able to control up to 4 defined relay points.

Communications between the CAT unit and card reader systems (DR-4 or equivalent) and relay control systems (RLY8 or equivalent) shall be through opto-coupled (isolated to at least 1 kilo-volt) RS-485 serial communications. Ancillary modules attached to the CAT shall be discretely addressed and polled continuously. See DR-4 and RLY8 specifications, attached separately.

Entrance relays may be activated and de-activated using remote control password and appropriate TouchTone™ number by authorized users, calling the CAT unit.

An (optional) RS-232 serial port capable of allowing serial communications between 300 and 19,200 baud may be provided.

An (optional) opto-isolated current loop port (CAT CLCOM) capable of allowing serial communications between 300 and 19,200 baud may be provided, in lieu of a serial port. This current loop port shall allow communications over conductors, at least 2000 feet in length.

An (optional CATCOM RF) RS-485 to wireless 2.4 GHz. spread spectrum RF, capable of operating at distances over 1 mile in length may be provided for use with (optional) DR-4 or RLY8 systems, in lieu of RS-485 wiring.

An optional ethernet adapter, used in lieu of the serial port, may also be provided and utilized for communications over a network, with the appropriately supplied software.

The LCD display shall operate normally in temperatures ranging from -20°C to +70°C without additional adjustments, required after initial installation.

Touch-Tone™ detection shall be capable of detecting tone bursts of less than 70 milliseconds in duration.

Power input may be either a 18VAC 40 VA transformer (supplied), or an externally supplied DC power source of 12 Volts DC.

All specifications are subject to change without prior notice, at any time.