

Imagine an easy to use access control panel with all the power of a PLC. The MAC-4R is an intelligent distributed processing access control panel with programmable ladder logic control functions normally needed for higher-end applications. The integrated Echelon communication scheme brings reliability, high addressability, and inter-panel communications.

Readers, inputs, and outputs can be configured in any shape or form to meet special conditions for opening doors. Real-time point status allows the user to see the true state of every point at all times. The controllers can even be programmed to arm or disarm the building based on certain activity. Analog devices can make decisions based on counts and greater than or less than commands.

So whether it's time-zone controlling a door to open at a certain time of day, or operating under the demanding controls of our U.S. State and Federal prisons, the MAC-4R Access Control Panel has what it takes to do the job.

### Main Features

Up to 4 readers and 16 outputs can be connected to one MAC-4R Access Controller. Multiple controllers can be programmed to talk to one another through our use of Echelon's LonTalk® peer-to-peer communications. Bus, Star or Loop technologies are all supported with up to 63 (panels) on one trunk line. If one of those devices is a repeater, you can change topology types and add another 63 panels. A project can start small with 4 or 8 doors and continue to expand into thousands of doors.

The controllers can be connected to one PC or multiple PCs throughout a campus. Connection options include serial, fiber, or ethernet adapters.

Ethernet adapters can be used to connect the control panel directly to your local or wide area network saving thousands of dollars in cabling costs.



- 16,000 5 or 12-digit card numbers
- 800 Transactions
- 4 Wiegand, magnetic stripe, or prox Readers
- Reader/PIN combinations for 8-bit keypads
- Supplies 5 or 12 VDC power for readers
- 16 supervised or non-supervised inputs
- 4 state supervision of inputs
- Inputs configure as binary or analog
- 8 five-amp output relays
- 16 solid state sinking outputs
- Star, bus or loop topologies
- Supports ladder logic programming
- Plug-in connector blocks
- Ethernet connection options
- Real-time clock
- Threat levels and Visitor cards

#### Specifications

##### Power

16.5 VAC @ 2 amps maximum  
18-28 VDC @ 2 amps maximum  
12 VDC when powered by system battery  
12 VDC @ 4 AH system battery  
3.5 VDC @ 350 mA memory battery

##### Outputs

4 Wiegand format card readers  
4 Wiegand format keypads (8 bits)  
1 DPS and 1 REX input reader or keypad  
(total of 4 DPS and 4 REX)  
1 panel tamper input  
8 single pole Double throw form-C contacts  
rated at 120 VAC or 30 VDC, 6 Amps, 5  
Amp fused output relays  
A total of 16 2/4 state inputs configurable as  
binary or analog input detectors. 0-12 V@  
10 samples per second with 12 mV  
resolution

##### Data

78 KBPS Free Topology twisted pair  
transceiver using the LonTalk protocol  
provides communications to host computer  
as well as peer-to-peer communications  
between control panels

##### Termination

Programming port RJ45  
I/O expansion bus RJ45 connector  
Host data, power, system battery, card  
readers, keypads, door control, and auxiliary  
inputs and removable screw terminals with  
up to 12 AWG wire

##### Dimensions

PCB Board, 8-3/4" W x 6-3/4" H x 1" D  
Enclosure size, 14" W x 14" H x 4" D

#### Parts and Ordering Information

MAC-4R Controllers	
MAC-4R	MAC-4R-PCB in enclosure. 12V battery and power supply not included
MAC-4R-PCB	Completed PCB Assembly
MAC-4R Components	
ENC-4R	Enclosure for MAC-4R-PCB
PWR-16.5	16.5 VAC Power supply
PWR-24	24 VDC, 50 watt Power supply
BAT-12V	12 Volt Battery for MAC-4R
LT-SA-10	LonTalk Serial Adapter
LT-EA	LonTalk Ethernet Adapter
LT-RTR	LonTalk Router