![WatchNET ACCESS logo]

WatchNET Access Elevator Controllers

WAE-016-ENC *(WAE-016-PCB in metal cabinet)*
WAE-016-PCB *(Elevator Controller)*
WAE-E16-PCB *(Add-on Floor Control Module)*

WAE-016-PCB

WAE-016-ENC

DESCRIPTION:

The **WAE-016-ENC** (3 Series Lift Controller, 16 Floors, 2 Readers, TCP/IP Enabled) is a fully intelligent Ethernet enabled controller based on a 8 bit microprocessor. It is compatible with both the V3.5 Economy and V4 Advanced range of WatchNET 3 Series access controllers (See Figure 1). The WAE-016-PCB can by itself control 16 floors with no additional hardware.

WAE-E16-PCB
3 Series Lift module, 16 Floors, 0 Readers, is a plug in module that increases the base 16 floors provided by the WAE-016-PCB controller by another 16 floors (See Figure 2). Connecting via a daisy chain ribbon cable, up to 7 WAE-E16-PCB lift modules can be attach to the WAE-016-PCB controller. With each WAE-E16-PCB lift module supporting 16 floors, the WAE-016-PCB lift controller with 7 x WAE-E16-PCB modules can support 128 floors. If only a single module is required to give a total of 32 floors, then this module can be piggybacked on top of the WAE-016-PCB (See Figure 3).

WAE-016-PCB Features:

• 32 bit Processor, 2 watch-dogs
• Supports up to 16 floors
• Expandable up to 128 floors with
  7 x WAE-E16-PCB Modules
• Supports up to 30,000 cardholders
• Stores up to 100,000 transactions
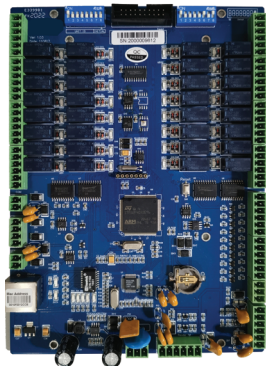• Supports Wiegand 24 to 72 bits
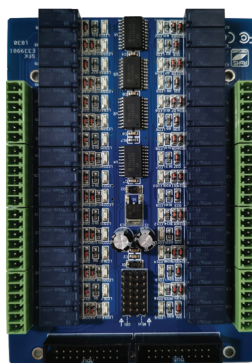

Figure 1
WAE-016-PCB
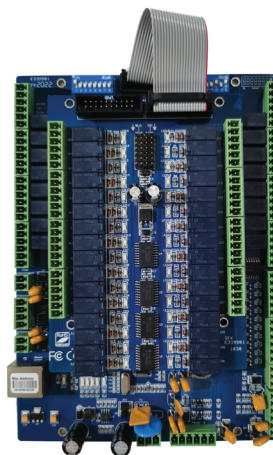

Figure 2
WAE-E16-PCB

Figure 3
WAE-016-PCB with
WAE-E16-PCB Module on top

Visitor Feature:

For visitors the operator can allocate temporary cards and set up the required visitor access level. The visitor access level includes the valid time, the authorized floor and the authorized lift.

Real-Time Monitor:

All card events are shown on the control room operators monitor. When the user presents their card the operator can see all information particular to this user.

Record:

The Watch*NET* Access Integrated Security System Software will store all the card events which can then be found at a later date through the filter function.

Fire Override:

On a fire alarm there will be no access limitation for the system.

Servicing Mode:

On servicing there will be no access limitation for the system.

Controller Specifications:

• 32 bit ARM processor

• 2 Watchdogs

• 30,000 Cardholders

• 200,000 Transactions

• Communication Mode: TCP/IP, RS-485(Option)

• Wiegand Reader: 2 pcs

• RS485 Reader: 2 pcs (Equal Wiegand)

• Operating Voltage: 12V DC (±10%)

• Operating Current: ≤800mA

• Standby Current: ≤150mA

• Working Temperature: -40^{0}C ~ 70^{0}C
                       -40^{0}F ~ 158^{0}F

• 1 Lithium battery backup (up to 10 years data retention)

• Metal case dimensions: 403mm x 384mm x 72mm
                         15.87" x 15.12 x 2.83"

• Weight: 0.2kg / 0.44lb (without metal case)
          4.7kg / 10.36lb (with metal case & PSU)

Operation

All the programming for the Lift Controller and associated modules is done through the WatchNET Access Control software.
The operator can set up the authorization at any time by configuring the floor access level and access time. Once programmed,
a user simply flashes their card at the reader inside the lift. The user is designated a home floor and the button for this home floor is
automatically enabled when the card is presented so there is no need to press the floor button. If a card is invalid or a valid card has
not been given access rights then no access will be allowed.

Advantages

All in 1 Card: one card can be used for Lift/Elevator Access, Access Control, Time & Attendance, POS and Car Parking Applications.

Bring you back home: Elevator will bring you back the floor you lived after you flash a valid card, and you need no press the floor
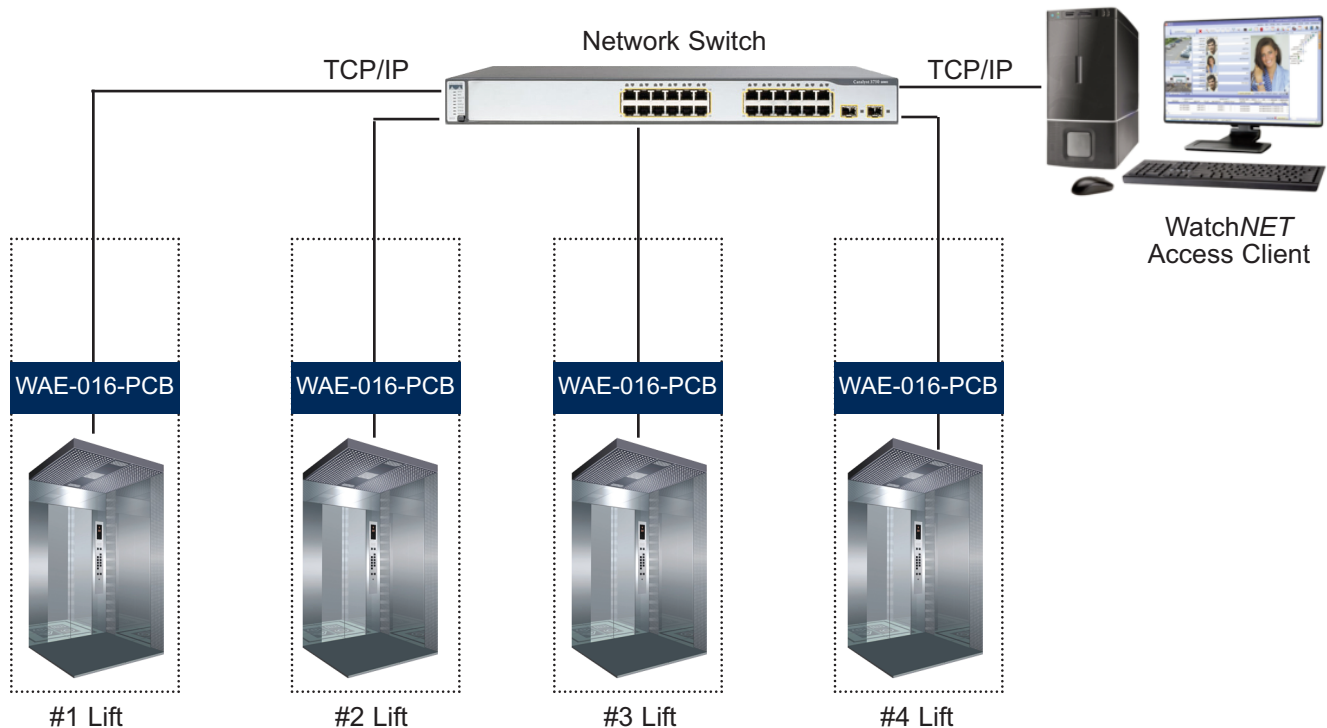button.

Visit Floor: When the user would like to go to public floor, he can press "Visit" button on the reader and flash his valid card, and choose
a floor he would like to go, then the elevator will bring him to that visited floor.

Fully Intelligent

The WAE-016-PCB is a fully intelligent lift/elevator controller which can control access to each floor individually, based on an event or
time period. It allows cardholders to select the floor(s) that they are allowed to enter, and the system will record each transaction.
It provides many auditing reports, such as data on selected floors to ensure complete accountability. The system can be fully operational
in a standalone mode, even during communication loss to the host PC. In offline mode, the controllers will have access to time
schedules, authorization groups and even holidays and there will be no additional access level limitation.

Installation

The diagram below shows how 4 x WAE-016-PCB Lift Controllers are connected via Network Switch to a computer running the
WatchNET Access Integrated Security Systems software. In this diagram the lift controller and the card reader are housed in the lift car.
Note that this is only one option as many lift companies prefer to locate the 3rd party lift controllers in the Lift Machine room with only the
actual card reader being located in the lift. As long as the security installation company has the ability to interface to the lift buttons then
the location of the controller is secondary.

Network Switch

TCP/IP   TCP/IP

WatchNET
Access Client

| WAE-016-PCB | WAE-016-PCB | WAE-016-PCB | WAE-016-PCB |

| #1 Lift | #2 Lift | #3 Lift | #4 Lift |