Vantage Point 4 door Controller

Installation Guide

Contents

Vantage Point 4 door Controller

Installation Guide

1. VC4/VC2 ACU Overview

1.1 Product Description

The Sensor Access VC4/VC2 access controller will provide intelligent access control for 4/2 door with memory capacity of up to 100,000 user ID and up to 50,000 events of access and of alarm.
It will allow diversity of reader format for its four reader ports and of reader operation mode (ID, ID and Password). It will provide high-level security control with 4 state input ports fault for various sensors of exit button, door open sensor, PIR sensor and many, monitoring Open loop, Shorted loop, Grounded loop and Line fault.

1.2 General Specification

Power:
Maximum Input Current: 12VDC / 2A
(Excluded Door lock and reader power)
Communication:
Network: Onboard Ethernet TCP/IP
(RS485 Option)
CPU / MEMORY:
32Bit ARM9 / 8bit AVR Processor
64M SDRAM
32M CODE/DATA Flash
Reader / Input / Output:
4 reader with Wiegand data output
(Or Clock and Data output reader optional)
8 inputs with 4 state monitoring
4 inputs with 2 state monitoring
8 outputs form-c
Capacity:
100,000 Users
50,000 Events
256 Time schedule index (includes 3 holidays)
256 Holiday index
Dimension:
242 * 158 * 25 (mm)
Operating Environment:
Operating Temperature: 0 ~ 75
Relative Humidity: 10 ~ 80%

1.3 Key Features

IP-based Network Access Control System
On-Board TCP/IP,
Embedded Web Server (optional)

Adapted multiple packet Tx/Rx protocol for fast two-way data transmission
Rapid data transmission with multiple packet protocol
Level option for each control for flexible and effective control
Effective security level control configuration by access reader, access reader mode, APB.

Priority event option for events and alarm reaction
Separated priority event buffer from normal event buffer to send the priority event first, Options for user to selection priority/normal event

4 State supervised inputs (Open loop / Shorted loop / Grounded loop / Line fault)
8 inputs monitoring Open loop, Shorted loop, Grounded loop and Line fault
Event output option for each input state
Input mode (NO/NC) and input TYPE (EXIT, DOOR CONTACT, ..) option
Door open too long and forced door open alarm option with door contact sensor input

Extra 2 State input ports
4 On/off input ports for internal inputs
Usable for inputs of exit button or door contact sensor

Various reader format support
Reader data input option of various wiegand formats
26bit(H10301), ext 26Bit, 32bit(no parity), 32bit(parity), 34bit, ext 34bit, 37bit(H10302, H10304), Pyramid 39bit, ACTAtec 40bit, Custom form

User defined reader format support
Auto reader detection: H10301, 32bit(parity), 34bit, H10304, 39bit, 40bit, custom mode

Global, Timed, Zone and Soft Anti-Passback
256 Time Schedule index and 256 Holiday index
LED display of its operation status

1.3 Key Features - Cont.

Various user mode options
User mode: NORMAL, VISITOR, ARM, DISARM, ARM/DISARM, MASTER, LOST
NORMAL mode: NORMAL User Access mode
VISITOR mode: VISITOR User Access mode
GUIDE mode: VISITOR + GUIDE User Access mode
ARM mode: ARM + NORMAL User Access mode
DISARM mode: DISARM + NORMAL User Access mode
MASTER mode: MASTER + NORMAL User Access mode

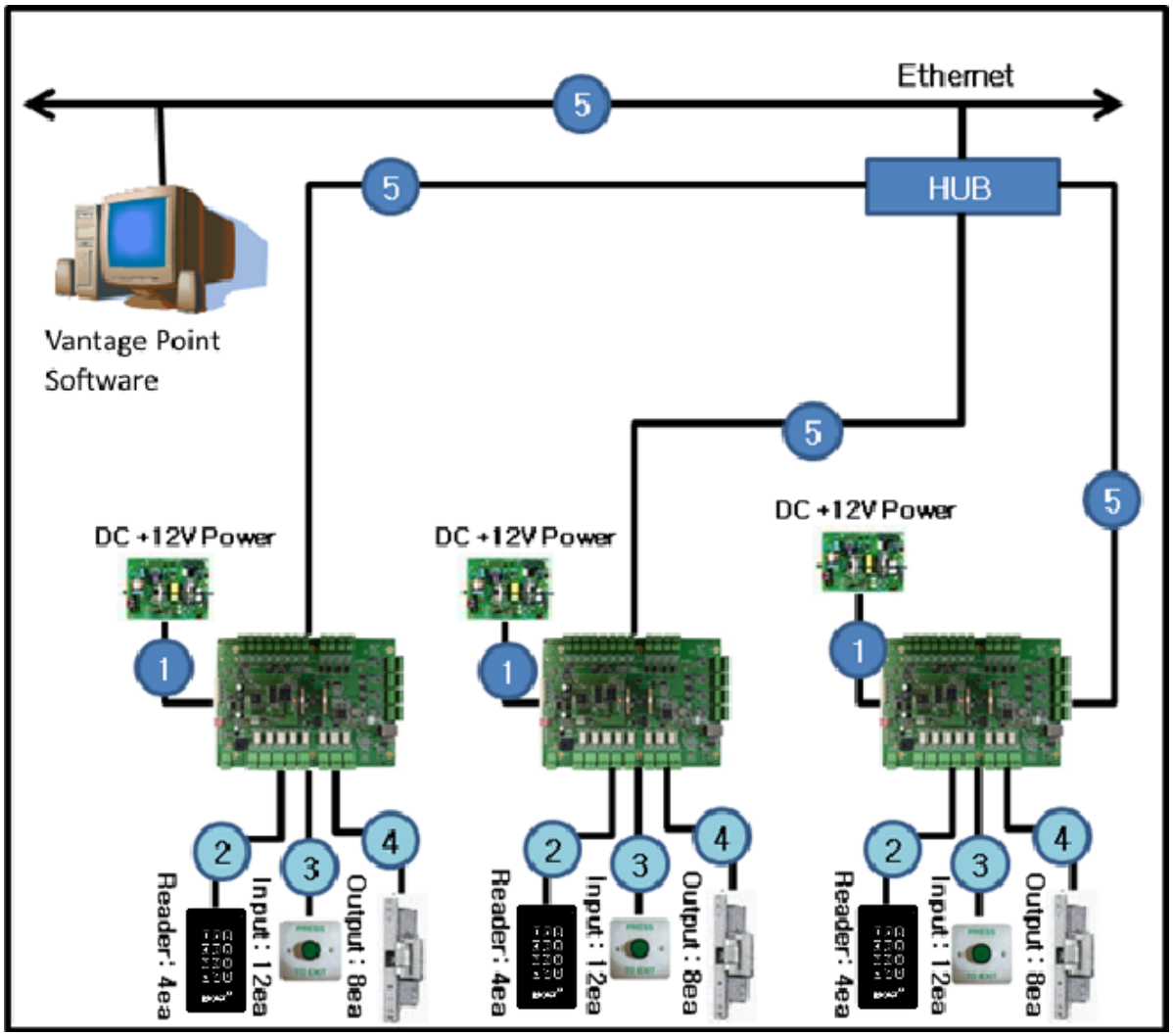
Global input/output trigger option
H/W and S/W Arm/Disarm option

Vantage Point 4 door Controller

Installation Guide

3 Hardware Installation

3.1 System Overview Diagram



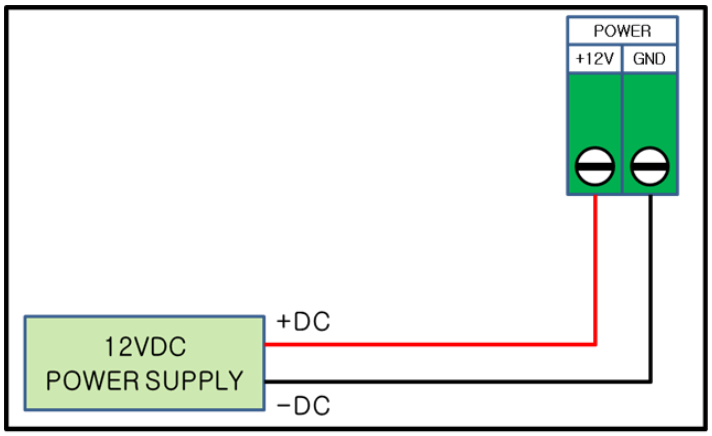
3.2 Recommended Wire and Cables

No.	Use	Recommended cable	Distance limit
1	Power supply VC4	Belden #9409, 18 AWG 2 conductor, unshielded	5m
2	Reader VC4	Belden #9512, 22 AWG 4 conductor, shielded	100m
3	Input Device VC4	Belden #9512, 22 AWG 4 conductor, shielded	100m
4	Output Device(Lock/alarm) VC4	Belden #9409, 18 AWG 2 conductor, unshielded	100m
5	Network VC4	UTP Cable CAT5(Catagory5)	

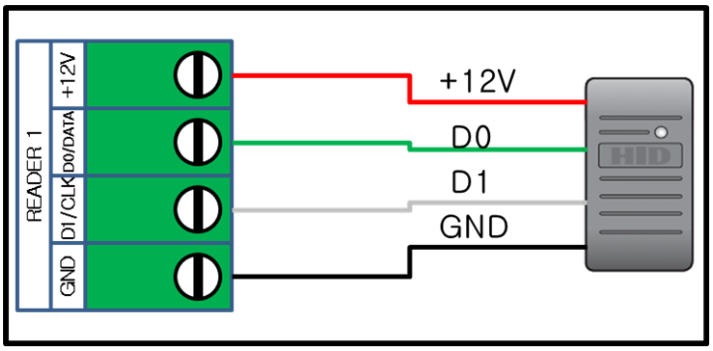
3.3 ACU Connection

Power Connection

Use +12V Power supply (TB21)



Reader port connection

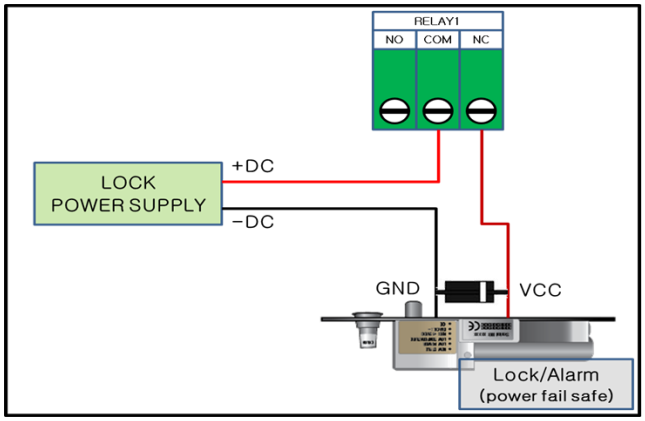


Vantage Point 4 door Controller

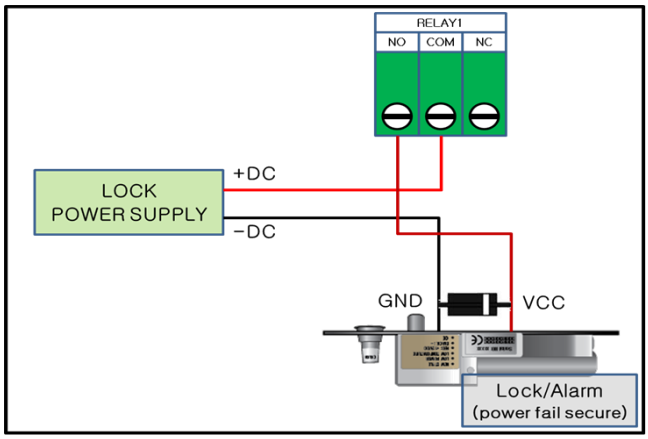
Installation Guide

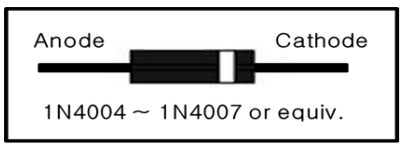
Relay port connection (Form-C)

In case of Power Fail SAFE Lock



In case of Power Fail SECURE Lock



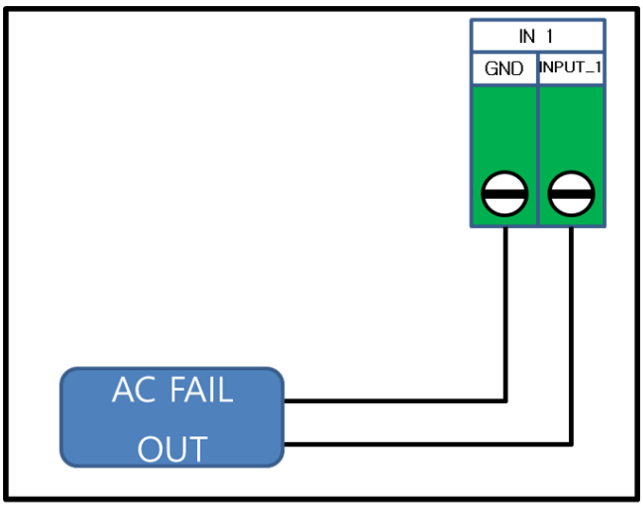


It is recommended to connect diode on the side of output devices as shown in the above configuration to protect the control device from possible damage by reversed power current from Lock or alarm devices

Vantage Point 4 door Controller

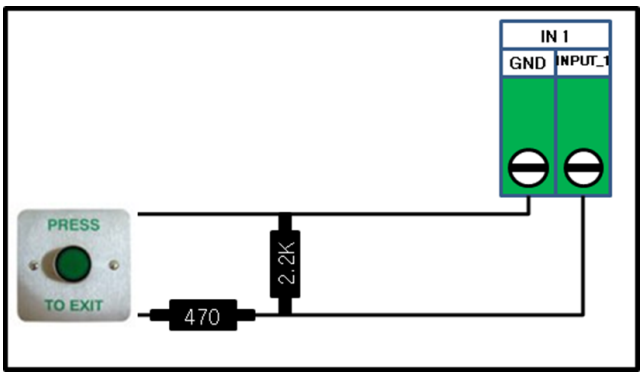
Installation Guide

Two state input port connection



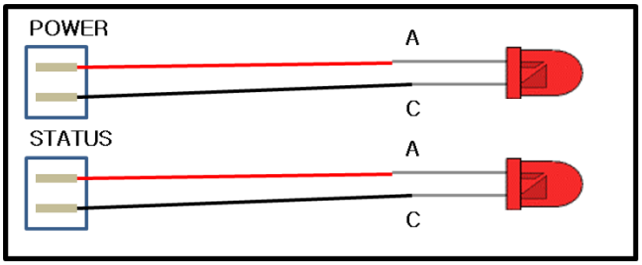
2 stated input ports to monitor controller box status of AC FAIL, LOW BATTERY, TAMPER ALARM and more NO/ NC option

Four state supervised input connection



Inputs for sensors of exit buttons, door contacts, PIR and others
4 state supervised inputs (ON / OFF / CUT / SHORT)
(Must connect 2.2K / 470 ohm resister (over 1/4W) as shown above diagram.
To use 2 status inputs, the resister connection is not necessary.
Dry contact signal with NO/NC option

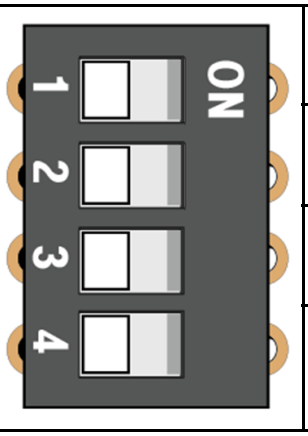
External LED Output Port



Output port for controller monitoring LED on the outside of controller box.
POWER / BOARD STATUS / ETH_TXD / ETH_RXD / ETH_STATUS
Output voltage/current: 5V / 20mA (MAX)

3.3 ACU Connection

ACU initialization switch



1	OFF—ON : Delete all the user ID data
2	OFF—ON : Delete all the EVENT data
3	OFF—ON : Delete all the configuration data of reader, system, T/S, HT/S and output
4	OFF Initialization of Network configuration

Network configuration default value
IP: 192.168.100.151
Gate Way: 192.168.100.1
Sub Net: 255.255.255.0
Port: 2005