

## VIP-172AL Revolution® Compliant IP DoorPhone/Intercom

### INTRODUCTION

The VIP-172AL Revolution® compliant IP Talkback DoorPhone/Intercom allows communication via the Intrado Revolution server, SIP based telephone systems or to Valcom IP gateways over an IP-based network. The -ST model includes a standard stainless steel faceplate, while the -VRSS model includes a heavier stainless steel faceplate and additional vandal resistant features.

### SPECIFICATIONS

#### Access Methods

- Intrado Revolution server
- SIP – enabled telephone system
- Standalone phones using Valcom gateways
- Valcom M Cast Page Group

#### Features

- 1 Form C relay
- Network activity LEDs
- Power over Ethernet (PoE) 802.3af compatible

#### Dimensions/Weight:

##### VIP-172AL-VRSS-SA

- 4.5" H x 4.5" W x 1.75" D  
(11.43cm H x 11.43cm W x 4.45cm D)
- Weight: 1.68 lbs. (0.76 kg)

##### VIP-172AL-ST-SA

- 4.5" H x 4.5" W x 1.3" D  
(11.43cm H x 11.43cm W x 3.3cm D)
- Weight: 0.55 lbs. (0.25 kg)

#### Network Interface

- 1.62" H x 5.63" W x 3.45" D  
(4.11 cm) x (14.30 cm) x (8.73 cm)
- **with brackets** – 8.22" W (20.87 cm)
- Weight: 2.10 lbs. (0.95 kg)



VIP-172AL-ST



VIP-172AL-VRSS



Network Interface

### Nominal Specifications

|                   |                |
|-------------------|----------------|
| Input Impedance:  | 600 Ohms       |
| Input Level:      | -10dBm         |
| Output Impedance: | 600 Ohms       |
| Output Level:     | -10dBm nominal |
| Relay Current:    | 1 AMP @ 24VDC  |

### Nominal Power Requirements

Via 802.3af PoE Ethernet Switch: Class 3

### Environment

#### Network Interface:

Temperature: 0 to +40° C  
Humidity: 0 to 85% non-precipitating

#### VIP-172AL Door plate:

Suitable for indoor or outdoor installation


### Precautionary Designations




**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: To reduce the risk of electric shock, Do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

## FCC Information

**This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference in which case the user will be required to correct the interference at his own expense.**

## INSTALLATION

### Operation:

The VIP-172AL provides door intercom access via network connection to Revolution server, customer telephone system or standalone telephone set. Interface to customer telephone system can be via SIP registration to a voice over IP (VoIP) telephone system, or analog port (when used with a Valcom gateway). Pressing the call button on the door plate initiates a call to a user-specified telephone number and the call assurance LED on the door plate begins to flash. When the call is answered, a hands-free communications path is established to the door plate, and the call assurance LED on the door plate remains lit. The form C relay included with the VIP-172AL may be activated by pressing the # key on the answering telephone, with the relay typically being used to activate door entry equipment.

### Mounting

**For enhanced protection against static electrical discharge, it is recommended the faceplate shipped with the VIP-172AL be installed into a grounded electrical box.**

The VIP-172AL Doorplate is designed for double gang FD electrical box mounting and must be within 350 feet of the Network Interface. See NEMA OS 3-2002 sec.1.2.3.5 for FD box specifications.

The Network Interface is designed for wall mounting and must be within 100 meters of the network switch. Using the wood screws and mounting brackets provided, secure the Network Interface to the wall.

## Power Connections

The only method of powering the Network Interface is via a Power over Ethernet (PoE) switch or power injector meeting the 802.3af specification.

Make all required signal connections before connecting to Ethernet switch or power injector meeting the 802.3af specification.

## Network Connection

The Network Interface has one RJ-45 Network connector and one RJ-45 Signal Output connector on the front panel.

Use a standard Ethernet patch cable to connect the NETWORK connector of the Network Interface to an Ethernet switch.

## Signal Connections

Connect RJ-45 using EIA/TIA 568B Standard to the signal connector of the Network Interface then to the RJ-45 connector of the VIP-172AL Door Plate.

## Door Relay Connections

Access to the form C relay is provided via a three-pin screw terminal block on the VIP-172AL Door Plate. The common contact is the middle terminal. The normally open contact is on the side closest to the RJ-45 connector, the normally closed contact is on the side furthest from the RJ-45 connector. For higher security, the included VIP172-RLY connection block can be used. Please refer to Figure 2 for wiring connections.

## Status Indicator Lights

The VIP-172AL Door plate is equipped with a status indicator LED. LED flashes when the call button is pressed and steady when the call is connected.

The VIP-172AL has 2 status indication lights on the front panel:

**Green LED:** (Link) Indicates Ethernet connection when illuminated.

**Yellow LED:** (Activity) Indicator flashes to indicate network activity.

## SETUP

The VIP-172AL will automatically acquire an IP address (using DHCP) and connect to the Revolution server when connected to the network and powered up. Information specific to your application will need to be programmed into the Revolution server. Refer to the Revolution documentation for further information. Additional setup may be required using the Valcom IP Solutions Setup Tool. The Setup Tool may be downloaded from the Valcom web site at <http://www.valcom.com/vipsetuptool>.

## TECHNICAL ASSISTANCE

Assistance in troubleshooting is available from the factory. Call (540) 563-2000 and press 1 for Technical Support or via email at [support@valcom.com](mailto:support@valcom.com).

When requesting assistance, you should include all available information. General information and troubleshooting procedures are available on the Valcom website at [www.valcom.com](http://www.valcom.com). Valcom equipment is not field repairable. Valcom, Inc. maintains service facilities in Roanoke, VA.

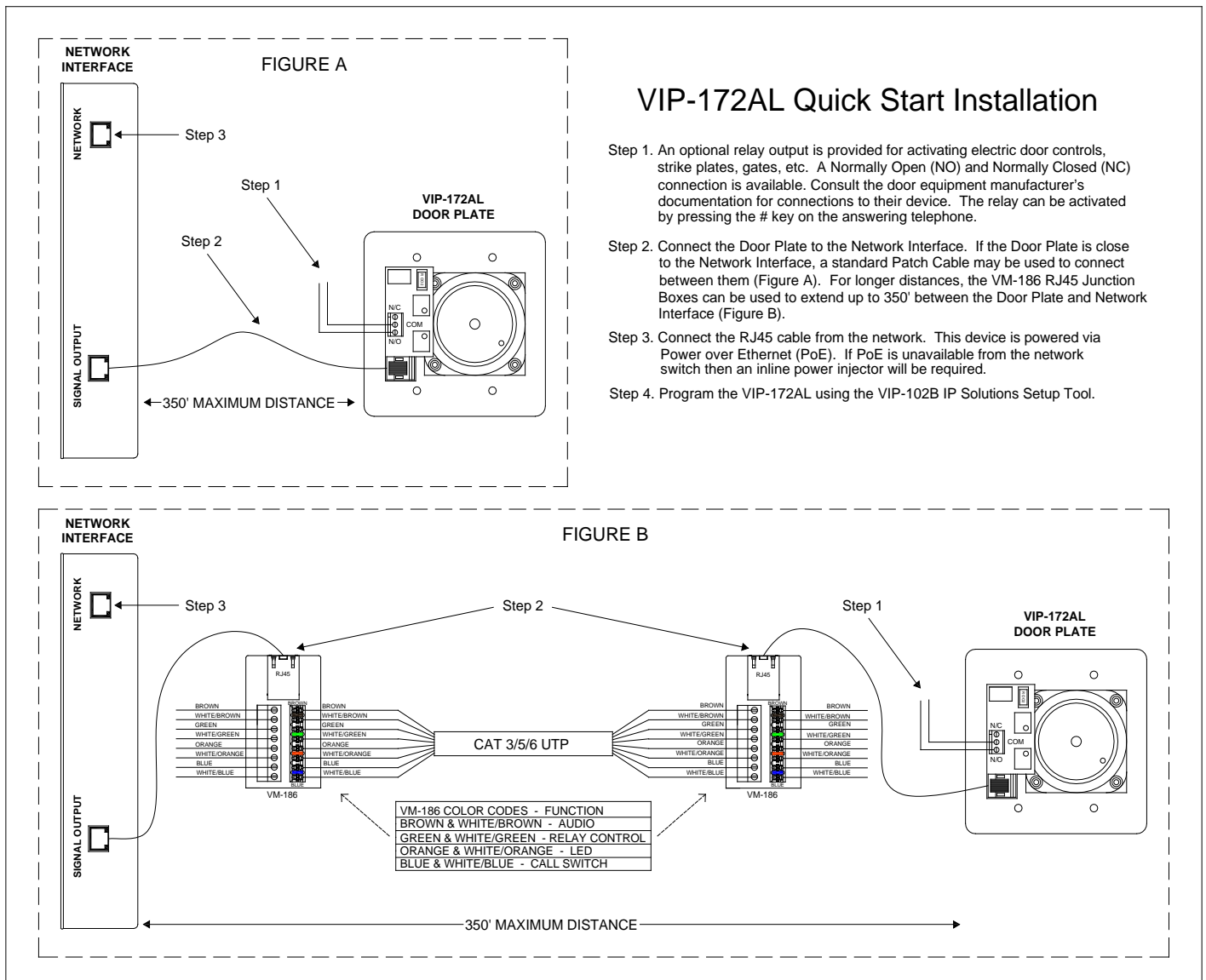
Should repairs be necessary, attach a tag to the unit clearly stating your company name, address, phone number, contact person and the nature of the problem.

Send the unit to:

**Valcom, Inc.**  
**Repair & Return Dept.**  
**5614 Hollins Road**  
**Roanoke, Va. 24019-5056**

## WARRANTY

Warranty information may be found on our website at [www.valcom.com/warranty](http://www.valcom.com/warranty)

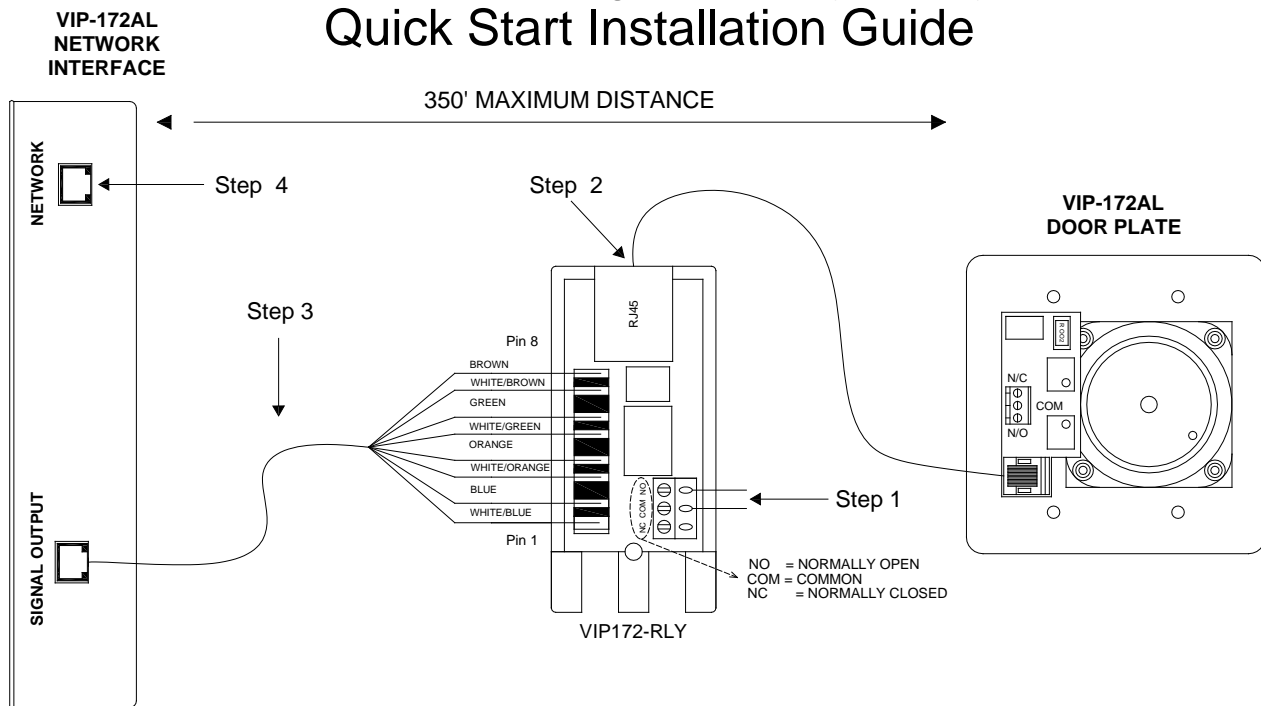


## VIP-172AL Quick Start Installation

- Step 1. An optional relay output is provided for activating electric door controls, strike plates, gates, etc. A Normally Open (NO) and Normally Closed (NC) connection is available. Consult the door equipment manufacturer's documentation for connections to their device. The relay can be activated by pressing the # key on the answering telephone.
- Step 2. Connect the Door Plate to the Network Interface. If the Door Plate is close to the Network Interface, a standard Patch Cable may be used to connect between them (Figure A). For longer distances, the VM-186 RJ45 Junction Boxes can be used to extend up to 350' between the Door Plate and Network Interface (Figure B).
- Step 3. Connect the RJ45 cable from the network. This device is powered via Power over Ethernet (PoE). If PoE is unavailable from the network switch then an inline power injector will be required.
- Step 4. Program the VIP-172AL using the VIP-102B IP Solutions Setup Tool.

Figure 1. Quick Start Installation

# VIP-172AL High Security Relay Quick Start Installation Guide



**Step 1.** An optional relay output is provided for activating electric door controls, strike plates, gates, etc. A Normally Open (NO) and Normally Closed (NC) connection is available. Consult the door equipment manufacturer's documentation for connections to their device. The relay can be activated by pressing the # key on the answering telephone.

**Step 2.** Connect the Door Plate to the VIP172-RLY with standard CAT5 T568A or T568B straight-through cabling.

**Step 3.** Connect the punchdown block on the VIP172-RLY to the SIGNAL OUTPUT on the Network Interface with standard CAT5 cabling. RJ-45 connector at Network Interface should be wired using T568B standard.

**Step 4.** Connect the RJ45 cable from the network. This device is powered via Power over Ethernet (PoE). If PoE is unavailable from the network switch then an inline power injector will be required.

**Step 5.** Program the VIP-172AL using the VIP-102B IP Solutions Setup Tool.

The VIP172-RLY External Relay adapter increases security for door unlock mechanisms. By installing the VIP172-RLY in a protected area, the relay connections can be protected from tampering. When installed inline as shown in this drawing, the relay connections on the Door Plate are not functional.

**Figure 2. Higher Security Wiring Connections**