Basic Wiring Diagrams

IP Bridge, RC-03, and RC-04

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Third Party Power Supply

+12/24VDC

-12/24VDC

Note: The external voltage provided by the power supply will be available on the DC terminal on the IPBridge.

Third Party Wiegand Long Range Reader

Note: This depicts the first port on an IPBridge, wire other ports the same.

Gate Controller

Ingress

Note: At a minimum voltage and D0/D1 must be connected to the IPBridge. The Beeper and Green LED are not necessary but helpful.
Third Party Power Supply

Note: The external voltage provided by the power supply will be available on the DC terminal on the IPBridge.

NC Door Contact

NC
NO

REX Motion

Exit Button
Such as Securitron EEB2

IPBridge – Power Supply with Magnetic Lock, Exit Motion, Exit Button and Door Contact

Date: 3/1/2016
Drawn By: Jason R Clement
Version: 1.00.00

4750 Walnut Street Suite 110
Boulder, CO 80301
www.isonas.com
Third Party Power Supply

Note: This depicts the first port on an IPBridge, wire other ports the same

Note: The external voltage provided by the power supply will be available on the DC terminal on the IPBridge

+12/24VDC
-12/24VDC

REX Motion
Such as Bosch DS150i

Exit Button
Such as Securitron EEB2

Third Party Power Supply

Third Party
Wiegand Prox Reader

DIP Switch Settings
for DS150i

ON

Note: These settings assume the relay timing resets with each trigger, set for fail safe and for a four second unlock. If other options are needed or another manufacturer is used please refer to their installation manual

Note: At a minimum voltage and D0/D1 must be connected to the IPBridge. The Beeper and Green LED are not necessary but helpful.

IPBridge – Power Supply with Magnetic Lock, Exit Motion and Exit Button

Date: 3/1/2016
Drawn By: Jason R Clement
Version: 1.00.00

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Boulder, CO 80301
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Third Party Power Supply

Note: The external voltage provided by the power supply will be available on the DC terminal on the IPBridge

BackEMF Diode Assembly

Electric Strike

Third Party Wiegand Prox Reader

Note: This depicts the first port on an IPBridge, wire other ports the same

Third Party Power Supply

Note: At a minimum voltage and D0/D1 must be connected to the IPBridge. The Beeper and Green LED are not necessary but helpful.
Third Party Power Supply

+12/24VDC
-12/24VDC

Note: The external voltage provided by the power supply will be available on the DC terminal on the IPBridge

NC Door Contact

Com NC NO +12VDC -12VDC

REX Motion

BackEMF Diode Assembly

Electric Strike

Third Party Power Supply with Electric Strike, Exit Motion and Door Contact

Third Party Wiegand Prox Reader

Note: At a minimum voltage and D0/D1 must be connected to the IPBridge. The Beeper and Green LED are not necessary but helpful.
Wire other devices as normal. Refer to wiring diagrams for details.

Shown here powered by RC-03, verify power consumption and use a power supply if necessary.

Shown here as electric strike powered by 12vdc from the RC-03. Verify power consumption and use a power supply if necessary or use the relay to trigger a power supply.

Important – Read This First
- Always refer to manufacturer instructions, this drawing is a recommendation and site characteristics vary.
- When utilizing 12vdc from a PoE powered RC-03 verify power calculation to ensure enough power is available for all devices.
- Some adjustment of the timing will be necessary by adjusting the potentiometers, installing the device at default values will result in errors.
- Note dip switch settings for this configuration.
Cat5e/6 to Switch

Optional Power Supply

To Lock or EDK Wiring

NC Door Contact

-12VDC +12VDC

REX Com NC NO

Motion

-12VDC +12VDC

Alarm Device

PowerNet – Typical RC-03 with SRM and Alarm Device Using TTL1

Dwg No: 
Sheet 1 of 1
Date: 8/17/16
Drawn By: Jason R Clement
Version: 1.00.00

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Connect Blue to Black When No Door Contact is Used

Other wires isolated and taped off

BackEMF Diode Assembly

PowerNet – PoE with EDK and Electric Strike

PowerNet RC Jumper Positions

PowerNet – PoE with EDK and Electric Strike

Dwg No: Sheet of

Date: 2/17/2016 Drawn By:

Version: 1.00.00

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Exit Button Such as Securitron EEB2

To 12VDC Power Source

Magnetic Lock

NC Door Contact

Other wires isolated and taped off

PowerNet – PoE with Magnetic Lock, DSM, REX and Exit Button

PowerNet RC Jumper Positions

Isonas In Rush Suppressor

RJ-45

ISONAS
PURE IP ACCESS CONTROL

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Dwg No:

Sheet 1

of 1

Date: 2/18/16

Drawn By: Jason R Clement

Version: 1.00.00
DIP Switch Settings for DS150i

**Note:** These settings assume the relay timing resets with each trigger, set for fail safe and for a four second unlock. If other options are needed or another manufacturer is used please refer to their installation manual.

<table>
<thead>
<tr>
<th>ON</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
</table>

**PowerNet RC Jumper Positions**

PowerNet – PoE with Magnetic Lock, REX Motion and Exit Button

*Date: 2/18/16*  
*Drawn By: Jason R Clement*  
*Version: 1.00.00*
BackEMF Diode Assembly

Connect Blue to Black When No Door Contact is Used

Other wires isolated and taped off
PowerNet – Power Supply with Magnetic Lock, EDK, REX Motion and Exit Button

DIP Switch Settings for DS150i

**Note:** These settings assume the relay timing resets with each trigger, set for fail safe and for a four second unlock. If other options are needed or another manufacturer is used please refer to their installation manual.

**ON**

1 2 3 4 5 6

PowerNet RC Jumper Positions

<table>
<thead>
<tr>
<th>JP 1</th>
<th>JP 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other wires isolated and taped off

Connect Blue to Black When No Door Contact is Used  
**Note:** When using a door contact do not use this wiring diagram, use the wiring diagram that includes a door contact.
Other wires isolated and taped off

Connect Blue to Black When No Door Contact is Used

PowerNet – Power Supply with EDK and Electric Strike

PowerNet RC Jumper Positions

JP 1

JP 2

RJ-45

BackEMF Diode Assembly

Electric Strike
Power Supply
REX Motion Such as Bosch DS150i
Exit Button Such as Securitron EEB2

Other wires isolated and taped off

Connect Blue to Black When No Door Contact is Used

Note: When using a door contact do not use this wiring diagram, use the wiring diagram that includes a door contact.

DIP Switch Settings for DS150i

Note: These settings assume the relay timing resets with each trigger, set for fail safe and for a four second unlock. If other options are needed or another manufacturer is used please refer to their installation manual.

PowerNet – Power Supply with Magnetic Lock, REX Motion and Exit Button

Dwg No: Sheet of
Date: 2/18/16
Drawn By: Jason R Clement
Version: 1.00.00

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Third Party Power Supply

BackEMF Diode Assembly

Electric Strike

Other wires isolated and taped off

Connect Blue to Black When No Door Contact is Used

PowerNet – Power Supply with Electric Strike

PowerNet RC Jumper Positions

<table>
<thead>
<tr>
<th>JP 1</th>
<th>JP 2</th>
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<tbody>
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Date: 2/23/2016
Drawn By: Jason R Clement
Version: 1.00.00
Cat5e/6 to PoE Switch

Relay on alarm panel—Changes state on Arm/Disarm (shown disarmed)

Red Orange Yellow White Blue Green Brown

POS+ C NC NO NEG C NC NO

Note: An RBSN is not a replacement for an EDK. For enhanced security please use the Isonas Exterior Door Kit.

To Fail Secure Lock

To Fail Safe Lock

Intrusion Panel

PureIP RC-04 Using Altronix RBSN for Dry Form C Relay

Dwg No: 04-INTRUSION_DISARM
Date: 2/9/2017
Drawn By: Jason R Clement
Version: 1.00.10

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Cat5e/6 to PoE Switch

Exit Button Such as Securitron EEB2

In Rush Suppressor installed close to lock

To 12 VDC power source

Red
Black
Orange
Yellow
White
Blue
Green
Brown

Isolate and insulate wires not used

NC Door Contact

Com NC NO +12VDC -12VDC

REX Motion

12/24 VDC Magnetic Lock

Note: When using PoE and powering a fail safe lock it is critical to understand that a loss of PoE will unlock the door due to loss of power.

PureIP RC-04 with PoE and Magnetic Lock

Dwg No: 04-MAG
Sheet 1 of 1

Date: 12/13/2016
Drawn By: Jason R Clement
Version: 1.00.10

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Cat5e/6 to PoE Switch

BackEMF Diode Assembly
(install close to strike)

12VDC Electric Strike

Isolate and insulate wires not used

PureIP RC-04 with Electric Strike

Date: 12/5/2016
Drawn By: Jason R Clement
Version: 1.00.00

4750 Walnut Street Suite 110
Boulder, CO 80301
www.isonas.com
Cat5e/6 to PoE Switch

BackEMF Diode Assembly (install close to strike)

12VDC Electric Strike

Red
Black
Orange
Yellow
White
Blue
Green
Brown

Isolate and insulate wires not used

NC Door Contact

Com
NC
NO
+12VDC
-12VDC

REX Motion

PureIP RC-04 with Electric Strike, Door Sense and Request to Exit

Drawn By: Jason R Clement
Version: 1.00.00
Date: 12/5/2016
Fast Acting Fuse Part Numbers:
- Fuse = Littelfuse 0208.500MXP or Equivalent
- Fuse Holder – Littelfuse 150274 or Equivalent

Exit Button Such as Securitron EEB2
In Rush Suppressor installed close to lock
To 12 VDC power source

PoE+ Splitter
Cat5e/6 to PoE+
Switch/Midspan

In Line Fast Acting Fuse

Red
Black
Orange
Yellow
White
Blue
Green
Brown

Isolate and insulate wires not used

NC Door Contact

Com
NC
NO
+12VDC
-12VDC

Leave Factory Jumper Wire!

Threaded Mounting Box

PureIP RC-04 Powered by PoE+ Splitter with a Magnetic Lock

Drawn By: Jason R Clement
Version: 1.01.00

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Cat5e/6 to PoE Switch

Exit Button Such as Securitron EEB2

In Rush Suppressor installed close to lock

to 12 VDC power source

Red
Black
Orange
Yellow
White
Blue
Green

Remove factory jumper wire from V+ to COM!

Isolate and insulate wires not used

NC Door Contact

REX Motion

12/24 VDC Power Supply

12/24 VDC Magnetic Lock

PureIP RC-04 with PoE and Magnetic Lock
Powered by External Power Supply
PureIP RC-04 with PoE and Electric Strike
Powered by External Power Supply

Cat5e/6 to PoE Switch

BackEMF Diode Assembly
(install close to strike)

12VDC Electric Strike

Remove factory jumper wire from V+ to COM!

Isolate and insulate wires not used

NC Door Contact

REN Motion

Red
Black
Orange
Yellow
White
Blue
Green
Brown

Com
NC
NO
+12VDC
-12VDC

12/24 VDC Power Supply

Remove factory jumper wire from V+ to COM!

12/24 VDC Power Supply

Com
NC
NO
+12VDC
-12VDC

12/24 VDC Power Supply

Com
NC
NO
+12VDC
-12VDC

12/24 VDC Power Supply

Com
NC
NO
+12VDC
-12VDC

12/24 VDC Power Supply

Com
NC
NO
+12VDC
-12VDC

12/24 VDC Power Supply

Com
NC
NO
+12VDC
-12VDC
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(BasicWiringDiagrams)

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