

# AXXESS INDUSTRIES INC.

## READY MAID PLUS (System III)

### INSTALLATION INSTRUCTIONS

Rev. Feb 2006

The Ready Maid /Ready Maid Plus product consists of 2 main components, the Master Unit which mounts inside the guest room and the Slave Unit, which mounts in the hallway. In addition, Ready Maid / Ready Plus ships with a standard 24" long Wiring Harness, which connects the Master and Slave units with a simple RJ45 style plug in connection, as well as 2 finish screws for each of the Master Unit and the Slave Unit (if not mounted in signage).

The customer must determine the exact location in consultation with the architect and the authority having jurisdiction. It is our current understanding that federal ADA guidelines set a max side-reach height of 54" (which would apply to the doorbell) and the height of the center of the room number sign at 60" from the finished floor level. Thus, it would appear to be reasonable to set the height so that the doorbell is at 54". However, these requirements may differ from location to location and from time to time. ANSI standards may differ. Customers are advised to confirm the requirements that apply in the place where the hotel is located before installation.

The standard wiring harness has a length of 24". If the Master and Slave units are located farther apart than can be accommodated with the 24" harness, a special order wiring harness is required, which can be supplied at additional charge (or the rough-in installer may install Cat 5 wire with RJ45 style connectors for which he must obtain pin-out instructions).

#### **Rough-in Requirements:** (Sketch Drawing supplied)

#### **1.0 Master Unit**

#### **1.1 Electrical**

- 1) Standard 4 square electrical box (2 ½" deep) with single gang mud-ring (1/2" deep) to be mounted in the guest room; (single gang electrical box possible in some circumstances, but this needs to be discussed with Axxess technical staff); any less depth requires factory authorization. It is assumed that the device mounting tabs on the mudring come to within 1/8" of the finished wall face. If they are significantly deeper (because of double sheetrock or the like) you must advise us, since extra long finish screws may be required. Even more important, the face of the mudring cannot protrude out of the wall board as this will cause damage and problems. Please ensure that the electrical box is mounted plumb, else the final fit of the Ready Maid Panel will be out of plumb.
- 2) Low Voltage wiring to the electrical box, with min. 190mA at min. 15VDC available supply to each room;  
2 alternatives are typical for power supply:  
First, Axxess can supply (at separate charge) a micro-transformer for each room, with 110VAC primary and 15VAC secondary; these transformers are small enough (size

1.35" x 1.27" x 1.1") to fit into a 4 square box with other wiring (and in some instances even into a single gang electrical device boxes; installation into single gang boxes must be approved by Axxess first);

Second, Axxess can supply (at a separate charge) 24 VDC supplies to be installed in a utility space, supplying up to 18 rooms in parallel connection. Wiring should be sized to ensure that each unit receives voltage and available current within the Device Specifications. NOTE: Ideally, wiring for these units should not be daisy-chained, but rather be home-run to the power supply. If power supply daisy chaining is required, please consult with Axxess technical staff. NOTE also, that significant length of DC wiring causes voltage drop. The minimum voltage at the Ready Maid unit should be 15VDC at 190 mA.

If a home-run Cat 5 wire is run from each Guest Room Master to a punch-down panel on that floor, then 1 pair of that Cat 5 wire may be used for the network communication and 1 pair may be used for power. In that case, somewhat adjacent to the punchdown, provision should be made for placing/mounting of the number of central power supplies required on that floor. (number of rooms/18). A shelf-unit on which desktop style supplies can be strapped down works well. The power supplies do require some ventilation space.

(Unless otherwise specified in the Purchase Order, the cost of power supplies is additional to the quoted Ready Maid price and depends on the specifics of each installation.).

Wire size is in the discretion of the LV electrical contractor in order to meet minimum Device Specifications, HOWEVER, the wire ends terminating the power supply at the Ready Maid units should be Solid Core Wire (not stranded) no larger in diameter than 22ga. If stranded wire or larger gauge wire is used for the run from the power supply, a solid wire pig-tail no larger than 22ga must be attached for termination as part of rough-in.

## **1.2 Networking (optional)**

### **1.2.1 Wiring Specifications:**

Wire Required: 1 Twisted Pair; Cat 5 type or better; shielding is optional;  
(120 Ohm characteristic impedance wire is acceptable) wire size at Ready Maid Master unit connector cannot exceed 22ga diameter and must be solid core;

Job Layout Specs:

- Each room should have a home run from the Master to a punch-down panel in the utility room of that floor;
- All the positive and negative wires at the punch down will be connected in parallel;
- From the Utility Room we require 1 Cat 5 wire to the dedicated server computer location (usually the Network Operations Center);

Any wiring configuration requiring more than 1 repeater port for each 64 units will incur additional charges for additional repeaters, which will be charged to the customer.

### 1.2.2 Recommendations:

- A more sophisticated network can be built by adding 1 repeater per floor, or 1 repeater for every 32 or 64 rooms; also galvanically isolated repeaters are available; (unless requested, our quotes do not include such additional repeaters)

## 2.0 Slave Unit

**2.01** A four square electrical box with single gang mud ring is to be mounted in hallway wall at the indicator location. Depth of 4 square box: 2" plus ½" deep mudring. Any less depth would require factory authorization. Single gang boxes can be used in some circumstances, but require factory authorization. If Ready Maid is incorporated into room number signs, ADA (or ANSI) regulations require certain mounting parameters. Please consult with you local compliance authority. Typically the height center of our signs will be located within 1" of the center of the mudring, but exact height will vary with the sign design chosen.

The facing edge of the mudring must not protrude to the surface of the sheetrock; instead the facing edge of the mudring should be recessed by at least 1/8".

Please ensure that the electrical box is mounted plumb/level, else the final fit of the Ready Maid Panel will be out of plumb.

**2.02** The electrical boxes for the Master and Slave units are to be connected by a conduit with min 1/2" ID. The conduit must readily admit pulling through an RJ45 plug (found at the end of any computer network cable)

## 3.0 FINISH INSTALLATION:

**Please ensure the 110 power supply (plug in adapter or breaker) is disconnected/switched off during installation!**

**This is a 2 person job. You cannot allow the Ready Maid components to dangle from the wire harness or power hookups!**

3.01 Run wiring harness between Master Unit electrical box and Slave Unit electrical box; (be careful not to damage the RJ45 Plug, particularly the release prong, it is best to wrap a piece of electrical tape around the plug to protect it while pulling it through.

3.02 Insert 6-32 screw into top hole of mudring.

3.03 Plug Master/Slave wiring harness into Slave Unit, but do not final mount slave before testing. Hang the sign on the mounting screw by the keyhole in the back of the sign;

### 3.04 Install Master Unit:

3.05 Plug Master/Slave wiring harness into Master Unit;

3.06 Connect Network wires (RS+ RS-)

3.07 Connect Occupancy indicator leads (if feature was purchased)

3.08 Connect ADA non-Audible Signal device (if feature was purchased)

3.09 Connect power leads (P1 P2) Polarity is irrelevant;

Ensure that all wires are stripped far enough that conductor (not sheathing) makes contact with terminal contact, but not so far as to allow adjacent wire conductors to touch when wires are bent.

3.10 Mount Master Unit panel to the electrical box/mudring with finish screws;

3.11 Test for full functionality before finish mounting the Slave/sign.

**You cannot allow the Ready Maid components to dangle from the wire harness or power hookups!**

**3.12 Mount Slave Unit.**

The weight of the room number sign is supported by hanging it by the keyhole onto the 6-32 mounting screw inserted into the top hole of the mudring. To keep the sign from being loose on the wall, apply a few small dabs of silicone on the back of the sign.

**Please Note: Once adhesive is applied to the wall, it may not come off without damage to the wall surface. Dislodging a silicon mounted sign is achieved by slipping a thin putty knife behind the sign to break the bond.** Be sure that the adhesive is applied at least 3/8" " inboard from the outside edge of the sign. If Slave unit needs to be removed for any reason, take care that wall surface is not damaged outside of area covered by sign;

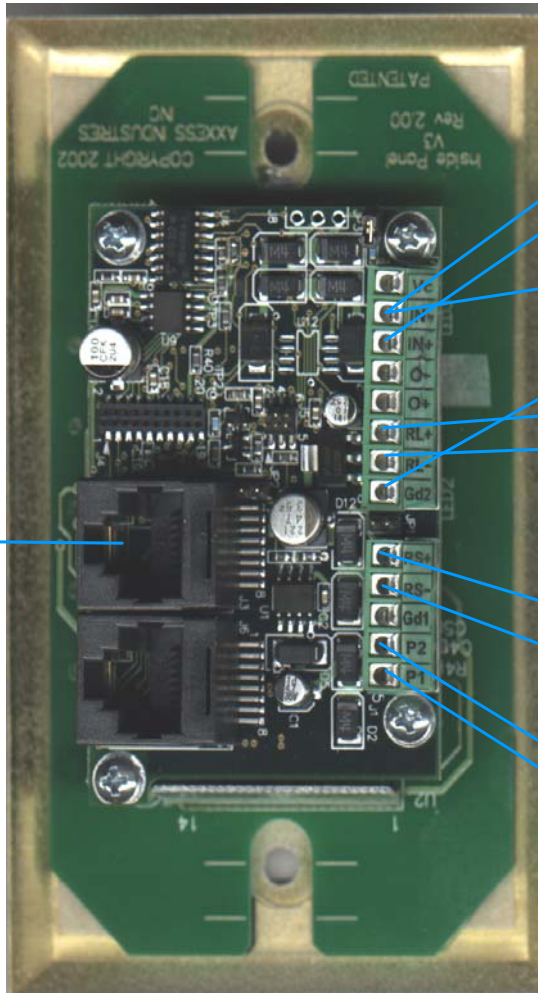
Please Note: Doorbell will not ring when the Do Not Disturb red LED is lit.

#### **4.0 Device Specifications:**

Min. Operating Voltage (at the Device)	15VDC
Max Operating Voltage (at the Device)	36VDC
Minimum supply current available at each unit	190mA (at 15VDC)
Typical Operating Current	140mA (at 15VDC)

For Technical questions please contact Joerg Wagner at Axxess Industries Inc.  
cell: 250-862-2260  
toll-free: 1-866-769-7009 ext 261

READY MAID PLUS - SYSTEM III MASTER UNIT - FULL FEATURED



Harness to Hallway Slave unit

Occupancy External Voltage Feed  
In- En. Mgt Occup feed neg  
In+ En Mgt Occup feed pos

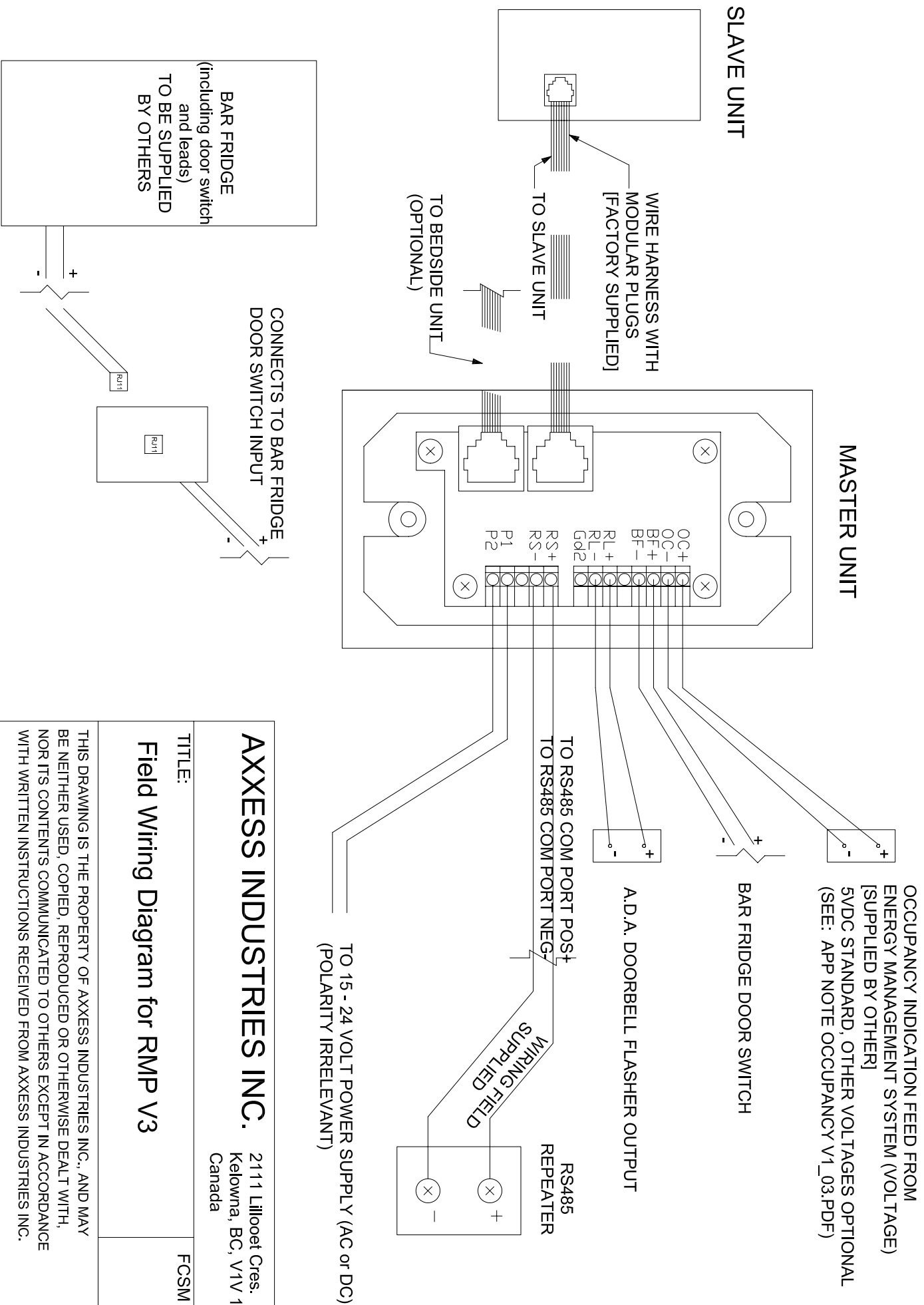
Occupancy Dry Contact Feed  
IN- En. Mgt Occup feed dry contact 1  
Gd2 En. Mgt Occup feed dry contact 2

RL+ Relay Activation (ADA) 5VDC pos  
RL- Relay Activation (ADA) 5VDC neg

Other voltage option possible on special request

RS+ Communication RS485 pos  
RS- Communication RS485 neg

P1 P2 Power Supply



**AXXESS INDUSTRIES INC.**

2111 Lillooet Cres.  
Kelowna, BC, V1V 1Y2  
Canada

TITLE:  
**Field Wiring Diagram for RMP V3**

FCSM NO.

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## 2.3 VA Micro Transformer

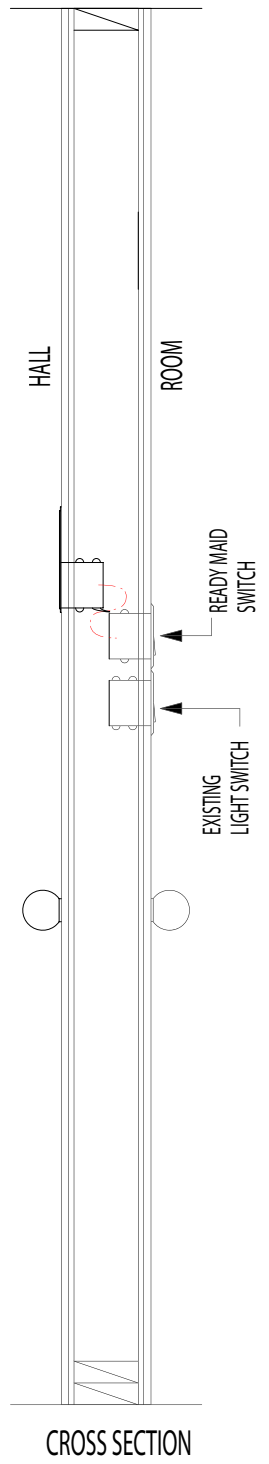
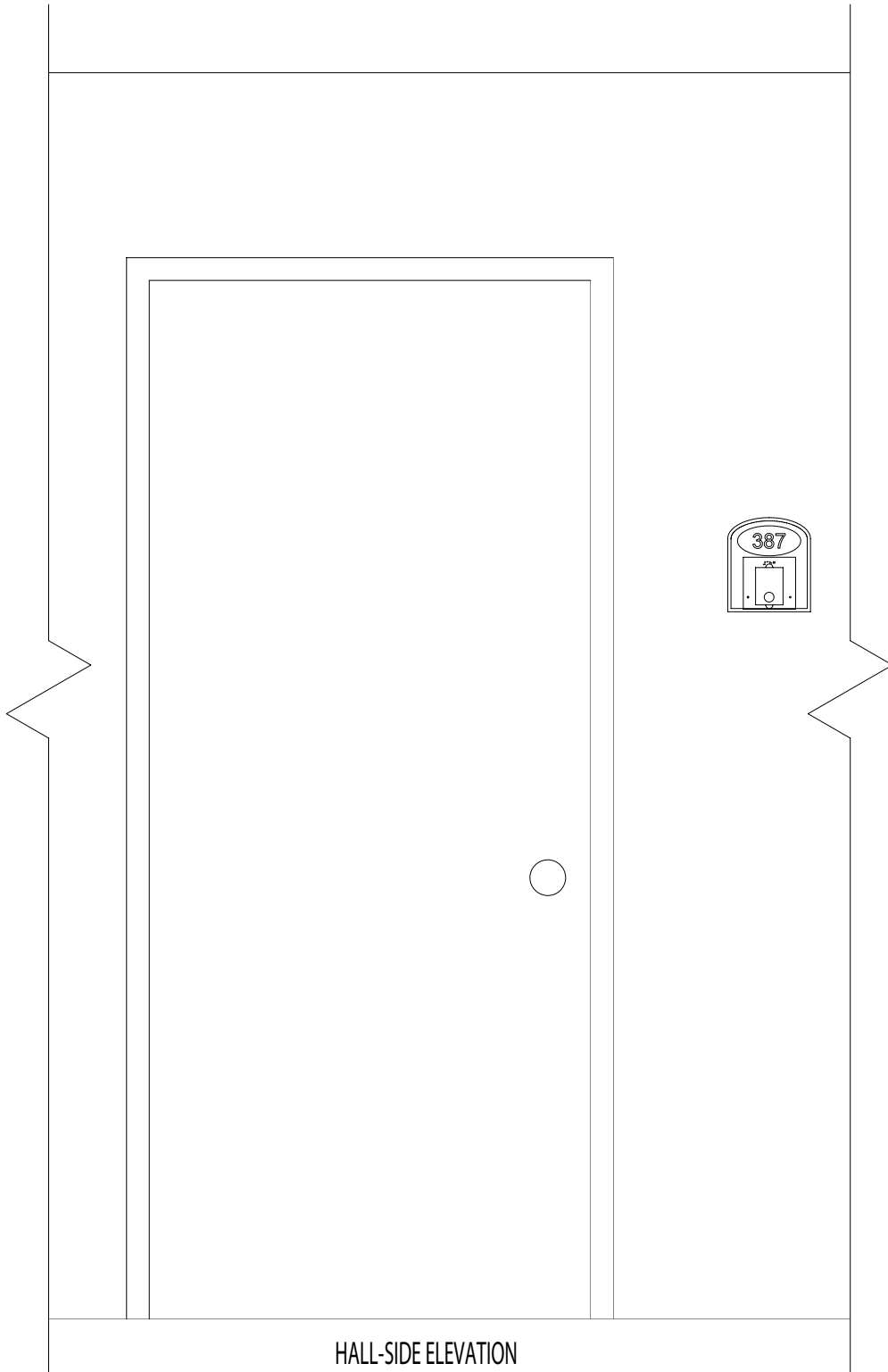
Dimensions:

1.3" x 1.1" x 1.2"

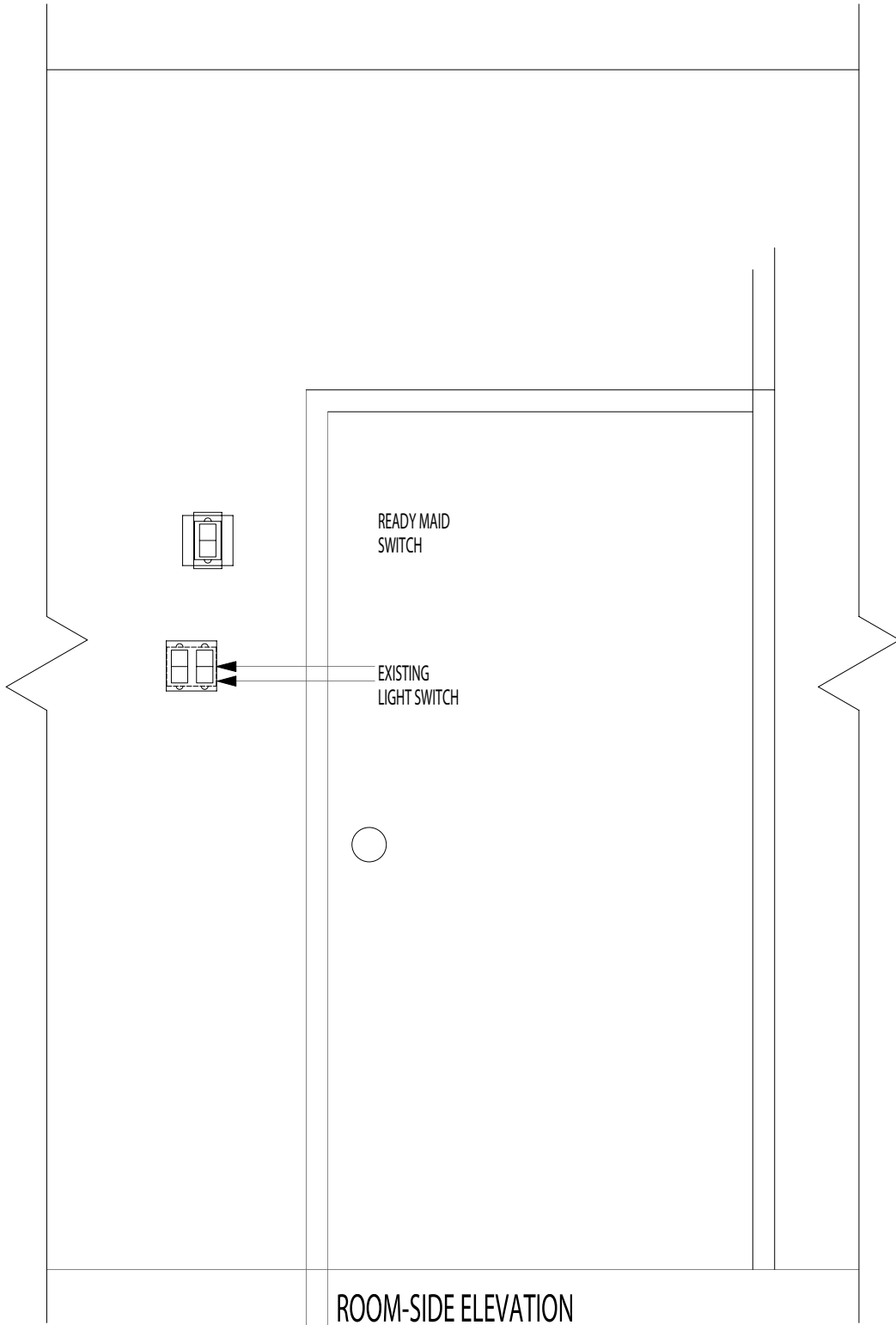
Flying Leads: 6"

Black = Primary 110V

White = Secondary 15V



AXXESS INDUSTRIES Inc.		Drawn On: Nov. 20, 2001
READY MAID	INSTALLATION ROUGH IN PART 1	



AXXESS INDUSTRIES Inc.	Drawn On: Nov. 20, 2001
READY MAID	INSTALLATION ROUGH IN PART 2