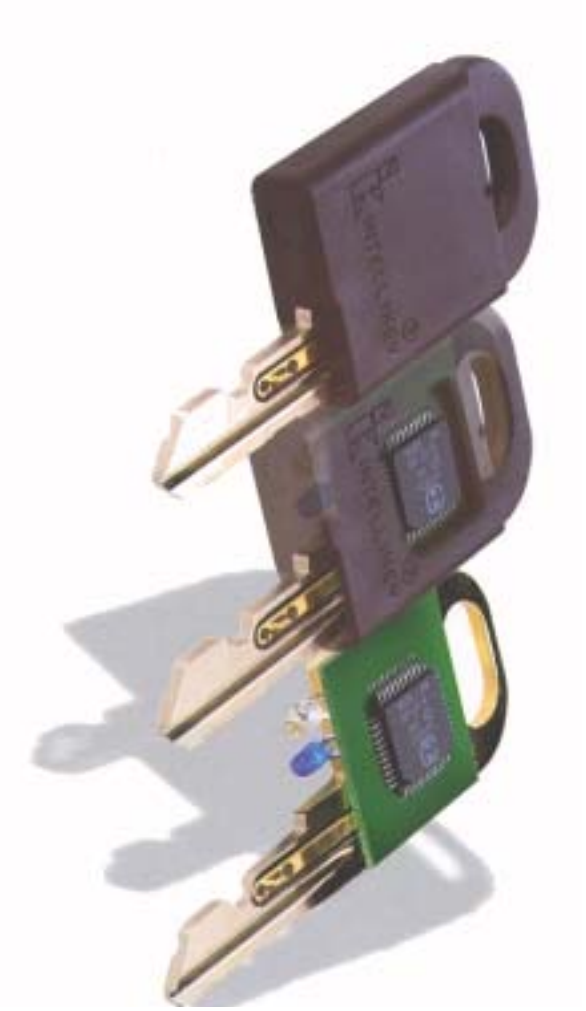
INTELLIKEY®

GENIUS AT YOUR FINGERTIPS

Installation Manual



Contents

FCC Notice

Warning: **Changes or modifications to any unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

Note: **This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:**

- **Reorient or relocate the receiving antenna**
- **Increase the separation between the equipment and receiver**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected**
- **Consult the dealer or an experienced radio TV technician for help**

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Fax: 321-724-5695
email: techsupport@intellikey.com

1.0 Introduction

The INTELLIKEY Access Control System has been designed with ease of installation as a major consideration. It is estimated that it will typically take 30 minutes or less to install this system as a retrofit to an existing mortise lock on a wood door. You should allow additional time for metal doors, as well as, installations involving complex trim packages.

We strongly recommend before proceeding with the installation of the electronic lock and cylinder that you familiarize yourself with this entire Lock Installation Guide. This will eliminate the need for costly rework or repair due to inadequate understanding of the procedures required.

Because of the wide range of available door hardware and doors themselves, this guide can only provide general guidelines for the installation. It is up to you, the professional installer, to insure that this system is installed correctly. For this reason, INTELLIKEY and its distributors cannot be responsible for incorrect installations and any subsequent damages.

2.0 System components

Electronic Key: This device carries both the access codes relevant to permitting entry to the protected facility as well as the means by which retraction/ projection of the mechanical lockset's deadbolt/ latchbolt is accomplished.

Drawing 2.1

Standard Control Module shown with Battery Pack

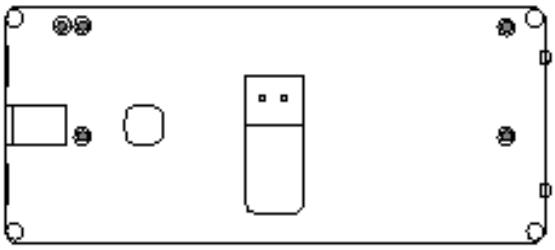
Drawing 2.2

Control Module: This device contains the intelligence to determine whether the information being presented by the electronic key matches the corresponding information in the lock as related to identity, system setup, time, etc.

Electronic Cylinder: This device, either Fixed, or Rotating, transmits the information presented by the Electronic Key to the Control Module. This is achieved by establishing an optical communication link between the key and the cylinder enabling the transfer of data relating to accessibility including codes, times and other characteristics, The Rotating Cylinder will also mechanically interface to operate the actual lock, whatever type.

Drawing 2.3

Mounting Plate: This component, to which the Control Module and battery pack are mounted, is designed to be fastened to the surface of the door on the inside of the room to be guarded. The Mounting Plate is intended to be mounted by insertion of four (4) screws through the Mounting Plate to the door. A spring clamp is welded to this mounting plate to hold the sealed battery pack in place (Battery Packs are available your Dealer or Distributor)



Drawing 2.4

Standard Escutcheon Shown

Drawing 2.5

Escutcheon: This enclosure is designed to fasten to the Mounting Plate by two tamper resistant screws and to house the batteries and electronic Control Module. One escutcheon gasket is needed for use on all exterior doors.

3.0 Required installation skills and tools

It is generally recommended that an experienced Door and Hardware installation person install this system. However no specialized skills are required beyond the ability to accurately read and follow the instructions for installation as a retrofit to an existing mortise lockset.

If you are not confident in your ability to successfully install this system, contact Intellikey for information on available training classes. Intellikey and its Distributors will not be responsible for inadvertent and/or accidental damage to existing property and/or equipment or to its component parts that may occur in the process of installation or operation of the system.

Typically, the tools required to physically install the INTELLIKEY system will include the following tools normally associated with the installation of commercially available door hardware upon wood or metal doors.

1/2” (12.7mm) Electric Drill
1” (25.4mm) or larger Wood or Metal Bit
7/64” (2.8mm) Wood or Metal Bit
1/4” (6.5mm) Round File
Phillips Screwdriver
Regular Screwdriver
Flat Screwdriver with rounded edges
Security Screwdriver for #8 screw spanner head type
Installation Instructions

Some variations are required depending on whether the installation is with fixed or rotating cylinders, mortise or rim cylinders or deadbolt Applications.

Because the INTELLIKEY Electronic Cylinder is slightly longer then most cylinders, adjustable collars or blocking rings may be required to complete the installation. These collars or rings are included for 1 3/4” (45mm) door thickness. For other door thicknesses a spacer may be required which is available from the Dealer/Distributor where you purchased your system.

4.0 Door Preparation/Physical Installation

The INTELLIKEY Electronic Access Control System is designed to retrofit to existing door hardware operated by rim or mortise cylinders. Consequently, only very minor modifications should be required to most existing installations, or only minor additional preparation is required for installations with new door hardware.

Because the most meaningful variable in operating existing door hardware is the actuating mechanism of the door hardware, the INTELLIKEY system is designed to function with most existing locking devices equipped with rim or mortise cylinders.

Questions regarding specific applicability to existing door hardware should be referred to INTELLIKEY Corporation or INTELLIKEY's approved dealer to determine suitability to specialized circumstances.

4.1 Preparation for Installation

Prior to attempting installation of the INTELLIKEY Electronic Access Control System in your facility, please be sure to read and understand fully the instructions contained herein.

After opening the box containing the basic system components, please spread them out on a nearby clean surface for easy identification. Caution should be exercised to prevent abuse of the Control Module and to prevent the abrasion or breaking of the connector cables. In addition, extra care should be made to insure that metal filings do not come into contact with the electronic board, Electronic Cylinder or any other electronic components as they may short out the electronics and cause permanent damage.

Normal installation time (excluding programming) is expected, on the average, to be less than thirty (30) minutes per door .

Standard Escutcheon

Drawing 4.2

Collar

Drawing 4.1

Control Module

Drawing 4.4

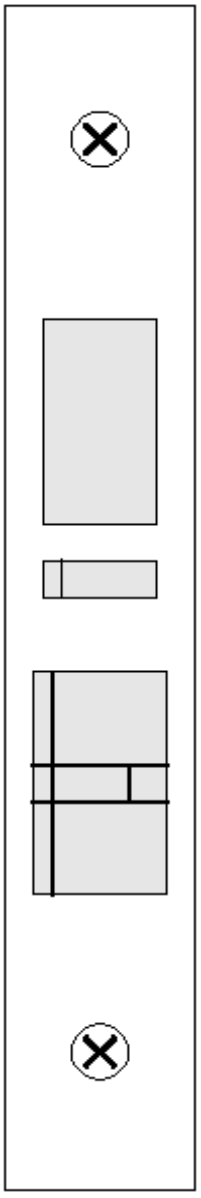
Electronic Cylinder

Drawing 4.3

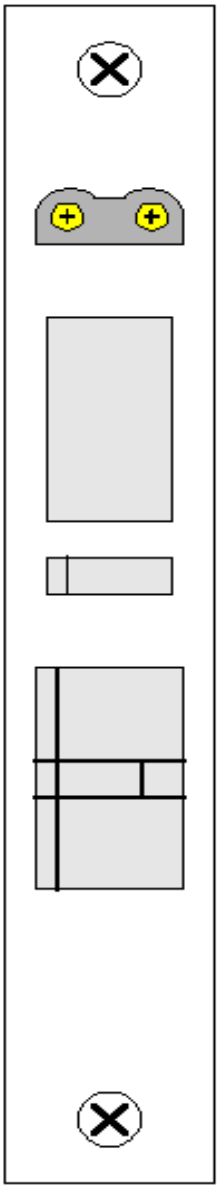
4.2 Remove Existing Cylinder

Remove the existing mechanical rim or mortise cylinder by first removing the screws fastening the cylinder to the lock mechanism. (For mortise locksets, this will involve removal of the scalp plate which permits access to the cylinder retaining screw. For rim cylinder applications, the door hardware should be removed to the extent that access to the cylinder retaining screws is obtained thereby permitting removal of the cylinder body itself.)

After the cylinder retaining screw is loosened, unscrew the cylinder from the lock body or in the case of a rim cylinder just remove from door cavity. May require an existing key to help unscrew cylinder. In order to avoid wood or metal shavings entering the mortise lock, it is recommended that the mechanical lock be removed from the door before drilling the cable access hole.



Drawing 4.5



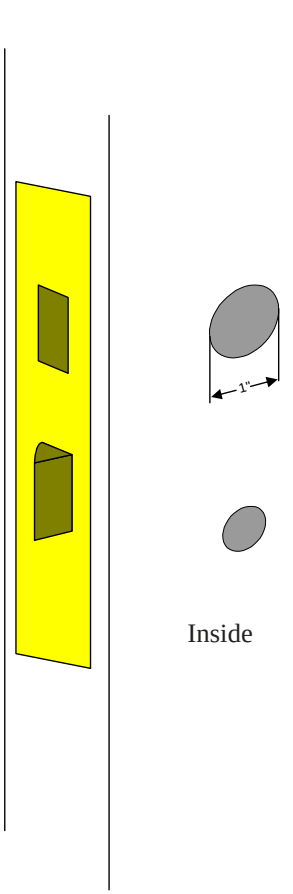
Drawing 4.6

4.3 Drilling Cylinder Cable Access Hole

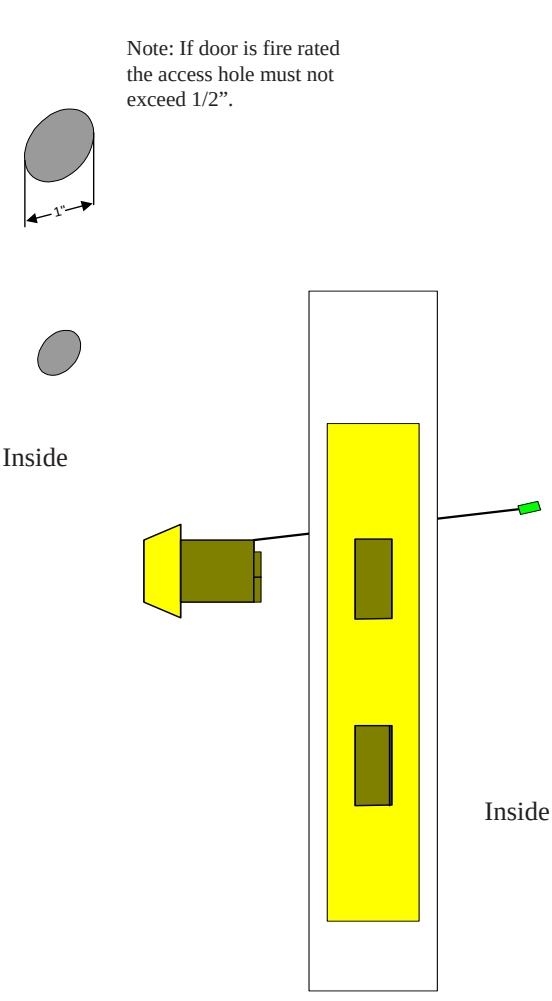
Having successfully accomplished the removal of the existing cylinder and the mechanical lock, the next step involves, as dictated by the existing or new door hardware, the drilling of a 1" (25.4mm) diameter hole through the surface of the door opposite to which the cylinder is to be installed.

Precise alignment of the hole allowing passage of the communication cable from the back of the Electronic Cylinder to the electronic Control Module is solely the responsibility of the installer.

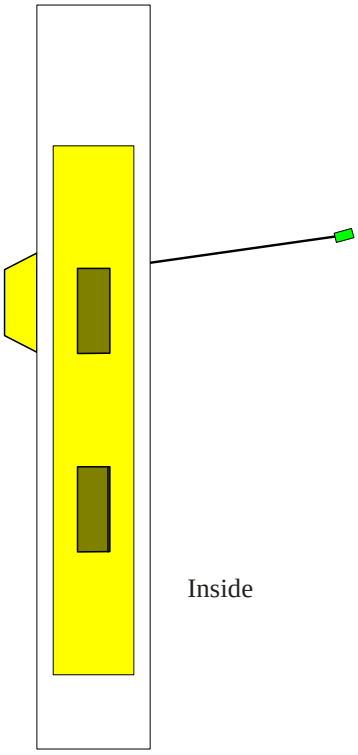
Due consideration must be made for the type of trim that is to be employed with either the existing or new lockset. Extreme care must be taken that the location of the access hole is in such a position that it will be covered either by the INTELLIKEY supplied Mounting Plate and Escutcheon or by the trim supplied by the door hardware manufacturer. This hole should be directly opposite the hole in which the cylinder in installed. Consult INTELLIKEY Corporation or INTELLIKEY's Approved Dealer for special cover plates if needed.



Drawing 4.7



Drawing 4.8



Drawing 4.9

Above shown with no trim.

4.4 Electronic Cylinder Installation

Having drilled the hole in the proper location, the next step is to install the Electronic Cylinder, either Rim or Mortise, utilizing the appropriate fastenings for this purpose. Install the mechanical lockcase back in the door.

Particular care must be paid to prevent the abrasion or twisting of the Communication Cable projecting from the back of the Electronic Cylinder as it is installed in the door hardware. In both instances of the Rim or Mortise Cylinders, the installer must be absolutely sure the Communication Cable does not become snarled, twisted, abraded or cut in any way.

Slide the Electronic Cylinder and cable through the collar and blocking ring, if necessary, prior to installing the cylinder into the locking device. In the process of threading or fastening the cylinder in its correct position relative to the door hardware, the projecting cylinder cable must be carefully extended through the previously drilled hole in the door. The front face of cylinder must be flush with the front face of the collar **(the cylinder must not appear recessed in relation to the collar, as this will prevent the key rotational movement, and possibly damage the key).** Reference drawing 4.10.

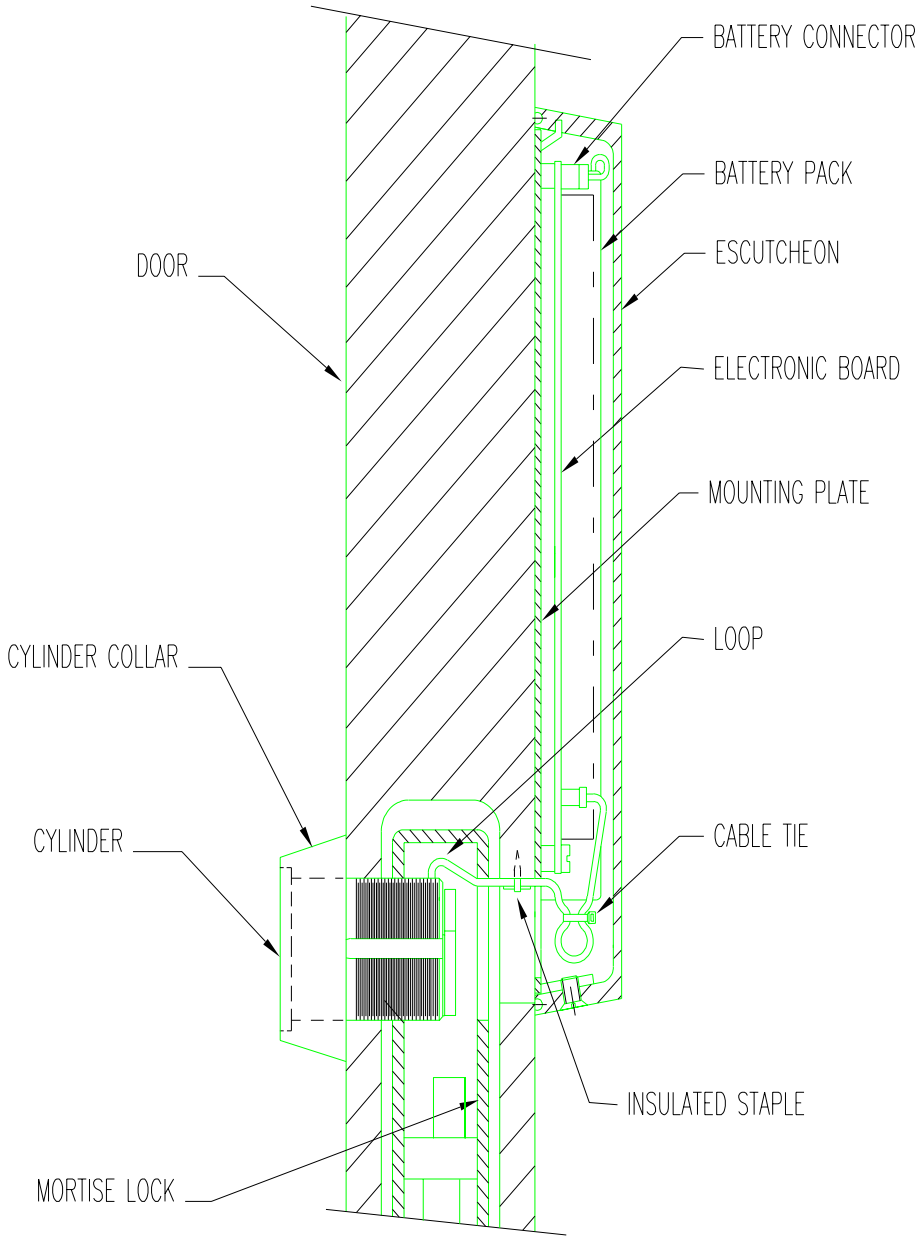
The fastening screws particular to that type of cylinder being installed must then be reinstalled to precisely hold the cylinder in place. Do not tighten these screws too hard. Excessive pressure may damage the cylinder!

At this time the Communication Cable must be positioned so that it does not interfere with the operation of the cam. **With the rotating cylinder version, failure to properly position the Communication Cable could result in damage to the cable and failure of the unit to function.**

Using the flathead screw driver with the rounded edges, push the Communication Cable towards the front of the cylinder (where the key is inserted) so that it forms a loop shown in drawing 4.11. For metal doors insert an insulating grommet into the previously drilled access hole. Do not forget to tighten the set/retaining screw when finished installing cylinder.

Drawing 4.10

INTELLIKEY LOCK INSTALLATION



Drawing 4.11

4.5 Mounting Plate Installation

Depending on the type of installation required, the Control Module will usually be pre-installed on the Mounting Plate. Although the Control Module is designed to be protected against many abusive actions, care must be exercised in its handling.

SAFEGUARD AGAINST ELECTROSTATIC DISCHARGE, PHYSICAL ABUSE, AND USE WITH UNAUTHORIZED AUXILIARY DEVICES. USE OR ABUSE IN SUCH CIRCUMSTANCES IS EASILY DETECTABLE AND WILL VOID ANY WARRANTIES OTHERWISE CONTAINED HEREIN.

Doors with Sectional Trim

With the cylinder cable projecting from the surface of the door, position the Mounting Plate such that the cylinder cable will extend through the opening in the Mounting Plate. The hole which was drilled to permit passage of the connecting cable will be covered by the Mounting Plate and Escutcheon.

Doors with Escutcheon Trim

For doors equipped with Escutcheon trim, the procedure is slightly more complicated.

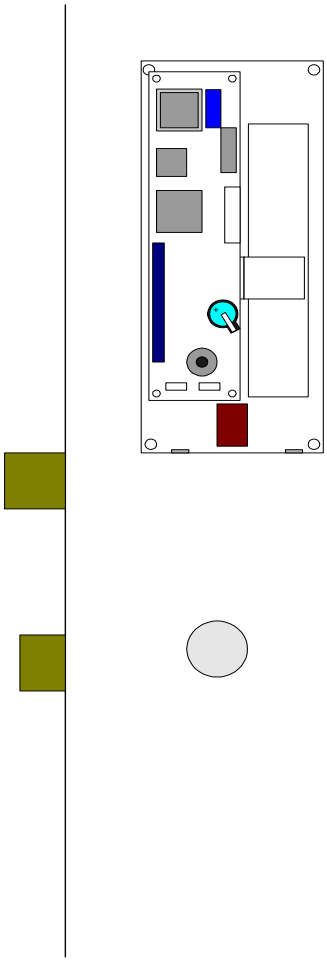
Holding the Mounting Plate against the surface of the door, align it in the desired position against the escutcheon trim. Allow an extra 1/4" (6.5mm) of clearance for the security cover (or better yet use tape or other temporary adhesive to hold the Mounting Plate so that the security cover can be fitted to check for the appropriate amount of clearance). Mark the location for drilling the pilot holes and using the 7/64" (2.8mm) bit, drill the pilot holes in door where marked.

With the escutcheon trim and Mounting Plate aligned, also mark the point on the trim where the cylinder cable must pass through in order to align with the cable channel (Mounting Plate indentation) on the Mounting Plate.

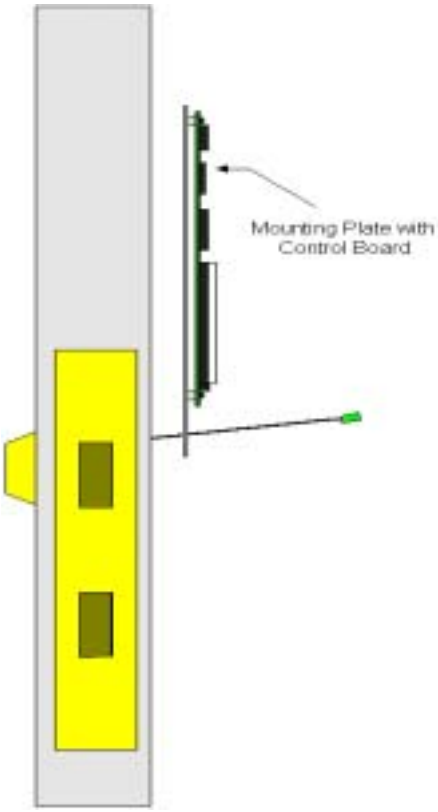
Remove the inside escutcheon and drill a hole directly opposite that of the cylinder to allow passage of the communication cable.

In general, the escutcheon trim will require a small channel to be filed at the position marked in order for the cylinder cable to pass through. Care must be taken to insure both proper alignment with the Mounting Plate channel and to avoid any pinching or cutting/abrasion of the Communication Cable. Due to variations in escutcheon trim it is not possible to provide a definitive procedure for all applications. For this reason, take extra care in planning and implementing the required modifications to the door and associated trim. If required, cylinder extension cables are available from an INTELLIKEY Corporation dealer.

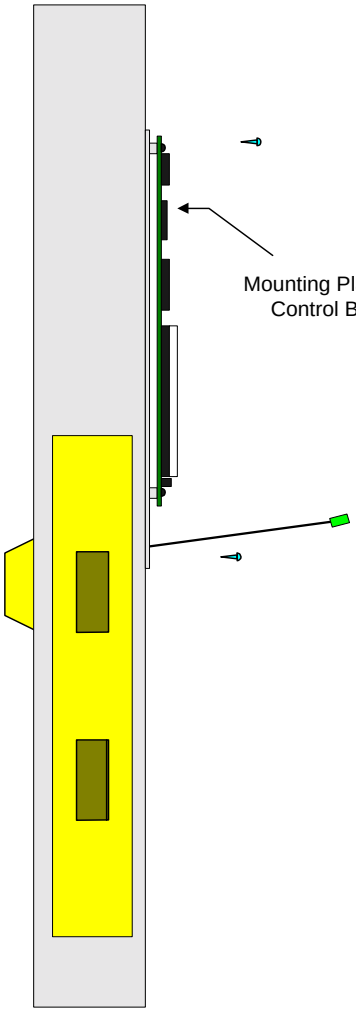
Place the cable from the cylinder through the hole filed in escutcheon trim and in the indentation on the back of the Mounting Plate so that the Mounting Plate will be flat against the surface of the door. Fasten the Mounting Plate directly to the surface of the door with the screws as shown in drawing



Drawing 4.12



Drawing 4.13



Drawing 4.14

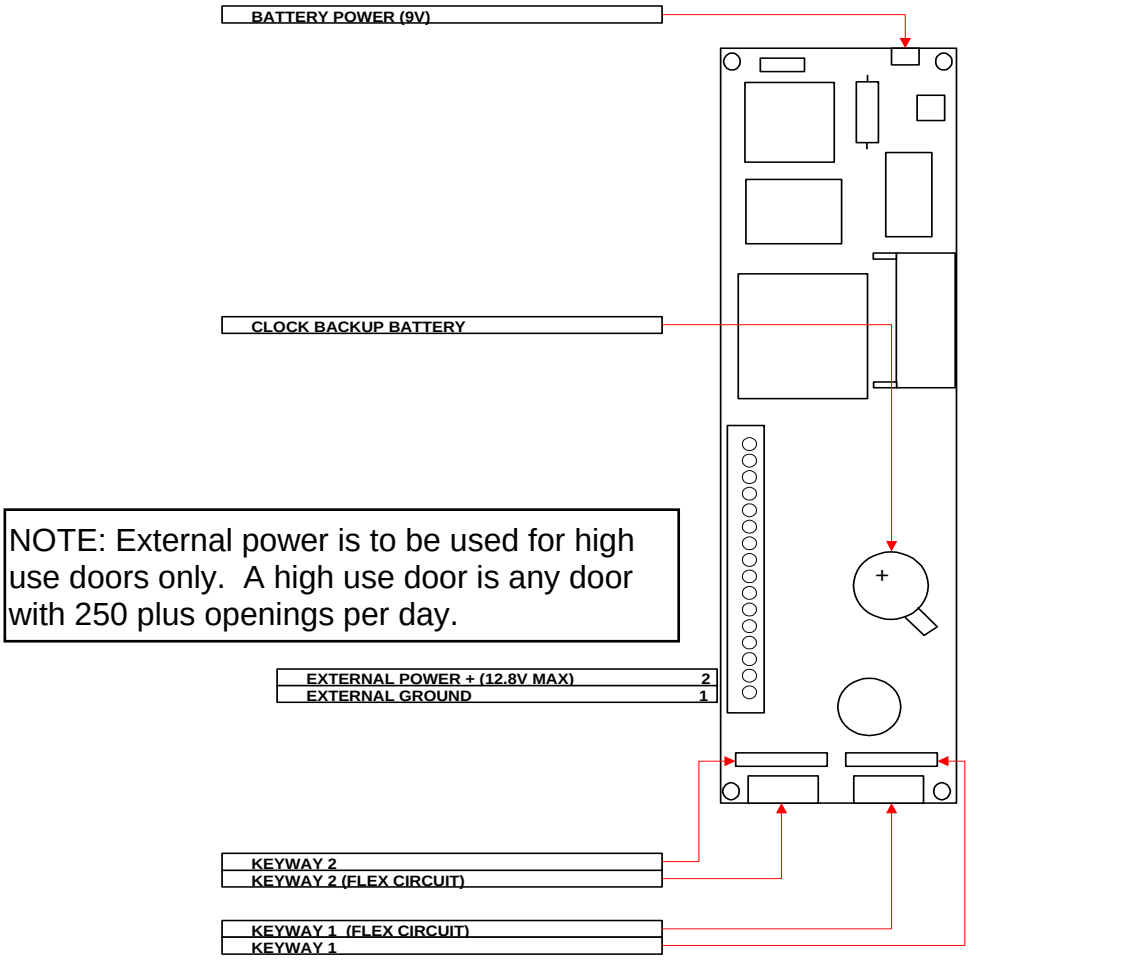
4.6 Battery Installation & Communication Cable Connection

Insert the battery pack under the battery clamp which is welded onto the Mounting Plate. Connect the cable from the Electronic Cylinder to the appropriate connector on the Mounting Plate. Connect the cable from the Battery Pack to the Control Module. Lay any excess length cable between battery and the Electronic Board. If Controller is installed on an exterior door and outside temperature drops below 35 degrees the Cold Weather Battery Pack must be used.

IF THE CLOCK BACK-UP BATTERY HAD BEEN INSTALLED PRIOR TO PROGRAMMING AND INSTALLATION, DON'T INSERT A KEY INTO CYLINDER UNTIL AFTER THE INSTALLATION IS COMPLETE AND BATTERY PACK INSTALLED. DO NOT TURN ON FIRST MAN IN OR PERIODIC BATTERY WARNING UNLESS BATTERY PACK HAS BEEN INSTALLED.

4.6.1 Clock Backup Battery Installation

Insert the coin cell clock battery under clip and into battery holder. Please observe the polarity and install with the + sign visible. The clock battery life is approximately 5 years with Battery Pack installed.



Drawing 4.15

Note: The plus (+) side of clock battery must face up.

4.7 Escutcheon Installation

Examination of the Mounting Plate and the Escutcheon will reveal an interlock mechanism at the top of each piece which, when engaged by the other, act to prevent access to the Control Module. The lower end of the Escutcheon is fastened to the Mounting Plate by means to two (2) security screws which requires a special spanner driver #8 for installation.

Use of an Escutcheon Gasket for all installations is recommended as it will provide for a snug fit of Escutcheon to door. THE ESCUTCHEON GASKET MUST BE INSTALLED IN ALL APPLICATIONS INVOLVING EXTERIOR AND/OR ANY INTERIOR DOORS EXPOSED TO MOISTURE.

4.7.1 Escutcheon Gasket Installation

Lay the Escutcheon on a flat surface with the inside facing up. Carefully remove only one end of the paper backing from the gasket. Starting at the top or Logo end, of the Escutcheon lay gummed side of gasket on Escutcheon and press firmly down. Starting down one side of Escutcheon, remove paper backing and press on Escutcheon, being careful not to stretch gasket material. Install the other side the same as first and then finish across bottom.

5.0 Summary

This completes the physical installation of the INTELLIKEY Electronic Lock. If the Control Module had been previously programmed with the back up clock battery and Battery Pack installed, it is now ready to operate. If the back up clock battery was not installed prior to programming, the time and date will need to be set on the Control Module using a laptop computer and LPU or the RAK.

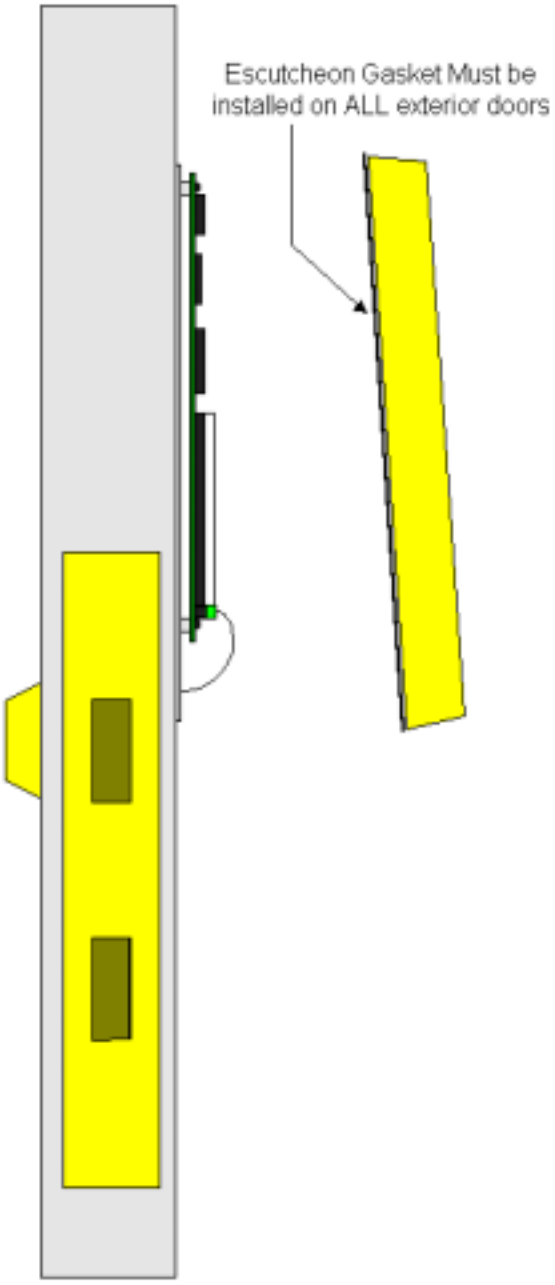
If the lock has not been programmed, you will need to program it prior to first use. **“It is a good idea to test the lock prior to closing the door”** in order to prevent being placed in the awkward position of being locked out. If, as you are reading this, you find that you are locked out, you may use a laptop computer with appropriate site coded EZ123 and or Quantum Software and LPU Interface to unlock door.

In addition, the keys for your lock should have been programmed and ready for operation with the lock. Refer to the User’s Guide for information on how to program your Electronic Keys.

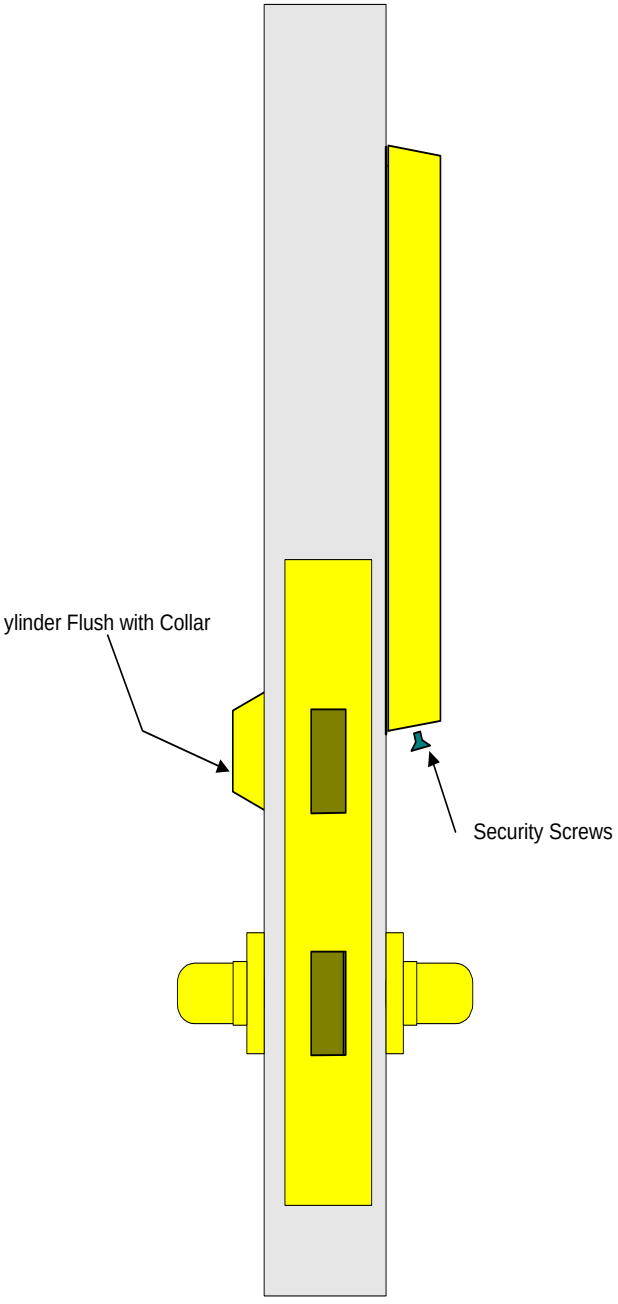
6.0 Maintenance

INTELLIKEY Lock Electronics need no maintenance. However the cylinder keyway should be maintained as follows. Corrosion Block should be sprayed into all INTELLIKEY exterior cylinder keyways every three months , with more than 100 transactions per day the cylinders should be treated once a month and interior cylinders every six months. Corrosion Block should be applied into the keyhole of the cylinder (one to two squirts) with particular attention being paid to the electrical contact. Following application an INTELLIKEY Key should be inserted and the cylinder core rotated several times so as to distribute the lubricant fully.

DO NOT USE GRAPHITE. Due to its conductive properties, graphite will cause shorts to the cylinder contacts.



Drawing 5.1



Drawing 5.2

Addendum A

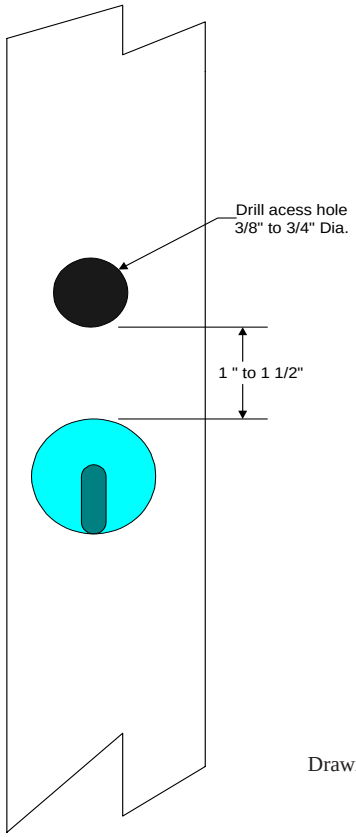
Specialty Lock Product Installations

Adams Rite type mortise Deadbolts

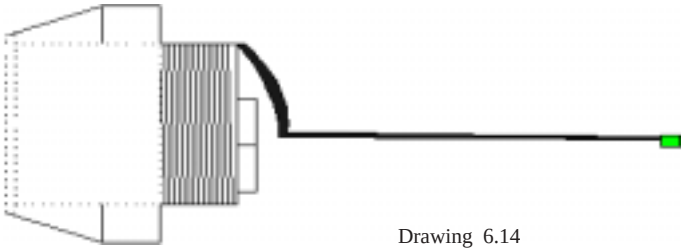
The Adams Rite mortise lock installation will require the use of a Slim Line lock controller and various thickness' of adaptor/blocking rings.

The lockset should be removed from door to keep from getting metal chips in the locking mechanism. On inside face of door measure up 1" to 1 1/2 " from top of cylinder/thumbturn hole and drill a 3/8" to 3/4" access hole. Refer to drawing 6.13. This access hole will be used to pull the cylinder cable out. Clean all metal chips and burrs from cylinder cable access hole and cutout for lockset then reinstall the lockset in door. Next bend the cylinder cable flat against the cylinder cam and then from center of cylinder bend up 90 degrees from cylinder, as per drawing 6.14. A piece of tape may be used to temporarily hold cable against cam. Place the cylinder security collar and the correct thickness of blocking rings on cylinder.

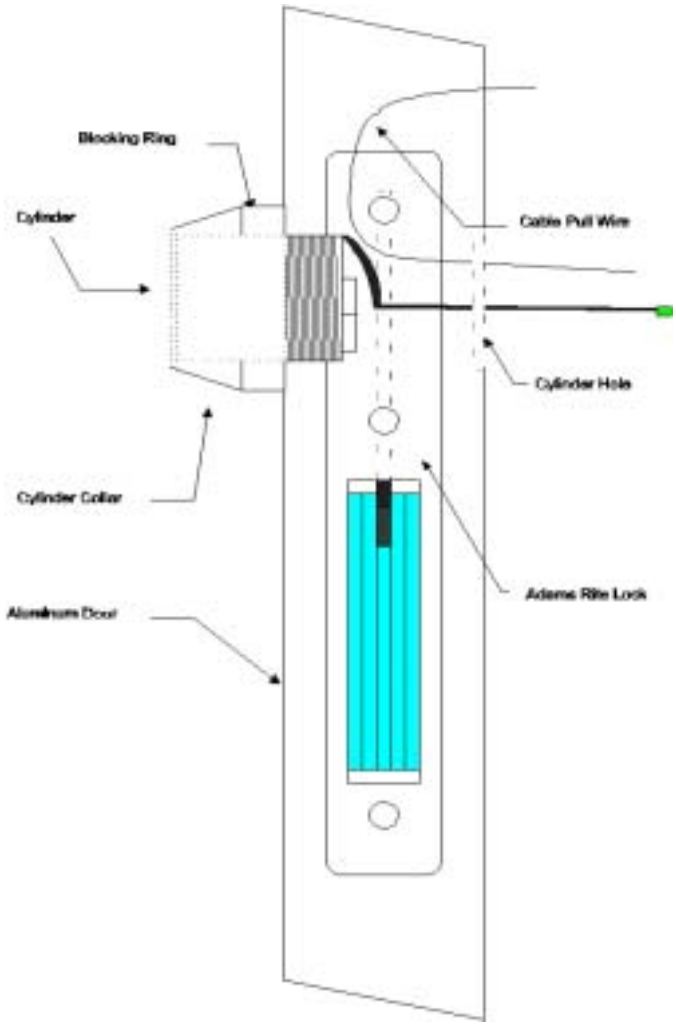
Insert cylinder into exterior cylinder hole with communication cable extending through lock and out of inside cylinder hole. Carefully turn cylinder into place being very careful that the cylinder cable is not damaged or twisted. The cylinder cam should not touch the cross bar of lockset. Insert a pull wire into inside cylinder hole through lock and back out the access hole. Refer to drawing 6.15 for correct positioning of pull wire. Attach cylinder cable to pull wire and VERY CAREFULLY work cylinder cable back through lock and out the access hole. It is recommended that an insulating grommet be installed in the access hole. Using the flathead screw driver with rounded edges, push the cable towards the front of the lock case. Refer to drawing 6.16 for correct position of cable. Make sure the piece of tape, if used, is removed at this time.



Drawing 6.13



Drawing 6.14

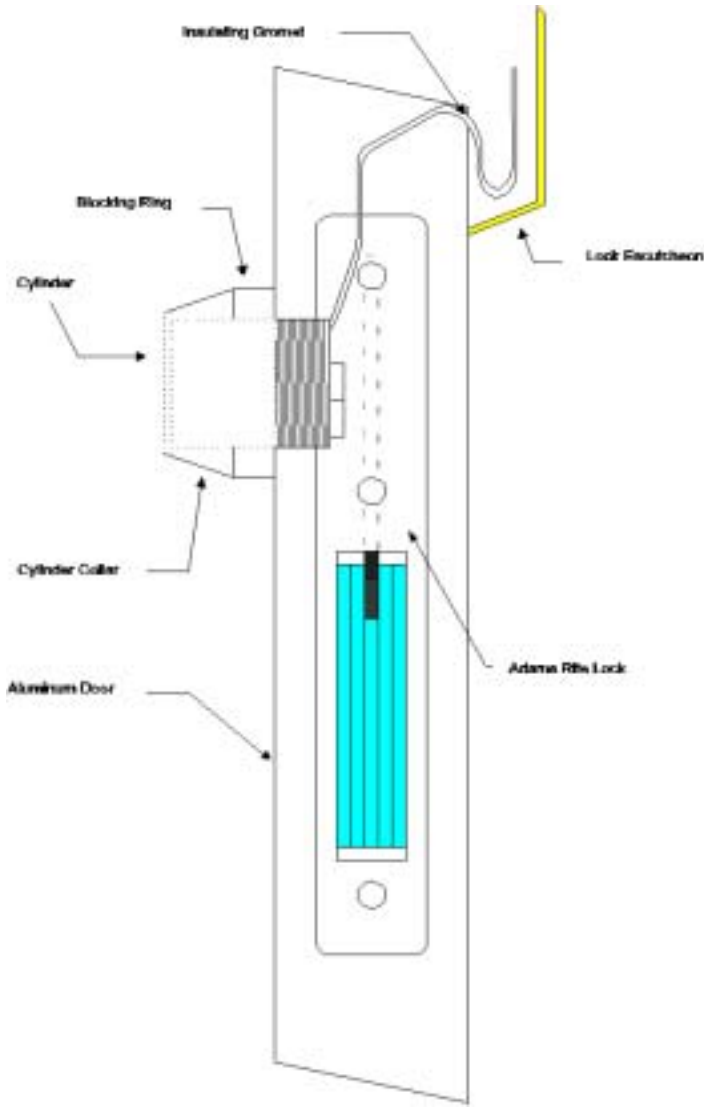


Drawing 6.15

The Control Module will come pre-installed on the Mounting Plate. Although the Control Module is designed to be protected against many abusive actions, care must be exercised in its handling.

Holding the Mounting Plate against the surface of the door, align it in its desired position. The hole which was drilled to permit passage of the connecting cable must be covered by the Mounting Plate and Escutcheon. Mark the location for drilling the pilot holes and using the 7/64" (2.8mm) bit, drill the pilot holes in the door where marked. Place the cylinder cable through the Mounting Plate and fasten to the surface of door with screws provided. The Mounting Plate with Control Module must be stored away when drilling pilot holes to avoid metal shavings getting in contact with electronics.

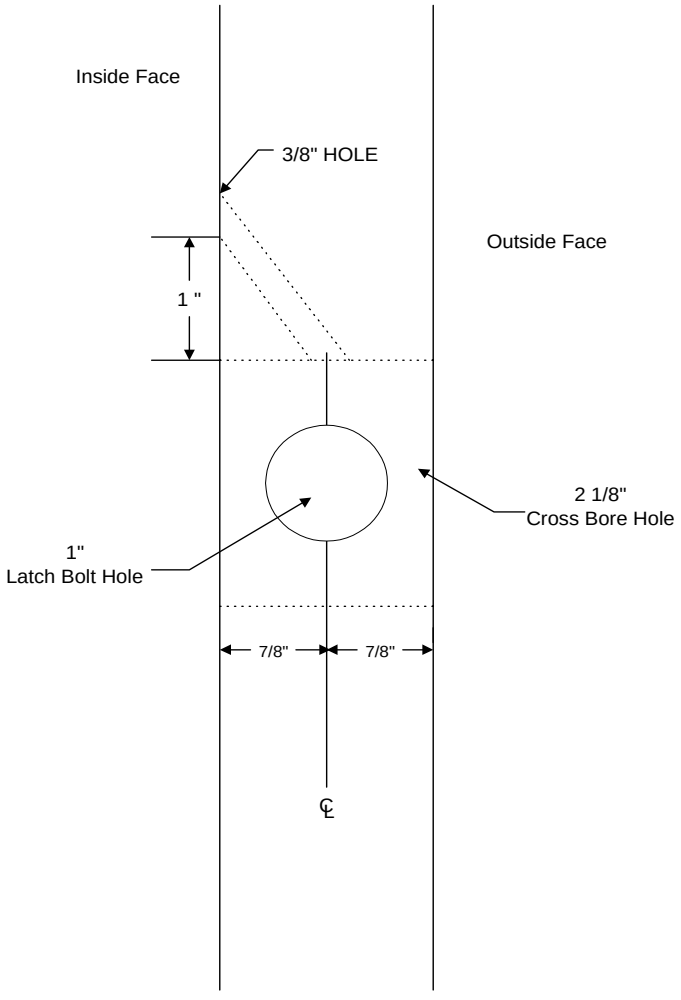
For installation of the battery, escutcheon and escutcheon gasket please refer to pages 14 and 15 of the Installation Manual.



Drawing 6.16

Lori Cylindrical Deadbolt

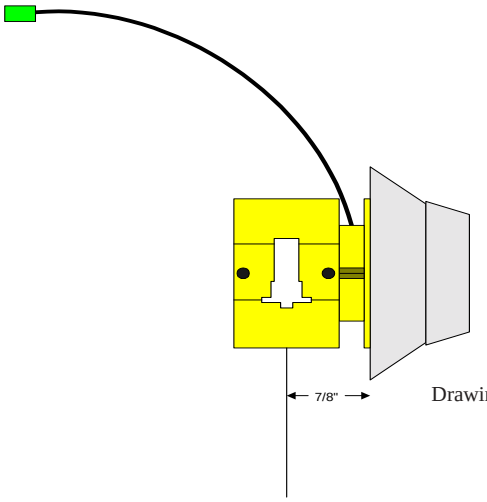
The INTELLIKEY Cylinder collars must be modified to properly operate with the Lori Deadbolt. When ordering the INTELLIKEY Controller please specify to be used with a Lori Deadbolt. The system is designed to operate in a 1 3/4" solid core type door only. If it is to be used in metal doors, the core around the deadbolt must be reinforced to keep the door face from collapsing. The door, for a new installation, must be prepped for the Lori Deadbolt by following the templates and instructions that was supplied from Lori. You must then finish prepping the door by drilling a 3/8" angled hole 1" on center line of cross bore hole on inside face of door and into the cross bored hole. Please refer to drawing 6.17 for correct placement of access hole.



Drawing 6.17

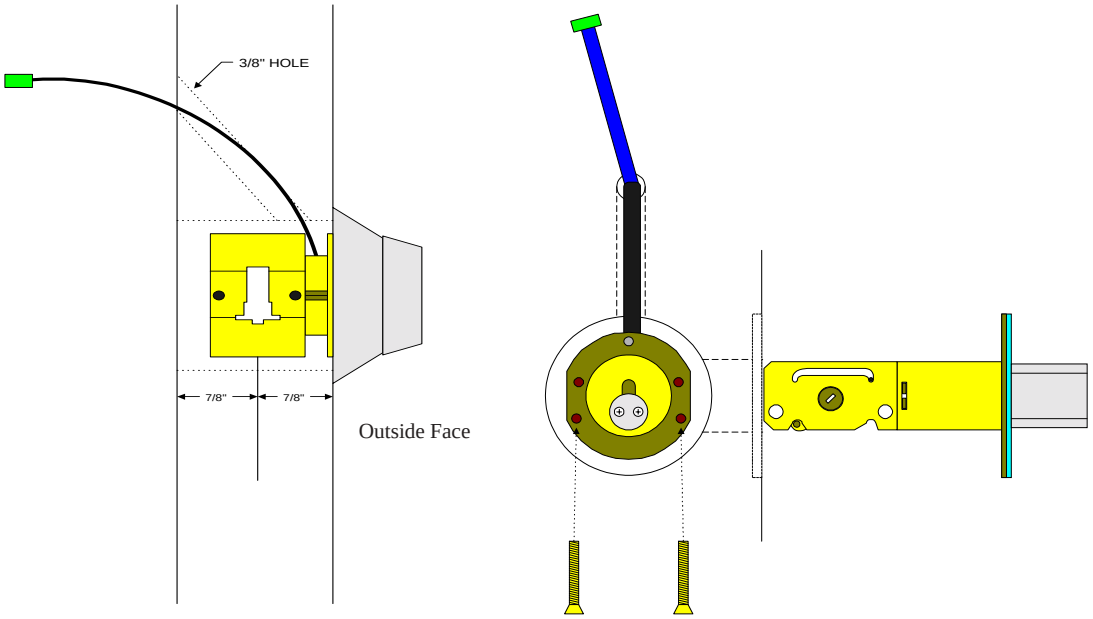
Next assemble the INTELLIKEY Electronic Cylinder by placing the modified cylinder collars over the cylinder the small one first and then the large one. Insert this assembly into the Lori outside cylinder rose. Screw the cylinder into the housing being careful to maintain the 7/8" dimension as shown in drawing 6.20. The assembly should look similar to drawing 6.20. If the cylinder has been installed properly then tighten the cylinder set screw being careful not to over tighten.

Check for clearance by inserting latch bolt into housing. If the latchbolt rubs the cam you must readjust the cylinder assembly.



Drawing 6.20

Place the completed assembly into the 2 1/8" cross bore hole in face of door. Carefully insert and pull connector cable up into and out of the access hole. Next insert the latch bolt through edge of door and into lock body. Insert the body locking screws into the proper holes and tighten assembly. The Lori latch bolt and lock body have now been assembled into a solid unit. Please refer to drawing 6.21.



Drawing 6.21

The Control Module will be pre-installed on the Mounting Plate. Although the Control Module is designed to be protected against many abusive actions, care must be exercised in its handling.

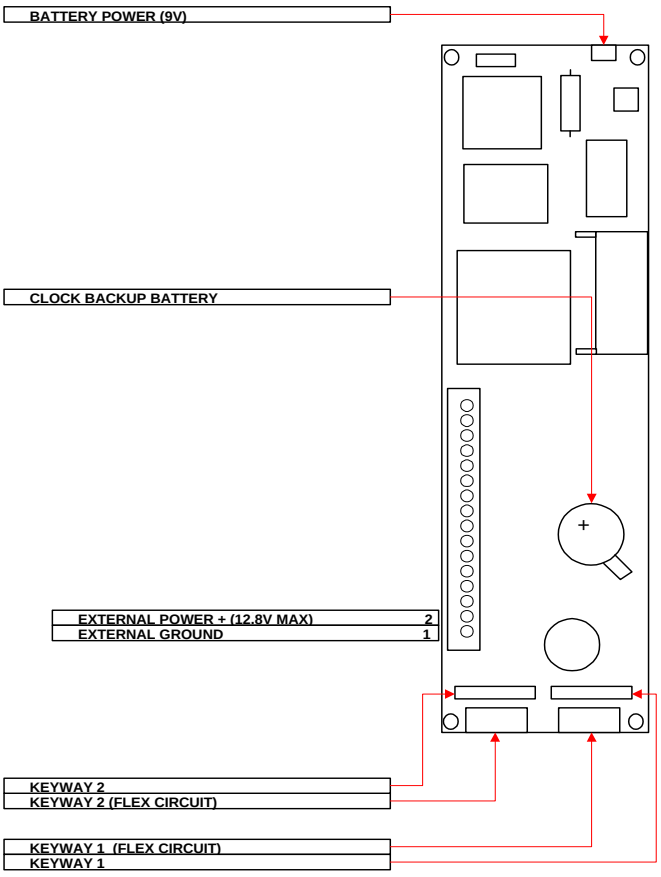
Holding the Mounting Plate against the surface of the door, align it in the desired position. The hole which was drilled to permit passage of the connecting cable should be covered by the Mounting Plate and Escutcheon. Mark the location for drilling the pilot holes and using the 7/64" (2.8mm) bit, drill the pilot holes in the door where marked. Place the cylinder through the Mounting Plate and fasten directly to the surface of the door with the screws provided.

Before inserting a key, insert the battery pack under battery clamp, which is welded on the Mounting Plate. Connect the communication cable from the Electronic Cylinder to the appropriate connector on the Control Module. Connect the cable from the Battery Pack to the Control Module. Lay any excess cable along the Battery Pack. Insert the coin cell clock battery under clip and into battery holder. Please observe the polarity and install with the + sign visible. Please reference section 4.6 on page 14.

For the installation of the Escutcheon and Escutcheon Gasket please refer to section 4.7 on page 15 of the Installation Manual.

Remote (Line) Power

For high use doors the ACS4000 with remote power supply with battery backup would be the ideal choice. The equipment needed is a UL listed 9Vdc - 12Vdc, regulated ± .8 Vdc, power supply with battery backup. The minimum wire type would be single pair 22 gauge stranded. If the distance between the power supply and the INTELLIKEY Lock is 50 to 100 feet use of 18 gauge wire is required. The cable is then run from the power supply to the Control Board and connected to screw terminals 1 & 2 with terminal 1 being ground (-) and terminal 2 plus (+).



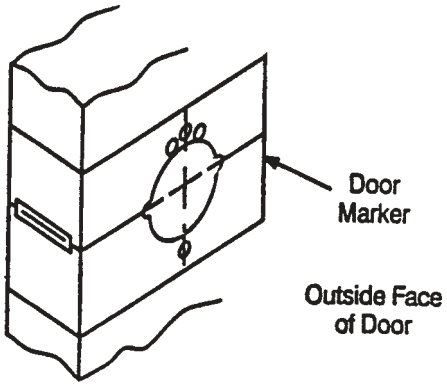
Drawing 7.1

Electronic Cylindrical Locksets

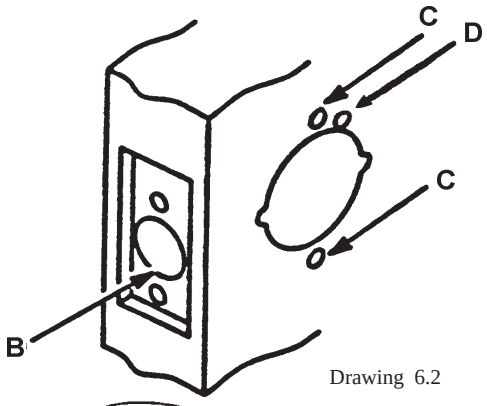
The installation instructions for the INTELLIKEY Cylindrical Lever Handle Lockset must be followed. Failure to do so could result in damage to the lock and/or electronics and void the factory warranty. The door preparation instructions and lock installation instructions are packaged with each INTELLIKEY Lever Handle Lockset. ***CYLINDRICAL LOCKS ARE NOT RECOMMENED FOR EXTERIOR APPLICATIONS WHEN EXPOSED TO THE WEATHER. For applications below 32^{0}F. use of the Cold-Pack battery required.***

1. Mark horizontal line across edge of door. 38" (965mm) is the usual height above floor. Fold template over edge of door, centering on horizontal line. Mark centers of holes at proper backset.

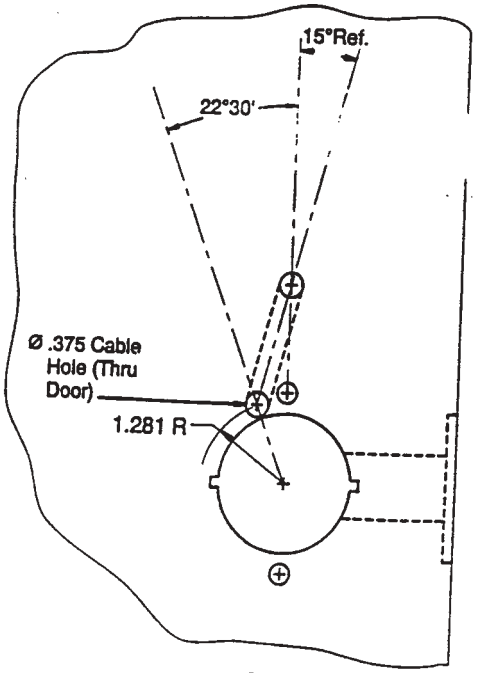
2. Drill the following holes; A. 2 1/8" (54mm), B. 1" (25mm) in edge of door and cut out for latch front 1 1/8" (29mm) wide x 2 1/4" (57mm) high x 5/32" (4mm) deep. C. Drill two (2) 5/16" (8mm) dia. holes through face of door. D. Drill 3/8" (10mm) hole at 45^0 angle upwards through the door from the outside.



Drawing 6.1

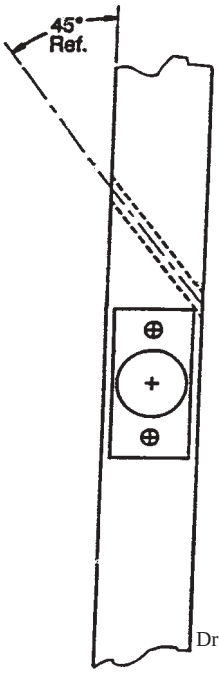


Drawing 6.2

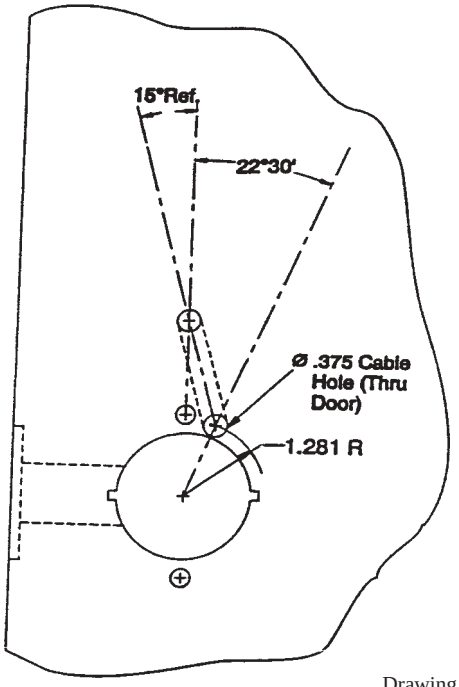


Drawing 6.3

OUTSIDE
LH-IHR DOOR

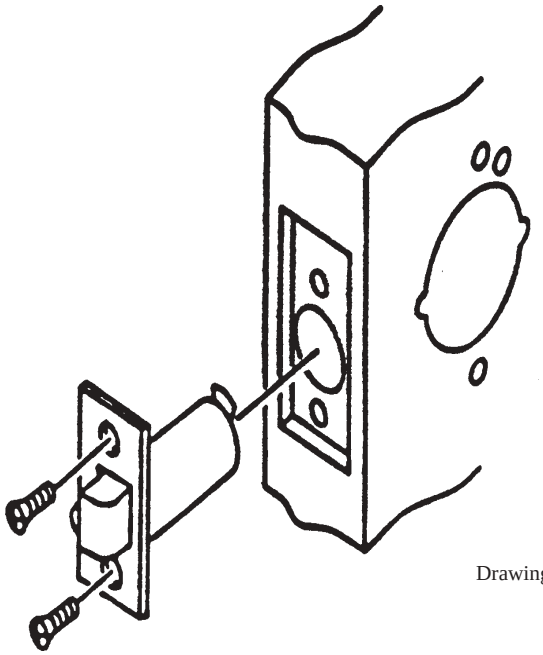


Drawing 6.4



Drawing 6.5

OUTSIDE
RH-RHR DOOR

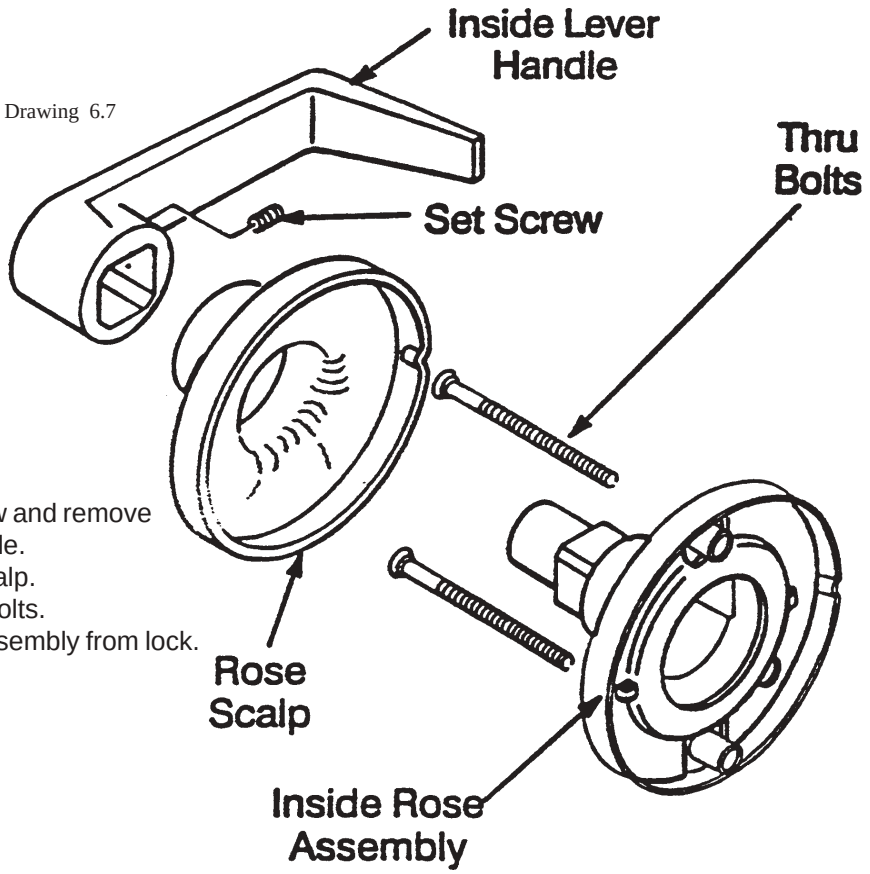


Drawing 6.6

3. Install Latch unit

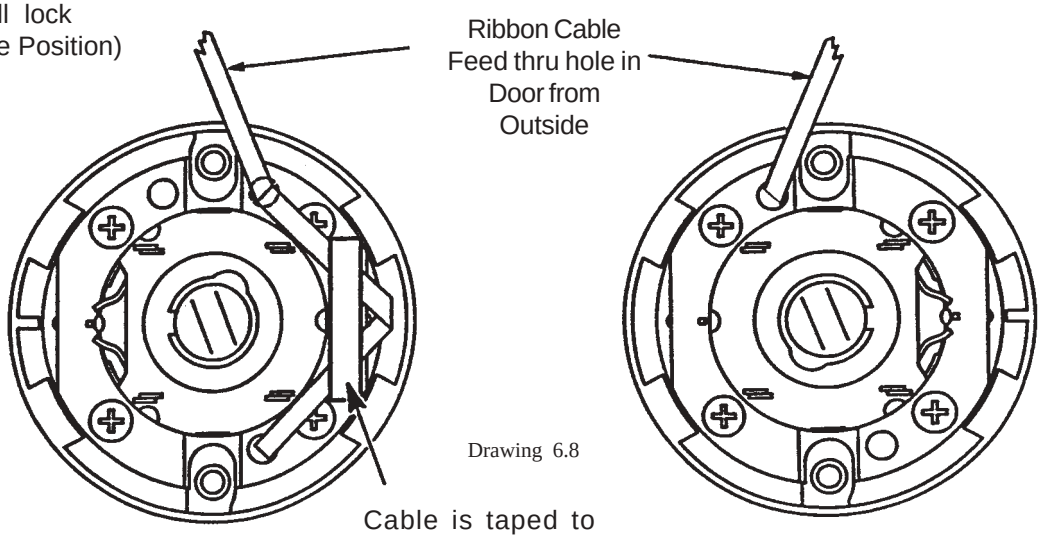
In Insert latch unit in door. (Be sure bevel edge of bolt faces strike plate.) Attach with two screws supplied.

Drawing 6.7



4. Disassemble lock
   A. Loosen set screw and remove inside lever handle.
   B. Remove rose scalp.
   C. Remove 2 thru bolts.
   D. Remove rose assembly from lock.

5. Install lock
(Wire Position)

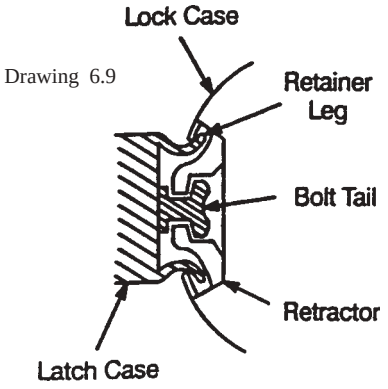


Drawing 6.8

LH Door

RH Door

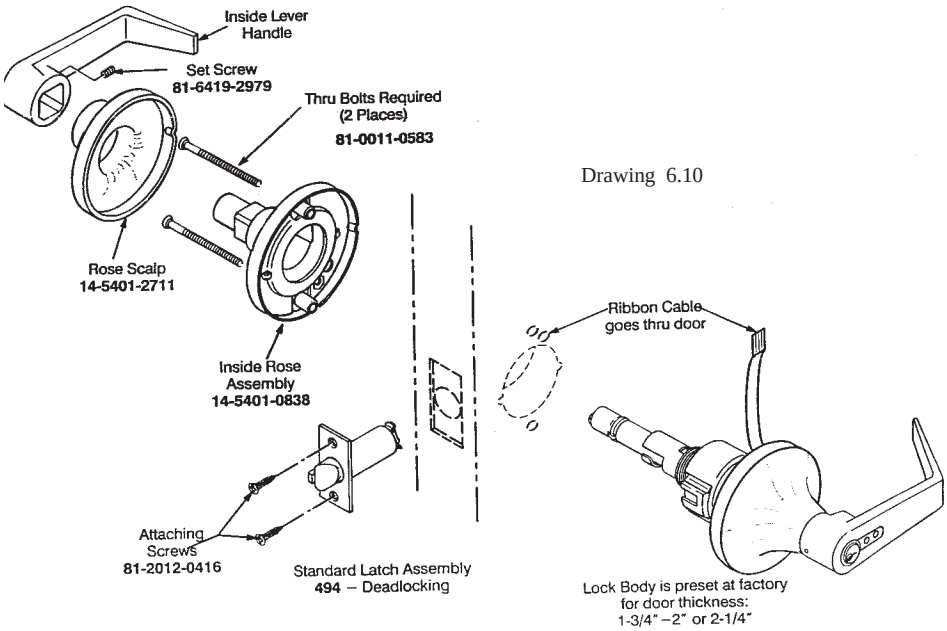
Cable is taped to rose plate. (Be careful not to crease or pinch cable when installing lock).



Drawing 6.9

6. Install lock

Insert lock body into door from outside making sure that lock case hooks retainer legs and retainer engages bolt tail. Depressing latch bolt slightly may aid in engagement into retractor. DO NOT FORCE (If lock body does not engage easily, check door preparation for errors.)



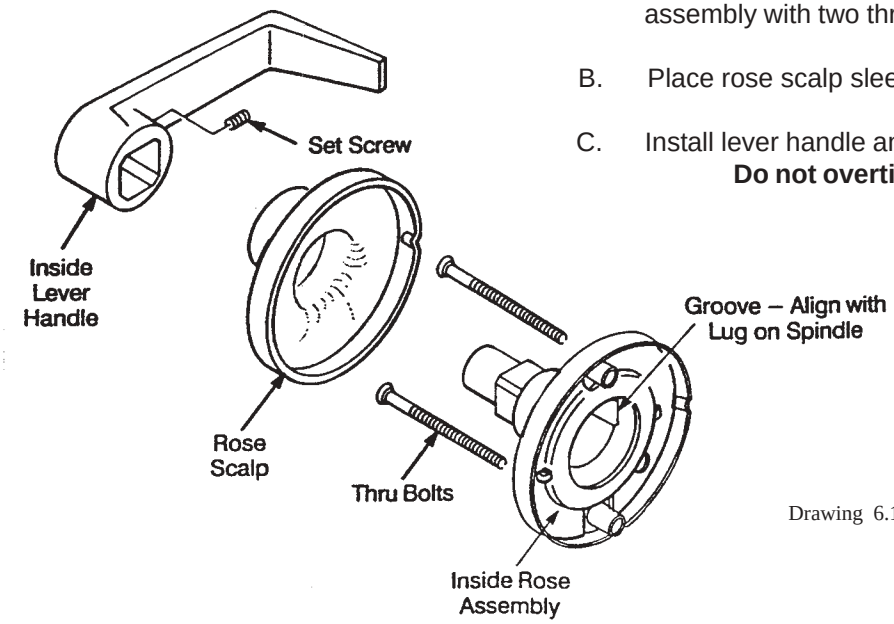
Drawing 6.10

7. Install inside components

A. Slide inside rose assembly onto lock body. NOTE: The groove (see below) must line up with drive lug on spindle. Fasten rose assembly with two thru bolts.

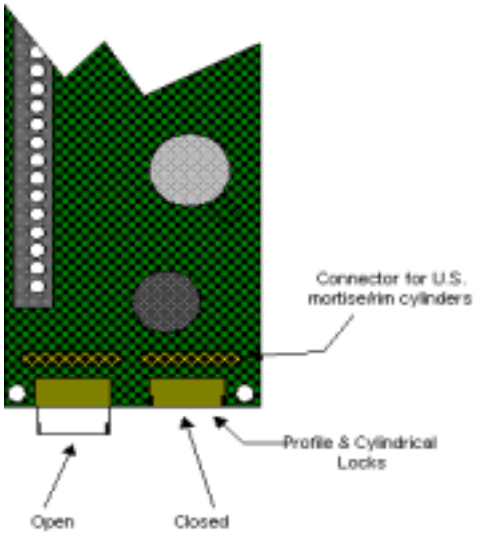
B. Place rose scalp sleeve on rose assembly.

C. Install lever handle and tighten set screw. **Do not overtighten.**



Drawing 6.11

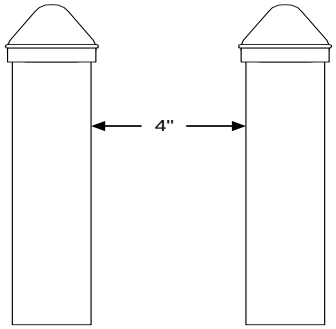
8. For installation of the Mounting Plate, Lock Electronics and Escutcheon please refer to section 4.5 on page 12. Please refer to drawing below for correct installation of the ribbon cable.



Drawing 6.12

Ribbon cable must be installed with solder pads upwards1.

INTELLIKEY Gate Lock installation



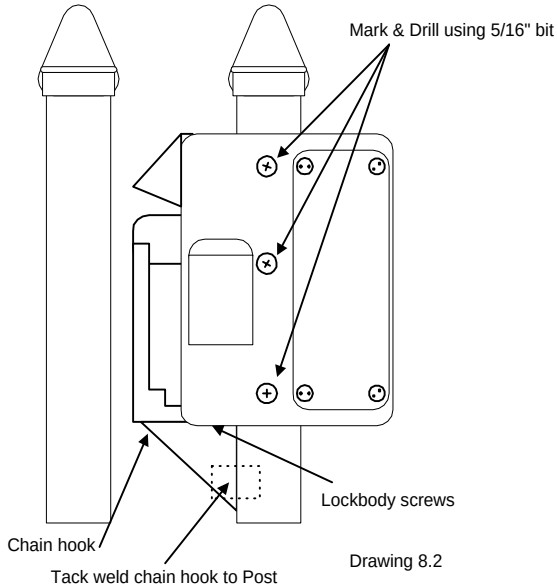
Drawing 8.1

The INTELLIKEY Gate Lock is designed to retrofit most swing or slide gates. The Gate Lock is fully compatible with INTELLIKEY's ACS4000 access control system, allowing it to be added to an existing INTELLIKEY system. The lock mechanism is constructed of hardened steel, automatically compensates for the usual misalignment inherent in swing gates and easy to install. All fasteners are made of stainless steel.

The equipment needed for the installation of the Gate Lock is a drill with 5/16" bit, #2 phillips, #1 phillips, adjustable wrench and an arc welder.

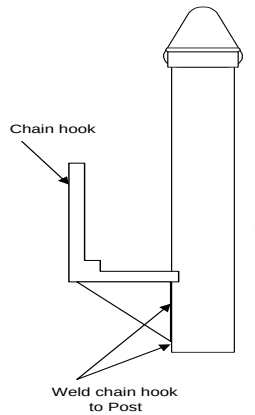
Prior to the installation you must check to see that there is a unobstructed clearance of no less than 4" between the posts, and that the Gate Lock has been programmed with the proper access information.

Holding the Gate Lock with the controller housing on the secure side of the sliding or swinging part of the gate (not the fixed side) and parallel to the gate fencing, mark the three (3) 1/4" bolt holes. Drill these holes using a 5/16" bit. Loosely fasten the Gate Lock with the bolts provided. Next tack weld the chain hook to the post. Please refer to drawing 8.2. Now remove the lock body screws and the controller. The chain hook should be tack welded to the gate post.

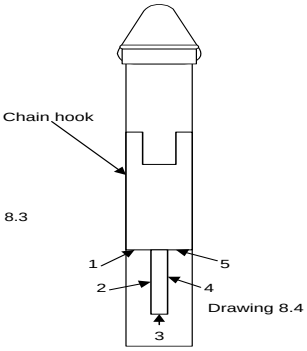


Drawing 8.2

Viewed from secure side



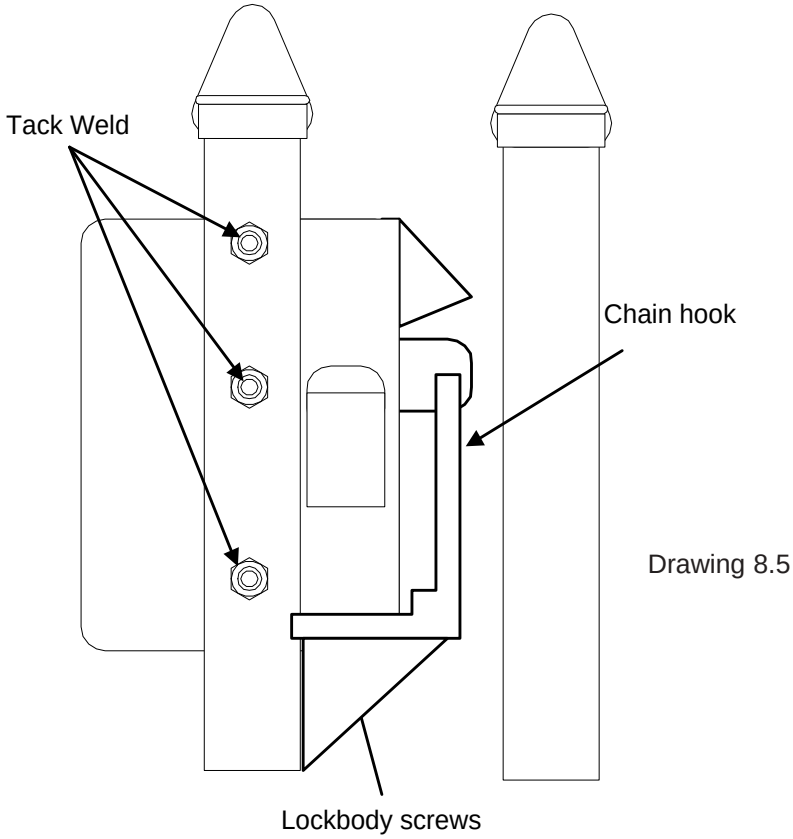
Drawing 8.3



Drawing 8.4

With the controller removed, the chain hook can welded to the gate post. Weld just the chain hook support bracket at the five (5) points. Please refer to drawing 8.3 and 8.4 for correct welding locations.

Next reinstall the controller using the three (3) stainless steel lock body screws and the three (3) 1/4" stainless steel bolts with the screw heads on the secure side of gate. DO NOT TIGHTEN screws and bolts at this time. Test the lock with a key. If the Gate Lock functions properly then tighten the three (3) lock body screws and then the three 1/4" bolts. After the screws and bolts are tight, tack weld the bolt and nut being careful not to weld to the post. Please refer to drawing 8.5.



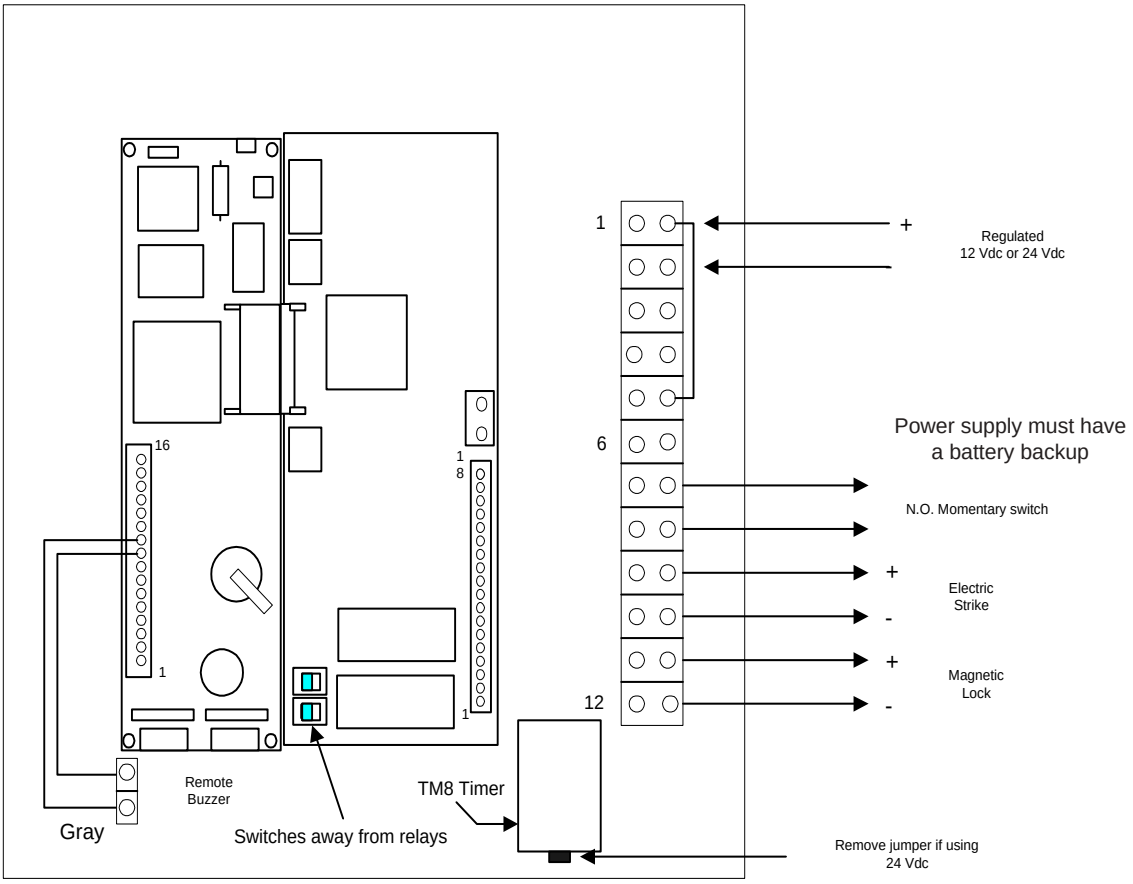
Drawing 8.5

The INTELLIKEY Gate Lock is now installed. The last thing to be done is the installation of a loop of chain or steel cable to the fixed side of the gate opening. When installing this loop allow enough slack for misalignment in gate. For long term operation the Adams Rite lock supplied with the INTELLIKEY Gate Lock and the INTELLIKEY cylinders must be lubricated every 3 months using Corrosion Block, INTELLIKEY part number 100795.

Addendum B

Typical DCU4000RBM Installations

DCU4000RBM

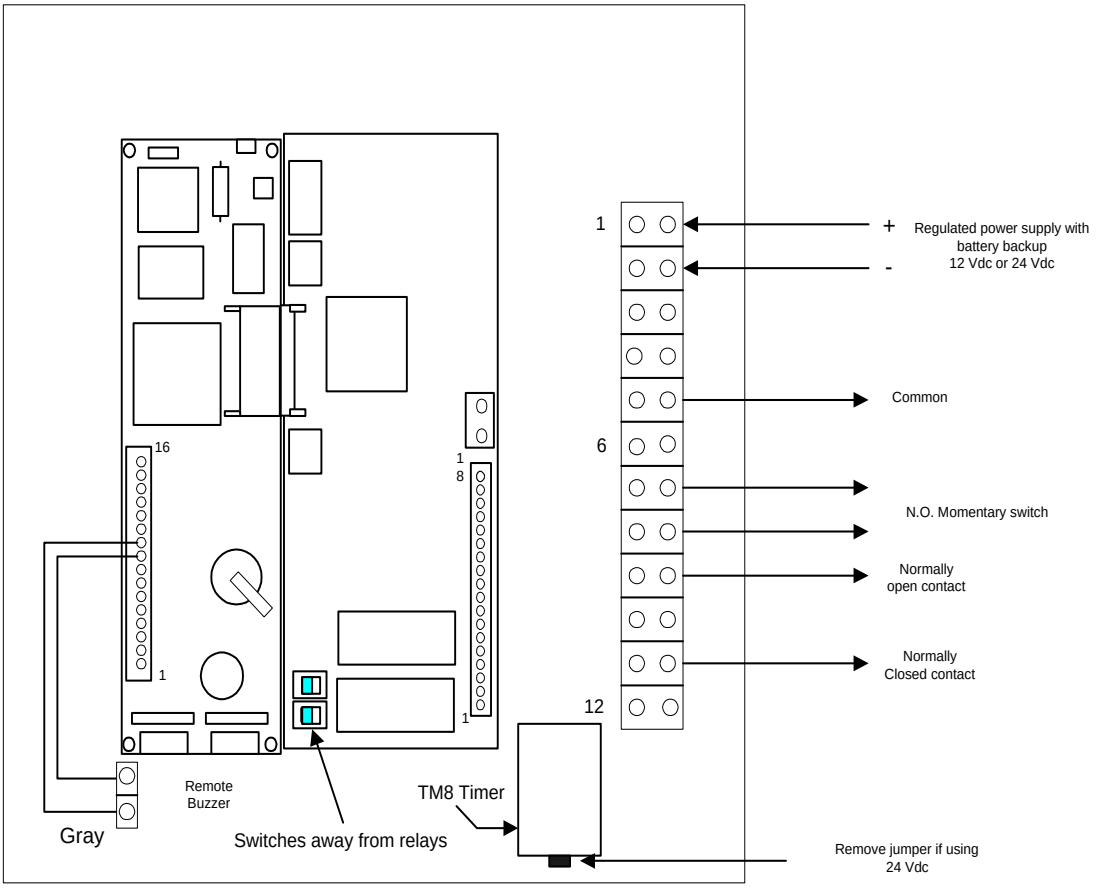


Drawing 7.8

Output voltage will be the same as the input voltage with jumper between 1 & 5. i.e.: 24Vdc in = 24 Vdc out. The DCU4000RBM has 1 input and 2 outputs. The single input is for a N.O. momentary switch which is used to remotely unlock a door. The 2 powered outputs are; One for electric strike or any fail secure (power to unlock) device and the second for a magnetic lock or fail safe (power to lock) device. It is recommended that the DC input voltage and both the input and outputs be fused. The slide switches on Relay Module must be toward the Lock Electronics Module. If using 24 Vdc the jumper in the TM8 timer must be removed.

			REVISION DATE	RELATED FILES
			97/11/19	
DCU4000RBM				
BY	APPROVED	FILE NAME		
RPB	JD	100667.vsd		

DCU4000RBM

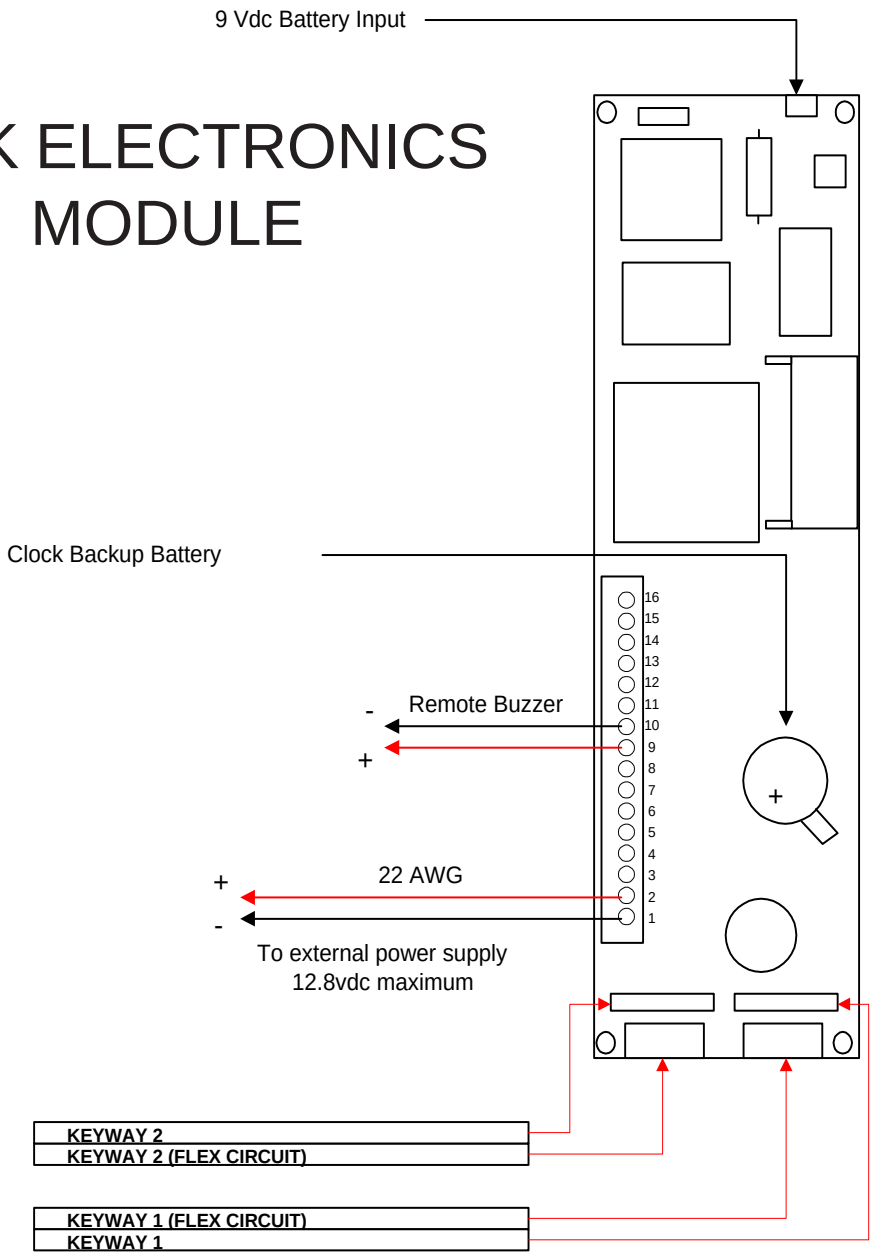


Drawing 7.8.1

With jumper between 1 & 5 removed the DCU4000RBM has 1 input and 2 dry outputs. The single input is for a N.O. momentary switch which is used to remotely unlock a door. The 2 dry outputs, with jumper removed, are common number 5 with the normally open being number 9 and the normally closed being number 11. The regulated 12 or 24 Vdc is connect to terminals 1 and 2 with 1 being plus (+) and 2 negative (-). It is recommended that the DC input voltage and the outputs be fused. The slide switches on Relay Module must be toward the Lock Electronics Module.

			REVISION DATE	RELATED FILES
			97/11/19	
DCU4000RBM				
BY	APPROVED	FILE NAME		
RPB	JD	100668.vsd		

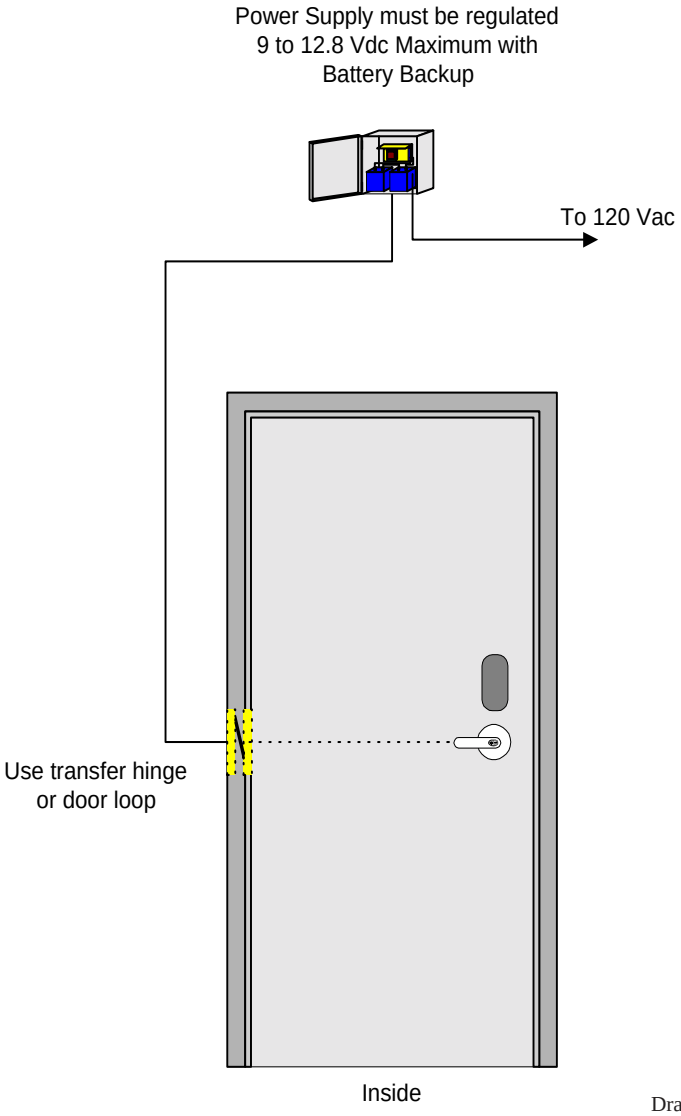
LOCK ELECTRONICS MODULE



Drawing 7.6

			REVISION DATE	RELATED FILES
INTELLIKEY CORPORATION			95/08/22	
			95/09/25	
Lock Electronics Module			97/11/19	
BY	APPROVED	FILE NAME		
RPB	JD	100629.vsd		

Typical remote power installation

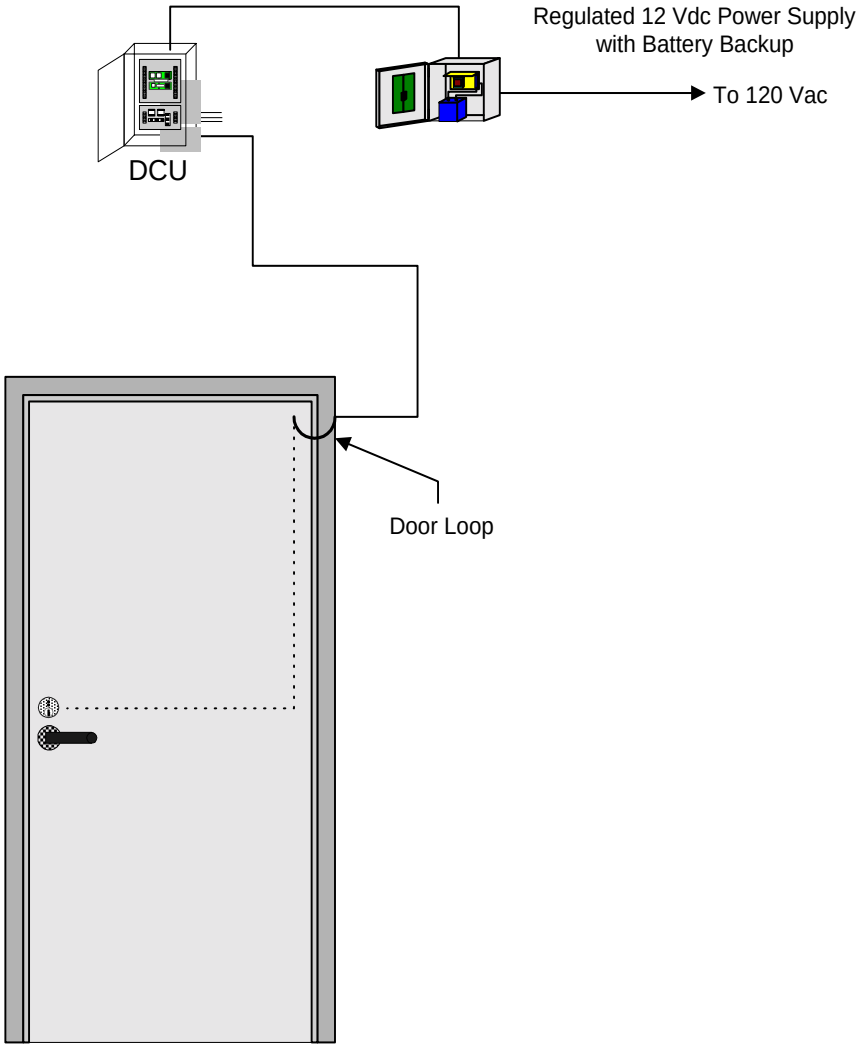


Drawing 7.2

A typical remote power installation with INTELLIKEY® Control Module and rotating Key Reader mounted on door.

			REVISION DATE	RELATED FILES
			97/06/18	
Typical remote power				
BY	APPROVED	FILE NAME		
RPB	JD	100669.vsd		

Typical remote installation



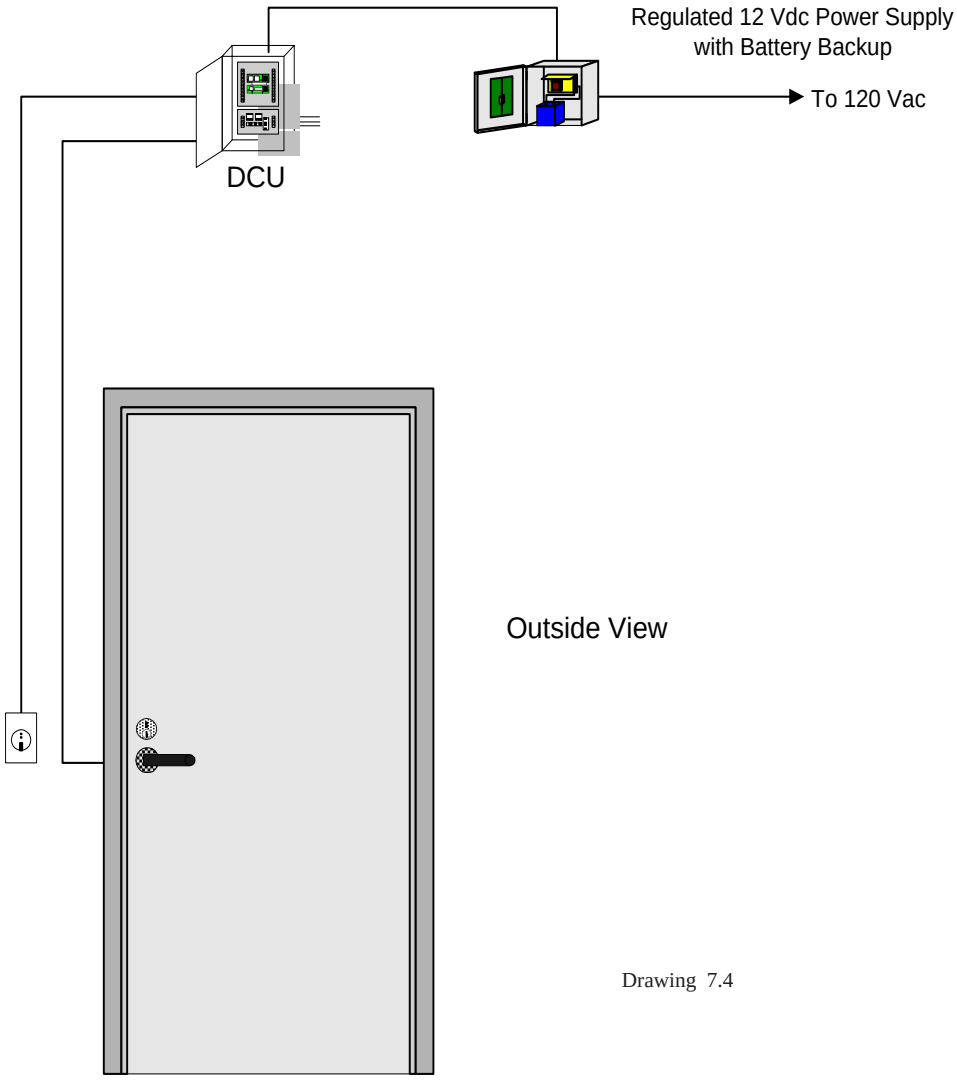
Drawing 7.3

Typical remote installation using DCU and power supply. The extension cable running through door and transfer loop to Door Control Unit (DCU). All INTELLIKEY electronics are mounted in the DCU. The regulated 12 Vdc power supply is connected to the DCU for continuous operation. This type of installation would be for a high use door.

			REVISION DATE	RELATED FILES
			97/11/19	
Typical Remote Installation				
BY	APPROVED	FILE NAME		
RPB	JD	100670.vds		

Typical electric strike installation

DCU4000RBM



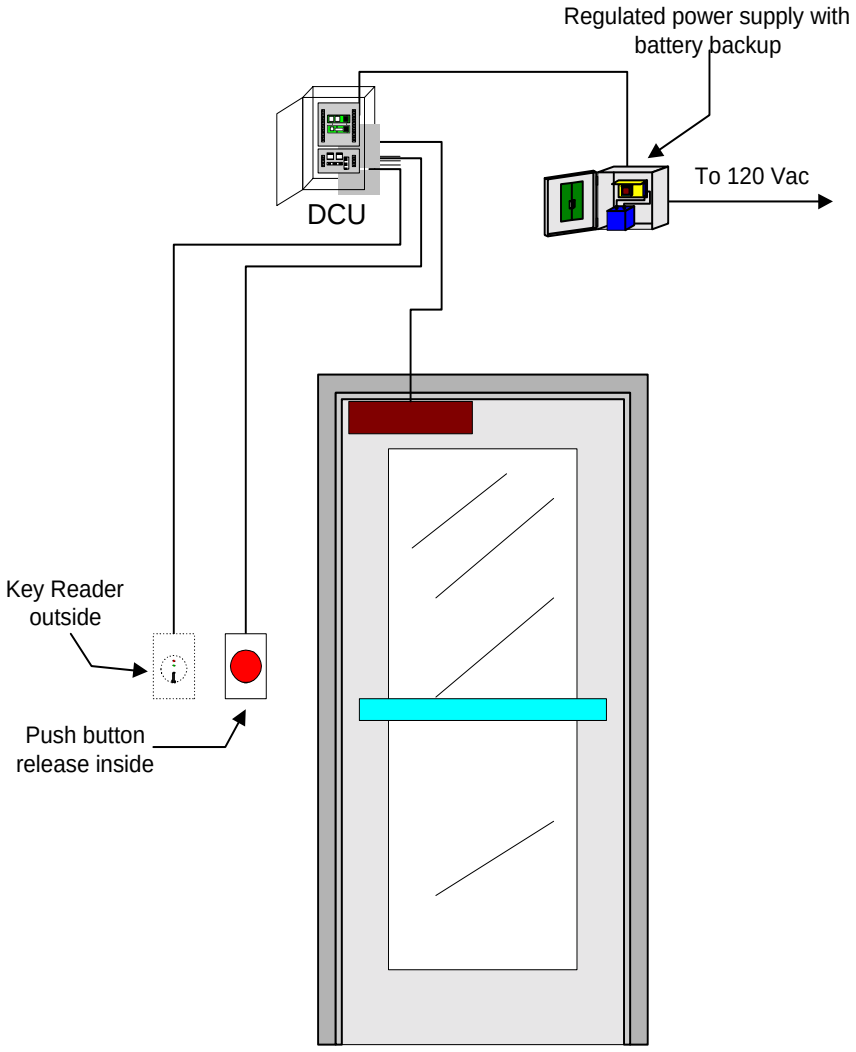
Drawing 7.4

Operation is by means of the fixed Key Reader on exterior of door and connected to the DCU4000RBM. Output voltage of the DCU4000RBM is dependent on the input voltage from power supply. The input voltage to DCU4000RBM can be 12 to 24 Vdc regulated. The DCU4000RBM comes complete with one fixed Key Reader, mounting box, 12' extension cable and DCU with Control Module/relay board. DCU4000RBM does not include a power supply, electric strike and/or wire. Use of a continuous duty electric strike is recommended. Note: DC input voltage and output voltage should be fused.

			REVISION DATE	RELATED FILES
INTELLIKEY			97/11/19	
Typical Electric Strike Installation				
BY	APPROVED	FILE NAME		
RPB	JD	100671.vsd		

Typical Magnetic Lock Installation

DCU4000RBM

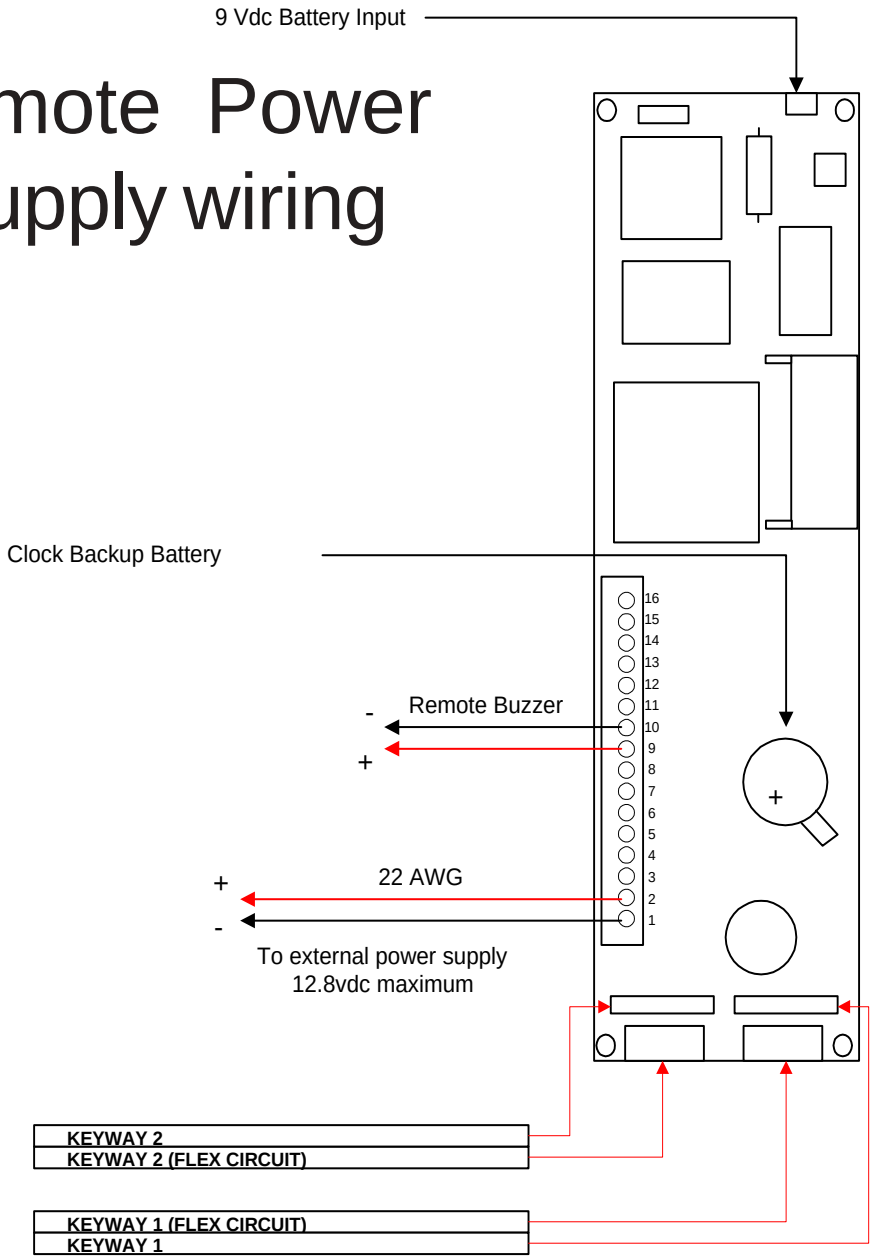


Drawing 7.5

Typical Magnetic lock installation with push button release and a fixed Key Reader installed near exterior entry of door. The DCU4000RBM houses all electronics and relays. The power supply is set to your required output voltage and is then cabled to the DCU4000RBM. 120 Vac must be ran to the power supply. If required the power supply may be connected to the fire alarm system. Please refer to page B1 for correct wiring diagrams.

			REVISION DATE	RELATED FILES
			97/11/20	
Typical Magnetic Lock Installation				
BY	APPROVED	FILE NAME		
RPB	JD	100672.vsd		

Remote Power Supply wiring



Drawing 7.7

The DC power is connected to terminals 1 & 2 with 1 being negative and 2 being positive. Wire size should be a minimum of 24 AWG with maximum run of 50 feet. For wire runs over 50 feet please refer to information supplied with power supply. Power requirements for the Lock Electronics Module is 9Vdc to 12Vdc regulated ±.8Vdc; .5 amps maximum.

			REVISION DATE	RELATED FILES
INTELLIKEY CORPORATION			95/08/22	
			95/09/25	
Lock Electronics Module			97/11/19	
BY	APPROVED	FILE NAME		
RPB	JD	100629.vsd		

Glossary of Terms

Battery Pack	Supplies 9 Vdc to run the Control Module and Electronic Cylinder. The Battery Pack comes in two (2) styles, slim line and standard and two (2) types. The one type of is the alkaline and other is lithium. The Cold Weather battery pack should be used in all applications where temperature goes below 35 degrees.
Control Module	This device is a PCB board fastened to the Mounting Plate, which contains the intelligence to determine whether the information being presented by the Electronic Key matches the corresponding information in the lock as related to identity, system setup, time, etc.
CPU	Please refer to Lock Programming Unit (LPU).
Controller Programming Unit	Please refer to Lock Programming Unit (LPU).
Cylinder Extension Cable	The Cylinder Extension Cable is used in both fixed cylinder and rotating cylinder applications. The Cylinder Extension Cable attaches to the Electronic Cylinder Cable and to the Control Module. Standard lengths are 1, 3, 6 and 12 foot. The maximum allowable run is 50 feet.
DCU4000	Please refer to Door Control Unit
Door Control Unit	The Door Control Unit consists of a mounting box, Control Module and RM or IOM depending on application.
Electronic Cylinder	This device, either fixed, or rotating, transmits the information presented by the Electronic Key to the Control Module. This is achieved by establishing an optical communication link between the key and cylinder, enabling the transfer of data relating to accessibility including codes, times and other characteristics. The Rotating Cylinder will also mechanically interface to operate the actual lock whatever type.
Electronic Key	This device carries both the access codes relevant to permitting entry to the protected facility as well as the means by which the operation of locking/unlocking is accomplished.
Escutcheon	This enclosure is designed to fasten to the Mounting Plate by two (2) tamper resistant screws and to house the Battery Pack and Control Module.
Escutcheon Gasket	The Escutcheon Gasket is to be affixed to the Escutcheon, after removal of backing. The Escutcheon Gasket must be used on all exterior applications.
EZ123 Software	This user friendly software system simplifies the task of programming controllers, issuing and tracking keys, maintaining access control within the system and maintains the database of the features selected for each key and controller in a users system.
KPU	The Key Processing Unit interfaces with the EZ123 and or Quantum Software via the IBM compatible computer. The interface is through the serial port of the computer. The KPU is used to transfer data to and from the Electronic Key.
Key Processing Unit	Please refer to KPU
Key Programming Unit	Please refer to KPU

Lock Electronics Module Please refer to Control Module

Lock Programming Unit Lock Programming Unit (LPU) interfaces with the EZ123 and or Quantum Software via an IBM compatible computer. The interface is through the serial port of the computer. The LPU is used to transfer data to and from the Control Module.

LEM Please refer to Control Module

Mounting Plate This component, to which the Control Module and Battery Pack is mounted, is designed to be fastened to the surface of the door on the inside of the room to be protected. The Mounting Plate is intended to be mounted by four (4) screws through the plate to the door. A spring clamp is welded to this Mounting Plate to hold the sealed Battery Pack in place.

Power Supply The Power Supply is used to supply the correct regulated voltage to a Control Module or DCU4000 unit. The PS1 power supply is capable of controlling one (1) DCU4000RBM or DCU4000IOM. The maximum recommended wire run is 50 feet with a wire size of 22 AWG. For longer runs please refer to the power supply instruction manual.

Quantum Software This user friendly software system simplifies the task of programming controllers, issuing and tracking keys, maintaining access control within the system and maintains the database of the features selected for each key and controller in a users system.

Remote Buzzer The remote buzzer can be used when the audible indications can not be distinguished at the Electronic Cylinder. The maximum distance from Control Module is 36 feet.

Relay Module The Relay Module attaches to the 4000 series Control Module by means of a connector. The Relay Module allows input of 12.8 to 35 Vdc (13.8 is recommended). The Relay Module contains up to two (2) relays, K2, is controlled by the Control Module and one relay, K1, is controlled by an external source.

RM Please refer to Relay Module.

Drawings List

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Technical Support

For technical support for your INTELLIKEY products, contact your local INTELLIKEY dealer, or contact INTELLIKEY directly:

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Fax: 321-724-5695

email: techsupport@intellikey.com
info@intellikey.com
www.intellikey.com