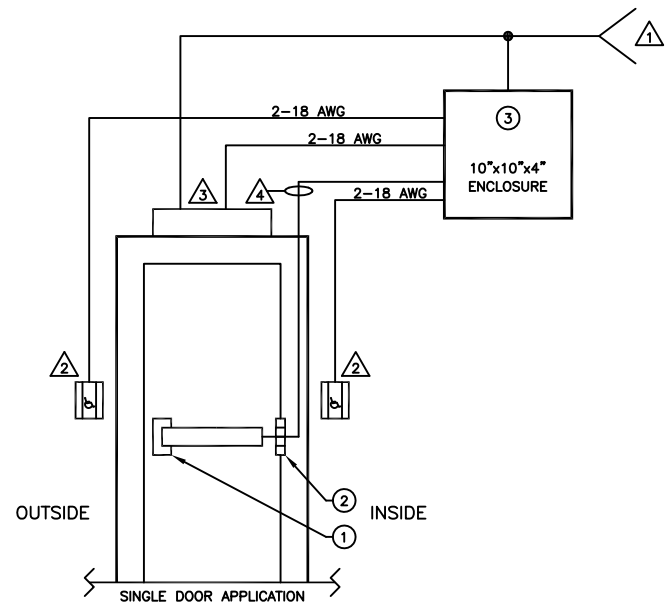
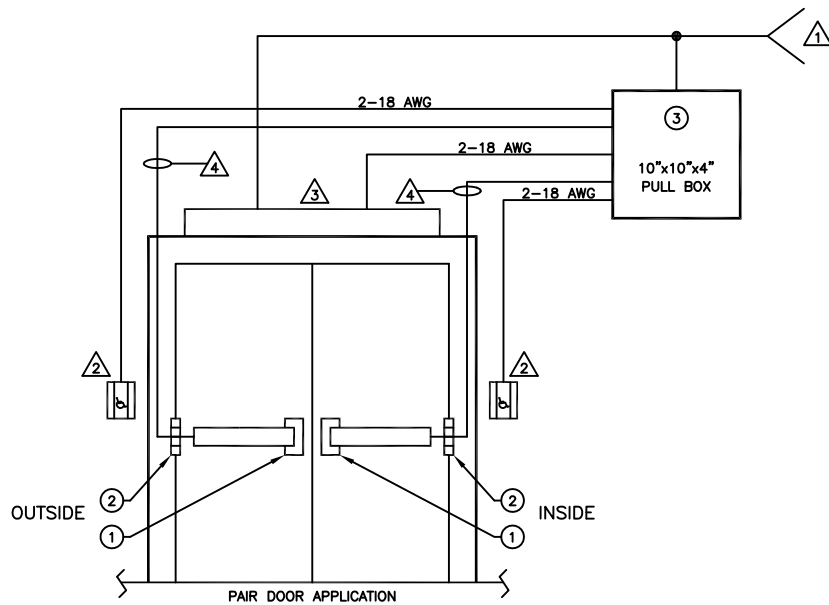




ACSI Series 1550K-MD and 1550-MD Motor Drive Electric Latch Retraction

**Riser and Point-to-Point Drawings for
Standard Access Control and
Day/Night Applications for Openings
Using Automatic Door Operators**

**For Use with ACSI Part Numbers
1420 and 1420-DN**



ACSI SUPPLIED EQUIPMENT:


- ① SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELECTRIC LATCH RETRACTION
- ② SERIES 1100 POWER TRANSFER HINGE
- ③ 1420 POWER SUPPLY

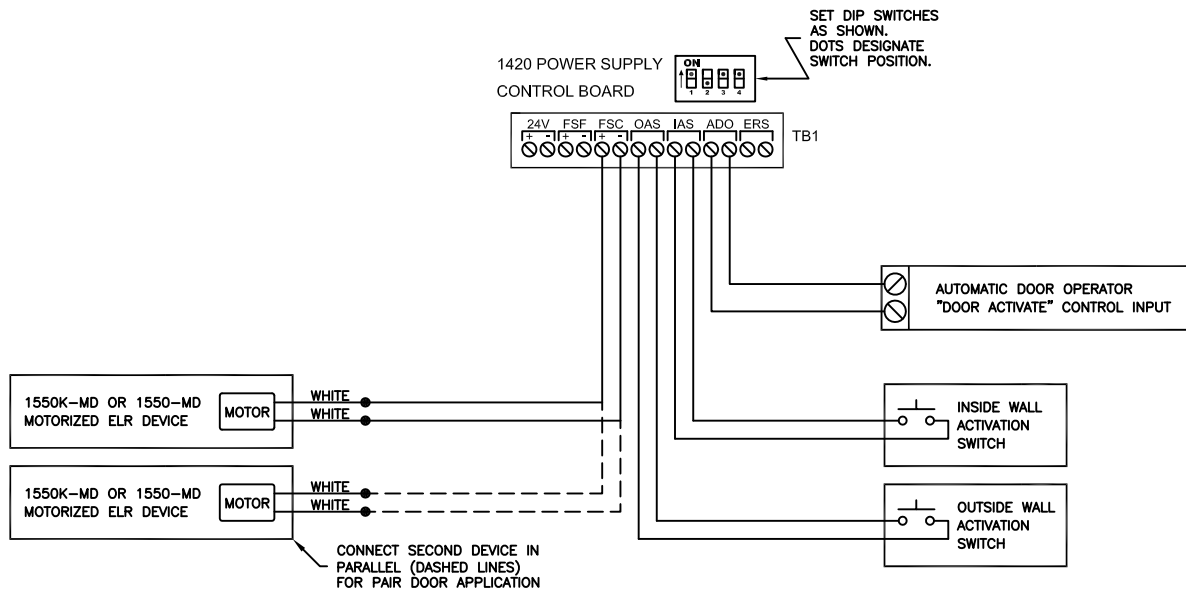
NOTES:

- ① TO 115V., 60HZ., 15A. SERVICE.
NOTE: IF FIRE ALARM INTERFACE IS REQUIRED, RUN 115V SERVICE THROUGH FIRE ALARM-CONTROLLED RELAY N.C. CONTACTS.
- ② WALL ACTIVATION SWITCH
- ③ AUTOMATIC DOOR OPERATOR
- ④ **WIRE GAUGE MAX. LENGTH 2-COND. CABLE**

WIRE GAUGE	MAX. LENGTH 2-COND. CABLE
22 AWG	70 FEET
20 AWG	110 FEET
18 AWG	180 FEET
16 AWG	280 FEET
14 AWG	450 FEET
12 AWG	720 FEET

RISER DIAGRAM FOR STANDARD AUTOMATED DOOR OPENING SYSTEM APPLICATION USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION 1/64 DECIMAL ± .008 ANGULAR ±1°	DRILL -.007 REAM -.001 PUNCH -.004			
			10/7/14	RELEASED	CRH
DESCRIPTION ACSI P/N 1420 ELR ACCESS CONTROL	DRAWING NO. REF 6037-R1	MATERIAL	DATE	REV.	APPRV.
SCALE 1/4" = 1'-0"			DRAWN BY CRH	DATE 10/7/14	
SHEET 1 OF 1			APPRV. BY CRH	DATE 10/7/14	
DO NOT SCALE THIS DRAWING					




POINT-TO-POINT WIRING DIAGRAM
 STANDARD ACCESS CONTROL WITH AUTOMATIC DOOR OPERATOR
 USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

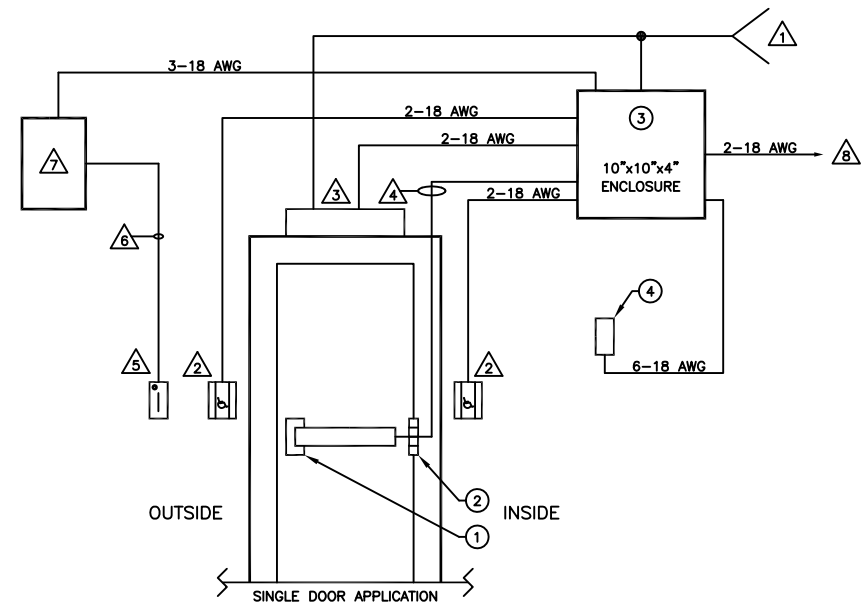
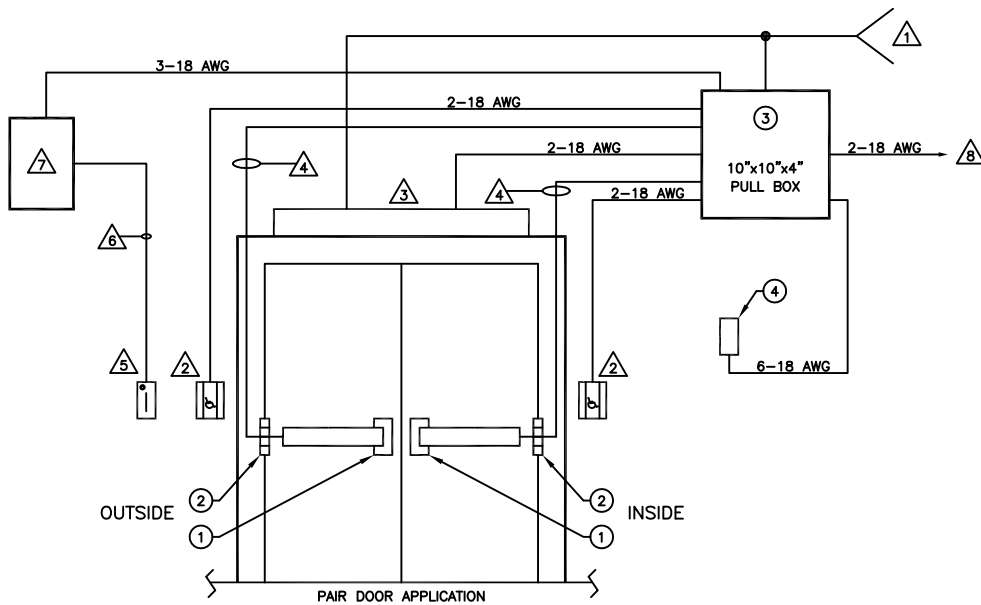
SYSTEM OPERATION:

OUTSIDE OR INSIDE WALL ACTIVATION SWITCH SEQUENTIALLY RETRACTS LATCHBOLT AND ACTIVATES AUTOMATIC DOOR OPERATOR.

IF THE 1420 POWER SUPPLY IS WIRED TO A FIRE ALARM CONTROL PANEL, AN ALARM CONDITION WILL IMMEDIATELY PROJECT LATCHBOLT AND DISABLE USE OF OUTSIDE AND INSIDE WALL ACTIVATION SWITCHES.

NOTE: IF THE FIRE ALARM ACTIVATES DURING A "DOOR OPEN" CYCLE, THE LATCHBOLT WILL IMMEDIATELY PROJECT AND THE OUTSIDE/INSIDE WALL ACTIVATION SWITCHES WILL IMMEDIATELY BECOME DISABLED, BUT THE THE SIGNAL TO THE AUTOMATIC DOOR OPERATOR TRIGGER INPUT WILL TERMINATE APPROXIMATELY 1/2 SEC. AFTER THE ALARM HAS ACTIVATED.

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION ±1/64 DECIMAL ±.008 ANGULAR ±1°	DRILL ±.007 REAM ±.001 PUNCH ±.004			
			10/7/14	RELEASED	CRH
DESCRIPTION ACSI P/N 1420 ELR ACCESS CONTROL			DRAWING NO. REF 6037-P1		MATERIAL
SCALE	DRAWN BY	DATE	REV.	APPRV.	
1 of 1	CRH	10/7/14			
DO NOT SCALE THIS DRAWING					



ACSI SUPPLIED EQUIPMENT:

- ① SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELECTRIC LATCH RETRACTION
 - ② SERIES 1100 POWER TRANSFER HINGE
 - ③ 1420 POWER SUPPLY
 - ④ RM RELAY MODULE
- NOTE: DO NOT LOCATE MORE THAN 10 FT. FROM POWER SUPPLY


④ WIRE GAUGE	MAX. LENGTH 2-COND. CABLE
22 AWG	70 FEET
20 AWG	110 FEET
18 AWG	180 FEET
16 AWG	280 FEET
14 AWG	450 FEET
12 AWG	720 FEET

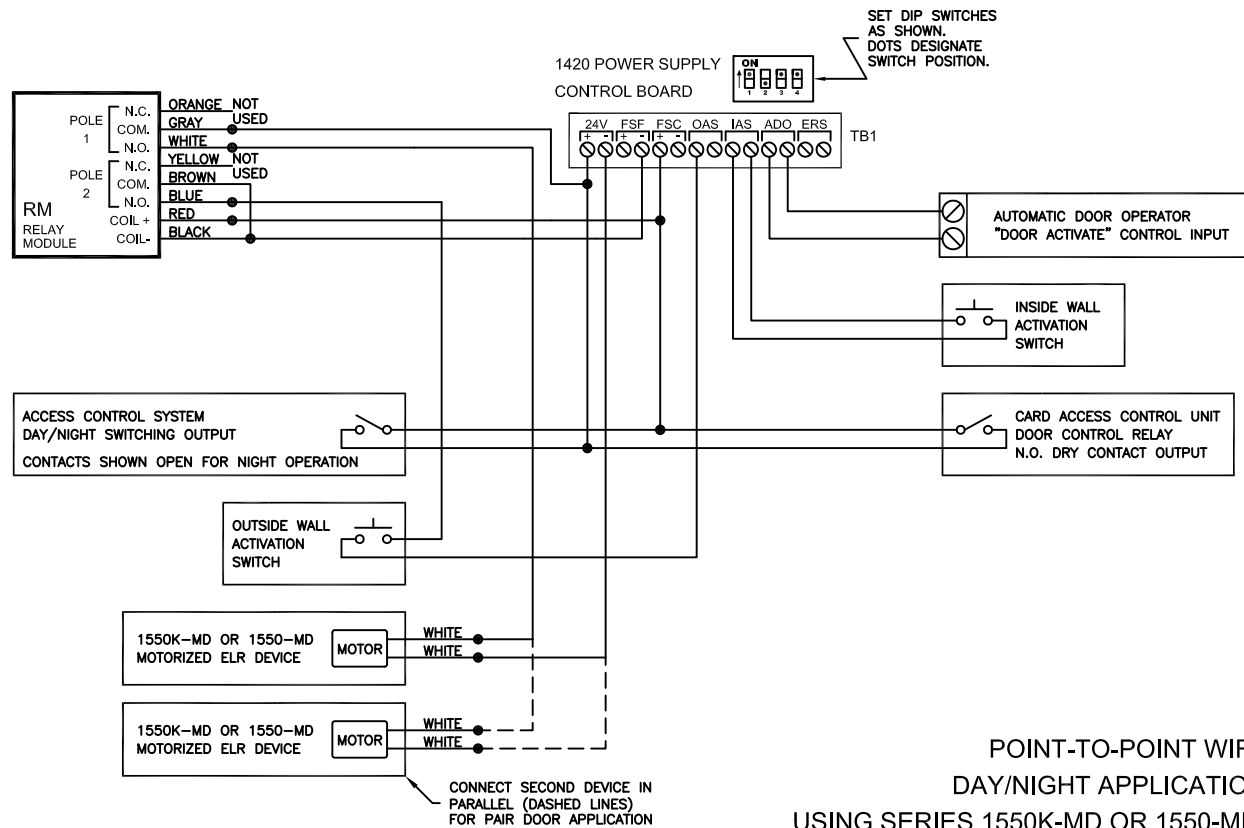
- ⑤ CARD READER UNIT
- ⑥ CARD READER POWER/DATA CABLE
- ⑦ CARD ACCESS CONTROL UNIT CONTAINING DOOR CONTROL RELAY RESPONDING TO CARD READER SWIPE FOR MOMENTARY AUTHORIZED ENTRY (NIGHT MODE)
- ⑧ ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT (TIME CLOCK, COMPUTER-CONTROLLED TIME SCHEDULE, ETC.)

NOTES:

- ① TO 115V., 60HZ., 15A. SERVICE.
- NOTE: IF FIRE ALARM INTERFACE IS REQUIRED, RUN 115V SERVICE THROUGH FIRE ALARM-CONTROLLED RELAY N.C. CONTACTS.
- ② WALL ACTIVATION SWITCH
- ③ AUTOMATIC DOOR OPERATOR

RISER DIAGRAM FOR DAY/NIGHT AUTOMATED DOOR OPENING SYSTEM APPLICATION USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION 1/64 DECIMAL ± .008 ANGULAR ± °	DRILL -.007 REAM -.001 PUNCH -.004	2/10/15	A	CRH
			10/7/14	RELEASED	CRH
DESCRIPTION ACSI P/N 1420-DN ELR ACCESS CONTROL			DRAWING NO. REF 6037-R2		
MATERIAL			SCALE 1/4" = 1'-0"	DRAWN BY CRH	DATE 10/7/14
SHEET 1 OF 1			APPROV. BY CRH	DATE 10/7/14	
DO NOT SCALE THIS DRAWING					



POINT-TO-POINT WIRING DIAGRAM
 DAY/NIGHT APPLICATION - VARIATION #1
 USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

SYSTEM OPERATION:

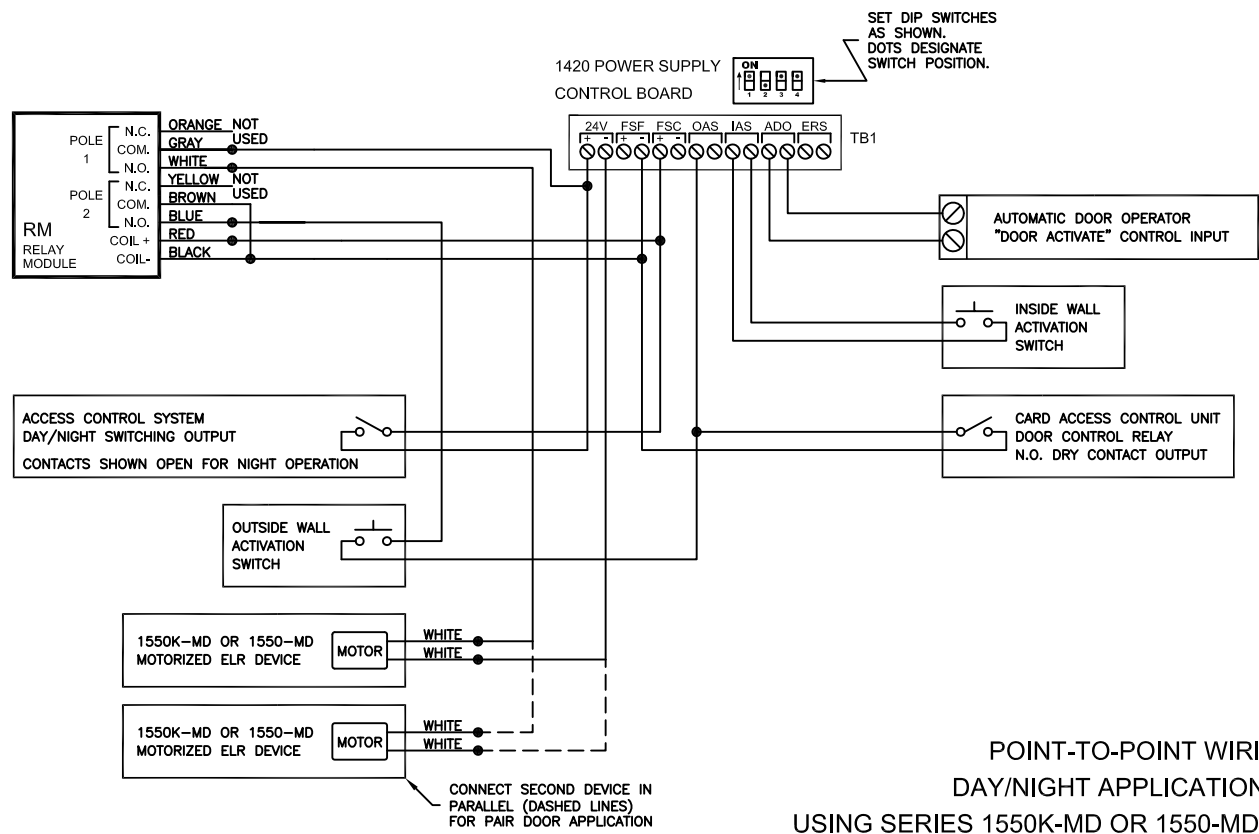
WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR DAY OPERATION (DRY CONTACTS CLOSED), THE LATCHBOLT WILL RETRACT. PUSHING THE OUTSIDE OR INSIDE WALL ACTIVATION SWITCH WILL ACTIVATE THE AUTOMATIC DOOR OPERATOR.

WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR NIGHT OPERATION (DRY CONTACTS OPEN), THE LATCHBOLT WILL PROJECT AND THE OUTSIDE WALL ACTIVATION SWITCH BECOMES DISABLED. A VALID SWIPE FROM THE CARD READER WILL TEMPORARILY RETRACT THE LATCHBOLT. WHILE THE CARD READER IS IN ITS ACTIVATED STATE, THE OUTSIDE WALL ACTIVATION SWITCH IS ENABLED FOR ACTIVATING THE AUTOMATIC DOOR OPERATOR. THE INSIDE WALL ACTIVATION SWITCH IS ALWAYS ENABLED IN NIGHT MODE AND WILL SEQUENTIALLY RETRACT THE LATCHBOLT AND ACTIVATE THE AUTOMATIC DOOR OPERATOR.

IF THE 1420 POWER SUPPLY IS WIRED TO A FIRE ALARM CONTROL PANEL, AN ALARM CONDITION OCCURRING WHILE IN DAY MODE WILL IMMEDIATELY PROJECT THE LATCHBOLT AND DISABLE USE OF THE OUTSIDE AND INSIDE WALL ACTIVATION SWITCHES. IN NIGHT MODE WHEN A FIRE ALARM CONDITION OCCURS, THE LATCHBOLT WILL REMAIN PROJECTED AND BOTH OUTSIDE AND INSIDE WALL ACTIVATION SWITCHES BECOME DISABLED.

NOTE: IF THE FIRE ALARM ACTIVATES DURING A "DOOR OPEN" CYCLE (DAY OR NIGHT MODE), THE LATCHBOLT WILL IMMEDIATELY PROJECT AND THE OUTSIDE/INSIDE WALL ACTIVATION SWITCHES WILL IMMEDIATELY BECOME DISABLED, BUT THE THE SIGNAL TO THE AUTOMATIC DOOR OPERATOR TRIGGER INPUT WILL TERMINATE APPROXIMATELY 1/2 SEC. AFTER THE ALARM HAS ACTIVATED.

ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED FRACTION 1/64 DECIMAL ±.008 ANGULAR ±1°	DRILL ±.007	12/18/14	A	CRH
		REAM ±.001	10/7/14	RELEASED	CRH
		PUNCH ±.004	DATE	REV.	APPRV.
DESCRIPTION ACSI P/N 1420-DN ELR ACCESS CONTROL	DRAWING NO. REF 6037-P2-1	MATERIAL	SCALE 1/1	DRAWN BY CRH	DATE 10/7/14
			SHEET 1 of 1	APPRV. BY CRH	DATE 10/7/14
DO NOT SCALE THIS DRAWING					



POINT-TO-POINT WIRING DIAGRAM
 DAY/NIGHT APPLICATION - VARIATION #3
 USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES


SYSTEM OPERATION:

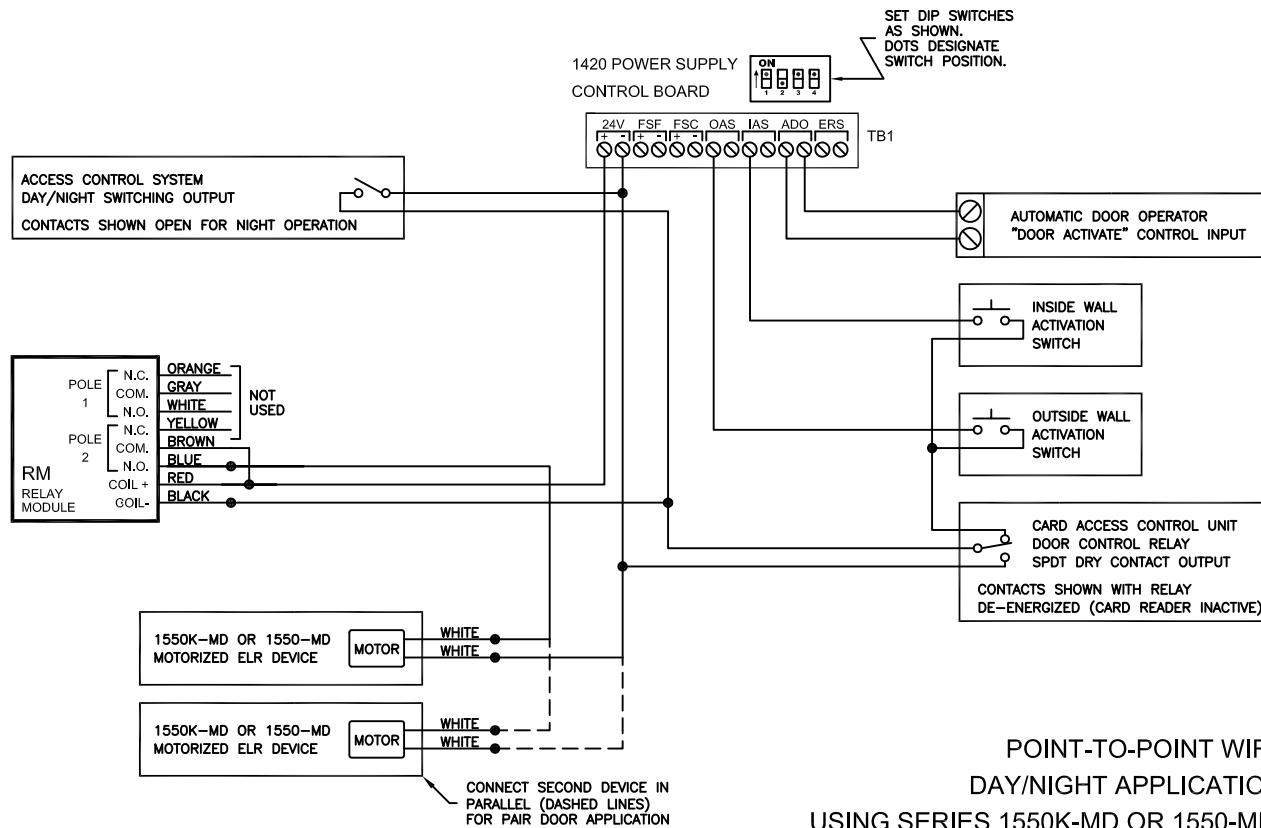
WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR DAY OPERATION (DRY CONTACTS CLOSED), THE LATCHBOLT WILL RETRACT. PUSHING THE OUTSIDE OR INSIDE WALL ACTIVATION SWITCH WILL ACTIVATE THE AUTOMATIC DOOR OPERATOR.

WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR NIGHT OPERATION (DRY CONTACTS OPEN), THE LATCHBOLT WILL PROJECT AND THE OUTSIDE WALL ACTIVATION SWITCH BECOMES DISABLED. A VALID SWIPE FROM THE CARD READER WILL SEQUENTIALLY RETRACT THE LATCHBOLT AND ACTIVATE THE AUTOMATIC DOOR OPERATOR. THE INSIDE WALL ACTIVATION SWITCH IS ALWAYS ENABLED IN NIGHT MODE AND WILL SEQUENTIALLY RETRACT THE LATCHBOLT AND ACTIVATE THE AUTOMATIC DOOR OPERATOR.

IF THE 1420 POWER SUPPLY IS WIRED TO A FIRE ALARM CONTROL PANEL, AN ALARM CONDITION OCCURRING WHILE IN DAY MODE WILL IMMEDIATELY PROJECT THE LATCHBOLT AND DISABLE USE OF THE OUTSIDE AND INSIDE WALL ACTIVATION SWITCHES. IN NIGHT MODE WHEN A FIRE ALARM CONDITION OCCURS, THE LATCHBOLT WILL REMAIN PROJECTED AND BOTH OUTSIDE AND INSIDE WALL ACTIVATION SWITCHES BECOME DISABLED.

NOTE: IF THE FIRE ALARM ACTIVATES DURING A "DOOR OPEN" CYCLE (DAY OR NIGHT MODE), THE LATCHBOLT WILL IMMEDIATELY PROJECT AND THE OUTSIDE/INSIDE WALL ACTIVATION SWITCHES WILL IMMEDIATELY BECOME DISABLED, BUT THE THE SIGNAL TO THE AUTOMATIC DOOR OPERATOR TRIGGER INPUT WILL TERMINATE APPROXIMATELY 1/2 SEC. AFTER THE ALARM HAS ACTIVATED.

 ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED				
	FRACTION 1/64	DRILL ±.001	12/18/14	A	CRH
	DECIMAL ±.008	REAM ±.001	10/8/14	RELEASED	CRH
	ANGULAR ±1°	PUNCH ±.004	DATE	REV.	APPRV.
DESCRIPTION ACSI P/N 1420-DN ELR ACCESS CONTROL	DRAWING NO. REF 6037-P2-3	MATERIAL	SCALE 1/1	DRAWN BY CRH	DATE 10/8/14
			SHEET 1 of 1	APPRV. BY CRH	DATE 10/8/14
DO NOT SCALE THIS DRAWING					



POINT-TO-POINT WIRING DIAGRAM
 DAY/NIGHT APPLICATION - VARIATION #4
 USING SERIES 1550K-MD OR 1550-MD MOTOR DRIVE ELR DEVICES

SYSTEM OPERATION:

WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR DAY OPERATION (DRY CONTACTS CLOSED), THE LATCHBOLT WILL RETRACT. PUSHING THE OUTSIDE OR INSIDE WALL ACTIVATION SWITCH WILL ACTIVATE THE AUTOMATIC DOOR OPERATOR.

WHEN THE ACCESS CONTROL SYSTEM DAY/NIGHT SWITCHING OUTPUT IS SET FOR NIGHT OPERATION (DRY CONTACTS OPEN), THE LATCHBOLT WILL PROJECT AND BOTH THE OUTSIDE AND INSIDE WALL ACTIVATION SWITCHES BECOME DISABLED. A VALID SWIPE FROM THE CARD READER WILL ONLY RETRACT THE LATCHBOLT. THE DOOR MUST BE PULLED OPEN MANUALLY FOR ENTRY OR PUSHED OPEN MANUALLY FOR EXITING.

IF THE 1420 POWER SUPPLY IS WIRED TO A FIRE ALARM CONTROL PANEL, AN ALARM CONDITION OCCURRING WHILE IN DAY MODE WILL IMMEDIATELY PROJECT THE LATCHBOLT AND DISABLE USE OF THE OUTSIDE AND INSIDE WALL ACTIVATION SWITCHES. IN NIGHT MODE WHEN A FIRE ALARM CONDITION OCCURS, THE LATCHBOLT WILL REMAIN PROJECTED. BY DEFAULT, BOTH OUTSIDE AND INSIDE WALL ACTIVATION SWITCHES ARE DISABLED IN NIGHT MODE.

NOTE: IF THE FIRE ALARM ACTIVATES DURING A "DOOR OPEN" CYCLE (DAY MODE ONLY), THE LATCHBOLT WILL IMMEDIATELY PROJECT AND THE OUTSIDE/INSIDE WALL ACTIVATION SWITCHES WILL IMMEDIATELY BECOME DISABLED, BUT THE THE SIGNAL TO THE AUTOMATIC DOOR OPERATOR TRIGGER INPUT WILL TERMINATE APPROXIMATELY 1/2 SEC. AFTER THE ALARM HAS ACTIVATED.

ARCHITECTURAL CONTROL SYSTEMS, INCORPORATED ST. LOUIS, MISSOURI 1-800-753-5558	TOLERANCES UNLESS NOTED				
	FRACTION 1/16"	DRILL ±.001	12/18/14	A	CRH
	DECIMAL ±.005	REAM ±.001	10/8/14	RELEASED	CRH
ANGULAR ±1°	PUNCH ±.004	DATE	REV.	APPRV.	
DESCRIPTION ACSI P/N 1420-DN ELR ACCESS CONTROL	DRAWING NO. REF 6037-P2-4	MATERIAL	SCALE 1/4" = 1"	DRAWN BY CRH	DATE 10/8/14
			SHEET 1 of 1	APPRV. BY CRH	DATE 10/8/14
DO NOT SCALE THIS DRAWING					