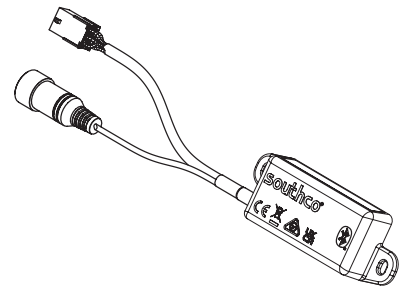


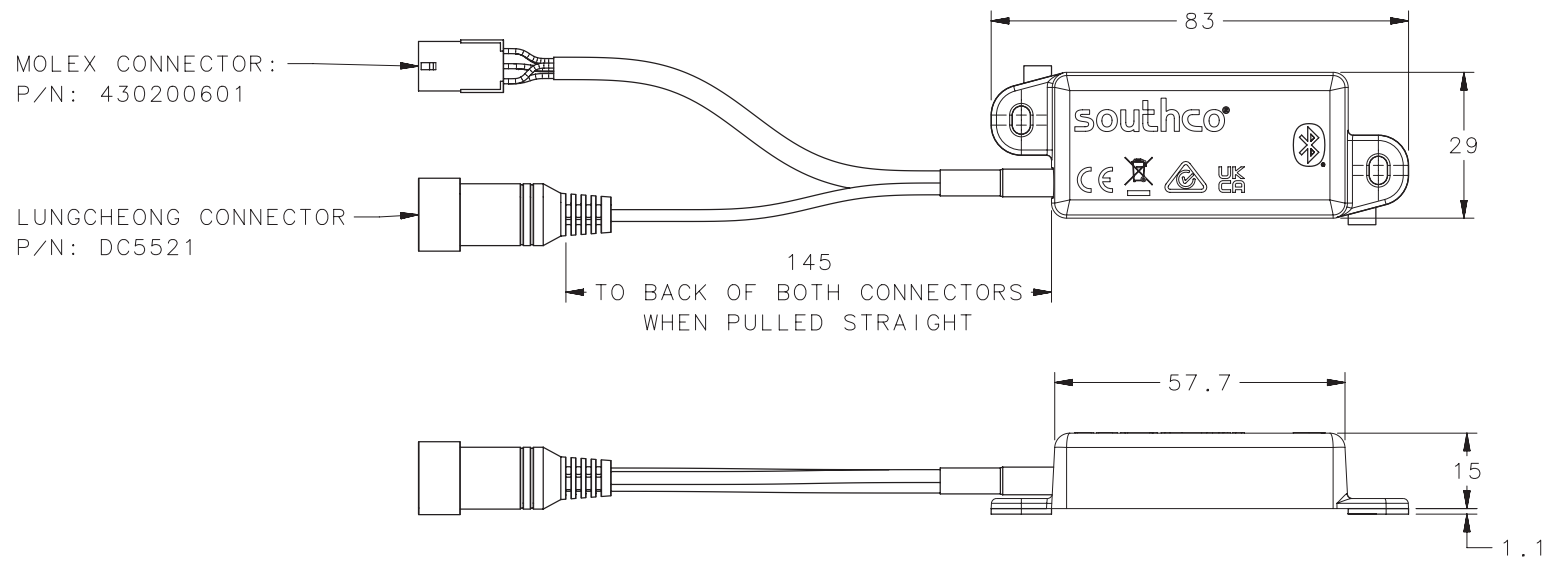
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
I	04AUG2023	GJL/SJK	PRN: P2023-1452

NOTES:

- A. PRODUCT DESCRIPTION: A DEVICE FOR CONTROLLING ACCESS TO SOUTHCO ELECTRONIC LOCKS AND LATCHES VIA BLUETOOTH®, SEE AP-BT-1-004 OR THE *KEYPANION™* APP. FOR ANY OTHER USE CASE CONTACT SOUTHCO FOR COMPATIBILITY
- B. MATERIAL:
 - HOUSING: PC/ABS
 - PRESSURE SENSITIVE ADHESIVE: ACRYLIC FOAM CORE
 - WIRE: UL 1007 UNSHIELDED, 24AWG, STRANDED, TINNED COPPER
 - POTTING MATERIAL: SILICONE BASED
- C. CONNECTOR TYPE
 - CONNECTOR MOLEX: (P1) FEMALE, DUAL ROW, 6 PIN, P/N: 430200601 OR EQUIVALENT
 - CONTACT MOLEX: (P1) MALE, P/N: 430310001 OR EQUIVALENT
 - CONNECTOR (J1) LUNGCHEONG P/N: DC5521 OR EQUIVALENT
 - MATING CONNECTOR AND HARNESSES NOT INCLUDED
 - SEE PAGES 4 AND 5 FOR MATING WIRE HARNESSES AND LATCHES
- D. ENVIRONMENTAL
 - ALL ITEMS COMPLY WITH RoHS DIRECTIVE AND REACH REGULATION
 - IP67 RATED ENCLOSURE



SCALE 1:2



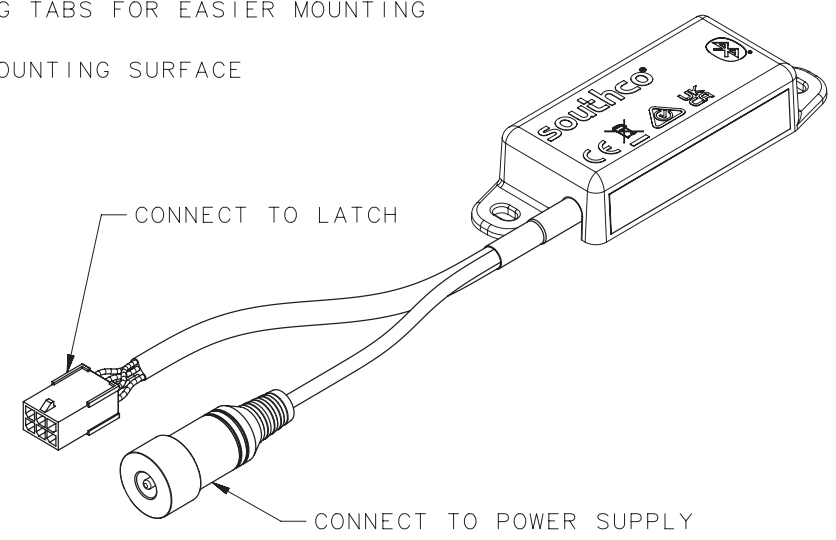
THE BLUETOOTH® WORD MARK AND LOGOS ARE REGISTERED TRADEMARKS OWNED BY BLUETOOTH SIG, INC. AND USE IS UNDER LICENSE

CPB NUMBER 2017-0837	THIRD ANGLE PROJECTION		southco® CONNECT • CREATE • INNOVATE	
	MILLIMETERS [IN]		DESCRIPTION SINGLE OUTPUT BLUETOOTH® CONTROLLER	
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED		SIZE A3	SYSTEM NX
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		DWG NO. J-EA-BT-4	
PROPRIETARY ITEM	PER ASME Y14.5M-1994	DRAWN BY ZAM/MLL	DATE 05MAY2021	SCALE NONE
EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREIN IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.				SHEET 1 OF 5

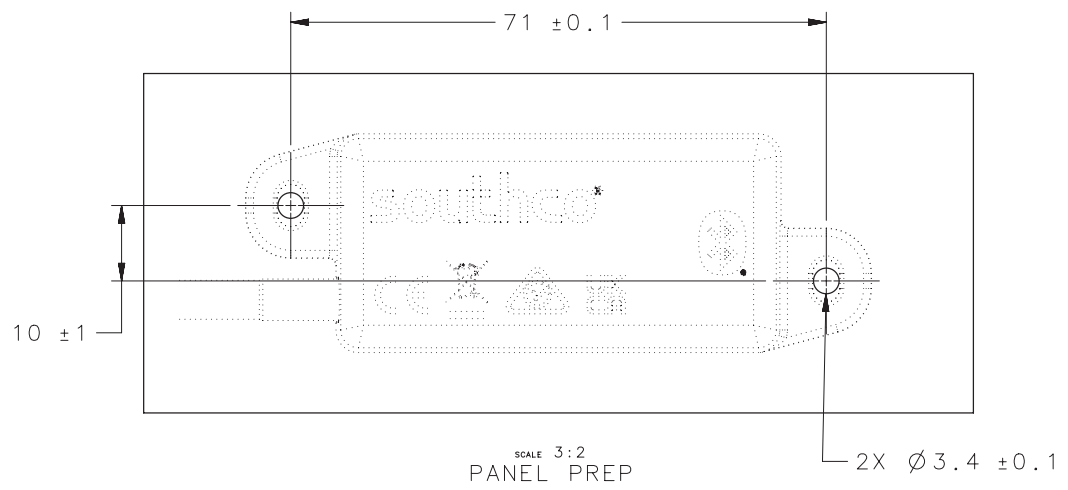
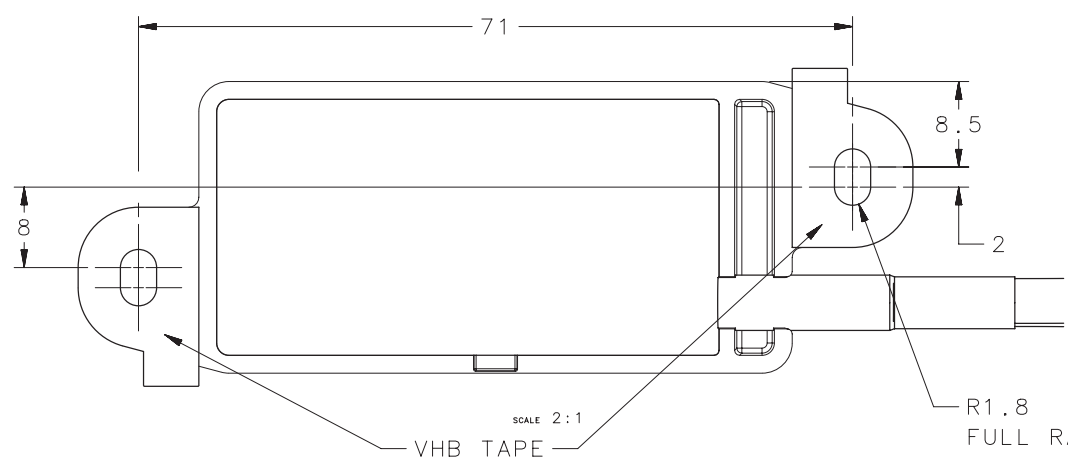
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
I	04AUG2023	GJL/SAK	PRN: P2023-1452

ASSEMBLY NOTES AND INSTRUCTIONS:

- E. PRESSURE SENSITIVE ADHESIVE IS PRE-INSTALLED ON CONTROLLER MOUNTING TABS FOR EASIER MOUNTING TO APPLICATION SURFACE
- F. ENSURE MOUNTING SURFACE IS CLEAN BEFORE INSTALLING CONTROLLER TO MOUNTING SURFACE
- G. MOUNTING SLOTS CAN BE USED WITH AN M3 OR #4-40 SCREW
- H. REMOVE BACKING FROM TAPE TO EXPOSE ADHESIVE SURFACE
LOCATE UNIT TO DESIRED LOCATION
GENTLY PRESS UNIT WITH EXPOSED TAPE INTO POSITION TO ACTIVATE ADHESIVE
OPTIONALLY INSTALL MOUNTING SCREWS
- I. ANTENNA IS LOCATED UNDERNEATH BLUETOOTH® SYMBOL
SURROUNDING MATERIAL CAN AFFECT SIGNAL RANGE AND QUALITY



SCALE 1:1



NOTE: NO MOUNTING HARDWARE IS PROVIDED
NOTE: ONLY ONE USER CAN BE CONNECTED AT A TIME

CPB NUMBER 2017-0837	THIRD ANGLE PROJECTION			southco CONNECT • CREATE • INNOVATE	
	MILLIMETERS [IN]				
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED		DESCRIPTION SINGLE OUTPUT BLUETOOTH® CONTROLLER		
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		SIZE A3	SYSTEM NX	DWG NO. J-EA-BT-4
PROPRIETARY ITEM <small>EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREIN IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.</small>	PER ASME Y14.5M-1994	DRAWN BY ZAM/MLL	DATE 07MAY2021	SCALE NONE	SHEET 2 OF 5

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
I	04AUG2023	GJL/SAK	PRN: P2023-1452

NOTES:

J. POWER SOURCE SHOULD BE SIZED BASED ON THE REQUIREMENTS OF THIS CONTROLLER AND THE CONNECTED LATCH
 K. SEE SOUTHCO P/N EA-A02-002 FOR SUGGESTED POWER SUPPLY



ELECTRICAL SPECIFICATIONS:

SYMBOL	PARAMETER	MIN	NOM	MAX	UNITS
V_{SUPPLY}	SUPPLY VOLTAGE	8.0	12	13.8	VDC
I_{SUPPLY}	SUPPLY CURRENT - AVERAGE IDLE	-	0.12	-	mA
	SUPPLY CURRENT - OPERATING*	-	2.6	-	
I_{OUTPUT}	STEADY STATE OUTPUT CURRENT	-	-	2.5	A
T	OPERATING TEMPERATURE	-40	-	80	°C
RANGE	SIGNAL RANGE**	-	10	-	m

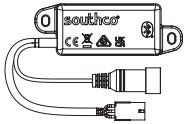

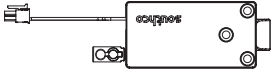
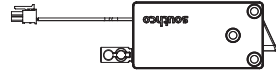
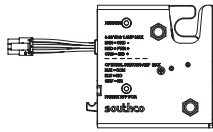
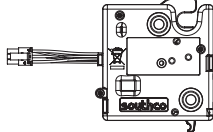
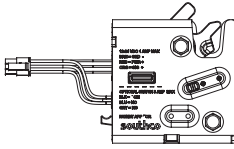
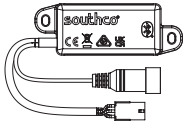
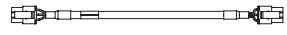
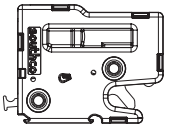


EA-BT-4043-10-BB

"BB" DENOTES LATCH CONFIGURATIONS					
CONFIGURATION	LATCH SERIES				
A1	R4-EM-2	R4-EM-6	R4-EM-7	EM-05-1	EM-05-2
B1	R4-EM-9D	R4-EM-9P	R4-EM-05		
C1	H3-EM-60	H3-EM-80	EM-10-XX-310	EM-10-XX-410	
D1	R4-EM-8 DOOR AND LATCH SENSOR VERSIONS				
F1	R4-25				
F2	AC-EM-102-1042				


NOTE:
 *WHEN THE OUTPUTS ARE BEING DRIVEN HIGH BUT NO LATCH IS CONNECTED
 ** IN OPEN AIR

CPB NUMBER 2017-0837	THIRD ANGLE PROJECTION 	 CONNECT • CREATE • INNOVATE
	MILLIMETERS [IN]	
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION SINGLE OUTPUT BLUETOOTH® CONTROLLER
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE SYSTEM DWG NO. A3 NX J-EA-BT-4
PROPRIETARY ITEM <small>EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREIN IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.</small>	PER ASME Y14.5M-1994	DRAWN BY ZAM/MLL DATE 07MAY2021 SCALE 1:1 SHEET 3 OF 5

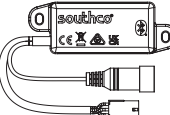

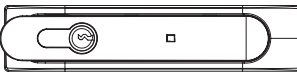



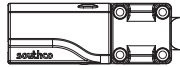
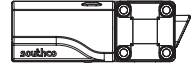
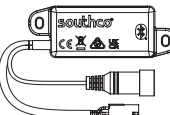

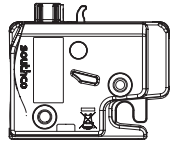
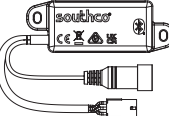

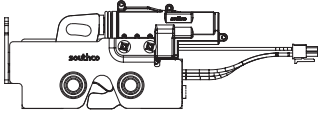
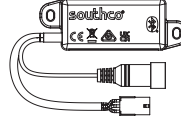
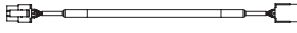
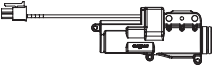
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
1	04AUG2023	GLE_PJAK	PRINT: P0223-1452

BLUETOOTH CONTROLLER	WIRE HARNESS PART NUMBER SEE TABLE	SOUTHCO LATCH SERIES
 <p>EA-BT-4043-10-A1 OPTIMIZED FOR BATTERY USAGE</p>		 EM-05-11
		 EM-05-21
		 R4-EM-2
		 R4-EM-6
		 R4-EM-7
 <p>EA-BT-4043-10-B1 NOT RECOMMENDED FOR USE WITH BATTERIES</p>		 R4-EM-9 DOOR & LATCH SENSOR VERSIONS
		
		 R4-EM-05 DOOR & LATCH SENSOR



WIRE LENGTH TABLE	
"X"	WIRE LENGTH (mm)
A	150
1	1000
2	2000

DATE: 2017-08-31	THIRD ANGLE PROJECTION	 <p>CONNECT • CREATE • INNOVATE</p>
DRAWN BY: JAC	TOLERANCES UNLESS OTHERWISE NOTED	
SCALE: ALL DIMENSIONS UNLESS OTHERWISE NOTED	TOLERANCES ARE FOR REFERENCE ONLY.	DESCRIPTION: SINGLE OUTPUT BLUETOOTH CONTROLLER
DATE RELEASED: 11/18/2022	REV: 00	SIZE: A0
DATE REVISED: 08/04/2023	REV: 01	PROJ: NX
PER ASME Y14.5M-1994	DATE: 31MAY2022	JOB: J-EA-BT-4
		SHEET 111 OF 5

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
1	08AUG2023	GLE_PJAK	PRINT: P0223-1452

BLUETOOTH CONTROLLER	WIRE HARNESS PART NUMBER SEE TABLE	SOUTHCO LATCH SERIES
 EA-BT-4043-10-C1 NOT RECOMMENDED FOR USE WITH BATTERIES	EA-W01-X23-21 	 H3-EM-60 SERIES
	EA-W01-X17-21 	 H3-EM-80 SERIES
	EA-W21-X03-02 	 EM-10-1X-310 AND EM-10-1X-410  EM-10-2X-310, EM-10-3X-310, EM-10-2X-410, EM-10-3X-410
 EA-BT-4043-10-D1 OPTIMIZED FOR BATTERY USAGE	EA-W24-X03-21 	 R4-EM-8
 EA-BT-4043-10-F1 OPTIMIZED FOR BATTERY USAGE	EA-W20-X01-21 (OPTIONAL - EXTENSION ONLY) 	 R4-25
 EA-BT-4043-10-F2 OPTIMIZED FOR BATTERY USAGE	EA-W20-X01-21 (OPTIONAL - EXTENSION ONLY) 	 AC-EM-102-1042

"X"	WIRE LENGTH (mm)
A	150
1	1000
2	2000

DATE	2017-0837	THIRD ANGLE PROJECTION		 CONNECT • CREATE • INNOVATE	
DRAWN BY		TOLERANCES UNLESS OTHERWISE NOTED			
TITLE		ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		DESCRIPTION	SINGLE OUTPUT BLUETOOTH CONTROLLER
SCALE		PER ASME Y14.5M-1994		SIZE	A0 NX
DATE				REV	J-EA-BT-4
				DATE	31MAY2022
				SHEET	5 OF 5