



Excellence in Compliance Testing

Certification Exhibit

**FCC ID: U4A-MODBLE9051
IC: 6982A-MODBLE9051**

**FCC Rule Part: 15.247
IC Radio Standards Specification: RSS-247**

ACS Project Number: 15-0143

Manufacturer: Assa Abloy Inc.
Model: BLE9051

Manual

Manual

Assa Abloy: Sargent Manufacturing and Corbin Russwin Factory Installation Instructions

Factory Installation Instructions for IN120 reader assemblies Models BIP, BIP-M, BIPS, BIPS-M, BCP and BCP-M, with Bluetooth Smart Model: BLE9051 Assembly: 52-9051 RF Module.

FCC Specific Statement:

“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.”*

General Statements (For all devices):

Warning: Changes or modifications to this device not expressly approved by Assa Abloy could void the user’s authority to operate the equipment.

Industry Canada Specific Statements:

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d’Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d’un type et d’un gain maximal (ou inférieur) approuvé pour l’émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l’intention des autres utilisateurs, il faut choisir le type d’antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l’intensité nécessaire à l’établissement d’une communication satisfaisante.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d’Industrie Canada applicables aux appareils radio ex-

empts de licence. L’exploitation est autorisée aux deux conditions suivantes : (1) l’appareil ne doit pas produire de brouillage, et (2) l’utilisateur de l’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

Users in the USA and Canada English:

Operation is subject to the following two conditions:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure

For Mobile Devices include the following:

“This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.”

Pour les usagers résidant au Canada (French):

L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Énoncé d'exposition à la radiation

Pour les appareils mobiles sont les suivants:

“Cet équipement est conforme aux limites d'exposition à la radiation RF FCC prévues pour un environnement non contrôlé. Cet équipement doit être installé et doit fonctionner avec une distance minimum de 20 centimètres des utilisateurs et des personnes Environnantes. Cet émetteur ne doit pas être co-localisées ou opérant en conjointement avec une autre antenne ou émetteur

Assembly Drawings and Instructions:

53-5378TAB

52-5376RTAB

52-4890

Factory Configuration Instructions:

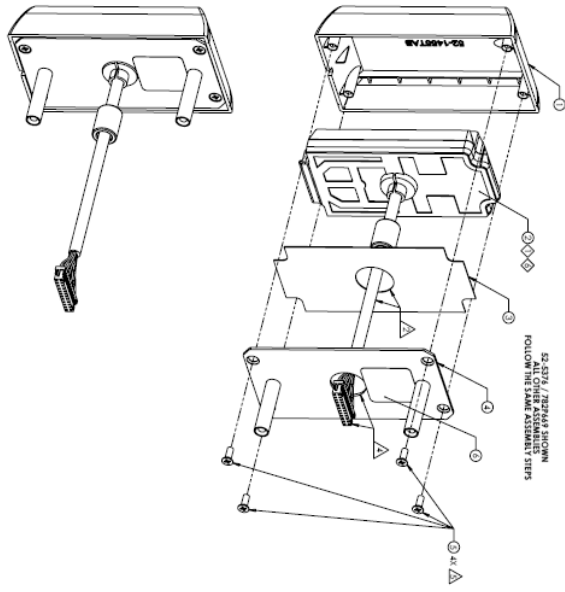
The assembly 52-9051-0000-000 IN120 BT shall be programmed at the manufacturing facility with firmware. The firmware version to be programmed into the unit shall be V5.09, which applies an advertising rate of 20ms and a RSSI tap sensitivity of -55dB.

Field Configuration Instructions:

At the customer site, encryption keys are loaded by a “Mobile Keys” certified technician using an HID configuration card. This installation can be performed on mobile enabled readers only. Once the “Mobile Keys” have been loaded interface with mobile devices can be achieved.

The HID BLE Configuration application is currently available on Android OS and provides additional configuration that can be used to configure tap sensitivity and transmission power. Transmission power is restricted to a maximum of 0dBm. The HID BLE Configuration application can be used to upgrade the BLE devices firmware using the OTA technology. Field firmware upgrades can only be performed through and HID certified technician that are authorized to use a controlled administration card.

ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	DISPOSITION		
				DATE	BY	REASON
1	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1
2	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1
3	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1
4	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1
5	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1
6	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1
7	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1
8	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1
9	52-4102	52-4102	READER ELECTRONICS ASSEMBLY - STANDALONE	1	1	1

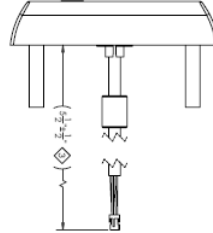
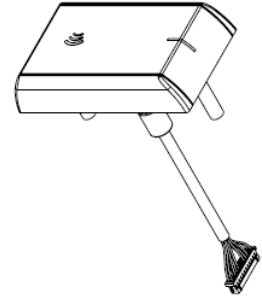


52-4102 / 782P649
FOLLOW THE SAME ASSEMBLY STEPS

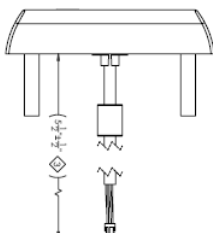
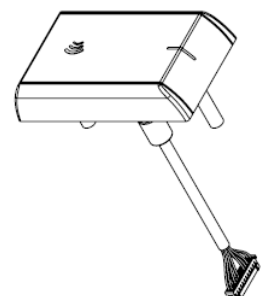
- NOTE:
1. PLACE ELECTRONICS (2) INTO COVER (1)
 2. FEED WIRE OF ELECTRONICS (2) THRU SHIELD (3)
 3. PLACE SHIELD (3) IN COVER (1) OVER ELECTRONICS (2)
 4. FEED WIRE OF ELECTRONICS (2) THRU P.A.T.E. (4)

5. SECURE FLUTE (5) TO COVER (1) WITH SCREW (6) AT.
6. APPLY LABEL (7) TO P.A.T.E. (4) IN APPROXIMATE LOCATION AFTER TESTING REFER TO READER LABEL INFORMATION TABLE FOR APPROPRIATE LABEL TEXT.
7. PLACE ROLL ASSEMBLED READER IN ANTI-STATIC BAG. THIN IN BOX R.
8. APPLY MODULE LABEL Y TO BOX.
9. ASSEMBLY TO BE BOMB COMPLIANT.
10. ALL DRAWING REQUIREMENT SHALL BE ADHERED FOR COMPLIANCE. ITEMS DERIVED AS SET OR CRITICAL CHARACTERISTICS SHALL REQUIRE ADDITIONAL INSPECTION UNDER AN OBTAINING OF THE DRAWING.

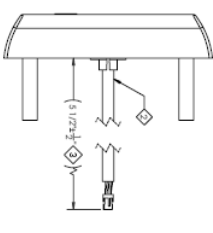
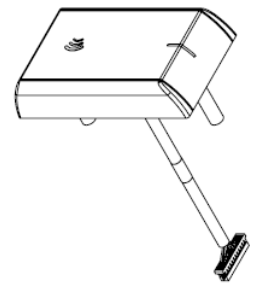
IN120 READER ASSEMBLY
52-5376 / 782P649



BLE IN120 READER ASSEMBLY
52-4902 / 725F20



IN100 READER ASSEMBLY
52-5452 / 802P409



WWTY
MODEL:
IN120-EW01-8CP-8
ASSEMBLY:
READER-ASS
FELICA
SHOW LOCATION REFERENCE
TABLE 1

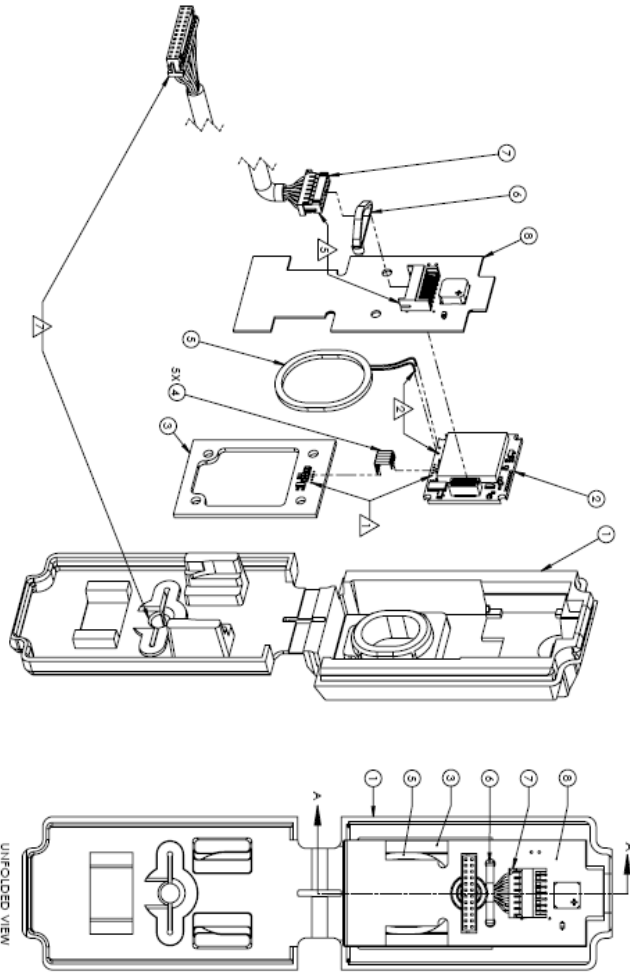
READER LABEL INFORMATION			
PART NO.	MODEL	ASSEMBLY	DATE CODE
52-5376 / 782P649	IN120-EW01-8CP-8	MULTICLASS READER SMART CARD	WW IN WEEK OF YY = YEAR OF MANUFACTURE
52-4902 / 725F20	IN120-EW01-8CP-8	BLE MULTICLASS READER SMART CARD	
52-5452 / 802P409	IN100-EW01-8CP-8	ANYMO MULTICLASS READER SMART CARD	

DESCRIPTION	REQUIREMENT	REASON
ELECTRONICS	APPROPRIATE WIRE GAUGE AND INSULATION	TO PREVENT SHORTS AND ELECTRICAL INTERFERENCE
SHIELDING	SHIELDING MUST BE PROPERLY INSTALLED	TO PREVENT RADIO INTERFERENCE
WIRING	WIRING MUST BE PROPERLY ROUTED AND SECURED	TO PREVENT SHORTS AND ELECTRICAL INTERFERENCE
COVER	COVER MUST BE PROPERLY INSTALLED AND SECURED	TO PROTECT INTERNAL COMPONENTS
MODULE LABEL	MODULE LABEL MUST BE PROPERLY INSTALLED	TO IDENTIFY THE MODULE
BOX	BOX MUST BE PROPERLY INSTALLED AND SECURED	TO PROTECT THE READER

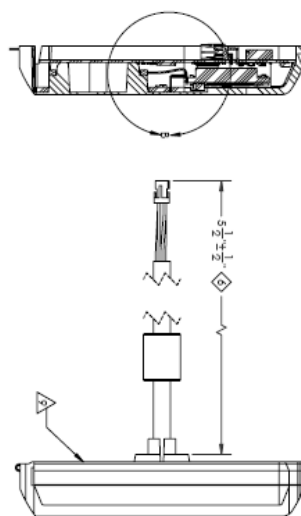
DATE	BY	REVISION HISTORY
11/11/11	1	ISSUED FOR PRODUCTION
11/11/11	2	REVISED TO ADD BOM
11/11/11	3	REVISED TO ADD BOM
11/11/11	4	REVISED TO ADD BOM
11/11/11	5	REVISED TO ADD BOM
11/11/11	6	REVISED TO ADD BOM
11/11/11	7	REVISED TO ADD BOM
11/11/11	8	REVISED TO ADD BOM
11/11/11	9	REVISED TO ADD BOM

ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	QTY.
1	52-1666	52-1666	READER BOOT	1
2	52-1457/AB	52-1443	3532 READER MODULE STANDARD	1
3	52-1444	52-1444	HIGH FREQUENCY ANTENNA	1
4	52-1486	52-1486	HF ANTENNA CONNECTOR	5
5	52-1445	52-1445	LOW FREQUENCY ANTENNA	1
6	01-0908	01-0908	CABLE TIE	1
7	52-4708	52-4708	READER HARNESS	1
8	52-9051-0000-000	52-9051-0000-000	IN120 BT LEO SOLDER PCB	1

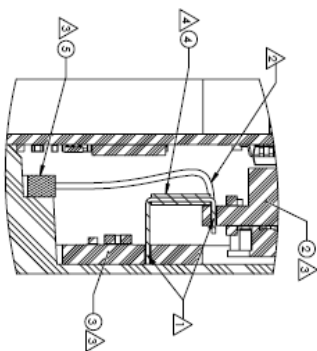
REVISION HISTORY			
ZONE	REV	DESCRIPTION	APPROVAL
A	001	ORIGINAL RELEASE PER ECOTYPING	



UNFOLDED VIEW
ITEM (7)
REMOVED FOR CLARITY



SECTION A-A
ITEMS (6) & (7)
REMOVED FOR CLARITY



DETAIL B
SCALE 4:1
ITEMS (3) & (7)
REMOVED FOR CLARITY

- NOTES:
1. SOLDER (2) TO (3) VIA SW (4) AS SHOWN. PLEASE NOTE ORIENTATION OF SW (4) AND OFFSET BETWEEN (2) & (3). LEAD PROTRUSION SHOULD BE NO MORE THAN .031". FOLLOW IPC-A-610 LATEST REVISION FOR ACCEPTANCE.
 2. SOLDER EX LEADS OF (3) TO (2). LEAD PROTRUSION SHOULD BE NO MORE THAN .031". FOLLOW IPC-A-610 LATEST REVISION FOR ACCEPTANCE.
 3. PLACE (2), SW (4), (3) & (5) INTO (1). MOST IMPORTANTLY, MAKE SURE (3) & (5) (ANTENNAS) ARE SEATED SECURELY AGAINST BOOT AS SHOWN IN DETAIL B.
 4. MAKE SURE LEADS FROM (3) TO (2) ARE NOT TWISTED, BENT, OR PINCHED.
 5. PLUG (7) INTO (8).
 6. USE (2) TO STRAIN RELIEVE WIRES OF (7) TO (8). MAKE SURE STRAIN RELIEF CABLE TIE (6) CLAMPS SLEEVE IN PLACE OVER WIRES.
 7. ALIGN AND PLUG (7) INTO (2).
 8. FOLD AND CLOSE THE LID OF (1) ONTO THE BASE OF (1) TO SECURE ALL ITEMS INSIDE ASSEMBLY TO BE ROHS COMPLIANT.
 9. ALL DRAWING REQUIREMENTS SHALL BE AUDITED FOR COMPLIANCE. ITEMS IDENTIFIED AS KEY (◇) OR CRITICAL (○) CHARACTERISTICS SHALL REQUIRE ADDITIONAL INSPECTION UNDER AN ONGOING LOT CONTROL PLAN.

DATE	DESCRIPTION	BY	CHKD	DATE
	INTERPRET DRAWING			4/17/15
	UNLESS OTHERWISE SPECIFIED			3/17/15
	ALL DIMENSIONS ARE IN INCHES.			3/27/15
	TOLERANCE	XX ± .005		14/2/15
	ANGLE	4:1 ± .005		14/2/15
	FINISH	11/4		14/2/15
	CONFIDENTIAL			3/20/15
	DATE OF THIS REVISION			3/20/15
	DATE OF PREVIOUS REVISION			14/9/15

REV	DATE	DESCRIPTION	BY	CHKD
001	4/17/15	ORIGINAL RELEASE PER ECOTYPING		