Payment Express® BRF300
Hardware Guide

Version 0.3

paymentexpress®

DOCUMENT REVISION INFORMATION

Version	Revision Information
0.1	Initial version.
0.2	
0.3	

RELATED DOCUMENTS

Version	Document Title

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PROPRIETARY NOTICE

CONTENTS

1   OVERVIEW

The BRF300 contactless antenna is an optional receiver that can be plugged into the SCR300 to support contactless payments (e.g. Visa PayWave, MasterCard PayPass, Amex ExpressPay). The BRF300 also supports closed loop proprietary payment cards such as MiFare RFID. The BRF300 can also be used as a standalone device.

The Payment Express BRF300 solution comes in two models. The only difference is mounting orientation. One landscape and one portrait.

2   BRF300 ANTENNA LANDSCAPE ASSEMBLY (AB0163)

Hardware Overview
- The BRF contactless antenna is an optional receiver that can be plugged into the SCR to support contactless payments (e.g. Visa PayWave, MasterCard PayPass, Amex ExpressPay).
- Supports closed loop proprietary payment cards (e.g. MiFare)
- 32-Bit Cortex M3 120MHz processor
- Display LEDs x4
- Landscape design.

Physical Link Interface
- Connection with the SCR300 unit is via the attached cable located on the back of the BRF300 unit.

Power Requirements
The device accepts DC regulated from +9VDC to +45V SEL (Safety Extra Low Voltage).

Operating & Storage Temperature Ratings
Storage: -35 to 80 degrees (Celsius)
Operating: -25 to 75 degrees (Celsius)

Additional Comments
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.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2.1 DIMENSIONS

SUITABLE FOR MOUNTING ON
MACHINE FRONT THICKNESS
1.5 to 15.0mm

R16.3

81.2

97.2

50.0

75.8

20.9

43.5

50.3

72.0

78.0

TEXT THIS WAY UP

HOST   AUX

BRF
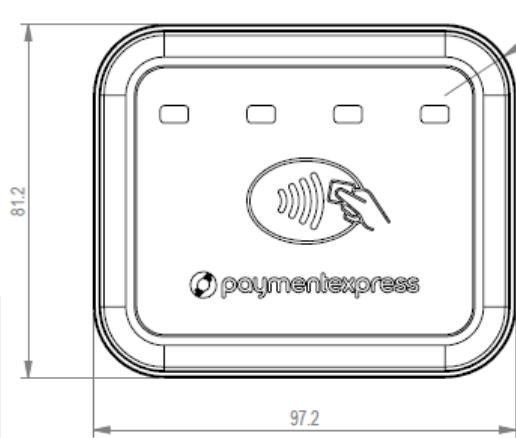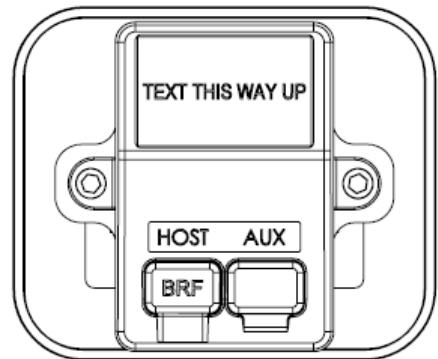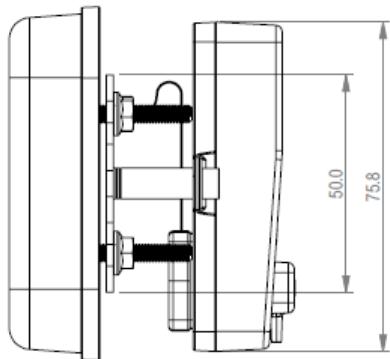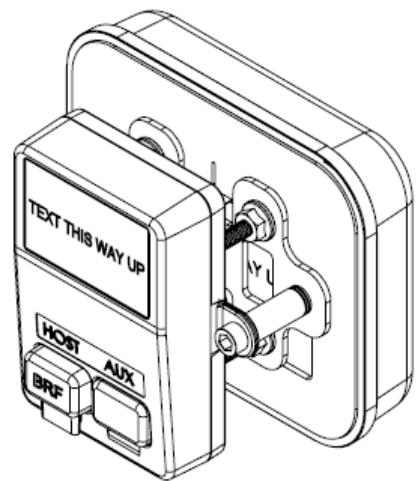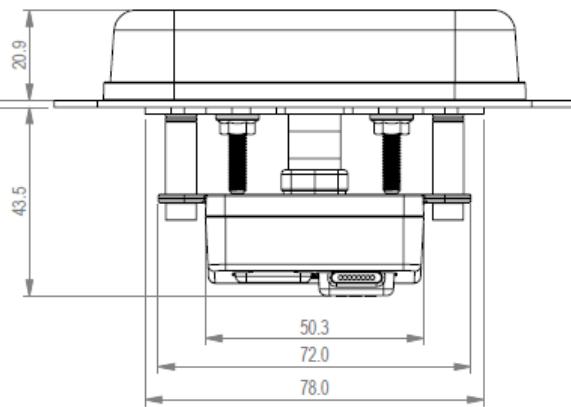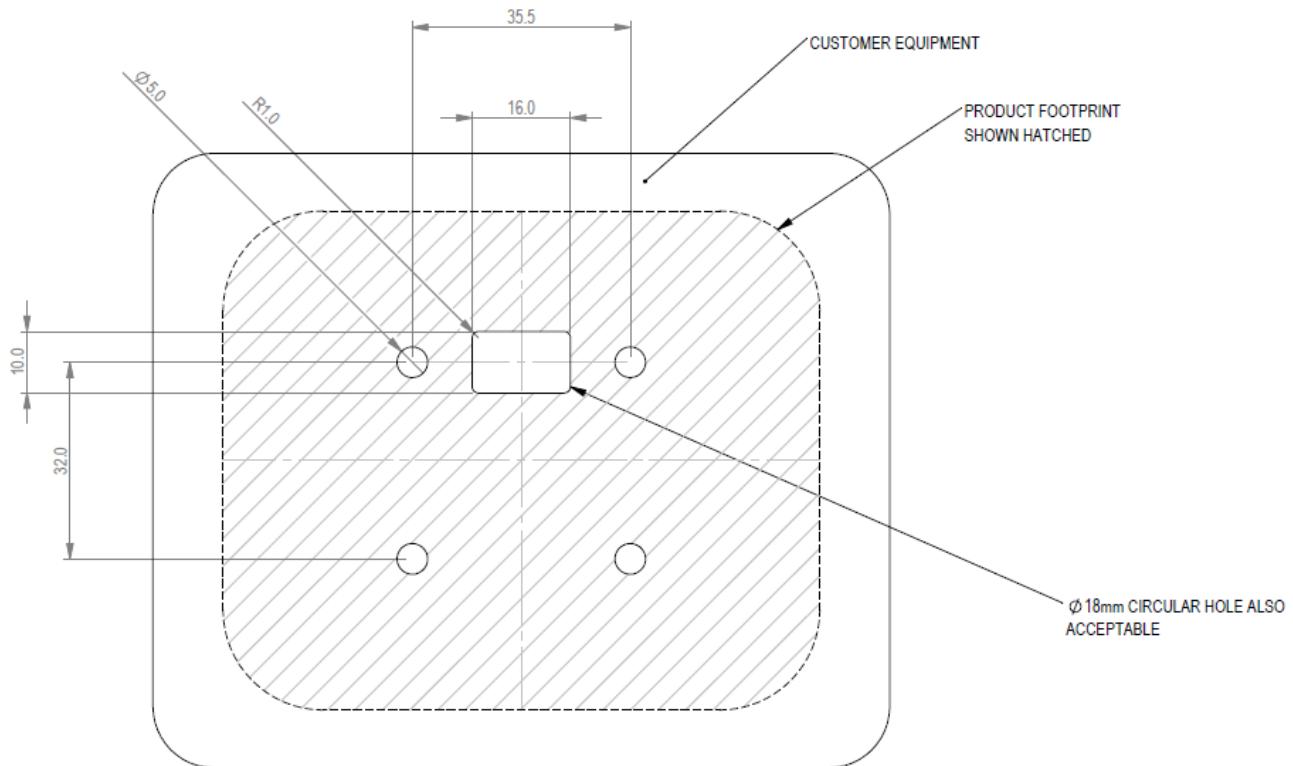
2.2 MACHINE CUTOUT


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MACHINE CUTOUT
HORIZONTAL MOUNT
(VIEWED FROM MACHINE FRONT)
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3   BRF300 ANTENNA PORTRAIT ASSEMBLY (AB0164)

Hardware Overview

- The BRF contactless antenna is an optional receiver that can be plugged into the SCR to support contactless payments (e.g. Visa PayWave, MasterCard PayPass, Amex ExpressPay).
- Supports closed loop proprietary payment cards (e.g. MiFare)
- 32-Bit Cortex M3 120MHz processor

- Display LEDs x4
- Portrait design.

Physical Link Interface

- Connection with the SCR300 unit is via the attached cable located on the back of the BRF300 unit.

Power Requirements

The device accepts DC regulated from +9VDC to +45V SEL (Safety Extra Low Voltage).

Operating & Storage Temperature Ratings

Storage: -35 to 80 degrees (Celsius)
Operating: -25 to 75 degrees (Celsius)

Additional Comments

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

3. This device may not cause harmful interference, and
4. This device must accept any interference received, including interference that may cause undesired operation.

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

3.1 DIMENSIONS

SUITABLE FOR MOUNTING ON
MACHINE FRONT THICKNESS
1.5 to 15.0mm

R16.3

TEXT THIS WAY UP

HOST   AUX

BRF

75.8
50.0
97.2
81.2
20.9
43.5
50.3
72.0
78.0

3.2   MACHINE CUTOUT

10.0

32.0

CUSTOMER EQUIPMENT

PRODUCT FOOTPRINT
SHOWN HATCHED

R1.0

35.5

16.0

Ø18mm CIRCULAR HOLE ALSO
ACCEPTABLE

MACHINE CUTOUT
VERTICAL MOUNT
(VIEWED FROM MACHINE FRONT)

paymentexpress®
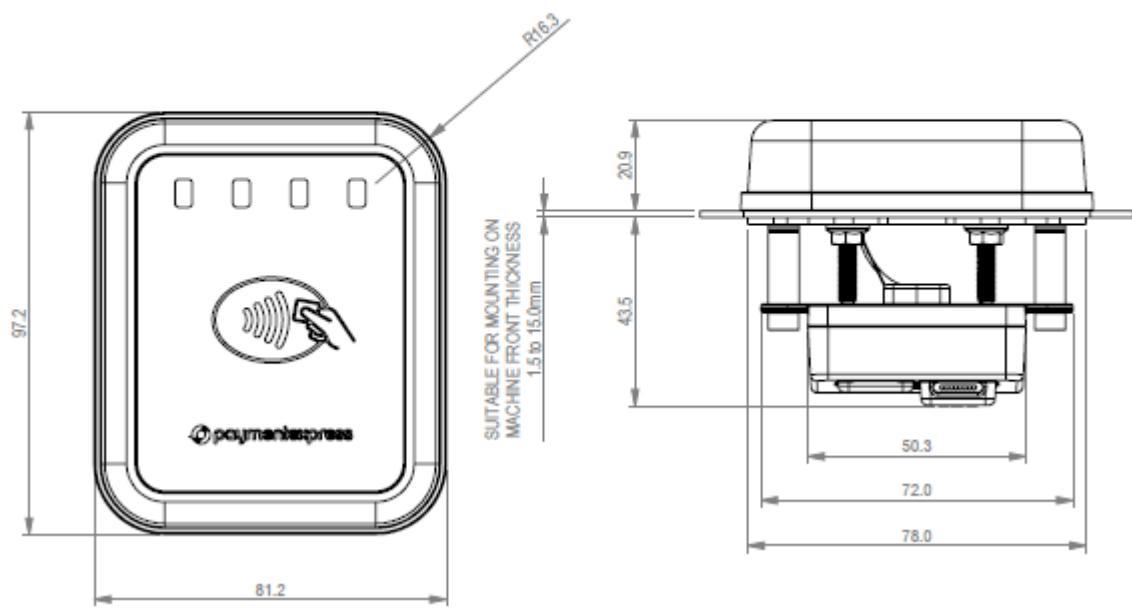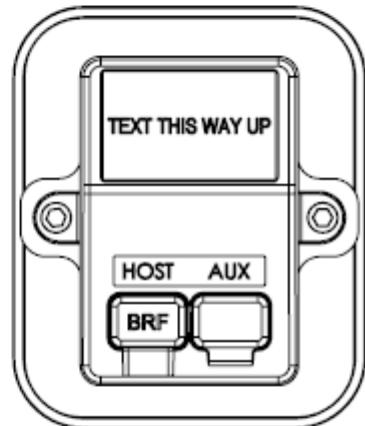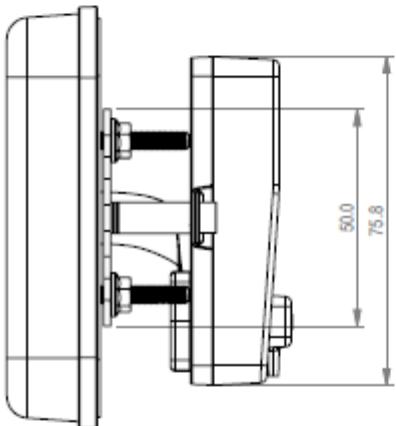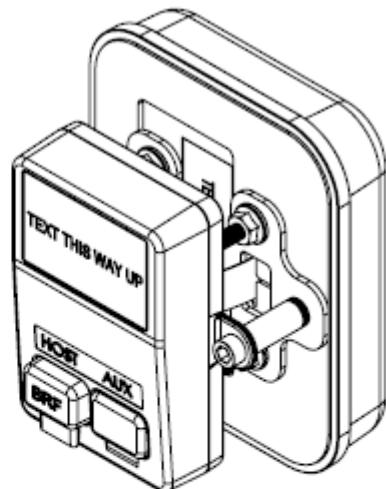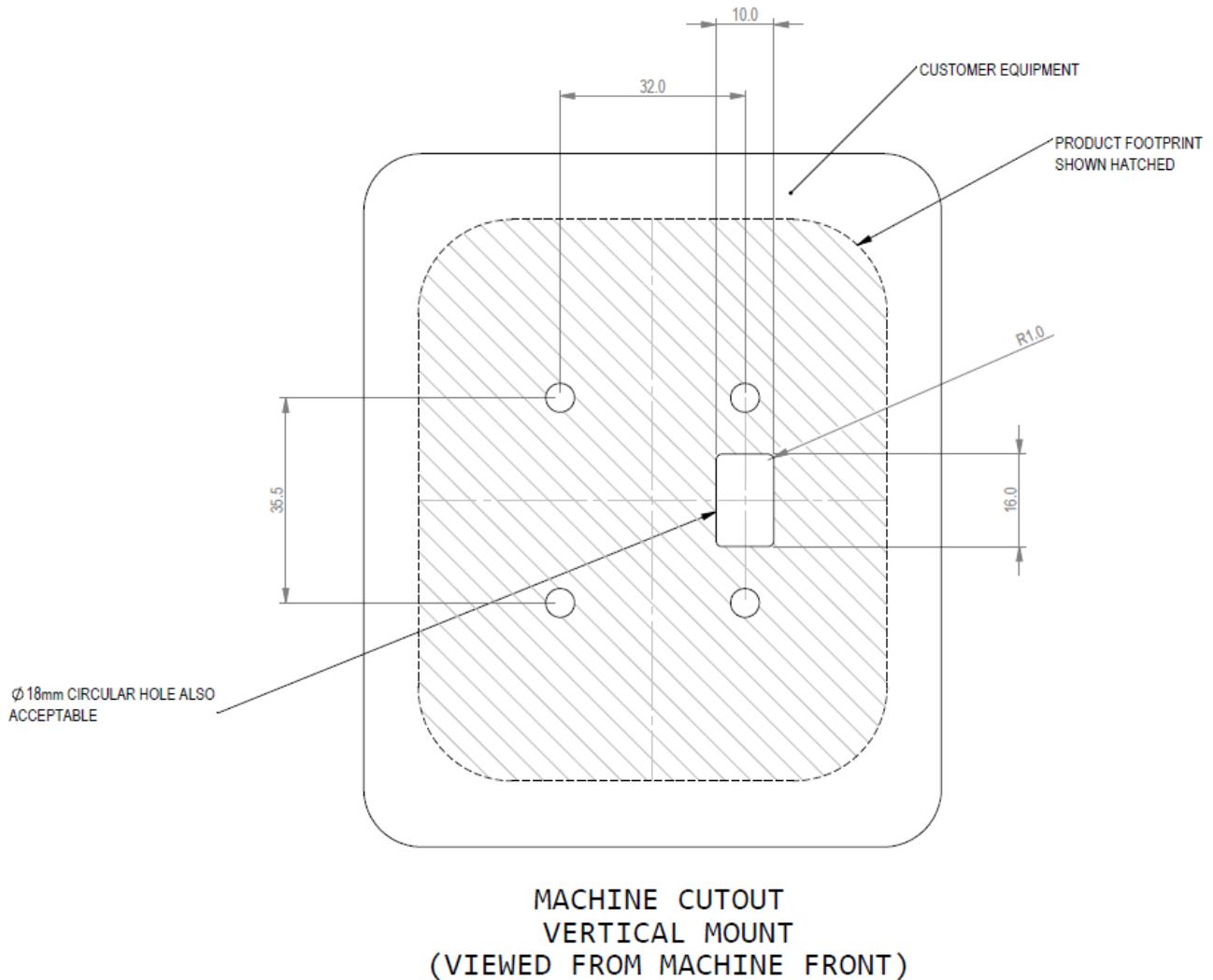
4   INSTALLATION

Part	Description	Quantity
1	BRF300 Antenna	1
2	Customer equipment with BRF300 mounting cut-out (see X and X).	1
3	Sheet Metal BRF300 Mounting Plate	1
4	Nut M4 Flange Serrated	4
5	BRF300 Controller Only	1
6	Screw M4 x 8mm Cap 3.0mm Hex SS304	2
7	Silicone BRF300 Controller Plug Bung	1
8	BRF300 Power & Comms Cable, 700mm	1
9	Silicon BRF300 Controller Plug Cover	1

TIGHTENING TORQUES:

M4 FLANGE NUTS = 1.5 Nm
M4 CAP SCREWS = UNTIL SNUG

①
②
③
④
⑤

CUSTOMER EQUIPMENT
(ENTIRE ENCLOSURE NOT SHOWN)

TEXT THIS WAY UP

⑤
⑥
⑦
⑧

TEXT THIS WAY UP
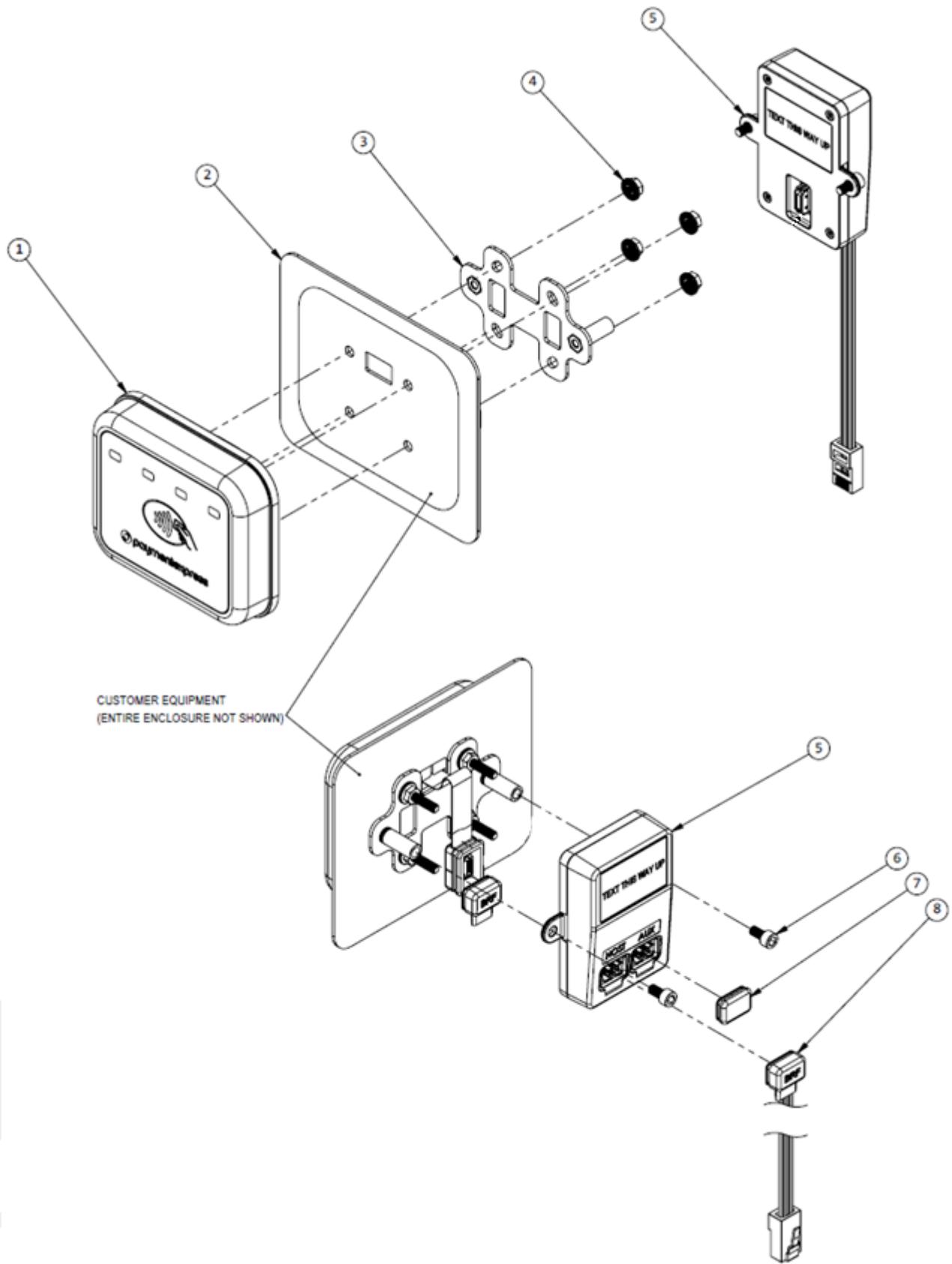
5   SECURE ACCEPTANCE

The BRF300 solution is a secure payment device and therefore before any units are installed the customer must check the following.

5.1   SERIAL NUMBERS

Each BRF300 device has their own unique serial number. Upon receiving the unit, the customer must check to ensure that the serial number on the box matches the serial number on the unit.

Any discrepancies need to be reported to Payment Express (*see appendix 7.1 for contact numbers*).

5.2   SIGN OF TAMPERING

Customers need to check each unit for signs of tampering.

The following should be checked:
- The exterior of the device should have no (new) holes, signs of adhesives or stickers other than the device label.
- The device label should be straight and smooth.
- LED lights. The 4 green LED's will blink 3 times on power up if tampered.

Any signs of tampering or concerns must be reported to Payment Express (*see appendix 7.1 for contact numbers*).

6   MAINTENANCE

6.1   TRADEOUTS & DEACTIVATION PROCESS

In the event that the BRF300 devices need to be swapped out or deactivated, please follow instructions below.

1. Call Payment Express Support to log a ticket (see appendix 7.1 for contact numbers). Please provide the following information.
   - Serial Number of BRF300 device(s).
   - Brief description of fault / reason for deactivation.
   - Contact Name.
   - Contact Phone Number.
   - Shipping Address (for replacement if needed).
2. Physically remove the device(s).
3. Ship the device(s) back to Payment Express.

7   APPENDIX

7.1   CONTACT PAYMENT EXPRESS

Phone

International	+64 9 309 4693
Australia	1 800 006 254 or +61 2 8268 7700
Hong Kong	+852 3 678 6766
New Zealand	0800 PAYMENT (729 6368) or 09 309 4693
Singapore	+65 3 158 1353
South Africa	+27 10 500 8784
United Kingdom	+44 (0) 20 3176 5551
USA	+1 310 670 7299

E-mail

Sales	sales@paymentexpress.com
Support	support@paymentexpress.com
Dev Support	devsupport@paymentexpress.com