BGR135

1D and 2D BCBP Boarding Gate Reader

Product Specification

Revision 1

Access IS
Interfacing Solutions

About this manual

BGR135 - Installation and Use

First Edition (Jan 2011) (c) 2011 Access Ltd.

Part No. BGR135 **www.access-is.com**

Warnings

This manual contains important information regarding the installation and operation of the BGR135 Boarding Gate Reader. For safe and reliable operation of the product, all users must ensure that they are familiar with and fully understand all instructions contained herein.

Warranty

Access Ltd warrants that this product shall be free from defects in workmanship and materials for a period of one year from the date of original purchase. If the product should fail to operate correctly in normal use during the warranty period, Access will replace or repair it free of charge. No liability can be accepted for damage due to misuse or circumstances outside Access control. Also Access will not be responsible for any loss, damage or injury arising directly or indirectly from the use of this product. Access total liability under the terms of this warranty shall in all circumstances be limited to the replacement value of this product.

If any difficulty is experienced in the installation or use of this product that you are unable to resolve, please contact Access.

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Radio Frequency Energy

European EMC directive 89/336/EEC

This equipment has been tested and found to comply with the limits for a class A computing device in accordance with the specifications in the European standard EN55022. These limits are designed to provide reasonable protection against harmful interference. 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 or television reception. However, there is no guarantee that harmful interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to correct the interference with one or more of the following measures (a) Reorient or relocate the receiving antenna. (b) Increase the separation between the equipment and the receiver. (c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected. (d) Consult the supplier or an experienced radio / TV technician for help.

CE

FCC Compliance Statement (United States)

This equipment generates, uses and can radiate radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a class A computing device in accordance with the specifications in Subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area may cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Canadian Department of Communications RFI statement

This equipment does not exceed the class A limits for radio noise emissions from digital apparatus set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le règlement sur le brouillage radioélectriques publié par le ministère des Communications du Canada.

Revision History

Rev 1	Jan 2011	Original

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1. Overview

The Access BGR135 is a compact Boarding Gate Reader for 2D Bar Coded Boarding Passes and NFC device. The BGR135 features

- Fixed focal length, regardless of bar code size. The operator does not have to find the optimum reading position.
- Omni-directional reading. The bar code may be inserted at any angle.
- Wide document throat. The imager can read a bar code printed at any position on an A4 (European) or Letter (American) document.
- Programmable visible and audible indication give an easy “go / no-go” indication to the operator.
- Robust unit with a small footprint, which may be easily secured to the check-in desk using the optional quick-release bracket (see section 4.2)
- Compatible with dedicated airline and common-user departure control systems.

Highly visible red/green LEDs and audible alarm provide positive read confirmation to the agent.

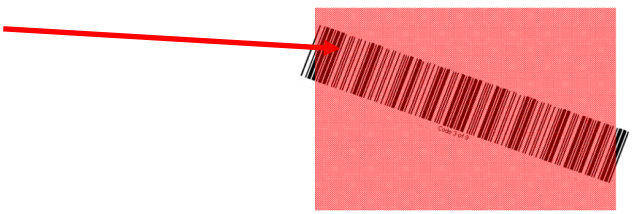
VFD display can be easily read over a wide range of angles, and in bright ambient lighting conditions.

Wide document throat facilitates reading of barcode at any position on an A4 document.

Omni-directional and fixed-focus design allows easy and instant reading of linear and 2D bar codes regardless of size and orientation. Wide reception area reads NFC cards and phones quickly and easily.

Can read barcodes from most mobile phones or PDAs.

Can read linear barcodes of up to 80mm presented At any angle. It may be possible to read longer linear barcodes up to a maximum of approximately 90mm by presenting them at an angle as shown.



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2. Specifications

2.1 BGR

Dimensions	Length 185mm Height 142mm Width 130mm Weight 750g (excluding cable)
Colour	Dark Grey
Environmental	Operating temperature 0º to 50ºC Storage temperature 0º to 60ºC Humidity 0 to 95%, non-condensing
Power Requirements	9V to 15V DC. BGR135 is supplied with a “universal” AC power supply, 100-240V 50/60Hz
Electrical Interface	Serial (RS-232)
Bar Codes	Linear Code 2 of 5, Interleaved 2 of 5, IATA 2 of 5, Code 3 of 9, Code 128 2D PDF417, QR, Aztec, DataMatrix
Performance	Will read in full sunlight. Can read bar codes from most mobile phone and PDA displays.
MTBF	85 000 hours
Approvals	FCC Class B CE EMC Class B CE Low Voltage Directive IEC60825-1 LED Safety Class 1

2.2 Bi-colour LEDs

A green LED of programmable duration is illuminated in response to a message from the host computer indicating that a valid boarding pass has been accepted.

A red LED of programmable duration is illuminated in response to a host message indicating that the boarding pass was invalid.

2.3 Internal Sounder

The BGR135 contains a sounder whose pitch and duration can be programmed for “accept” and “reject”, and which may be addressed by the host computer.

2.4 Display

The BGR135 contains a 2 line x 16 character VFD display, which may be addressed by the host computer.

3. Data Format Protocol

The BGR135 will normally be delivered factory-configured to work within the common use or shared environment specified by the customer. It has been certified by SITA, ARINC, Ultra and RESA, and complies with AEA2009 specifications, including 2D symbologies and headers.

For non-common use or shared applications, or for assistance with changing the host protocol, please contact Access sales department on +44 118 966 3333 or email sales@access-is.com.

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4. Installation

4.1 BGR Connection

The BGR135 connects by means of an RJ-50 10-pin modular socket on the back of the unit.

To connect the BGR135 cable, push the connector into the host socket until you hear a click. The host socket is clearly marked as can be located closest to the power switch.

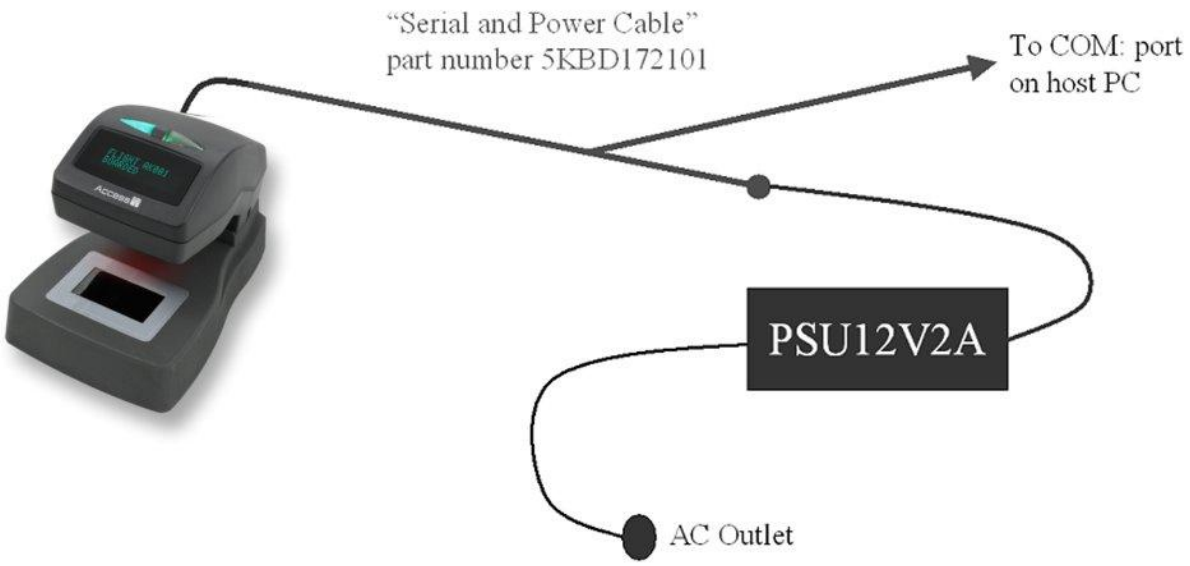
To remove the cable the connecting lug must be depressed while the cable is gently pulled to disconnect it.

The BGR135 is supplied with the following accessories

5KBD172102 Serial and Power Cable

PSU12V2A Universal AC Power Supply

These are connected as depicted below



The BGR135 features a RJ45 port for receipt printing functionality as well as an on/off switch. Both are located to the rear base of the unit – see attached illustration.

4.2 BGR Configuration

The BGR135 serial port configuration, including the host protocol, may be achieved in either of the following ways

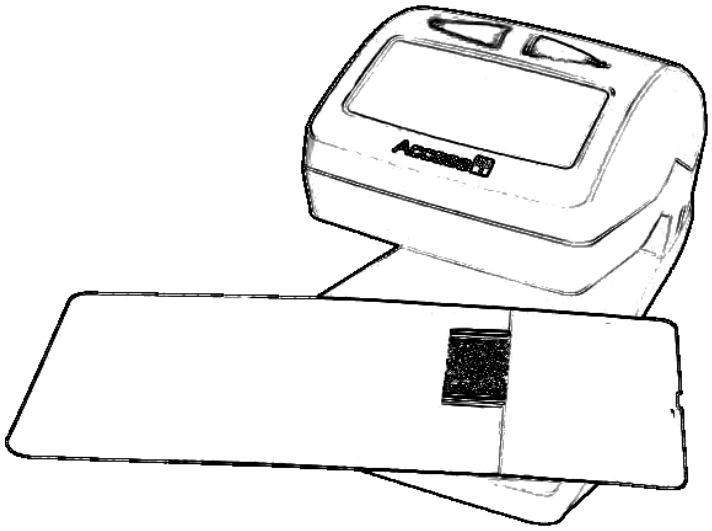
1/ Using the Access "ZippyTools" utility.

2/ Using a configuration barcode provided by Access.

5. Operation

5.1 Barcode Reading

To read a bar coded boarding pass, place the document face-up into the bar code reader zone. As soon as a document is detected, the bar code reader's LEDs will illuminate the document (a bar code on a mobile phone or PDA will be automatically illuminated at a lower level than a bar code on a paper document).



The bar code imager is omni-directional, and a well-printed document should be read almost immediately.

Better read performance will be achieved if the document is held flat on the surface under the bar code reader.

The boarding application will determine if the document is valid, and a message will be sent to the operator message display. Either the green LED (OK to Board) or the red LED (Do Not Board) will be illuminated.

6.0 Maintenance

Limited maintenance of the BGR135 is required as essentially the unit is free from moving parts and the glass window is protected.

General, monthly cleaning of the sensor window and imager window (underside of unit) is recommended to remove any dust and build up of debris.

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