Introduction

The PayRange payment system includes several BluKey hardware devices (BluKey, BluKey Plus, BluKey USB) for making payments with a mobile app.

Consumers maintain a prepaid balance on their smartphones and use it to make payments at a variety of machines that can include vending, amusement, parking, transit ticketing, and laundry equipment.

Usage

Install the device per the installation instructions included in the device envelope.

Specification

Operating Conditions

Description	Min	Typ	Max	Unit
Operating temperature range	0	-	60	°C
Supply voltage (Blukey, Blukey Plus)	6	24	35	VDC
Supply voltage (Blukey USB)	4.5	5	5.5	VDC
Power Dissipation	.2	1.5	2	W
RF Output Power	9	9	9	dBm

Connector Pinout

Blukey and Blukey Plus use MDB style connections from NAMA 4.2

https://namanow.org/images/pdfs/technology/mdb_version_4-2.pdf

Pin	Name	Type	Pin	Name	Type
5	MDX RX	Signal Input	6	MDB Common	Signal Common
3		Not Connected	4	MDB RX	Signal Output
1	DC IN+	Power	2	DC In -	Power

Blukey USB used a USB 2.0 Interface

https://en.wikipedia.org/wiki/USB#USB_2.0

Pin	Name	Type	Pin	Name	Type
1	DC IN+	Power	4	DC In -	Power
2	D-	Data -	3	D+	Data +

United States FCC Requirements

Labeling

The Blukey has been labeled with its own FCC ID number, and if the FCC ID is not visible when the device is installed inside another device, then the outside of the finished product into which the device is installed must also display a label referring to the enclosed device. This exterior label can use wording as

follows:

Contains FCC ID: 2AF78-00377

FCC Notice

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 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.

CAUTION: Per FCC 15.21, changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF EXPOSURE

The BluKey is certified as a modular transmitter device for integration into fixed products under the following conditions:

1. The antenna(s) must be installed such that a minimum separation distance of 20cm is maintained between the radiator (antenna) and all persons at all times.

2. The transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

As long as the two conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.). IMPORTANT NOTE: In the event that these conditions cannot be met (for certain configurations or co-location with another transmitter), then the FCC and Industry Canada authorizations are no longer considered valid and the FCC ID and IC Certification Number cannot be

used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC and Industry Canada authorization.

HELPFUL WEB SITES

Federal Communications Commission (FCC):
http://www.fcc.gov
FCC Office of Engineering and Technology (OET) Laboratory Division Knowledge Database (KDB):
http://apps.fcc.gov/oetcf/kdb/index.cfm

Canada IC Requirements

The devices known by the Host Marketing Name(HMN): (BluKey, Blukey Plus, BluKey USB) have been certified for use in Canada under Industry Canada (IC) Radio Standards Specification (RSS) RSS-247 and RSP-100 with the Product Marketing Name (PMN) : PayRange BluKey Modem.

LABELING AND USER INFORMATION REQUIREMENTS

Per section 3.2 , RSP-100, Issue 11, January 2016

The Host Marketing Name (HMN) must be displayed (according to e-labeling requirements) or indicated at any location on the exterior of the host product or product packaging or product literature, which shall be available with the host product or online.

The host product shall be properly labeled to identify the modules within the host product.

The Innovation, Science and Economic Development Canada certification label of a module shall be clearly visible at all times when installed in the host product; otherwise, the host product must be labeled to display the Innovation, Science and Economic Development Canada certification number for the module, preceded by the word “Contains” or similar wording expressing the same meaning, as follows:

Contains IC: IC:21341-00377

IC Notice

This device complies with Industry Canada’s license-exempt RSSs. 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 exempts 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.

RF EXPOSURE

All transmitters regulated by IC must comply with RF exposure requirements listed in RSS-102 - Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands).

This device is certified for integration into fixed products and must not be collocated or operating in conjunction with any other antenna or transmitter except in accordance with Industry Canada's multi-transmitter guidelines. The antenna used for this transmitter must be installed >20 cm from all persons, or it will separate approval.

APPROVED EXTERNAL ANTENNA TYPES

Transmitter Antenna: The Blukey can only be sold or operated with internal antenna with which it was approved.

HELPFUL WEB SITES

Industry Canada: http://www.ic.gc.ca/