

BulleT Installation and Development Manual for Android Phones

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REVISIONS

Rev Number	Date	Notes
1	Mar 25 2011	Initial Release
2	June 1, 2011	Added Section 3
3	June 1, 2011	Updated Title Updated screen shot images
3.02	June 9, 2014	Updated text and image on Section 1, step 5 Removed image from step 8, removed step 8 number Added "Connect to the desired MAGTEK BLUETOOTH device." To section2, step 3 Added "The top green bar shows the device is now connected." To section 2, step 4

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This equipment has been tested and was found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation.

FCC COMPLIANCE STATEMENT

This device complies with Part 15 of the FCC Rules. Operation of this device 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.

CANADIAN DOC STATEMENT

This digital apparatus does not exceed the Class B limits for radio noise 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 B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CE STANDARDS

Testing for compliance with CE requirements was performed by an independent laboratory. The unit under test was found compliant with standards established for Class B devices.

UL/CSA

This product is recognized per Underwriter Laboratories and Canadian Underwriter Laboratories 1950.

RoHS STATEMENT


When ordered as RoHS compliant, this product meets the Electrical and Electronic Equipment (EEE) Reduction of Hazardous Substances (RoHS) European Directive 2002/95/EC. The marking is clearly recognizable, either as written words like "Pb-free", "lead-free", or as another clear symbol ()

TABLE OF CONTENTS

SECTION 1. CONNECTING READER TO MOBILE DEVICE 7
SECTION 2. QWICKPAY APPLICATION 8
SECTION 3. DEVELOPMENT 9

TABLES AND FIGURES

Figure 1-1. BULLET READER 6



Figure 1-1. BulleT Reader

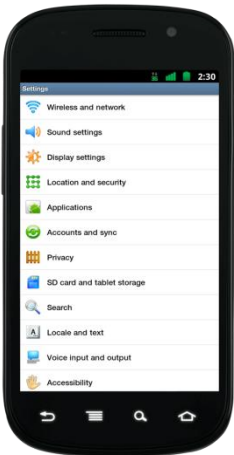
SECTION 1. CONNECTING READER TO MOBILE DEVICE



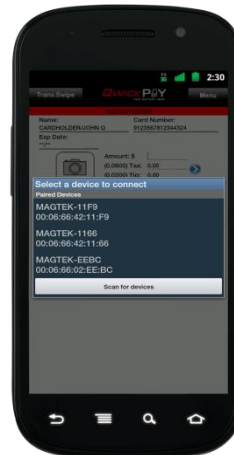
1.
Pull up Applications or Menu and select Settings



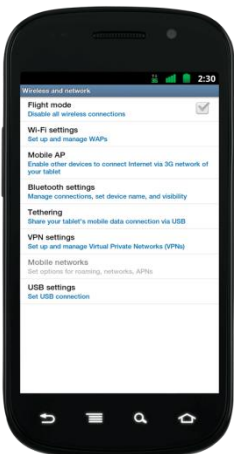
5.
On your Android device select SCAN FOR DEVICES.



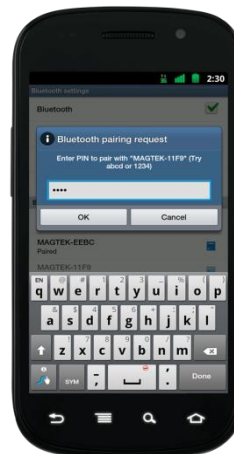
2.
Select Wireless and network



6.
Select the MAGTEK DEVICE when it appears on the screen.



3.
Select Bluetooth settings



7.
The screen will prompt you for a PIN (the default is 1234).



4.
Turn on the BulleT reader; a green light will flash when the device is trying to connect

At this point the device is **PAIRED BUT NOT CONNECTED** to QwickPAY.

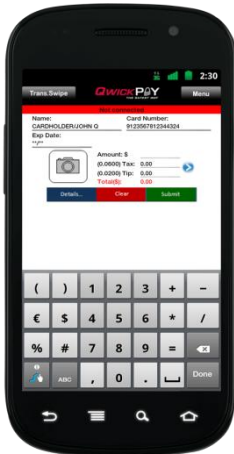
SECTION 2. QWICKPAY APPLICATION



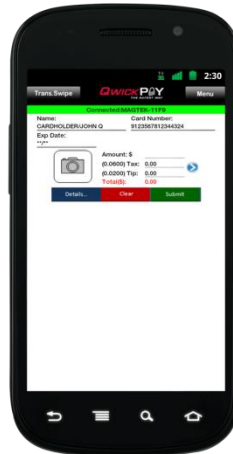
1.
Go to the QwickPAY application



3.
Press the 'Android MENU' button on your Android device and choose **CONNECT.**
Connect to the desired **MAGTEK BLUETOOTH** device.



2.
The top red bar shows the device is not connected



4.
The top green bar shows the device is now connected.

The device is now ready to use.

SECTION 3. DEVELOPMENT

Android comes with a demo with source that is called the BluetoothChat that allows communicating to the Bluetooth Devices. In order to use that demo with the reader, you need to change one line of code in [BluetoothChatService.java](#)

change the following from

```
private static final UUID MY_UUID = UUID.fromString("fa87c0d0-afac-11de-8a39-0800200c9a66");
```

To

```
private static final UUID MY_UUID = UUID.fromString("00001101-0000-1000-8000-00805F9B34FB");
```

The change above allows communication to Bluetooth SPP.

Once you receive the data from the reader, you can send the data to the attached class file for processing.

eg.

```
private String mStringCardDataBuffer;
MagTekSCRA mMTSCRA;

private void processCardData(String lpstrData)
{
    String strEncryptedTrack1="";
    String strEncryptedTrack2="";
    String strEncryptedTrack3="";
    String strMaskedTrack1="";
    String strMaskedTrack2="";
    String strMaskedTrack3="";
    String strMagnePrintStatus="";
    String strEncryptedMagnePrint="";
    String strDSN="";
    String strKSN="";
    String strPAN="";
    String strtPAN="";
    String strCustName="";
    String strCustLastName = "";
    String strCustFirstName = "";
    String strCardExpDate = "";
    String strFirst4PAN="";
    String strLast4PAN="";

    mMTSCRA = new MagTekSCRA();
    mMTSCRA.setCardData(lpstrData);

    if (mMTSCRA.isDataValid())
    {
        if(mMTSCRA.isValidCardDataCRC())
        {
            strEncryptedTrack1 = mMTSCRA.getTrack1();
            strEncryptedTrack2 = mMTSCRA.getTrack2();
            strEncryptedTrack3 = mMTSCRA.getTrack3();
            strMagnePrintStatus = mMTSCRA.getMagnePrintStatus();
            strEncryptedMagnePrint = mMTSCRA.getMagnePrint();
            strDSN = mMTSCRA.getDeviceSerial();
            strKSN = mMTSCRA.getKSN();
            strMaskedTrack1 = mMTSCRA.getMaskedTrack1();
            strMaskedTrack2 = mMTSCRA.getMaskedTrack2();
            strtPAN = mMTSCRA.getMaskedPAN();
            strPAN = strtPAN;
            if (strtPAN.length() >= 4)
            {
                strFirst4PAN = strtPAN.substring(0, 4);
                strLast4PAN = strtPAN.substring(strtPAN.length() - 4);
            }
            strCustName = mMTSCRA.getNameFromMaskedTrack1();
            strCustLastName = mMTSCRA.getLastNameFromMaskedTrack1();
            strCustFirstName = mMTSCRA.getFirstNameFromMaskedTrack1();
            strCardExpDate = mMTSCRA.getExpDateFromMaskedTrack2();
            if ((strMaskedTrack2.length() > 0) &&
                (!strMaskedTrack2.equalsIgnoreCase(";E?")))
            {
                //Card Read OK.
            }
            else
            {
                //Handle Error and Return
            }
        }
    }
}
```

```

        else
        {
            //Handle Error and Return
        }
    }

private boolean IsCompleteMessage(String lpstrData)
{
    try
    {
        if (lpstrData.length() > 0)
        {
            if (Character.toString('\r').compareTo(
                Character.toString(lpstrData
                    .charAt(lpstrData.length() - 1))) == 0)
            {
                return true;
            }
        }
    }
    catch (Exception ex)
    {
    }
    return false;
}

```

Add Code to BluetoothChat.java

```

// The Handler that gets information back from the BluetoothChatService
private final Handler mHandler = new Handler() {
    case MESSAGE_READ:
        byte[] readBuf = (byte[]) msg.obj;
        // construct a string from the valid bytes in the buffer
        String readMessage = new String(readBuf, 0, msg.arg1);
        if (readMessage.length() > 0)
        {
            mStringCardDataBuffer += readMessage;
            if (IsCompleteMessage(mStringCardDataBuffer))
            {
                processCardData (mStringCardDataBuffer);
                mStringCardDataBuffer="";
            }
        }
    break;
}

```