Amp'ed RF
Wireless Technology

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ARTDemo v2.1 Mobile Application for Android

ARTDemo V2.1 for Android User Manual

## 1. How to install and start ARTDemo V2.1

1.1. How to install

The ARTDemo Application contains a setup file called "ARTDemo.apk" and should be installed on an Android smart phone. From Android Market obtain "apkInstaller" to install third party Android applications. Copy the ARTDemo Application to the sdcard and then disconnect the phone from its USB Port. Go to the menu and open "apkInstaller". Find the sdcard directory in apkinstaller, and locate the path to ARTDemo V2.1.apk file. Click on the file icon, request permission to install and installation is complete.

1.2. How to start

After completing the installation process, go to the Menu and look for "ARTech" icon. Click on the "ARTech" icon to start "ARTDemo V2.1".

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2. Welcome Screen

Once the ARTDemo starts successfully, the following "Welcome" screen will appear:
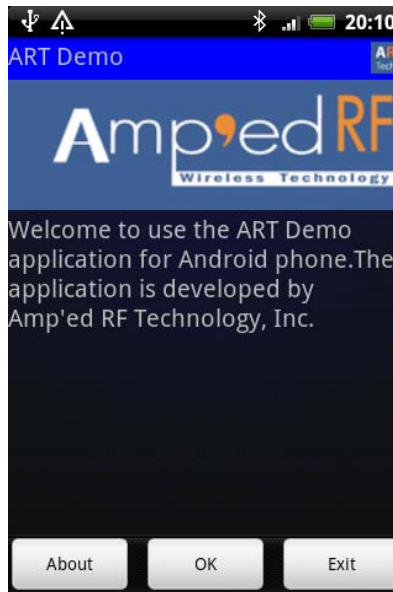
The "Welcome screen" displays a welcome message and company logo. The bottom of the screen contains three buttons: "About", "OK" and "Exit".
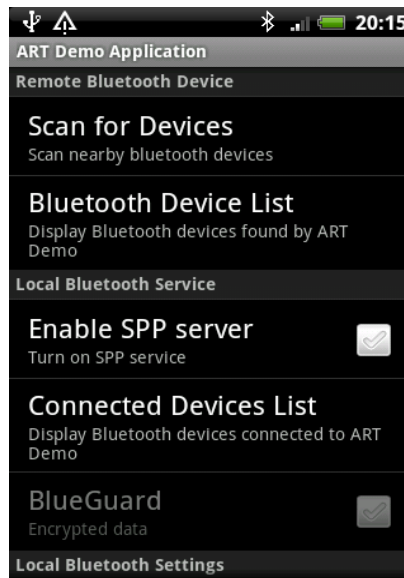
2.1. About

The "About" button launches the "About ARTDemo" screen containing application information:

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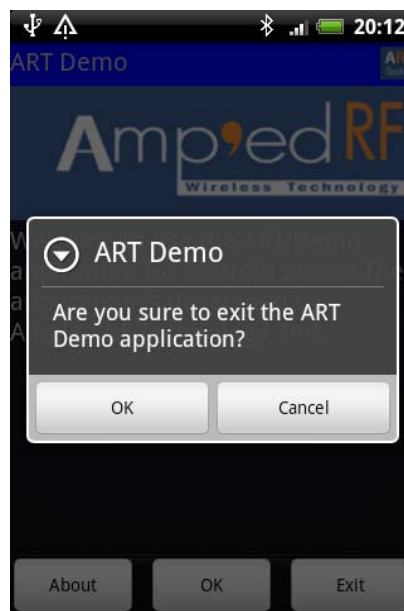地址：天津市华苑产业区海泰西路 18 号西 3B-202（300384）

2.2. OK

The "OK" button launches the "Main Screen":

2.3. Exit

The "Exit" button contains a dialog box to ask your permission to either exit the application by selecting "OK" or cancelling the request by selecting "Cancel".

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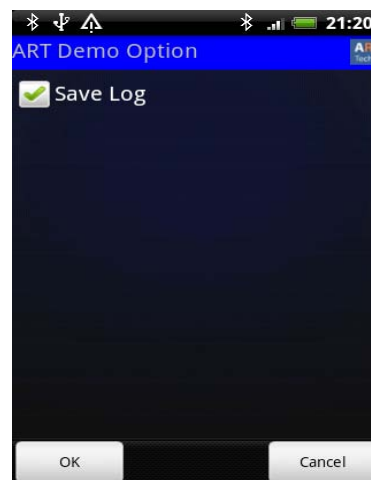地址：天津市华苑产业区海泰西路 18 号西 3B-202（300384）

3. Main Screen

The ARTDemo V2.1 main screen includes three sections:

(1) Remote Bluetooth Device: described in a chapter 4.

(2) Local Bluetooth Service: described in a chapter 5.

(3) Local Bluetooth Settings: described in a chapter 6.
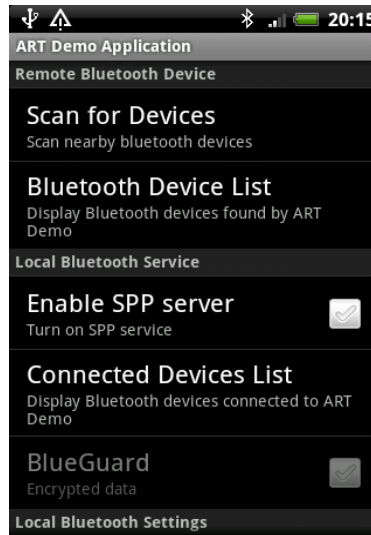
3.1. Option Screen

From the Main Screen, the "Option" button may be selected. Enable the "Save Log" box to save log information. Log information is stored as a text file named "ARTDemoLog.txt" in the SD Card root directory.

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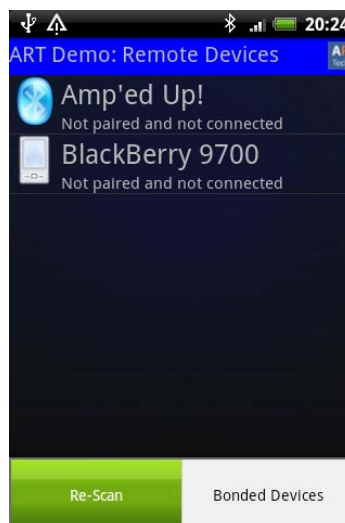
4. Remote Bluetooth Device

4.1. Scan for Devices

Selecting the "Scan for Devices" button allows the app to scan for nearby Bluetooth devices.
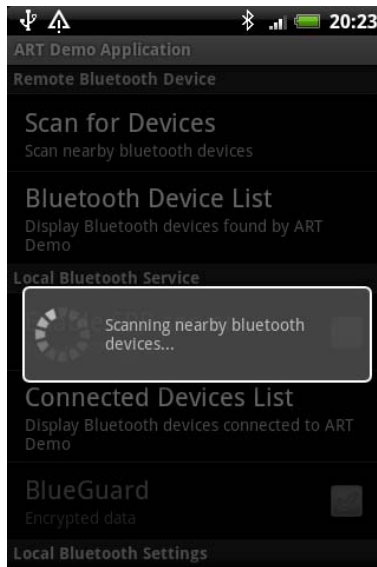
4.2. Bluetooth Device List

The "Bluetooth Device List" shows all of the devices found by the ARTDemo app. Two menus are located at the bottom of the screen: "Re-Scan" and "Bonded Devices".

Each device will contain the device name, pairing state and connection state. Select a device and then long-press until a popup with a context menu appears.

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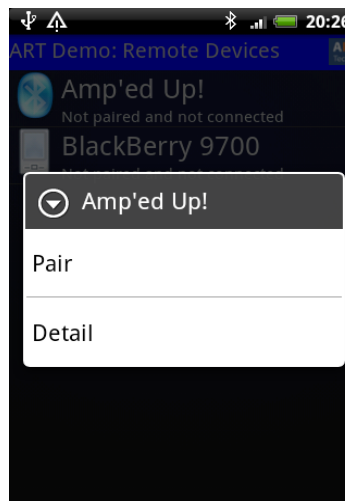地址：天津市华苑产业区海泰西路 18 号西 3B-202（300384）

4.2.1. Re-Scan

The "Re-Scan" button will re-scan and search for nearby Bluetooth devices.

4.2.2. Bonded Devices

The "Bonded Devices" button will locate all devices that are paired with the phone.
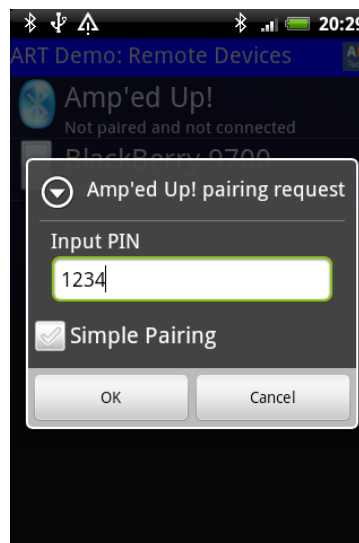
4.3. Context Menu: Not Paired

When a Bluetooth device is not paired with the phone, it will display the following context menu: "Pair" and "Detail".
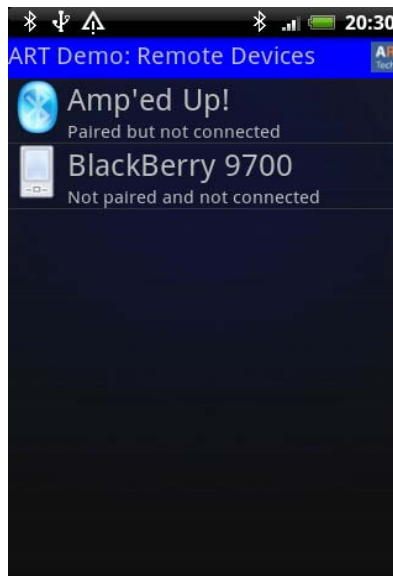

4.3.1. Pair

Select the "Pair" menu to pair a remote device. The "Input PIN" dialog box will appear.

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When using PIN code pairing type (Bluetooth v2.0 or lower), please input the correct PIN code in the edit text, and press the "OK" button to bond the remote device.
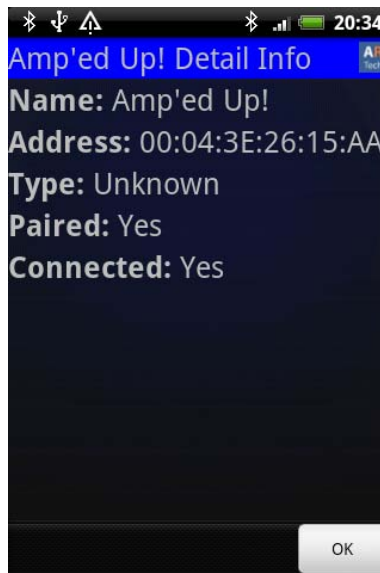
When using simple pairing type (no PIN code needed), choose the "Simple Pairing" checkbox, then press the "OK" button to bond to the remote device.

After pairing successfully, the device state is changed to "paired".


4.3.2. Detail

Pressing "Detail" displays the following device information screen:

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4.4. Context Menu: Paired but Not Connected

When then phone is paired with the device but not connected, the following context menu is displayed with the "Unpair", "Connect" and "Detail" options available.
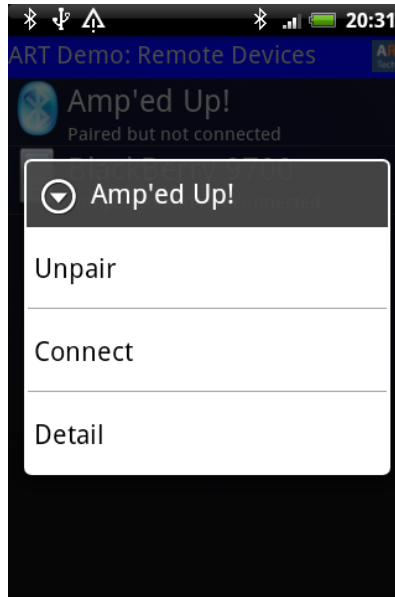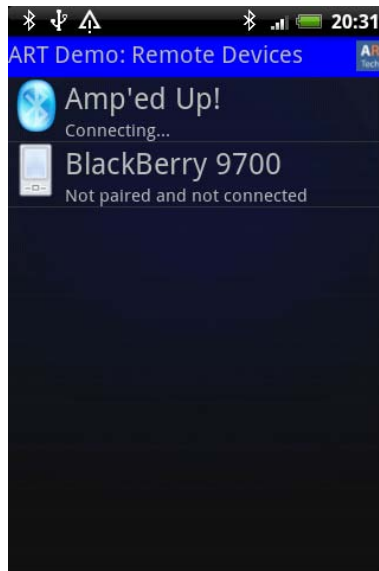

4.4.1. Unpair
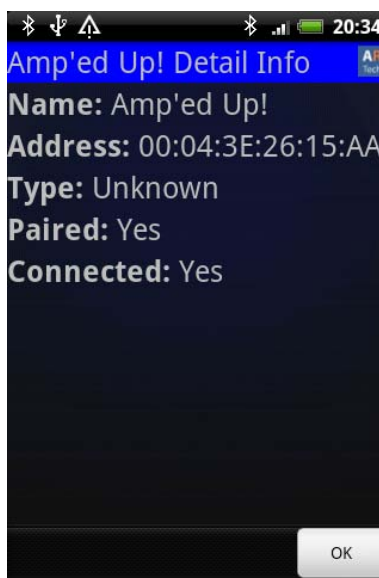
Select this option to unpair a paired device.

4.4.2. Connect

Select this option to connect to a specific Bluetooth device.

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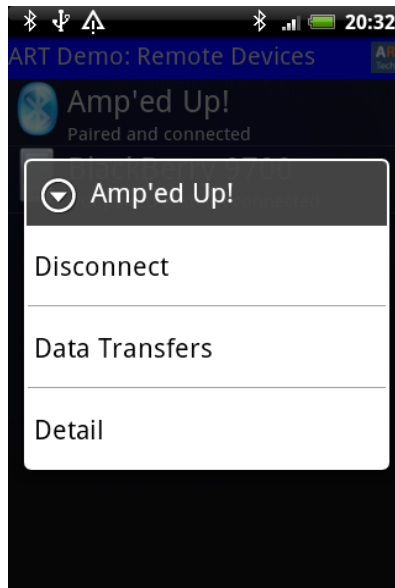地址：天津市华苑产业区海泰西路 18 号西 3B-202（300384）

4.4.3. Detail

The "Detail" button displays the following device information screen:

4.5. Context Menu: Connected

When the phone is connected to the device, it displays the following context menu: "Disconnect", "Data Transfers" and "Detail".

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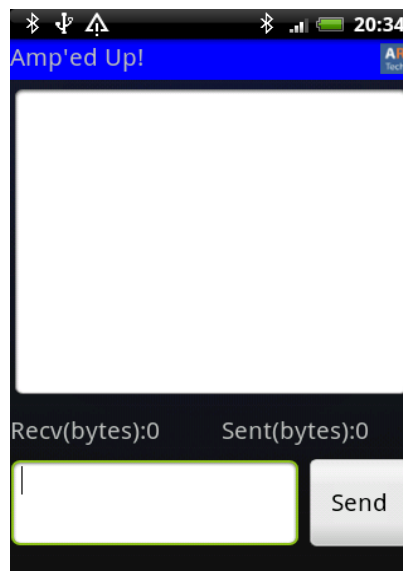地址：天津市华苑产业区海泰西路 18 号西 3B-202（300384）
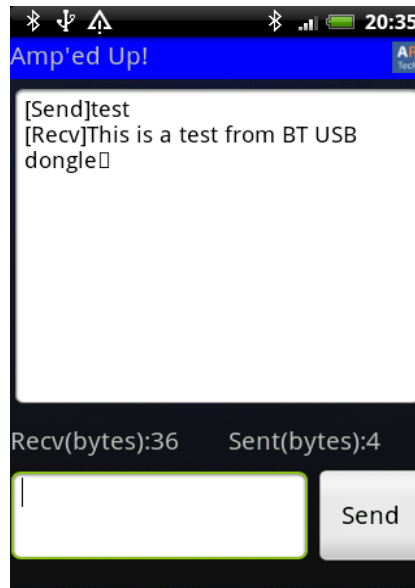
4.5.1. Disconnect

Select this button to disconnect the connected Bluetooth Device.
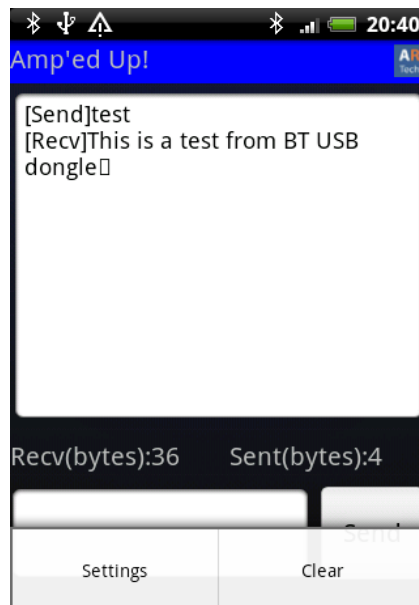
4.5.2. Data Transfers
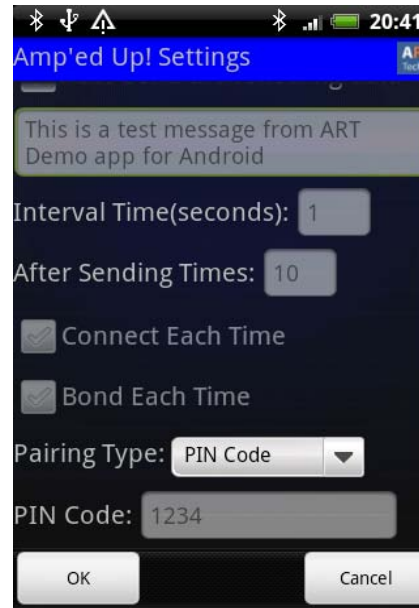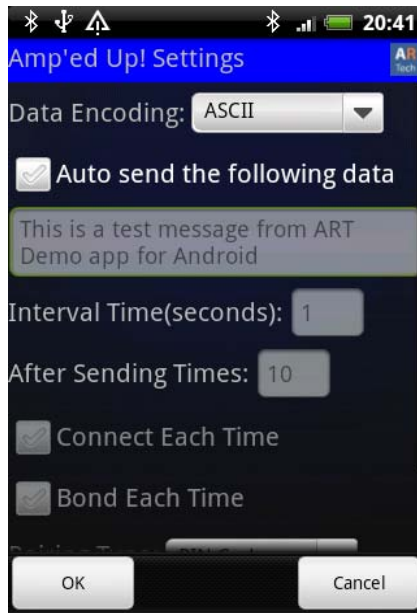
Select this button to begin data transfer mode.

Enter text then press the "Send" button to send text to the remote device by SPP link. The app will display text that it receives from the remote device.

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Press "menu" to display two sub menus: "Settings" and "Clear".

4.5.2.1. Settings

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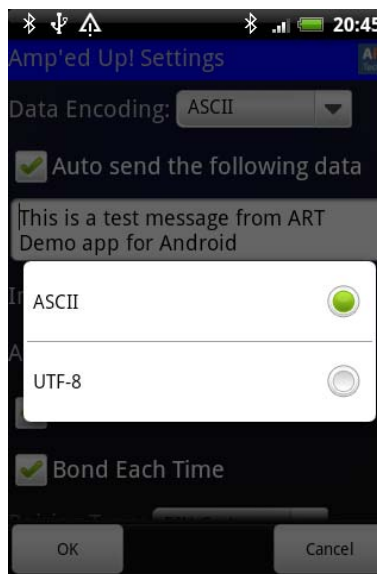地址：天津市华苑产业区海泰西路 18 号西 3B-202（300384）

◆ **OK**

Press this button to save these settings, and return to the "data transfers" screen. If it is set to "auto send", the "data transfers" screen will start to send data automatically to the device.

◆ **Data Encoding**

Data encoding can either be ASCII or UTF-8. The default value is ASCII.

◆ **Auto Send**

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This checkbox will enable the app to automatically send data to the remote device. The user defined text is displayed in the box below the checkbox.
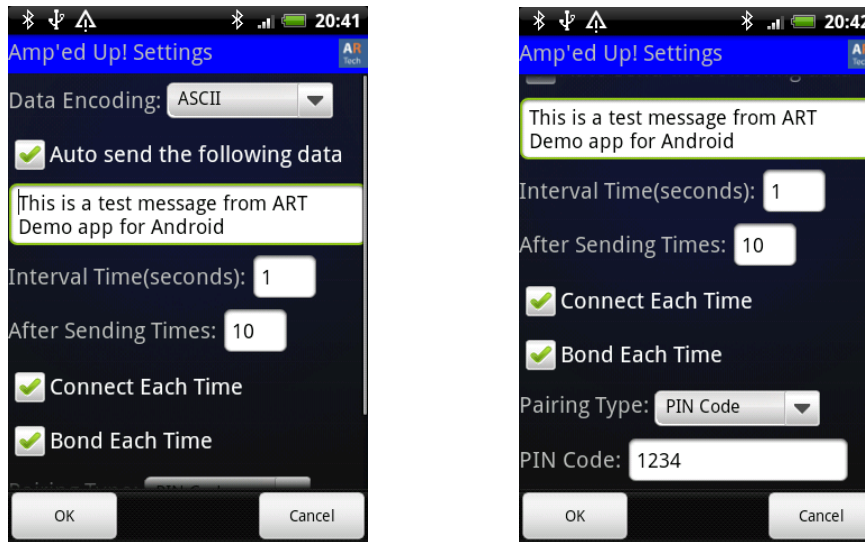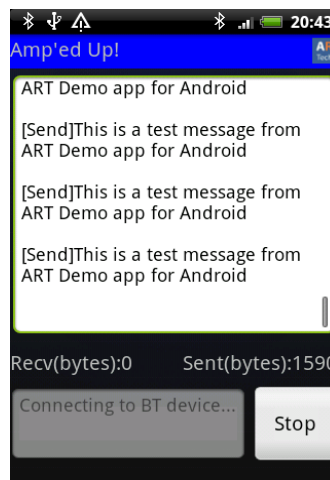

◆ **Interval Time**

Set interval time to send data automatically each time.

◆ **After Sending Times**

Set this value N means, after sending N messages, the app will perform re-connect or re-bond to the device.
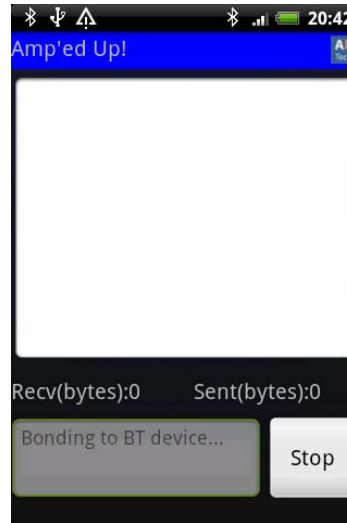
◆ **Connect Each Time**

With Connect Each Time enabled, after every N messages, the app will re-establish the connection.

◆ **Bond Each Time**

With Bond Each Time enabled, after every N messages, the app will re-bond the device.

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◆ **Pairing Type:**

 Pairing type can either be "PIN Code" or "Simple". The default value is "PIN Code".
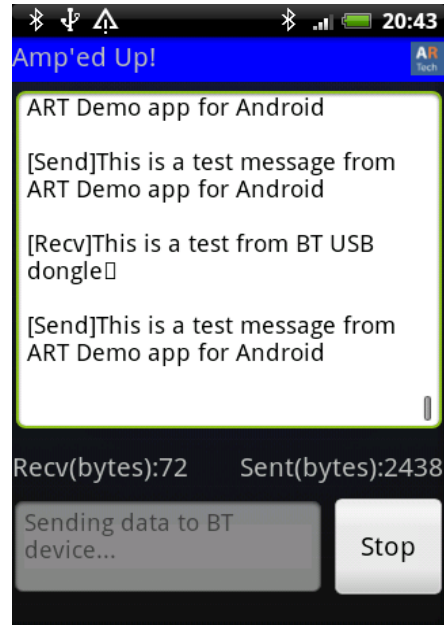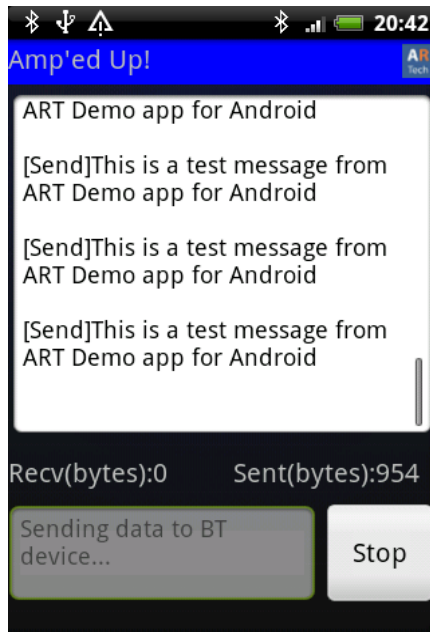
◆ **PIN Code:**

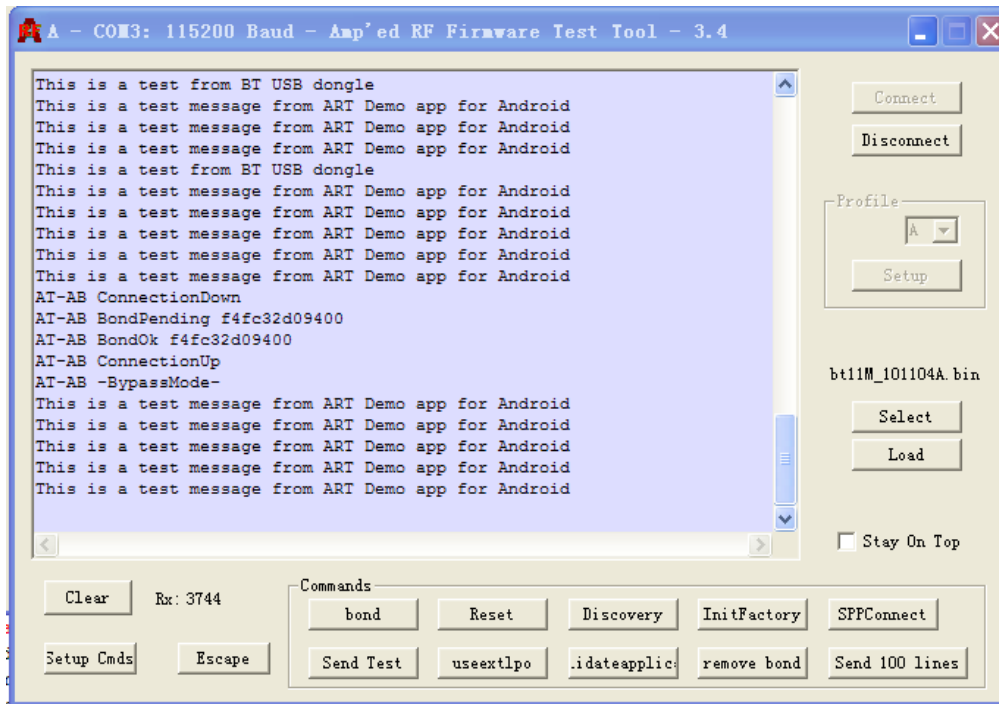When pairing type "PIN Code" is selected, then input the correct PIN code into the text field.
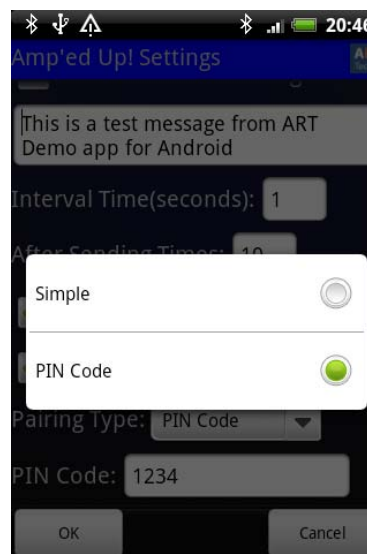
4.5.2.2.   Stop

After pressing the "Stop" button, it will stop the automatic data sending operation.

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The USB dongle Screen below, shows sample messages of Auto Test.

4.5.2.3.   Clear

Selecting this sub menu will clear all the data from Data Transfers Screen.

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5. Local Bluetooth Service

Local Bluetooth Service has three settings options: "Enable SPP Server", "Connected Devices List" and "BlueGuard".
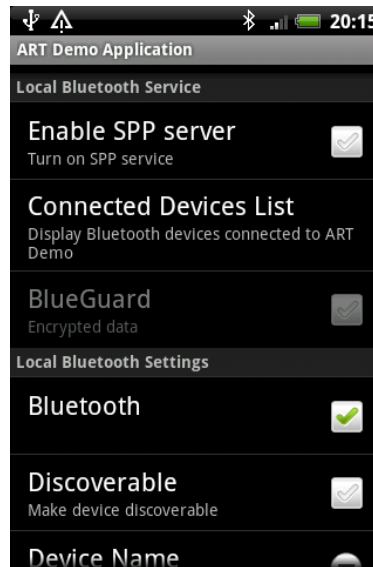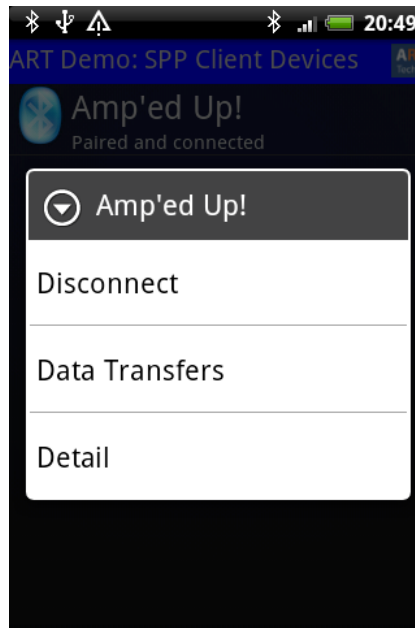

5.1. Enable SPP server

To start the SPP server, check the "Enable SPP server" box. To stop the SPP Server, uncheck the "Enable SPP server" box.

5.2. Connected Devices List

This setting displays the "Connected client device list". Long-press the connected client until the following Context Menu is displayed with options: "Disconnect", "Data Transfers" and "Detail".
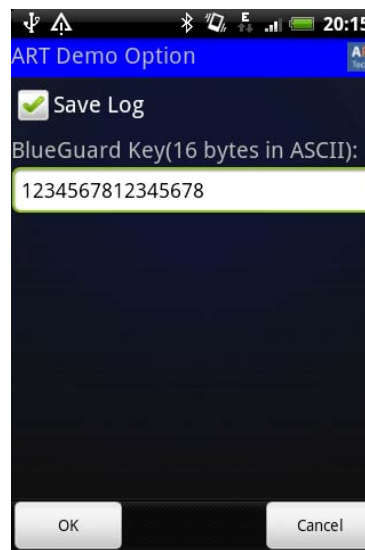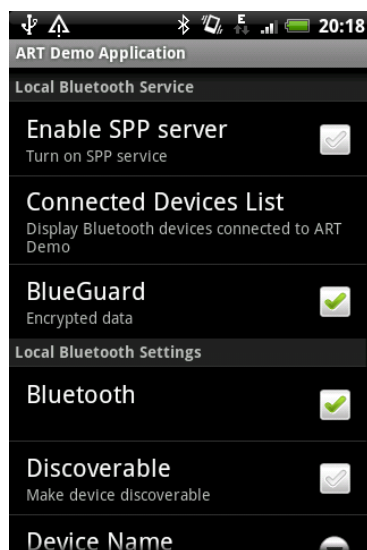
5.2.1. Disconnect

Select this menu to disconnect a connected Bluetooth Device.

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6. BlueGuard

Enabling the "BlueGuard" function requests a 16 Byte ASCII key. Start the scanning for the Bluetooth devices. All of the Bluetooth data transmissions are secured with BlueGuard Encryption.

7. Local Bluetooth Settings

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Local Bluetooth Settings have four options: "Bluetooth", "Discoverable", "Device Name" and "Device Address".
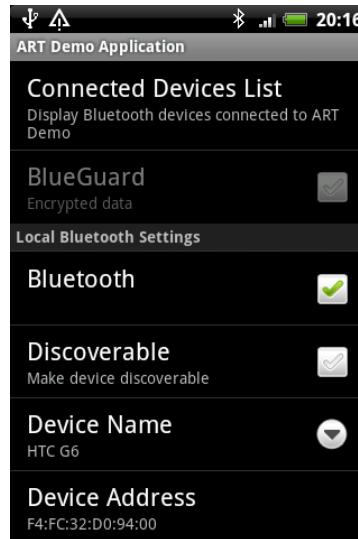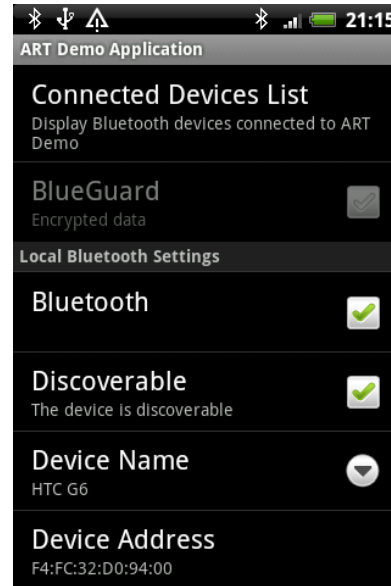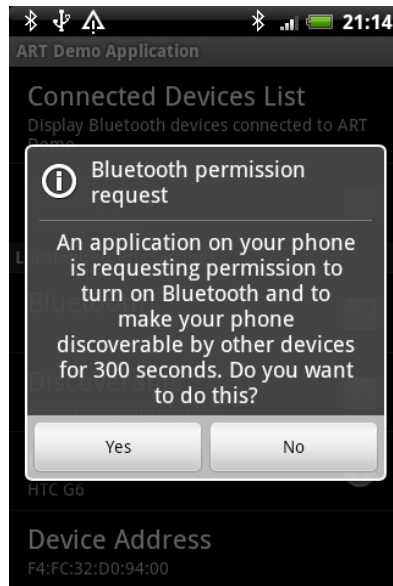

7.1. Bluetooth

Select the local Bluetooth check box. If the local Bluetooth is disabled, the application won't function properly.
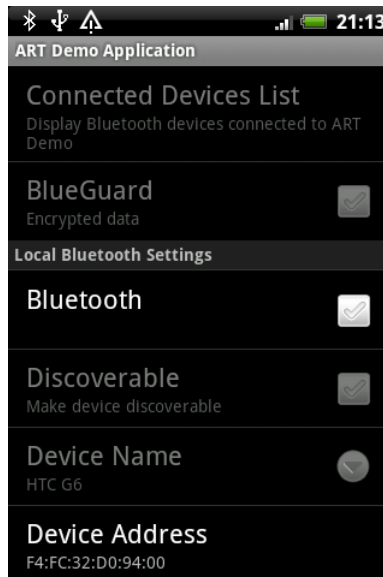
7.2. Discoverable

To make the local device discoverable for 300 seconds check this box.

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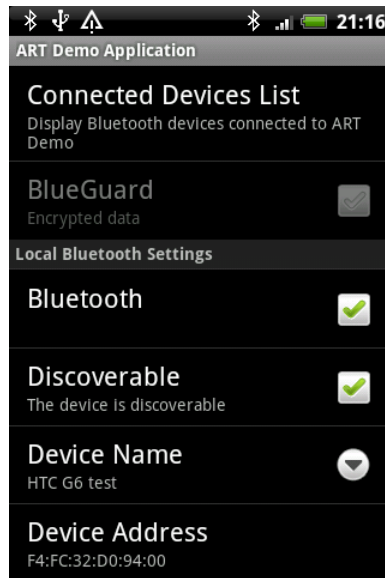地址：天津市华苑产业区海泰西路 18 号西 3B-202（300384）

7.3. Device Name

Change the displayed local Bluetooth device name by pressing this option. Edit this text box. After finishing name change, click on the "OK" button.
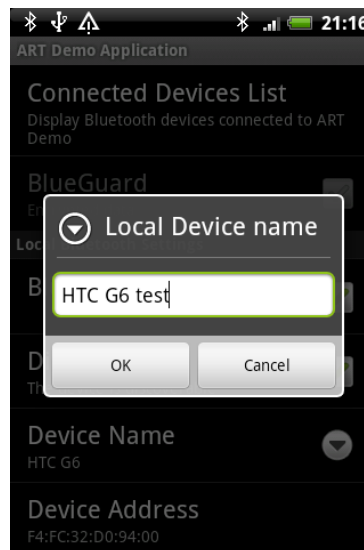
7.4. Device Address

This option displays the local Bluetooth device address. **It cannot be edited.**

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