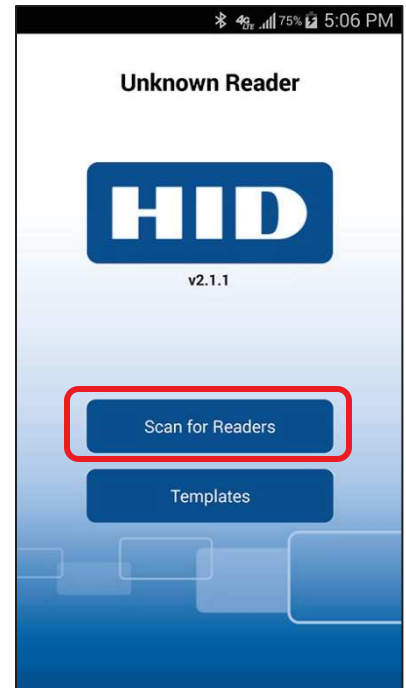


7 HID Mobile Access Configuration Application

7.1 Launch the Application

Select the **Mobile Access Reader Configuration Tool** icon to launch the application.



7.2 Scan for Readers

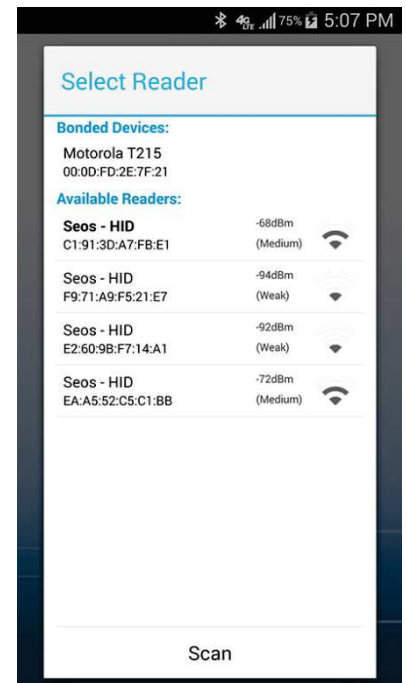
This screen allows the user to list all Mobile Access readers within range, and to connect to a given reader.

7.2.1 List Available Readers

Select **Scan for Readers**. All the readers found are displayed. They will be listed in the following groups:

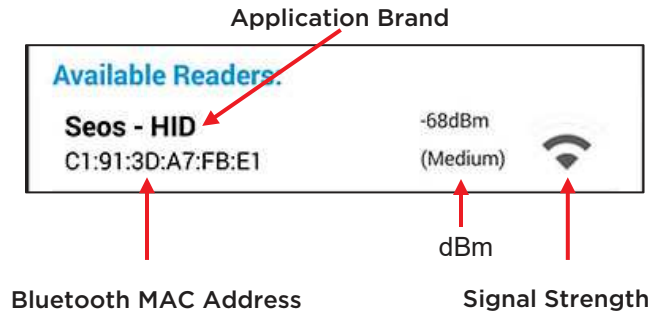
Bonded Devices - displays any Bluetooth device (not HID readers) that may be bonded with the device.
Example: hands-free headset.

Available Readers - displays a list of Mobile Access enabled readers that are currently within range.



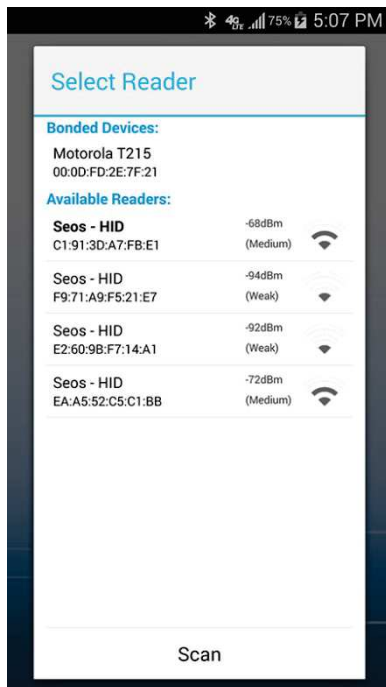
7.2.2 Available Readers

The Available readers will display the following information.



Field	Description
Bluetooth MAC Address	Displays the reader's BLE MAC address.
Application Brand	The Application Brand directly correlates to the Advertising Data used to synchronize reader and mobile application. Assa - For interoperability with ASSA Mobile IDs. HID - For interoperability with HID Mobile IDs.
dBm and Signal Strength	The received signal strength associated with that reader, shown in dBm and a graphic displaying the signal strength in bars.

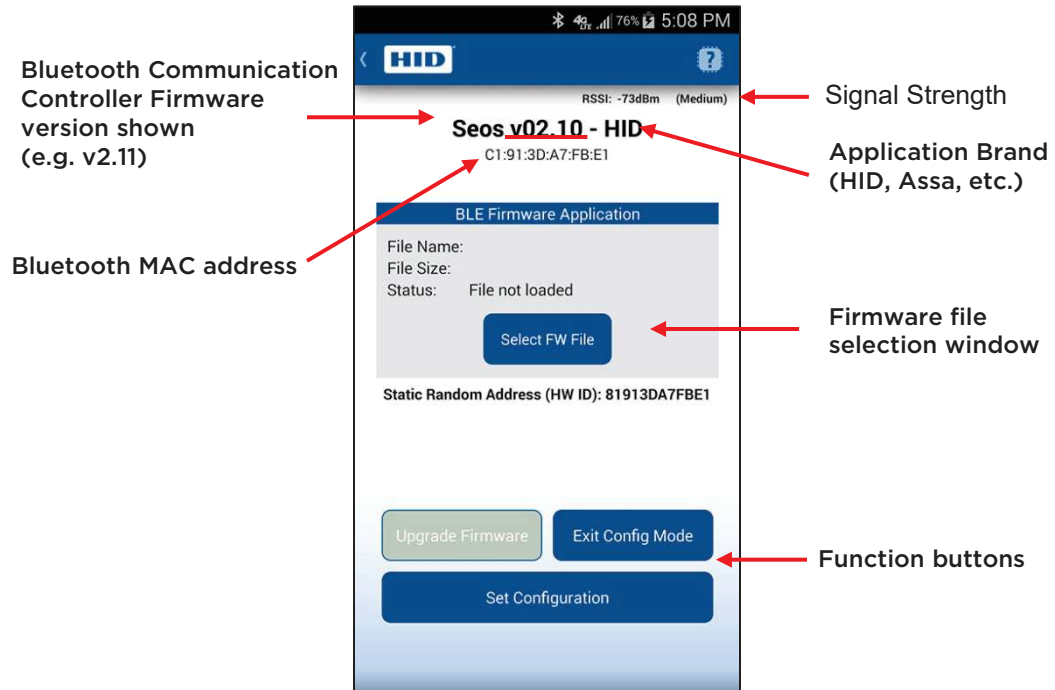
All **Available Readers** will be displayed.



Typically, the reader that is physically closest to the device running the Configuration Application will have the strongest dBm signal (the lower the dBm number, the stronger the signal). Select the appropriate reader from the list.

7.3 Connection Screen

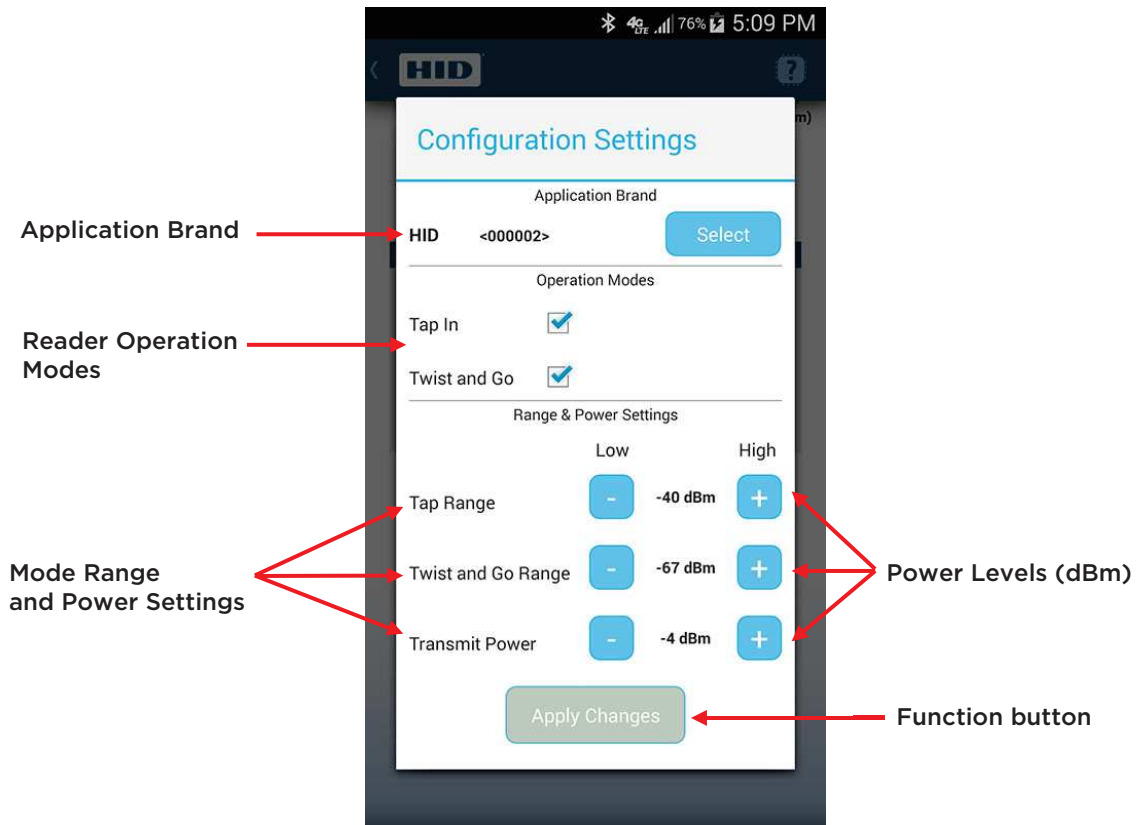
Once the application has connected to the selected reader, the following screen is displayed.



7.4 Set Configuration

This screen shows the Bluetooth controller firmware version, Bluetooth MAC address, and Application Brand, as well as the firmware file selection window.

If the **Set Configuration** option is selected, the following screen is displayed:



Field	Description
Application Brand	DO NOT change this setting unless directed to do so. The result would be the user's applications will no longer communicate with the Reader. If necessary to change this setting, the Select button provides a selection of settings for the Application Brand.
Operations Modes	
Tap In	This option enables/disables the use of the mobile device at close proximity to the reader (approx. 0 to 4 in.). Default.
Twist and Go Range	This option enables/disables the Twist gesture operation, where the use of the mobile device is at a greater distance from the reader (normally 1 to 10 ft.).
Range & Power Settings	
Range and power settings work in tandem to increase or decrease effective read range. See Section 7.4.1: Ranges and Transmit Power for detailed information.	
Tap Range	Default is -40 dBm .
Twist and Go Range	Default -67 dBm .
Transmit Power	Default is -4 dBm .

7.4.1 Ranges and Transmit Power

The following diagram illustrates the relationship between **Range** and **Transmit Power**. The values for **Tap** and **Twist and Go** are set as in *Section 7.4: Set Configuration*, and the power levels are indicated by the number shown at the bottom right of the setting.

Note: The default setting for **Tap** is *low*, and the default for **Twist and Go** is *High*. Depending on the site installation these can be adjusted to best suit the performance and range of the user’s device, but the default setting should always be used as the starting point.

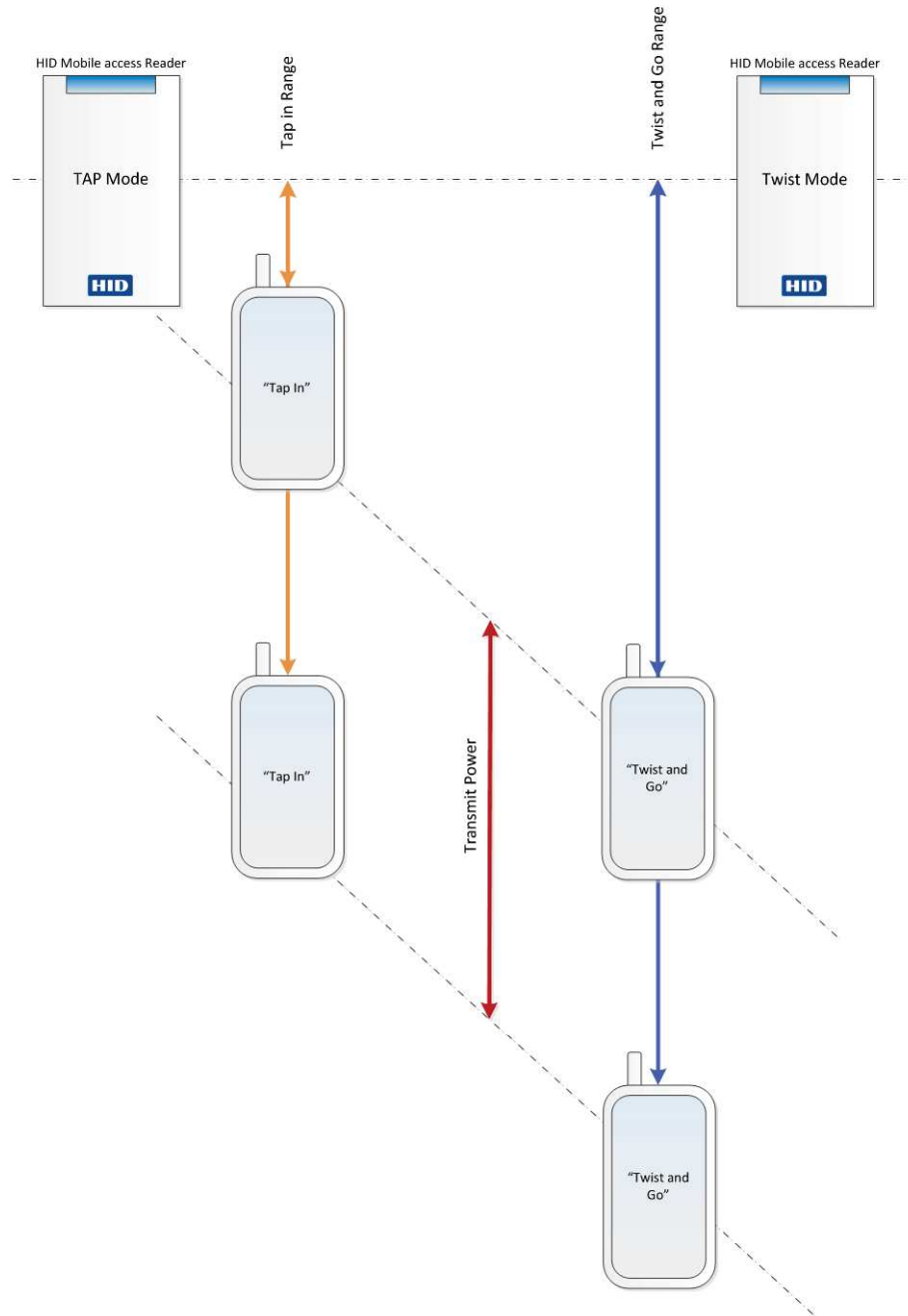
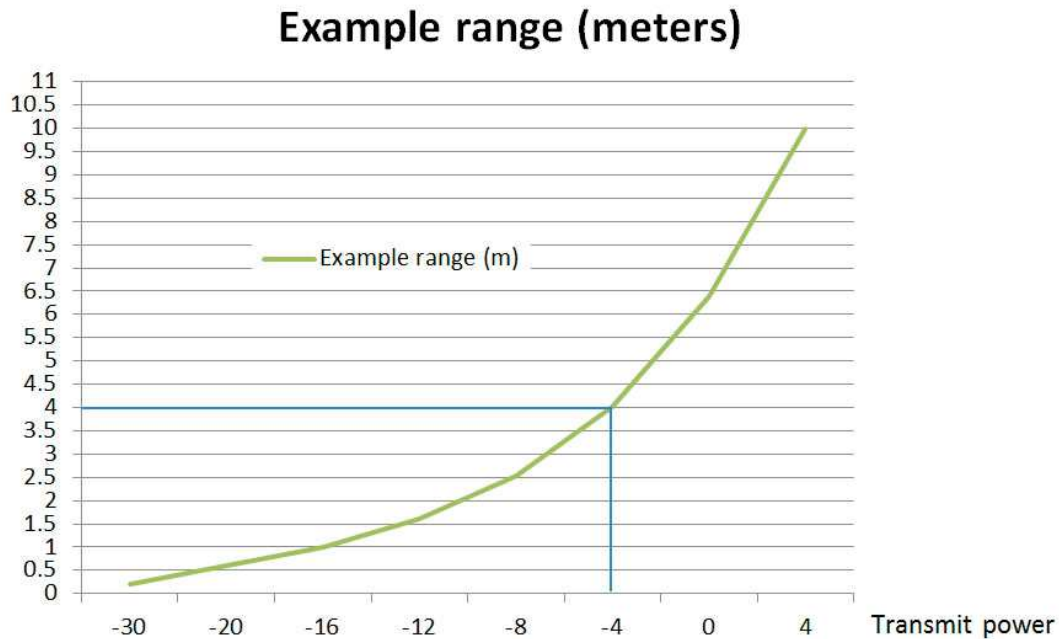


Figure 1: Relationship between Range and Transmit Power

To illustrate the effect of the power setting, the following shows the approximate effect on the read distance when adjusting the transmit power only (keeping Range settings the same).

If the default setting (-4 dBm) gives a read range of 4m, then changing the transmit power would theoretically have the following effect on read distance:



7.4.2 Recommended Configuration Values



Due to the fact that the *range* and *performance* of mobile devices may vary, it is advised that the appropriate settings are selected based on a representative cross-section of mobile device types to be used.

In certain installations a higher or lower **Transmit Power** may be required, and thus the relative operational distance can be set as shown by the **Transmit Power** in *Section 7.4.1: Ranges and Transmit Power*.

Note: This setting should only be adjusted if the *Read Range* settings do not result in the desired read range.

It is recommended that the default Transmit Power setting (-4dBm) is not exceeded unless absolutely necessary.

7.5 Changing and Saving the Bluetooth Configuration Settings

To change the Bluetooth settings select the option boxes or a  or  button to set the new values and select **Apply Changes**.

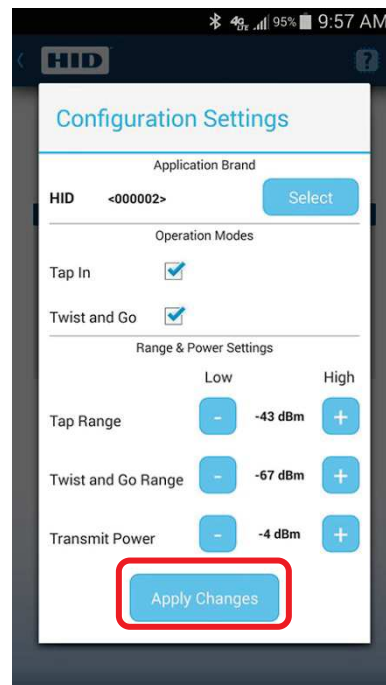
Note: Multiple settings can be set and saved at the same time, but it is recommended that:

- **Application Brand, Operational Modes** (*Tap* and *Twist and Go* settings) are set and saved first.
- **Range** settings are set after a study of the operations at that installation site.

7.5.1 Set Configuration Settings Procedure

Follow this procedure in order to set the Configuration Settings:

1. Verify the Mobile Application is fully closed. See *Section 6.2: Stop the HID Mobile Access Application*.
2. Open the *HID Mobile Access Configuration Application*.
3. Link the Reader to the Application. See *Section 7.2 Scan for Readers*.
4. Select **Set Configuration**.
5. Modify the settings as needed.
 - To configure individual operational modes for the first time first configure the respective **Range** (*Tap* or *Twist and Go*). If the desired range is not achieved, next modify the **Transmit Power**. The **Transmit Power** will affect *Tap* as well as *Twist and Go* ranges, while the individual Range settings will only affect the specific operational mode.
6. Present the *Mobile Admin* card to the reader. See *Section 5.3: Mobile Admin Card*.
 - When the *Mobile Admin* card is presented, the reader will beep twice quickly and the LED will flash blue / purple, indicating that the reader is in *Configuration* mode and ready to accept new settings.
7. Select **Apply Changes**.



If the changes are applied successfully, a message will be displayed confirming this action. **Configuration has been set successfully.**

Note: Once the settings have been set the reader will beep three times and the LED will return to Red (or default color). The audio visual indicators are controlled by the host if the LED and beeper lines are connected to the controller, and host control is enabled.

Note: There is no need to power cycle a reader after the configuration change is completed.

8. The settings can now be verified by launching the *HID Mobile Access Application*.
9. Test the device. If the *Range* or *Power* settings require additional adjustments, repeat the process. See *Section 7.5.1: Set Configuration Settings Procedure*.
10. Once the desired settings have been found, select the **< HID** to return to the Application Launch screen, to scan for another reader and repeat the process as described in this section.

