Windows Embedded Handheld Setup and Troubleshooting

PANATRACK, INC

This guide was created to assist you with the initial setup of your Windows Embedded Handheld computers. Setting up and administering these devices is the responsibility of your company's IT infrastructure. Please enlist the assistance of an IT resource familiar with your wireless infrastructure in order to get these devices fully set up for use with your PanatrackerGP software. This guide is separated into two sections for each of the handheld manufacturers we support, Intermec/Honeywell and Motorola/Zebra. Please see the table of contents for page numbers of each section.

Contents

Connect Intermec/Honeywell Windows Embedded Handheld Device to Wireless

1. Open the **Start Menu**
2. Select **Settings**
3. Select **System**
4. Select **Intermec Settings (or Enterprise Settings if Intermec Settings does not appear)**
5. Select **Communications**
6. Select **802.11 Radio**
7. Ensure **Radio Enabled** is set to **On**. If it is not, select **Radio Enabled**, then mark the box next to Radio Enabled and select Ok.
8. Ensure **Security Choice** is set to **Funk Security**. If it is not, select **Security Choice**, then check the radial next to Funk Security and select Ok.
9. Select **Funk Security**
10. Ensure **Active Profile** is set to **Profile 1**. If it is not, select **Active Profile**, then check the radial next to Profile 1 and select Ok.
11. Select **Profile 1**
12. Enter your **Profile Label** (can be named anything) and the **SSID** of the network the handheld is being connected to.
13. Scroll down to **Power Mode** and select **CAM**
14. Select the correct **Association** (most networks use WPA2)
15. Enter your **Pre-Shared Key** (password for WiFi)

To confirm the handheld is successfully connected to the wireless network:

1. Open the Start Menu.
2. Select ISpyWiFi.
3. Ensure an IP address is present.

Ensure Device Can Communicate with Internal Work Network

By default, the devices will try to communicate only externally with the internet and will not look internally for on site servers. Certain settings need to be changed to enable the handhelds to communicate internally.

1. Open the Start Menu
2. Select Settings
3. Select Connections
4. Select WiFi
5. Ensure the drop down under "My network card connects to" says **Work**
6. Select Ok
7. Once back in the Connections menu, select the Connections icon.
8. Navigate to the Advanced tab and click the "Select Networks" button.
9. Ensure both drop downs are set to My Work Network.

Set Device Name/ID

To use your handheld scanning devices with PanatrackerGP, they will each need a unique name. Naming conventions for multiple mobile computers will typically have units named respective to where they will be used/located.   e.g. "WHS1" to represent Warehouse 1.

1. Open the **Start** menu on the mobile computer
2. Select **Settings**
3. Select **System**
4. Select **About**
5. Enter the desired device name
6. **Save**

Configure Handheld to Disable Auto-Shutoff

We suggest that you set your handheld scanning device so that the backlight and power settings don't automatically turn off your device after a set period of time.

Backlight Settings

1. Open the **Start** menu
2. Select **Settings**
3. Select **System**
4. Select **Backlight**
5. *Uncheck* the "Turn off backlight" option

Power Settings

1. Tap **Start** (Windows logo).
2. Tap **Settings**.
3. Tap the **System** tab.
4. Tap the **Power** icon.
5. Tap the **Advanced** tab.

Remap F1 and F2 Keys to Up and Down on Intermec CK3 Series Handhelds

1. On the handheld, open **Internet Explorer**
2. Navigate to http://bit.ly/pgpkbru
3. Accept the download. Make sure "Open file after download" is checked
4. The installer will start, accept all defaults.
5. Once the installer is finished, open the Start menu and navigate to **Settings > System > Keyboard Remapper**
6. In the "Physical Key" drop down, select "<F1> Key"
7. In the "Key Value" drop down, select "<Up>" (it should be about 3/4 of the to the bottom of the list)
8. Click the "Add Key Definition" button
9. In the "Physical Key" drop down, select "<F2> Key"
10. In the "Key Value" drop down, select "<Down>" (it should be about 3/4 of the to the bottom of the list)
11. Click the "Add Key Definition" button

Troubleshooting Connection Issues

This portion of the document will guide you through different issues that may cause your handheld to not connect to your wireless network.

Switch Device to Use Windows Security Instead of Funk

Some networks do not operate well with the default Funk security option the Intermec/Honeywell devices use. In these scenarios, you can change the handhelds to use Windows Security instead.

1. Open the **Start Menu**
2. Select **Settings**
3. Select **System**
4. Select **Intermec Settings (or Enterprise Settings if Intermec Settings does not appear)**
5. Select **Communications**
6. Select **802.11 Radio**
7. Select **Security Choice**
8. Place a check mark next to **Microsoft Security**
9. A pop-up will appear letting you know the device will require restart, click **Yes**
10. Once the device reboots, it will ask which network you'd like to connect to. If you don't see yours in the list, select Show all networks.
11. Select your network from the list.
12. In the options on the first screen, the "connects to:" drop down should say Work.
13. Click Next
14. Select the appropriate Authentication and Data Encryption type for you network and enter in your Network key.
15. Click Next
16. If entered correctly, it should show "Connected" next to your wireless networks name in the list.

Motorola/Zebra Windows Embedded Handheld Device Setup

Connect Motorola/Zebra Windows Embedded Handheld Device to Wireless

1. Open the **Start Menu**
2. Select **Wireless Companion**
3. Select **Wireless Launch**
4. Select the icon to the **left** of **Find WLANS**
5. Locate the network you wish to connect to in the list, hold down the stylus on it and select **Create Profile**
6. On the first window, leave the defaults for both Profile Name and ESSID and click Next
7. On the second window, leave the defaults for both Operating Mode and Country and click Next
8. On the third window, set your **Security Mode** (typically this is WPA2 – Personal, but your system administrator will know the correct mode). Also set your **Authentication Type** (typically this will be none, but your system administrator will know the correct type). Once done, click next.
9. On the fourth window, select your Encryption Type (your system administrator will know what type). Under "Enter Preshared Key (PSK) using", choose either Pass-phrase or Hexadecimal Keys. Typically a Pass-phrase is used, this would be your Wifi network password. Uncheck **For added security mask characters entered**. Once done, click next
10. On the fifth window, In the **Passphrase** field, enter in your passphrase for your wifi (your wifi password). Once done, click Next
11. On the sixth window, ensure all 3 boxes are checked. Click next.
12. On the seventh window, leave Transmit Power as Automatic. Click next.
13. On the eighth window, ensure Battery Usage Mode is set to **CAM.** Click Save.
14. Once done, you will be taken to the Manage Profile screen. Once here, locate the profile you just created. If there are more profiles then the one you created, hold down the stylus on any *other* profiles and select **Delete.** This is important as it keeps the device from trying to connect to wireless networks you do not want to use.

To confirm the handheld is successfully connected to the wireless network:

1. Open the Start Menu
2. Select Wireless Companion
3. Select Wireless Status
4. Select IPv4 Status
5. Ensure and IP Address is present.

Ensure Device Can Communicate with Internal Work Network

By default, the devices will try to communicate only externally with the internet and will not look internally for on site servers. Certain settings need to be changed to enable the handhelds to communicate internally.

10. Open the Start Menu
11. Select Settings
12. Select Connections
13. Select WiFi
14. Ensure the drop down under "My network card connects to" says **Work**
15. Select Ok
16. Once back in the Connections menu, select the Connections icon.
17. Navigate to the Advanced tab and click the "Select Networks" button.
18. Ensure both drop downs are set to My Work Network.

Set Device Name/ID

To use your handheld scanning devices with PanatrackerGP, they will each need a unique name. Naming conventions for multiple mobile computers will typically have units named respective to where they will be used/located.   e.g. "WHS1" to represent Warehouse 1.

7. Open the **Start** menu on the mobile computer
8. Select **Settings**
9. Select **System**
10. Select **About**
11. Enter the desired device name
12. **Save**

Configure Handheld to Disable Auto-Shutoff

We suggest that you set your handheld scanning device so that the backlight and power settings don't automatically turn off your device after a set period of time.

Backlight Settings

6. Open the **Start** menu
7. Select **Settings**
8. Select **System**
9. Select **Backlight**
10. *Uncheck* the "Turn off backlight" option

Power Settings

6. Tap **Start** (Windows logo).
7. Tap **Settings**.
8. Tap the **System** tab.
9. Tap the **Power** icon.
10. Tap the **Advanced** tab.

Troubleshooting Connection Issues

This portion of the document will guide you through different issues that may cause your handheld to not connect to your wireless network.

Ensure 802.11d option is not enabled on device

The 802.11d option will sometimes cause the device to not make a connection to your wireless network. To deactivate this, do the following:

1. Open the Start Menu.
2. Select Wireless Companion.
3. Select the icon to the left of Options.
4. In the Options window, select Regulatory in the drop down.
5. Ensure "Enable 802.11d" is unchecked.

Ensure the Correct Wireless Band Is Active on the Device

Motorola/Zebra devices ship with the ability to specify what bands of the wireless spectrum they should be limited to. To make sure the band your network uses is available follow these steps

1. Open the Start Menu.
2. Select Wireless Companion.
3. Select the icon to the left of Options.
4. In the Options window, select Band Selection in the drop down.
5. Ensure a check mark is placed in the Band that your wireless network utilizes.

Motorola/Zebra Device Will Still Not Connect

If the above steps didn't solve the connection issue, it is likely the Fusion Firmware needs an update due to your wireless access point being newer than the current Wireless Fusion Driver is compatible with. To confirm, do the following:

1. Open the Start Menu.
2. Select Wireless Companion.
3. Select Wireless Status
4. Select Versions
5. Under Wireless Fusion > Version, you will see a number. The current, up to date version number is 3.00.32.0.043R.
6. If you have an earlier version, you need to contact Motorola/Zebra support for assistance in accessing an updated version. You can reach them with the information below

Motorola: 1-800-653-5350 #2 (New Case) International 011-302-444-9700

https://portal.motorolasolutions.com/Support/US-EN