for detecting pedestrians at midblock crossings

Configuration Instructions

Monitor Connection

Connect the VGA and USB connectors of the monitor to the SBC. Close both programs (two screens with yellow print) by clicking on the exit button (X) on top of each DOS window.

There are options to interface with SBC:

- Use MigmaMonitorTM with touch screen and onscreen keyboard
- Use a laptop via crossover cable (see remote login configuration later in this guide)
- Use desktop computer VGA monitor, and USB/PS2 mouse and keyboard



Detection Zone Configuration

The configuration procedures for both System1 and System2 are identical. The program is a three (3) zone configurator. To configure the detection zones for System 1, please follow the steps below:

Step 1: On the desktop, double click on the **System1_GUI** icon to configure the detection zone for System 1. This will start the configuration software.



The stereo camera view from $\underline{System 1}$ is shown. The zone marked in color red is **ZONE I** (Detection) used for

detecting pedestrians, which will trigger the beacon flashing light. The yellow **ZONE II (Direction)** is for directional purposes. If pedestrian is detected in the yellow zone first, the subsequent detections in the red zone are ignored. The **AVOID ZONE** is marked in cyan and is the smallest of the 3 zones. Any detections in this avoid zone will be completely ignored.

Step 2: Select the tab name **Configure Zone.** This will bring you to the zone configuration screen.







Step 4: Now click on the **Clear Zone** button to clear the default zone, and then click on the **Draw Zone** button to start drawing the zone:



Vigma

for detecting pedestrians at midblock crossings

Configuration Instructions

Step 5: Draw Zone by using the stylus or mouse to touch the upper left corner of the desired location zone.

mera View Configure Zones Configure Parameters	
Upper Left First & Clockwise	Configure Zones
dual 1	Clear Zone
	Draw Zone
to de	Sum .

Step 6: Touch the upper right corner of the monitor screen, this will display a red line is connecting the points of the detection zone. As shown below:



Step 7: Now touch the lower right corner of the zone. Notice the second red line drawn.



Step 8: Finally touch the lower left corner with either stylus or mouse. Observe that the zone is complete. As shown below:



(Note: You can always clear the zone and draw it again if needed.)

Once the zone is done:

• Click on the <u>Save</u> button. This will save the zone you just configured, which is shown below:



Once you have saved **Zone I** (**Detection**) it will bring you back to the Configure Zones screen. To configure the directional zone, you will follow the same procedure as **Zone I** (**Detection**).

Step 1: Click on the **Zone II** (**Direction**) button located to the side of the image.





for detecting pedestrians at midblock crossings

Configuration Instructions

Step 2: Click on the **Clear Zone** button to clear the default zone, and now click on the **Draw Zone** button to draw the zone that best suits the environment.

nera View Configure Zones Configure Parameters	
Upper Left First & Clockwise	Configure Zones
- the	Clear Zone
A Star and and	
Zone	Draw Zone
	Save

Step 3: Draw Zone by using the stylus or mouse to touch the upper left corner of the desired location zone.



Step 4: Touch the upper right corner of the monitor screen, this will display a yellow line connecting the points of the detection zone, which is shown below:



Step 5: Now touch the lower right corner of the zone. Notice the second yellow line drawn.



Step 6: Finally touch the lower left corner with either stylus or mouse. Observe that the zone is complete, as shown below:

mera View Configure Zones Configure Parameters	
Upper Left First & Clockwise	Configure Zones
Jonen -	Clear Zone
	Draw Zone
	Save

Step 7: Now you have finished drawing the directional zone. You need to click on the **Save** button.



The next zone to configure is the **Avoid Zone.** This zone is small and is designed to cover a particular area of the midblock that may cause false detections. Again, configuring this zone you will follow the same procedures as the two previous zones.

Migma

for detecting pedestrians at midblock crossings

Configuration Instructions

Step 1: Click on the **Avoid Zone** button in cyan color shown below.



Step 2: Click on the **Clear Zone** button to clear the default zone and then click on the **Draw Zone** button.



(Remember this zone will be a lot smaller, just enough to cover an area that may cause false detections.)

Step 3: Draw Zone by using the stylus or mouse to touch the upper left corner of the desired location zone.



Step 4: Touch the upper right corner of the monitor screen, this will display a blue line connecting the points of the detection zone as shown below:

amera View Configure Zones Configure Parameters	
Upper Left First & Clockwise	Configure Zones
Zonet .	Clear Zone
	Draw Zone

Step 5: Now touch the lower right corner of the zone. Notice the second blue line drawn.



Step 6: Finally touch the lower left corner with either stylus or mouse. Observe that the zone is complete as shown below:

amera View Configure Zones Configure Parameters	
Upper Left First & Clockwise	Configure Zones
Total Andrews	Clear Zone
	Draw Zone
	Save

Step 7: Now you have finished the avoid zone and you need to click on the **Save** button.



for detecting pedestrians at midblock crossings

Configuration Instructions



You have completed the System 1 zone configuration. Now you will need to configure the zones for System 2 by following the same procedures for System 1.

Parameter Configuration

One can configure the delay time (i.e. how long the pedestrian must be in the zone before being detected) and hold time (i.e. how long the flasher is on), which are located in the Zone I (Detection) box. The default delay time is 1 second, meaning the pedestrian will be detected about 1 second after walking inside the zone. You may increase this time that fits your application. The default hold time is 30 seconds. If the crosswalk is relatively narrow you can always decrease the values. You may also use the default values as well.

The Zone II (Direction) can also be configured. For delay time the default is 1 second (i.e. how long the pedestrian must be in the zone before being detected) which is what we recommend. Leave the hold time at its default value.

To configure both delay time and hold time, select the **Configure Parameters** tab to configure the time. Click on the **Config** button to change the time in seconds. You MUST click on the **Save** button to save both delay and hold time for each of the zones.



Now you have finished the configuration and ready to have the system operational. Please do the following:

- You MUST save the data to the hard drive.
- To do this, Exit to the Main desktop screen and
 - **Double click** on the **Save** icon on the desktop as shown below.
 - The system will then save the data and automatically reboot after 5 seconds.



Wait until the system restarts. You can then disconnect the monitor and close the cabinet door.



REMEMBER: Whenever you configure the system, <u>you must</u> <u>click on the Save icon to save</u> <u>the configuration and reboot the</u> <u>system.</u> Otherwise your configuration changes <u>will NOT</u> be saved.

Remote Login Configuration

Before logging into SBC remotely, you should configure your laptop that you will use to connect to SBC with crossover Ethernet cable.

• Open Properties of Local Area Connection in Network Connections in Control Panel



for detecting pedestrians at midblock crossings

Configuration Instructions

Realtek PCIe G	BE Family Controller	
		Configure
This connection uses	the following items:	
Gord For Mic Gord Packet Gord Pac	rosoft Networks Scheduler er Sharing for Microsoft I scol Version 6 (TCP/IPvi pool Version 4 (TCP/IPvi poplogy Discovery Mapp poplogy Discovery Resp	Networks 5) 4) er I/O Driver onder
Install	Uninstall	Properties

• Open Properties of Internet Protocol version 4 (TCP/IPv4)



- Select **Use the following IP address** and enter the following network information:
 - IP address: 192.168.0.2
 - Subnet mask: 255.255.255.0
 - o Default gateway: 192.168.0.1
- Select Use the following DNS server addresses: • Preferred DNS server: 192.168.0.1
- Click on **OK** button to finish configuration of local area connection.

Remote Access

- Open **Remote Desktop Connection** in Windows
- Enter 192.168.0.1 in Computer



1600 Providence Highway, Walpole, MA 02081 Telephone: (508) 660-0328 Fax: (508) 660-0288 Web: <u>http://www.migmapd.com</u>

Click Connect button



A remote desktop login window appears. Enter the following information:

- Username: administrator
- **Password:** migmasys

Click on **OK** button to access the SBC.

Log On to	Window
0.2018	Windows Embedded
Liser name Bassvord:	administrator