## **MigmaCount**<sup>TM</sup>

for counting pedestrians and cyclists

## **General Description**

Each base station of MigmaCount<sup>TM</sup> has the TeamViewer Host pre-installed and configured. It also has Internet access through a pre-activated and service-subscribed cellular modem (i.e., aircard). To access Migma's counting units in the field, one needs to have the knowledge of

- TeamViewer ID which is generated by TeamViewer server and is unique worldwide
- Password which is generated by Migma

If incorrect passwords are entered for three consecutive times, there is a 30-second pause before one can enter the password again, which makes it extremely difficult for unauthorized party to gain access to Migma's counting units remotely.

For remote access, TeamViewer must be installed in an office computer. A free copy of TeamViewer can be downloaded at <u>https://www.teamviewer.com/en-us/download/windows/</u>. It is free to try for a short period of time and a license is required afterwards. However, it is free for local and federal government agencies such as DOT and DPW.

Before the data collection is started, it is assumed that the site location information have been entered into the base station, which include: *State*, *City*, *Intersection Corner*, *Traveling Direction*. As an example, assume one entered the following location information:

MA, Brookline, MA-9 & Cypress, North

Then the system will create a folder as follows: \root\Migma\Results\MigmaCount\MA\Brookline\ MA-9 & Cypress\North

The subsequent counting data will be organized under year, month and day. Counting data are in MS2 format (<u>https://www.ms2soft.com/</u>) and stored in Excel file. MS2 format is used by MassDOT as well. Only hourly counting data are currently supported, and one Excel file is created in one day. Counting data in different intervals such as 15minute bin will be supported in the near future.

## **Remote Access for Data Download**

**Step 1:** Start TeamViewer, enter TeamViewer ID found at the bottom of base station, and select "File transfer".



**Step 2:** Click "Connect" and enter base station password provided by Migma.

**Step 3:** Create a folder for saved data. For example, one can create a folder on the desktop, *Counting Data from MigmaCount*.

**Step 4:** Copy "C:\Users\xxxx\Desktop\Counting Data from MigmaCount" (xxxx is username) and paste it into the left folder field in TeamViewer and hit "Enter" key. Then copy "\root\Migma\Results\MigmaCount\MA\Brookline\MA-9 & Cypress\North \2020\07" (suppose you want to download data in July) and paste it into the right folder field and hit "Enter".

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**Step 5:** To download the counting data of July 22, doubleclick on the folder "22". You will see a .csv file which is the counting file in MS2 format.

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**Step 6:** Drag and drop this .csv file to the left to save the counting data to your local folder, which downloads the counting data in July 22 to your computer.

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Note: Repeat the same steps to download data in other days.

**Step 7:** To download images, double-click on "Images". *Note: It is recommended to zip images into one file and download it, instead of downloading images which may take a very long time.* 

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**Step 8:** To download images stored in Hour 00, doubleclick on "00". You will see a folder "Detection\_60min\_60" which indicates images in 60 minutes are stored here.

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**Step 9:** Double-click on "Detection\_60min\_60" to see images saved in Hour 00. You can drag and drop images to the left folder.

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