

# Sensapex Firmware update tool

## Operating manual

Rev 2.0  
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# 1 Sensapex firmware tool installation

Please download the Sensapex firmware update tool from the support sections of the website and install according to the instructions provided by the installation wizard: [www.sensapex.com](http://www.sensapex.com)

Please contact Sensapex in case you have questions or problems that are not covered in this document: [support@sensapex.com](mailto:support@sensapex.com). We are also looking forward to feedback on any possible bugs and suggestions for improvements and new features.

# 2 Firmware update instructions

BETA FIRMWARE VERSIONS MAY BE AVAILABLE AT THE TIME. THE BETA VERSIONS HAVE NOT PASSED VALIDATION TEST PROCESS AND MAY NOT WORK PROPERLY. WE DO NOT RECOMMEND USING THEM UNLESS THIS HAS BEEN DISCUSSED IN ADVANCE AND RECOMMENDED BY THE SENSAPLEX REPRESENTATIVE.

1. Connect Sensapex products to the computer where the firmware update tool is installed according to the operating manual of that product (see also section 3).
2. Security and other IT settings specific to your computer may sometimes block the required connectivity and functionality of the firmware update tool. In case issues arise, please review the tips provided in section 3 of this document and discuss with your IT support for further instructions how to resolve them.
3. Press SEARCH AVAILABLE DEVICES button and confirm that the Sensapex products that are connected to the PC are shown in the list (Figure 1).
  - If devices do not show up, confirm that the Devices in Group selection matches with the device group set to the products (A by default).
  - In case products are still not shown in the list, review the PC connection quick guide for further instructions.
4. To discover uMp-TSC or uMp-TSC2 touch-screen products for update:
  - Identify the touch screen local IP address from its general menu -> About. Scroll down the view until you see the IP address, which will have a format of: 169.254.xxx.yyy
  - Toggle ON Update Touch Screen (TSC) -selection from the firmware update tool and set the IP address accordingly (Figure 1).
5. Press REFRESH button to retrieve the latest firmware versions available for your product. In case Available versions drop-down menu list does not show any firmware, please confirm that the computer has internet connection.
6. Press DOWNLOAD button. This will download the firmware that is selected in the Available versions drop-down menu to the computer, which will then appear in the Local firmware drop-down list.
7. Select the firmware to be updated from the Local firmware drop-down list. Tool will validate that the firmware that is selected is correct for the product.
8. UPDATE button will appear next to the listed products when firmware that is compatible with it is selected from the Local firmwares drop-down menu (Figure 1).
9. Press UPDATE button next to the product in the product list to update that product. Wait until it is completed.
10. Repeat for all Sensapex products according to the same process.

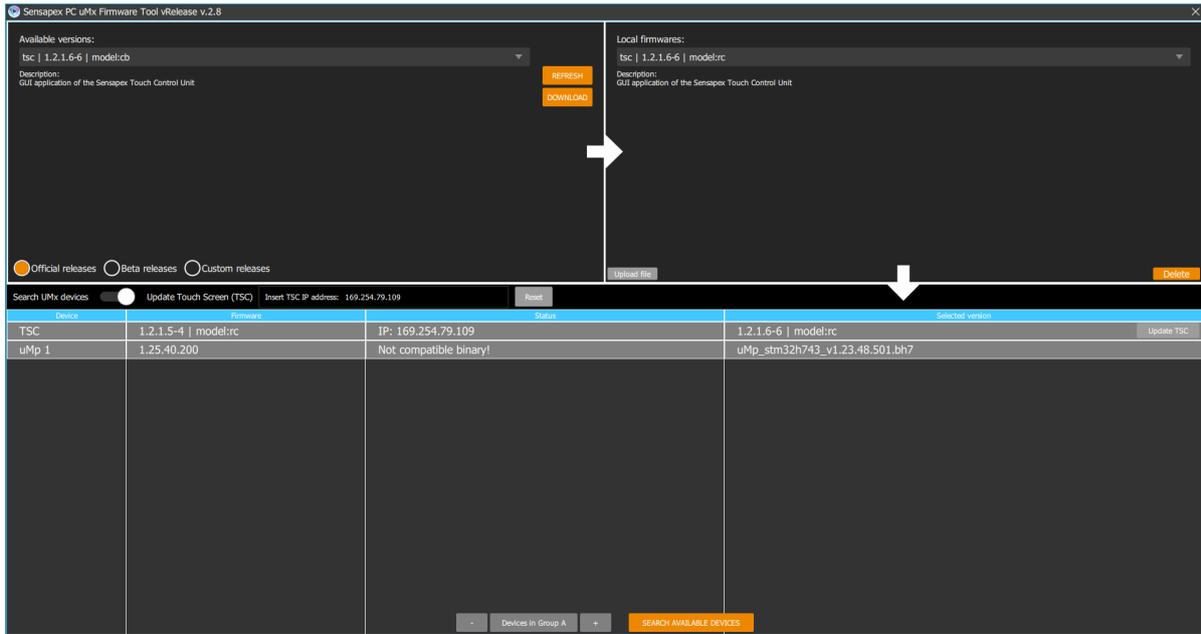


Figure 1. Sensapex Firmware update tool user interface.

### 3 Connectivity and IT settings

Sensapex products are controlled by local area network (LAN) architecture through local link address. They must be connected to different physical ethernet card / adapter / port than what is used for the internet connection or otherwise Windows operating system may fail to automatically configure the local link address.

#### 3.1 uMp micromanipulator system with uMp-TSC touch screen controller

uMp micromanipulator system connections with battery operated uMp-TSC are shown in Figure 2. Standard ethernet cable is used for ethernet connections.

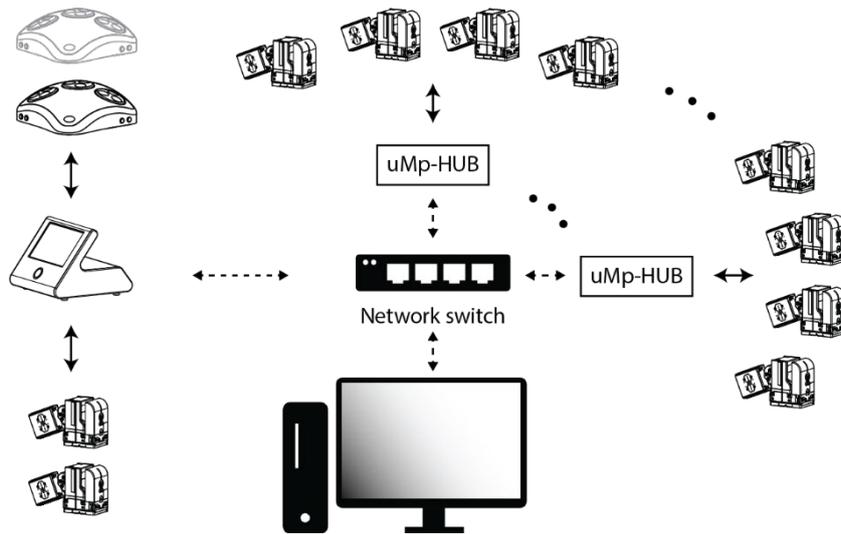


Figure 2. uMp micromanipulation system connections with uMp-TSC

#### 3.2 uMp micromanipulator system with uMp-TSC2 touch screen controller

uMp micromanipulator system connections are shown below with uMp-TSCv2 in Figure 3 below. Standard ethernet cable is used for ethernet connections.

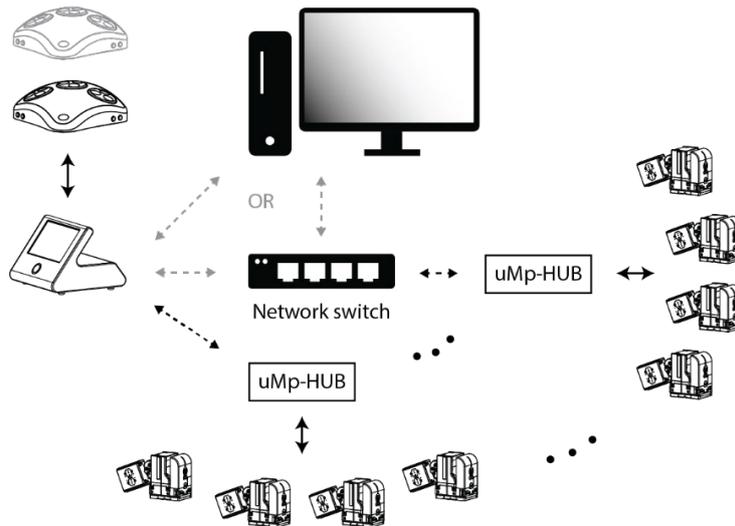


Figure 3. uMp micromanipulation system connections with uMp-TSC2

### 3.3 uM workstation connections

uM workstation system connections are shown in Figure 4, including uMp micromanipulator system, uMc pressure control and uMs microscope products. Standard ethernet cable is used for ethernet connections.

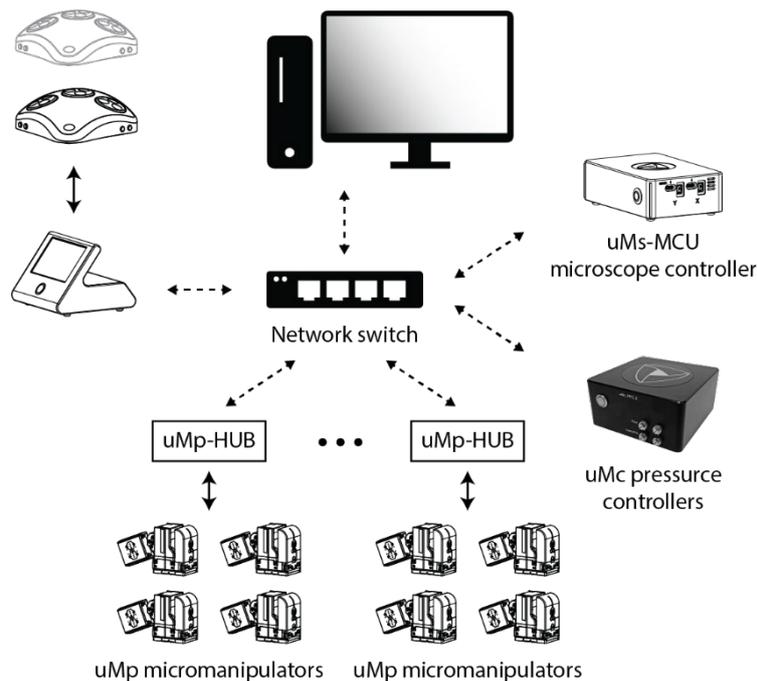


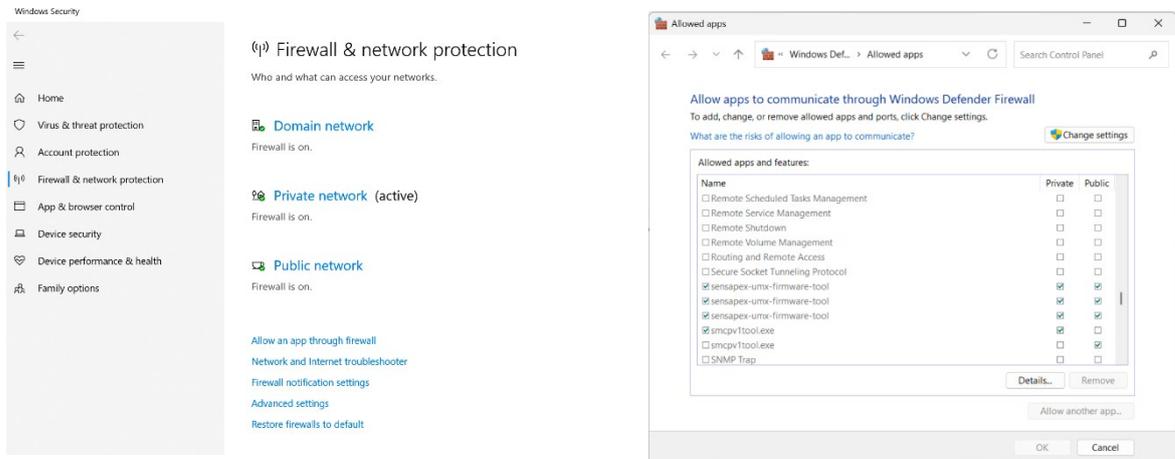
Figure 4. uM workstation connections

### 3.4 Troubleshooting connectivity issues

The connectivity issues may relate to specific IT settings in the computer. We cannot address those specific issues or settings, which are often set by IT support. This sections provides some general tips to troubleshoot.

**Please consult your local IT support in case you have any questions or concerns related to this configuration. Sensapex assumes no liability of any kind for any issues or damage from configuration options described in this section.**

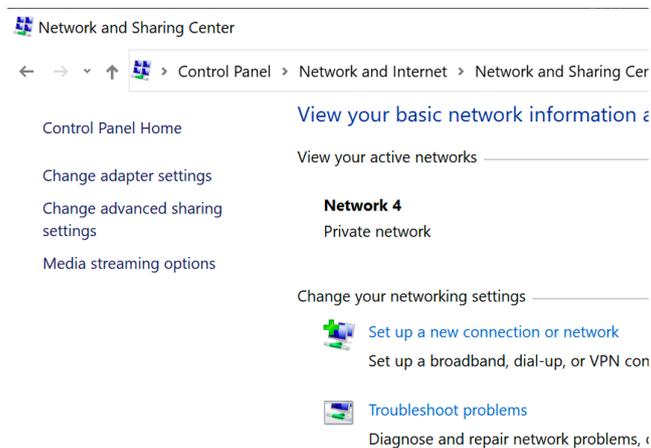
1. Please check your Windows firewall settings. Sensapex Firmware update tool should be allowed as shown in the screenshot below.



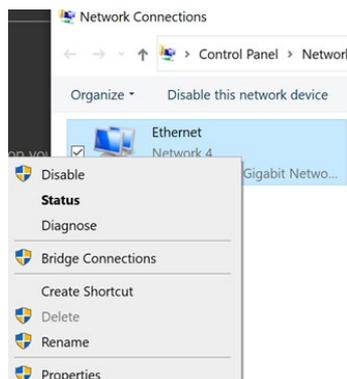
2. In case Windows is not succeeding in setting up the local link IP address automatically, it can be set up manually following these steps:
  - o Open Windows control panel
  - o Go to Network and internet and then Network and Sharing center



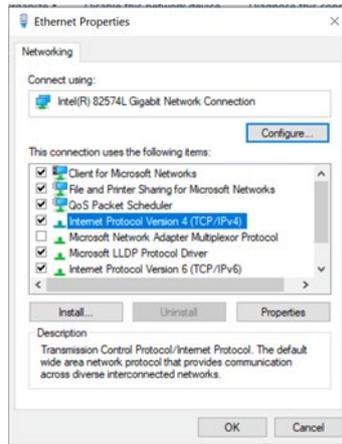
- o Select Change adapter settings:



- o Right click ethernet device and select Properties



- Select Internet Protocol Version 4 (TCP/IP) and press 'Properties' button



- Select 'Use the following IP Address' and type in the settings for the IP address and Subnet mask fields as shown in picture below. Then press OK. **NOTE: IF THIS IS YOUR ONLY NETWORK CARD THIS MEANS YOUR INTERNET CONNECTION WILL BE OFFLINE. TO GET BACK TO INTERNET CHANGE THE SELECTION TO "OBTAIN AN IP ADDRESS AUTOMATICALLY".**

