

OPERATING INSTRUCTIONS FOR
REMOTE ACCESS TO
GC PRO – HMI

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Introduction

1.1 Objective

The objective is to access and control the GC PRO touch screen display HMI5070TH using smart phones like IPHONE & ANDROID PHONES.



Figure 1-1: Communication between HMI and Phone

1.2 Overview

The operating instruction manual is prepared to define the set of procedures to access & control the GC PRO HMI on the smart devices like IPHONE, IPAD, ANDROID PHONES and NOTEBOOKS etc. The remote connection is achieved by the VNC client protocol applications available for smart phones.

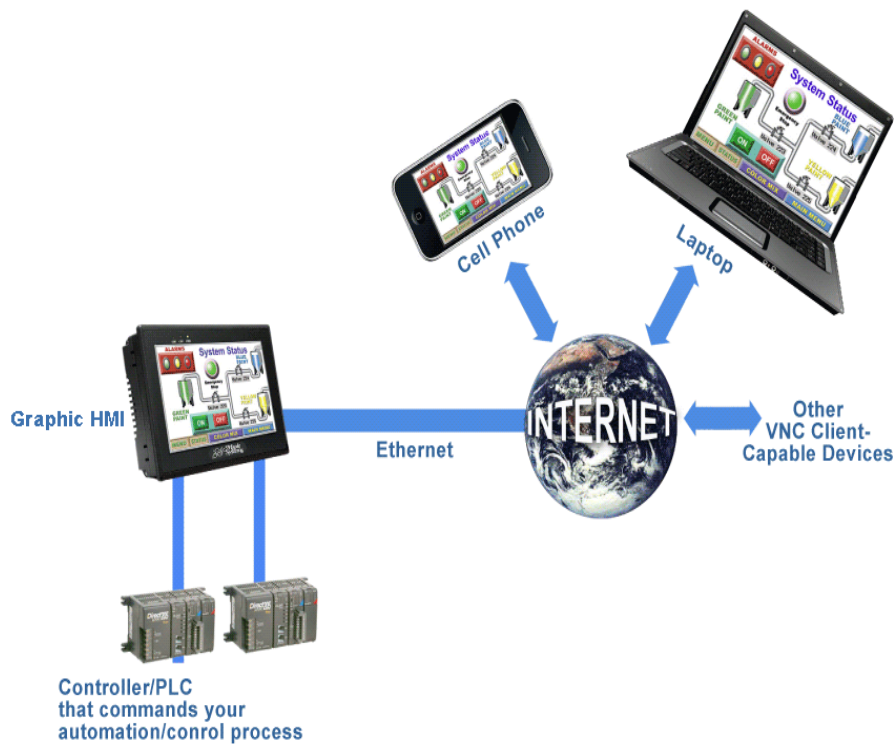


Figure 1-2: VNC Protocol Communication via Internet

Operational Theory

The VNC Server is enabled on HMI5070TH display with Ethernet cable connected to its LAN port. The VNC client/viewer on the internal network can use the private IP address of the server, but the VNC client/viewer on the external network need to use the public IP address. However if private network has to be accessed by the VNC client from the external network, “port forwarding”/“net mapping” can be used as demonstrated in the following block diagram.

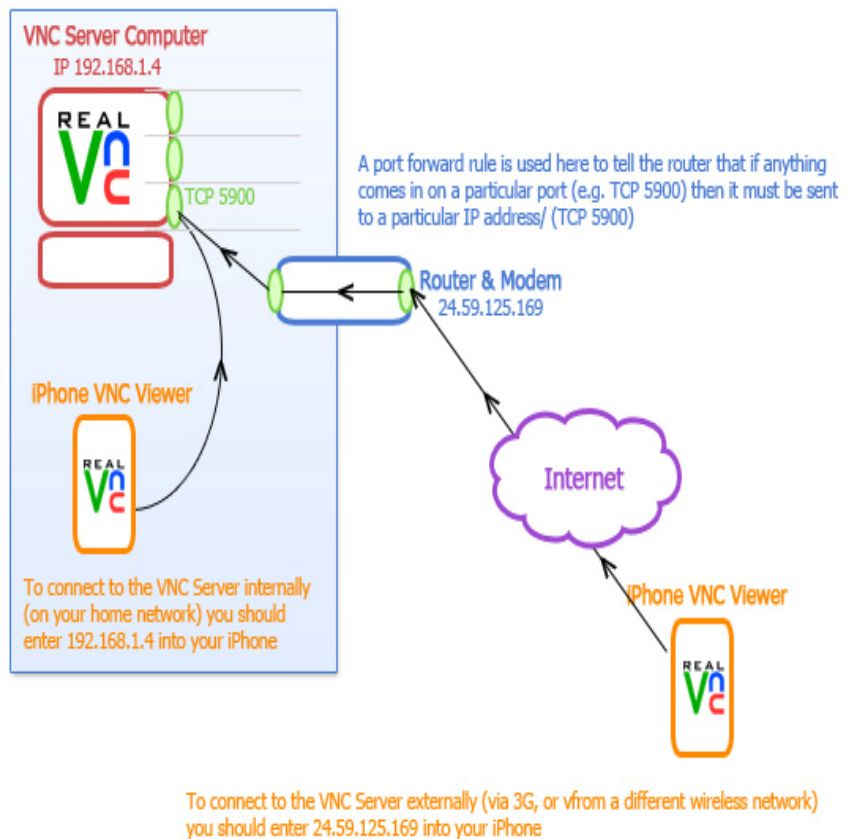


Figure 2-1: Server Access by the Client on Internal and External Networks

Configuration

3.1 Settings to Enable HMI VNC Server

To use the VNC connection in the **GC PRO** HMI, VNC server must be enabled in HMI5070TH display.

1. Apply power to the HMI and make sure that Ethernet cable is connected to LAN port.
2. Click the icon in the lower right-hand corner of the screen.
3. Select the Setting icon on the right side of the task bar.
4. Enter the password (default password is 111111).



Figure 3-1: Password Authentication for Changing System Settings

5. Click the Network tab and note the HMI IP address. Ensure the correct IP address, subnet mask & Gateway details are entered

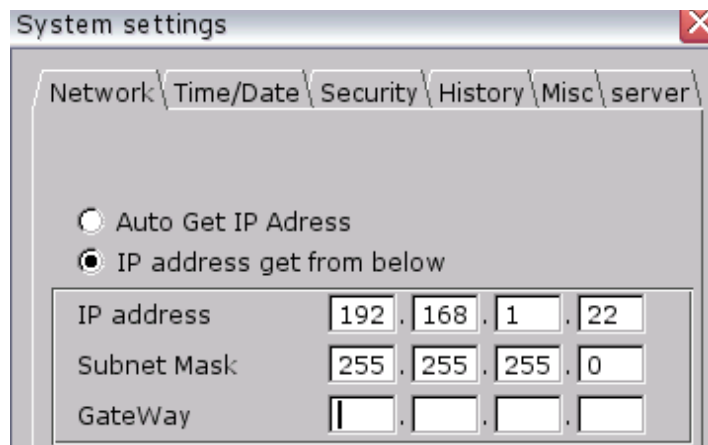


Figure 3-2: Network Details for Server

6. Select the right most tab “**VNC Server tab**” on the system settings. This tab can be hard to see. It appears as a tiny sliver beneath the firmware tab.



Figure 3-3: Password Settings for VNC Server

7. Click VNC login password to set the password used to login to the GC PRO HMI from the VNC application.
8. Select Start VNC.
9. Click Apply then click OK.

3.2 Settings to Enable VNC Viewer on IPHONE

1. Make sure Wi-Fi is enabled. The small pie icon must be shown in the status bar
2. Run VNC client viewer application (current setup is tested with Mocha VNC lite)
3. Go to Configuration.



Figure 3-4: VNC Client Configuration Screen on IPHONE

4. Enter the IP address of the HMI5070TH in the VNC IPHONE setting (Point 1)
5. Make sure that server port is 5900
6. Insert the password (Point 3) of VNC server HMI5070TH
7. Go back to VNC menu and click on connect button.

3.3 Settings to Enable VNC Viewer on ANDROID PHONE

The setup is tested using androidVNC client viewer. Install and open **android-vnc-viewer** on the ANDROID PHONE. In the connection configuration menu make the following settings.

1. Insert the Nickname (Optional)
2. Insert the VNC server password assigned in the HMI display (Check the **Keep** checkbox to store the password for future use).
3. Insert the IP address of VNC server HMI5070TH

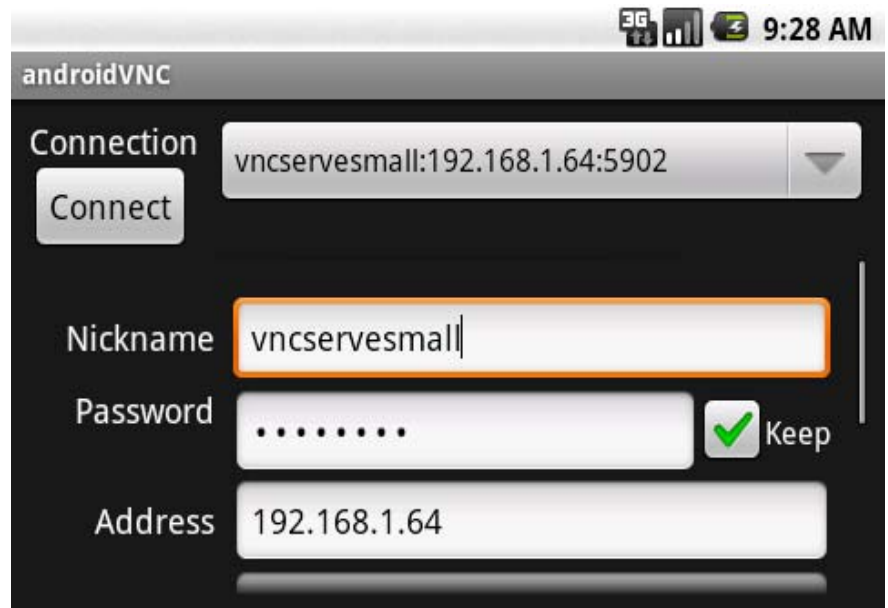


Figure 3-5: VNC Client Authentication on ANDROID PHONE

4. Make sure that server port is 5900
5. Choose the Color Format
6. Local mouse pointer draws a small square cursor at the mouse position.
7. Force full-screen bitmap avoids breaking the large display into smaller tiles.

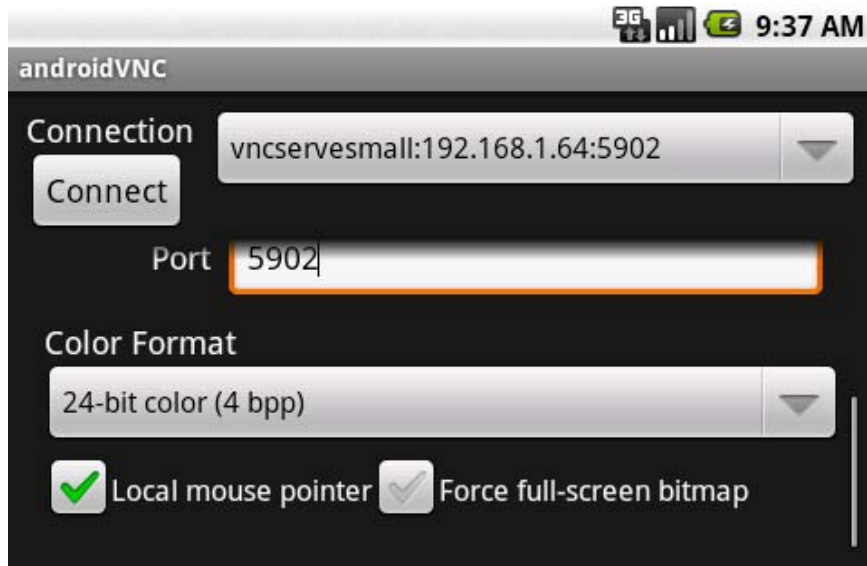


Figure 3-6: VNC Client Control Settings Screen on ANDROID PHONE

8. Click on Connect.