



**NETWORK EMULATOR
LCD PANEL USER GUIDE**

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1 Introduction

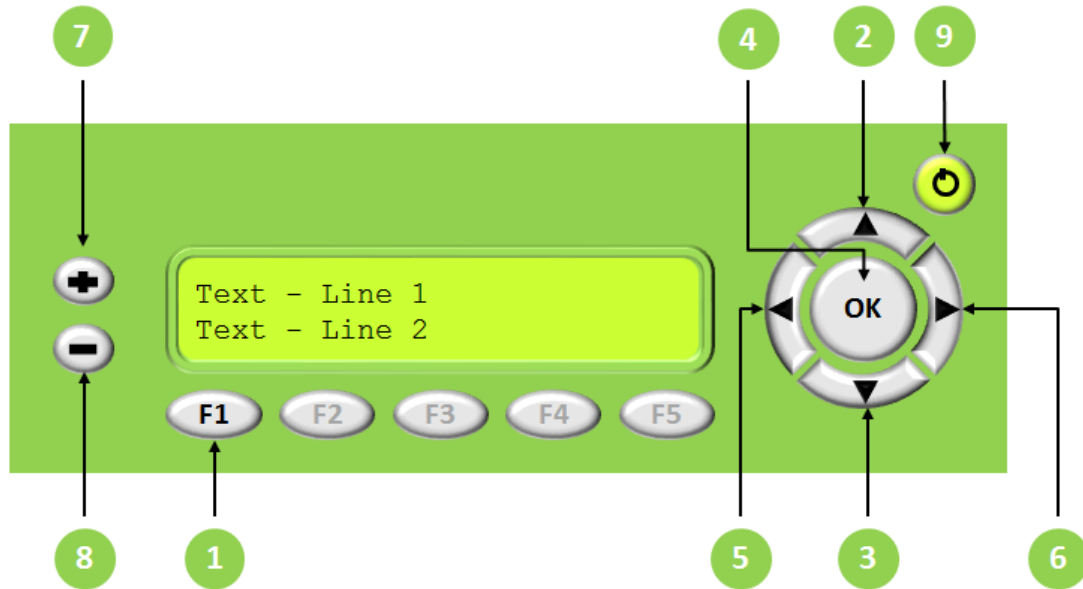
In addition to the NE-ONE Web GUI, the NE-ONE Desktop Appliance has an LCD panel on the front of the unit, providing options for interface configuration (Network Settings), collecting diagnostic data and License/Version information (Support), basic appliance management functions (Shutdown and Reboot) and Emulator specific functions.



Note: If unlicensed the Emulator will load but will default to the License Key request page and will not progress beyond this point until a valid License Key is installed.

2 LCD Panel Buttons

The LCD is a twenty (20) characters by two (2) line display with nine (9) active buttons (buttons F2, F3, F4 and F5 are NOT used on the NE-ONE Appliance):



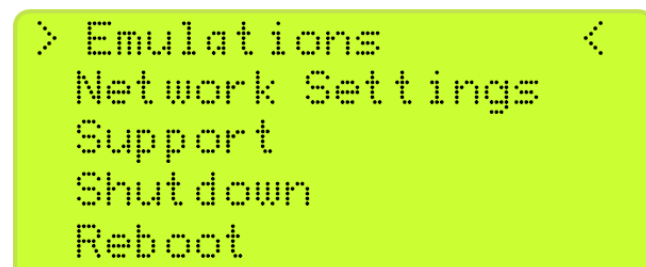
Label	Button Symbol	Button Function
1	F1	Go to the Main Menu from anywhere
2	▲	Go Up through the menus
3	▼	Go Down through the menus
4	OK	Select this menu, or perform this operation
5	◀	Go back to previous level (normally), or Go back one field (when updating a value)
6	▶	Go forward one field (when updating a value)
7	+	Increase numeric value e.g. IP address
8	-	Decrease numeric value
9	⏻	Power on and boot up or Shutdown

3 Emulator Main Menu

The normal LCD looks like this:



The primary Emulator menu items are:



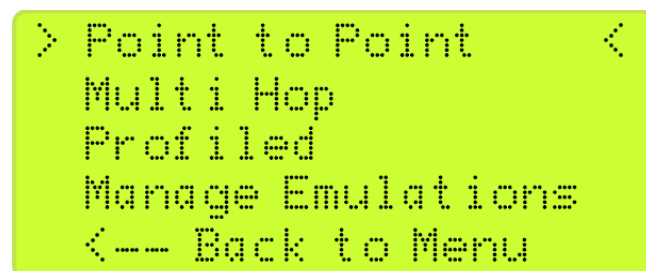
Note: For clarity the figure shows all five lines although the LCD can only show two lines at a time and you must scroll through the menu options using the Go Up and Go Down arrow keys.

The inward pointing arrows (> <) define which menu item is selected and would be actioned if the OK button was pressed.

3.1 Emulations

Selecting Emulations provides five sub-menu options.

Note: For clarity the figure shows all five lines although the LCD can only show two lines at a time and you must scroll through the menu options using the Go Up and Go Down arrow keys.



The NE-ONE Emulator supports three types of Emulation:

- Point to Point Emulations
- Multi Hop Emulations
- Profiled Emulations

Note: NE-ONE Profiler is an End-of-Life Product

Once an emulation is saved on the NE-ONE Appliance (via the Emulator or generated by the iTrinegy Profiler product and loaded on

to the emulator) they are immediately available for selection using the LCD Panel.

Note: Please refer to the “NE-ONE - Emulator User & Administrator Guide” and “NE-ONE - User & Administrator Guide” for more detail.

3.1.1 Point to Point

This option will display all the Point to Point emulation scenarios saved via the Emulator web GUI.

```
>WAN_10Mbps_PoorQua<
  4G_Slow_PoorQuality
```

3.1.2 Multi Hop

This option will display all the Multi Hop emulation scenarios saved via the Emulator’s Web GUI. The menu is similar to the Point to Point example.

3.1.3 Starting an Emulation

If your Emulator is licensed for two port pairs (0&1 and 2&3) you will be asked which over which port pair the emulation should be run.

```
>   Port 0 & 1   <
>   Port 2 & 3   <
```

Else or after port selection, the following message is displayed:

```
Emulation Started
```

If there is already an emulation running on one of the Port pairs (for a two-port pair license model) then the user is only offered the available port pair, for example:

```
>   Port 2 & 3   <
<-- Back to Menu
```

3.1.4 Manage Emulations

This option displays the status of any emulations running on port pairs 0&1 and 2&3.

```
>P01: WAN_10Mbps_Poo<
>P23: No emu running
```

The Emulator adds the user that created/saved the emulation i.e. In this example the user was “admin”.

Note: The emulation name maybe truncated as the LCD can only display 20 characters in total.

If an emulation is running, on Ports 0 & 1 in this example, selecting it offers the option to stop the emulation.

```
> Stop Emulation <
<-- Back to Menu
```

If the emulation is stopped the Manage Emulation display will show the status for both port pairs as appropriate.

```
>P01: WAN_10Mbps_Poo<
>P23: No emu running
```

3.2 Support – Run Diagnostics

This option builds a diagnostic report file for use by iTrinegy support and should only to be used under their direction.

Selecting the option displays the following message:

```
>Confirm & Press OK <
```

Press the OK button to confirm.

If the NE-ONE appliance can connect to the internet it will automatically send the diagnostic report file to the iTrinegy support site.

If there is no internet access then the following message will be displayed and the diagnostic report file will be saved on the NE-ONE appliance.

```
No internet access
SUCCESS: Stored diag
```

Please contact your support representative on how to download the file.

4 LCD Panel Menu Options

4.1 Network Settings

This menu provides management for the NE-ONE Appliance Management (MGMT) port network settings.


```
> Network Settings <
  Support
```

Selecting Network Settings provides four sub-menu options:

```
> Show IP Address <
  DHCP
  Static IP Address
  <-- Back to Menu
```

Note: For clarity the figure shows all four lines although the LCD can only show two lines at a time and you must scroll through the menu options using the Go Up and Go Down arrow keys.

4.1.1 Show IP Address

This option displays the Management (MGMT) Port IP Address.

```
IP:  xxx.xxx.xxx.xxx
GW:  xxx.xxx.xxx.xxx
```

Note: You cannot change the IP address from this option; to change the IP Address select either the “DHCP” or “Static IP Address” options.

4.1.2 DHCP

This option allows you to activate DHCP (i.e. use DHCP) or deactivate it (i.e. use Static IP addressing).

```
> Activate <
  Deactivate
```

If you deactivate DHCP you will need to set a static IP address from the “Static IP Address” option.

If the DHCP operation is successful the display will switch to the “Show IP Address” option with the newly obtained IP Address and Default Gateway (GW) information.

4.1.3 Static IP Address

This option allows you to configure a static IP address for the Management (MGMT) Port.

```
> IP: xxx. xxx. xxx. xxx<
  NM: xxx. xxx. xxx. xxx
  GW: xxx. xxx. xxx. xxx
  DNS: xxx. xxx. xxx. xxx
  Save & Activate
```

Note: For clarity the figure shows all five lines although the LCD can only show two lines at a time and you must scroll through the menu options using the Go Up and Go Down arrow keys.

For a static IP address, you also need to define the Network Mask (NM) and Default Gateway (GW). When you have entered all the relevant parameters select the “Save & Activate” option and press the OK button.

4.2 Support

This menu provides some Management and Licensing functions for the NE-ONE Appliance.

```
> Support <
  Shutdown
```

Selecting Support provides five sub-menu options.

```
> MAC Address <
  License Info
  Product Version
  Run Diagnostics
  Factory Reset
  <-- Back to Menu
```

Emulator Support Menu

Note: For clarity the figures show all six lines although the LCD can only show two lines at a time and you must scroll through the menu options using the Go Up and Go Down arrow keys.

4.2.1 MAC Address

This option displays the MAC address of the NE-ONE Appliance Management (MGMT) Port.

```
XX: XX: XX: XX: XX: XX
```

4.2.2 License Info

This option displays the License Key "Expiry Date" value for the Emulator.

```
Expiry Date:  
Permanent
```

If the License Key has an expiry date (non-perpetual License) then the expiry date will be displayed in yyyy-mm-dd format.

```
Expiry Date:  
2016-12-31
```

4.2.3 Product Version

This option displays the Emulation application code version and the application model/type.

```
Version: 1.7  
Model: 20
```

Emulator Product Version Example

4.2.4 Factory Reset

This option resets the Emulator to its default factory settings.

WARNING: This option will reset (erase) the following items and return the appliance to the factory settings:

- All the appliance user emulation scenarios will be erased and the factory emulation scenarios will be restored.
- All the users and user passwords will be erased and the single factory default admin user will be restored.

The user is asked if they wish to keep the current license key.

```
> Keep License      <
  Remove License
```

If the license is removed the Emulator cannot be used until a new license key is installed via the Web GUI.

Press the OK button to confirm or the F1 key to cancel. The LCD will revert to the main menu and no action is taken if the OK button is not pressed within 15 seconds.

```
> Press OK to Reset <
  and Reboot
```

The appliance will now be reset to the factory defaults and then will reboot.

```
Resetting and Reboot
now. Please wait...
```

4.3 Shutdown

This option will shut down the Emulator and power down the NE-ONE Appliance.

```
>Confirm & Press OK <
```

WARNING: Shutting down an active NE-ONE Appliance will terminate all running emulations and all unsaved emulation scenarios will be lost.

4.4 Reboot

This option will reboot the Emulator.

```
>Confirm & Press OK <
```

WARNING: Rebooting an active NE-ONE Appliance will terminate all running emulations and all unsaved emulation scenarios will be lost.

5 NE-ONE Appliance Initialization Messages

On power up, reboot the following LCD panel messages are displayed. The initial message will depend on the process that was initiated i.e. "Rebooting now.....", etc.

The LCD screen will then blank and the following message sequences will appear, these are identical on a power up or reboot process.

```
System is starting,  
Please wait...
```

Depending whether the Management (MGMT) Port is setup for a static IP address or DHCP the following messages are displayed:

```
IP: xxx.xxx.xxx.xxx
```

Using Static IP Addressing

```
Issuing DHCP Request
```

Using DHCP

For DHCP the following additional messages will be displayed:

```
DHCP Request  
Successful
```

OR

```
DHCP Request Failed
```

If the DHCP request failed or the Appliance cannot detect a network connection on the Management (MGMT) Port the following messages will appear:

```
Waiting for Network  
configuration .....
```

AND

```
Booting without full  
network config .....
```

If the Management (Mgmt) Port cannot detect a connection the following message is displayed:

```
Mgmt Port: no signal  
or not plugged in
```

For the Emulator application the next screen is:

```
Starting IPPE Engine
```

The IPPE Engine is the network impairment application.

Note: Not every instantaneous and error message is covered in this section.

Once the appliance has booted the Emulator main menu is displayed.