



# DP-10iN-100-MU

## Rack Mount E-Fuse DC Distribution Panel



- Provides internet-based monitoring and control of DC power distribution through standard RJ45 Ethernet port
- Each electronic fused channel features independent on/off control and remote reset (no need to manually reset fuses on site)
- Individual voltage and current monitoring for each channel
- User adjustable over and under voltage protection on each channel
- TCP/IP communication over RJ45 ethernet
- Integrated HTTP web server for monitoring and control, no additional software required
- Can be configured to issue alarm email when channel trips off
- Front mounted LCD display and indicator LEDs for local monitoring of status, input voltage and current draw from each channel
- SNMPv1, v2c, & v3 with MIB file from [www.DuraComm.com](http://www.DuraComm.com)
- Email notifications via SMTP

	DP-10i-100-MU	
<b>Input Voltage</b>	-5 to -58 VDC*	
<b>Max Input Current</b>	100 Amps Max	
<b>Max Output Current</b>	30 Amps Max per channel	
<b>Continuous Output Amperage</b>	0 ~ 25 Amps per channel	
<b>eFuse Rating</b>	User Adjustable 100mA to 30A in 100mA increments	
<b>Power Consumption</b>	<150mA	
<b>Voltage Accuracy</b>	+/- 2.5%	
<b>Voltage Resolution</b>	0.01V	
<b>Current Accuracy</b>	+/- 2.5%	
<b>Current Resolution</b>	0.01A	
<b>Minimum Current Reading</b>	50mA	
<b>Dimensions, (H X W X D) Product</b>	44.5 x 482.6 x 152.4 mm	1.75 x 19 x 6 in
<b>Dimensions, (H X W X D) Shipping</b>	203.2 x 533.4 x 381 mm	8 x 21 x 15 in
<b>Weight, Shipping</b>	4.99 KG	11 LB

**\*This unit is designed for positive ground applications only (i.e. -48V systems)**

**\*\*NOTE: Specifications are subject to change without notice**

## Table of Contents

Section 1   Important Safety Instructions .....	4
Installation Warning .....	4
Mounting Location .....	4
Section 2   Product Overview .....	5
Front Panel Description .....	5
Back Panel Description .....	5
Output Enable and eFuses.....	6
Section 3   Status Screen .....	6
Scrolling Status Mode  .....	6
Individual Status Mode  .....	7
DHCP Toggle .....	8
DHCP Toggle and Factory Reset .....	9
Rebooting the Device .....	10
Section 4   Installation .....	11
Connecting Power and Loads .....	11
Conductor Pretreatment.....	11
Web Pages .....	11
Home.....	12
XML .....	12
Configuration.....	13
Channel Set Up .....	13
E-mail alerts .....	15
Configure Buttons.....	16
Device, SMTP, and Network Configuration.....	17
Using DHCP Client .....	19
Using Static IP (no DHCP Client) .....	19
Set-up Network Configuration in Windows.....	20
Alerts.....	24
Section 5   Warranty .....	25
Section 6   Contact Us .....	25

## Section 1 | Important Safety Instructions

### Installation Warning

The individual user should take care to determine, prior to use or installation, whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, DuraComm makes no representation or warranty as to the merchantability, suitability or fitness of these units for any specific application.

DO NOT block any of the cooling vents on the sides and always allow adequate ventilation by not installing the unit inside tightly closed spaces. The physical mounting position is not critical, but the cooling vents must not be blocked.

Failures require investigation as to cause and/or repair of the unit.

**THERE ARE NO USER SERVICEABLE PARTS INSIDE. SERVICE AND REPAIR MUST BE REFERRED TO QUALIFIED FACTORY PERSONNEL**

### Mounting Location

Consider a location that gives easy access and is easy to see. The location should be close, or central, to most of the equipment; especially those that draw large amounts of current. Locate the power source in close proximity to the DP-10i-100-MU, remembering every wire has resistance, and longer wires have more resistance. Understand that #10 cable of 10 feet or more will not allow for adequate full output supply to the DP-10i-100-MU without a significant voltage drop. Install in a cool, dry place with good ventilation. Do not place on top of an amplifier or room heater and do not cover the unit.

## Section 2 | Product Overview

The DP-10i-100-MU is a power distribution panel that provides up to 10 load circuits protected by electronic fuses with remote monitoring of voltage and current for each position, remote on/off control, automatic fuse reset, and email alerts. Each circuit can be user adjusted up to 30 Amps Max. The unit has an easy to use LCD display and LED status indicators are on the front of the unit while input and output are on the rear. Remote monitoring through a standard Ethernet internet connection. Heavy duty DC input connectors provide strong ¼ inch studs to accept up to 100 amps from a single power supply. Convenient pluggable phoenix connector block output terminals for ease of installation. All inputs and outputs are isolated.

### Front Panel Description

- LCD - The status screen operating in two modes: Scrolling status mode or Individual status mode
- Next  /Exit  Buttons - operation for LCD display
- Output Channel LEDs - The LED above the button indicates the current state of that output channel
  - Unlit - the output channel is not active, and no power is being supplied to the output.
  - Green - the output channel is active, and power is being supplied to the output.
  - Red - The eFuse has blown and no power is being applied to the output.
  - Output Enable Buttons - button press will toggle the ON/OFF state of each output channel or Reset eFuse.

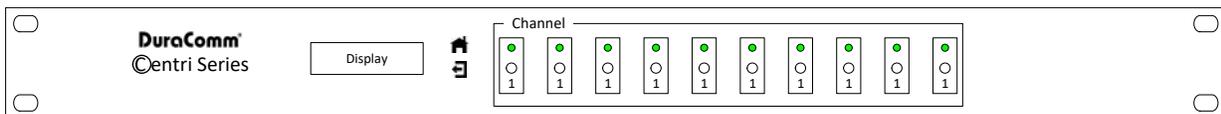


Figure 1. Front panel of the DP-10i-100-MU.

### Back Panel Description

The far-right lug connectors are DC IN for input of a power supply or battery. All output channels have software adjustable fuses. eFuse configuration and adjustment procedures are discussed in a later section of this manual. Ethernet Port connector is a standard RJ45 jack to connect the DP-10i-100-MU to any Internet connection or router.

## Output Enable and eFuses

Each output channel has a toggle button to enable/disable the output. Pressing the corresponding button will toggle the ON/OFF state of the output. The LED above the button indicates the current state of that output. The ON/OFF state is stored in program memory and retained if power is lost to the DP-10i-100-MU. Each output has an “eFuse”, meaning that it has a user-configurable disconnect setting. The fuse value can be configured from the web browser over a network connection. If the eFuse has been blown, the Channel Enable Button must be pressed twice to return to ON status. NOTE: The first button press disables the output and the second button press enables the output.

## Section 3 | Status Screen

The LCD status screen operates in two modes:

- Scrolling status mode  (See Figure 2. Scrolling Status Screen)
- Individual status mode  (See Figure 3. Individual Status Screen)

Press the NEXT  button while in scrolling status mode to go to the individual status mode. Press the EXIT  button while in individual status mode to return the unit to scrolling status mode. Press either button at any time to temporarily enable the backlight on the LCD. The LCD status screen and the NEXT  and EXIT  buttons generally are used to view unit information and settings. In order to configure the unit, the user must use a web browser over the network.

### Scrolling Status Mode

The LCD will display the status of the entire connected output channels see Figure 2. Scrolling Status Screen



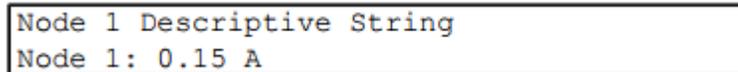
```
Supply: 13.80 V
Node 1: 0.15 A
```

*Figure 2. Scrolling Status Screen.*

The top line displays the current voltage of the power supply. The bottom line displays the status of one channel at a time for a few seconds before scrolling to the next channel. If the channel is enabled, it will display the load (in Amps) drawn from that channel. If the channel is disabled, it will display OFF in that position.

## Individual Status Mode

The LCD status screen will continue to display a screen until the NEXT  or EXIT  button is pressed. If NEXT  is pressed it will display the next status screen. If EXIT  is pressed, it will return to the scrolling status mode. The following is an example of an individual screen.



```
Node 1 Descriptive String
Node 1: 0.15 A
```

*Figure 3. Individual Status Screen.*

The top line shows a descriptive name for this channel, which can be configured using a web browser over the network. The bottom line displays the load or whether the channel is OFF.

## Network Status Screen

While still in Individual Status Mode, press NEXT  past each channel status to view the network status information.



```
Network Status:
192.168.100.220
```

*Figure 4. Network Status Screen.*

In this screen, the second line gives the current network status, and has the following possible values:

- Not Connected – No network connection is found. If using Ethernet, verify that a good Ethernet cable has been connected from a hub/PC to the DP-10i-100-MU.
- DHCP Not Bound – A network connection has been found, but no IP information has been sent by a DHCP server. More information about this is detailed in the Networking section of the DP-10i-100-MU manual.
- IP Address – An IP address is a set of 4 numbers, with each number separated by a ‘.’. This number represents the address on the network and is the address that can be open with a web browser. More information about this is detailed in the Networking section of the DP-10i-100-MU manual.

### DHCP Status Screen

Press NEXT  when viewing the Network Status Screen to view the DHCP client configuration information.

```
DHCP (Auto IP) :  
Disabled
```

Figure 5. DHCP Status Screen.

This screen displays the current DHCP client configuration. DHCP is a protocol that allows for auto IP address configuration. If enabled, the DP-10i-100-MU will attempt to talk to a DHCP server to get IP address configuration automatically. In order to enable this, there must be a DHCP server on the network. Most modern routers have DHCP support. Additional information and details are discussed in the Networking section of this manual.

### HTTP Port Screen

Press NEXT  when viewing the DHCP Status Screen to view the HTTP Port web browser information.

```
HTTP Port  
80
```

Figure 6. HTTP Port Screen.

The HTTP port is the TCP/IP port that the DP-10i-100-MU's web server is using for web browser connections. The default port used by all web browsers is 80, but in order to route or use port-forwarding on some router configurations, it may be required to change this port. More information about this is detailed in the Networking section of this manual.

### DHCP Toggle

By holding down the NEXT  and EXIT  buttons for 5 seconds the DP-10i-100-MU will start a special menu that allows the user to toggle the DHCP setting or perform a factory reset. Disable DHCP? Next=N, Exit=Y

```
Disable DHCP?  
Next=N, Exit=Y
```

Figure 7. DHCP Toggle Screen.

Figure 7 shows the DHCP toggle screen and is the first choice shown after holding down the NEXT  and EXIT  buttons for 5 seconds. Pressing the EXIT  button will toggle the existing value of the DHCP client configuration and then return to normal operation. This only toggles the DHCP client configuration of the DP-10i-100-MU. Refer to the manual of the router in use to adjust the DHCP server configuration.

## DHCP Toggle and Factory Reset

### DHCP Toggle

By holding down the NEXT  and EXIT  buttons for 5 seconds the DP-10i-100-MU will start a special menu that allows the user to toggle the DHCP setting or perform a factory reset. Disable DHCP? Next=N, Exit=Y

```
Disable DHCP?  
Next=N, Exit=Y
```

*Figure 8. DHCP Toggle Screen.*

Figure 8 shows the DHCP toggle screen and is the first choice shown after holding down the NEXT  and EXIT  buttons for 5 seconds. Pressing the EXIT  button will toggle the existing value of the DHCP client configuration and then return to normal operation. This only toggles the DHCP client configuration of the DP-10i-100-MU. Refer to the manual of the router in use to adjust the DHCP server configuration.

### Factory Reset

A reboot of the DP-10i-100-MU is required for this change to have an effect. Pressing the NEXT  button *Figure 9. Factory Reset Screen* will go to the Factory reset screen as shown in Figure 9.

Factory Reset: Press the NEXT  button to advance the toggle of DHCP screen to Factory Reset screen.

```
Factory Reset?  
Next=N, Exit=Y
```

*Figure 9. Factory Reset Screen.*

Press the EXIT  button will perform a factory reset. Press the NEXT  button to bypass performing a factory reset and return the unit to normal operating mode.

Below is a list of the initial values that will be set if a factory reset is performed.

NOTE: Toggling the DHCP client or performing a factory reset requires a power-cycle in order to take effect.

### Factory Defaults:

- DHCP client: Enabled
- IP Address: 192.168.100.220
- Netmask Address: 255.255.255.0
- Gateway Address: 192.168.100.1
- HTTP Port: 80
- HTTP username and password are cleared
- Channel descriptive strings are clear
- Device String: DP-10iN-100-MU
- Expansion port pins set to high impedance
- All eFuses set to 30A
- E-mail server configuration cleared
- All e-mail alerts disabled

### Rebooting the Device

By holding the EXIT  button down for 3 seconds, the device will prompt if you want to reboot (reset) the device:

```
Reboot Unit?  
Next=N, Exit=Y
```

*Figure 10. Reboot Prompt Screen.*

Pressing the NEXT  button will ignore the request and the unit will operate normally. Pressing the EXIT  button will cause the unit to be rebooted. A reason for wanting to reboot the unit is to load new or changed network settings.

## Section 4 | Installation

### Connecting Power and Loads

1. Ensure source power lines are off and locked out before installation.
2. Ensure loads are switched to off, if possible.
3. Connect VDC Negative (-) to the Input Negative connector. Connect VDC Positive (+) to the Input Positive Connector. Note: Do not use this unit with Positive grounds.
4. Connect loads to circuits 1 through 10 in positive/negative pairs. The left connector is Positive (+) and the right connector is Negative (-).
5. **Priority is given to channel 1 and in ascending order after that. Higher current devices should be connected to channel 1 and lower draw devices on the higher channels. For example: In a radio repeater system you would connect the amplifier to Channel 1 then the repeater or radio to Channel 2 and any control devices to the higher number channels.**
6. Connect the unit power leads to a power source. The leads can be run to the input power for the unit or to a separate battery backup unit for extra redundancy.
7. Remove source power lockout and turn on power to DP-10i-100-MU. Verify all DP-10i-100-MU front panel LEDs are ON.
8. Switch on loads one at a time, when you are ready to install and use them.  
**NOTE: Factory Preset eFuse value will be 30 Amps per channel. You should program a proper value for each channel before turning on load equipment.**

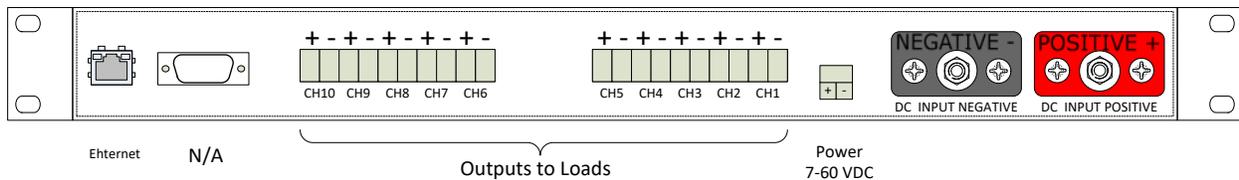


Figure 11. Rear panel of the DP-10i-100-MU.

### Conductor Pretreatment

All kinds of copper conductors can be clamped without treatment. DO NOT solder tin stranded conductors. The solder yields and fractures under high pressure. The result is increased contact resistance and excessive temperature rise. Additionally, corrosion has been observed due to the fluxes. Notch fractures at the transition from the rigid tinned part to the flexible conductors are also possible. Ferrules can be used as a protection when wiring stranded conductors. Copper ferrules prevent the current transfer from being influenced by dissimilar metals and remove the risk of corrosion. Always use the correct tool to crimp the ferrule.

### Web Pages

The status and configuration of the DP-10iN-100-MU can be viewed remotely using a web browser over the network connection. Each output channel can also be remotely controlled from a web browser. There are three main web-pages: Home, XML, and Config; each with Help integrated within the page.

## Home

Home (Status Page) – view power supply status (voltage), view status of each output channel (enabled, current draw) and turn ON/OFF each output channel.



## DP-10i-100-MU

[Home](#) | [XML](#) | [Config](#)

### Control

Output	Status	Current Draw	Control
Power Supply	11.57 V	3.03 A Total	---
Chan 1	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 2	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 3	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 4	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 5	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 6	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 7	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 8	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 9	ON	0.00 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>
Chan 10	ON	3.03 A	<input type="button" value="On"/> <input type="button" value="Off"/> <input type="button" value="Pulse"/>

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Figure 12

## XML

This page allows you to download the raw XML information of the status page of the distribution panel and output channels. This is useful for interfacing with external logging software.

## Configuration

The configuration page allows you to adjust the settings for the DP-10i-100-MU.



## DP-10i-100-MU

[Home](#) | [XML](#) | [Config](#)

### Configure Device

Configure Outputs				
Channel #	Description	Fuse Setpoint (Amps)	Low Voltage Disconnect (Volts) (Zero to Disable)	High Voltage Disconnect (Volts) (Zero to Disable)
Channel 1	<input type="text" value="Chan 1"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 2	<input type="text" value="Chan 2"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 3	<input type="text" value="Chan 3"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 4	<input type="text" value="Chan 4"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 5	<input type="text" value="Chan 5"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 6	<input type="text" value="Chan 6"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 7	<input type="text" value="Chan 7"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 8	<input type="text" value="Chan 8"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 9	<input type="text" value="Chan 9"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Channel 10	<input type="text" value="Chan 10"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Power Fail Threshold (Volts)	<input type="text" value="8"/> (Supply voltage at which power is considered too low. Used only for E-mail alert.)			

Figure 13

### Channel Set Up

The first section allows you to set a descriptive name for each channel of the DP-10i-100-MU along with setting the eFuse point (overcurrent), low voltage disconnect, and overvoltage protection for each channel. The power fail threshold allows you to set a

global low voltage disconnect for all output channels. See *Figure 14* for the speed with which a fuse trips.

<b>E-mail Alerts</b>	Fuse Tripped	Disabled ▼
	Low/High Voltage Disconnect (Leaves set voltage range)	Disabled ▼
	Low/High Voltage Reconnect (Reenters set voltage range)	Disabled ▼
	Power Fail (Voltage below power fail threshold)	Disabled ▼
	Power Stable (Voltage above power fail threshold)	Disabled ▼
	Power Up (Device powers on)	Disabled ▼
Changing these values requires a reboot.		
<input type="button" value="Save Outputs"/> <input type="button" value="Cancel Changes"/>		

*Figure 14*

## E-mail alerts

The DP-10i-100-MU can be configured to send e-mail alerts. For example, the DP-10i-100-MU can send an e-mail if one of the fuses has blown. In order to send e-mails, the DP-10i-100-MU must have access to an SMTP server. An SMTP server is a server on the internet that relays e-mails. The configuration web-page can be used to point the DP-10i-100-MU to a valid SMTP server. In order to prevent unauthorized access or the relaying of spam e-mails, many SMTP servers have strict rules about who can access the server. SMTP servers may ignore clients for the following reasons:

- Outside its local network.
- E-mails not destined to someone on its network.
- E-mails not sent from someone on its network.
- Invalid authorization (username and password required).

If the DP-10i-100-MU appears to be configured correctly but no e-mails are being received the configure webpage can be used for debugging. On the configure web-page there is a row labeled 'E-mail Status'. Here is a description of some of the values seen on this row:

- 'Idle' - no attempts to send an e-mail performed since power-up.
- 'Busy' - currently trying to send an e-mail.
- 'OK' - last e-mail appeared to be sent successfully.
- 'Waiting for SMTP to be free' - Many SMTP servers will block an e-mail client if it tries to send too many e-mails in a short time period. To prevent the DP-10i-100-MU from doing this, there is a 3-minute delay between e-mails. If a trigger event occurred within that 3 minute period, that e-mail will be delayed until this period has expired.
- "FAIL, XXX, YYY" - An error occurred on last e-mail. XXX will be a descriptive tag of the problem. YYY is an SMTP result code.

If XXX is 'CONNECT' that means it could not make a TCP/IP connection to the SMTP server. Verify that the E-mail hostname and E-mail port are correct for the desired SMTP server. If using a hostname instead of an IP address (ex someserver.com) then verify that the DNS server setting of the DP-10i-100-MU is correct.

If YYY is not 0, that means the SMTP server responded with an error during the transaction. An internet search of SMTP result codes will give an overview of the many errors that are possible. If presented with an error code, an internet search of that error may yield information as to why the SMTP server is rejecting the e-mail.

Configure Buttons			
Channel #	Front Panel ?	Web GUI ?	Pulse Off Delay ?
Channel 1	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 2	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 3	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 4	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 5	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 6	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 7	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 8	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 9	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
Channel 10	Toggle ▼	Toggle and Pulse ▼	Pulse disabled ▼
<input type="button" value="Save Buttons"/> <input type="button" value="Cancel Changes"/>			

Figure 15

## Configure Buttons

This section (Figure 15) allows you to configure the control buttons in the front panel (Figure 1) and in the status page (Figure 12). These can be set to operate in the “Toggle” or/and “Pulse” configurations. The default is set in “Toggle” configuration with “Pulse disable”. In “Toggle” configuration, the button turns the channel between “ON” and “OFF”. In “Pulse” configuration, pushing the button will turn off the channel with a selected time delay, then turns on the channel after the time delay is over. The duration of the time delay is defined by “Pulse Off Delay” from 500 msec up to 60 seconds.

## Device, SMTP, and Network Configuration

<b>Configure Device</b> Many of these require a reboot	
<b>ID</b>	<input type="text" value="DP-10i-100-MU"/> This is displayed in the DHCP client list and in the title of the webpages.
<b>DHCP Client</b>	<input type="text" value="Enabled"/>
<b>IP Address</b>	<input type="text" value="192.168.100.220"/> This is not used if DHCP is enabled
<b>Gateway Address</b>	<input type="text" value="192.168.100.1"/> This is not used if DHCP is enabled
<b>Netmask</b>	<input type="text" value="255.255.255.0"/> This is not used if DHCP is enabled
<b>DNS</b>	<input type="text" value="192.168.100.1"/> This is not used if DHCP is enabled
<b>Web Username</b>	<input type="text"/> Set a username/password in order to view the webpages. Leave either username or password blank to disable login.
<b>Web Password</b>	<input type="text"/> Set a username/password in order to view the webpages. Leave either username or password blank to disable login.
<b>HTTP Port</b>	<input type="text" value="80"/> TCP port the Webserver listens to. Default value a web browser uses is 80.
<b>Email Server</b>	<input type="text"/> If blank, all e-mailing will be disabled. This can be an IP address (ex 192.168.100.1) or a fully qualified hostname (ex mailserver.com). In order to use a hostname you must have access to a DNS server. If blank, all e-mailing will be disabled.
<b>Email Port</b>	<input type="text" value="25"/> If 0, all e-mailing will be disabled. Default for most Email servers is 25.
<b>Email Username</b>	<input type="text"/> Required if your SMTP server requires authentication (also see Email Password). RR4005i does not support encrypted authentication (SSL).

Figure 16

This section (Figure 16) allows you to change the displayed name of the device. The default is DP-10i-100-MU. You can also configure the network settings for security or local networking and set up a username and password for the webpage. The web pages can be password protected to prevent unauthorized remote access. Note: Review all settings when installing the DP-10i-100-MU.

<b>Email From</b>	<input type="text"/>
<b>Email Status</b>	Idle
<b>Backlight</b>	Auto On/Off ▼
<b>Fuse speed</b>	~150ms ▼
<b>Power on enable delay</b>	1 second ▼ When the unit it turns on, it will add this delay when turning on the outputs. This delay is added between each output. This is used to reduce in-rush current that will be caused by turning on all the outputs at the same time.
<b>Watchdog Timer</b>	Disabled ▼ Unit will reset if a NET_WDT_CLR is not received within this time period. When unit resets the outputs will be temporarily disabled until full power-up. If you are unsure about how to use this option then disable it.
<b>Front panel buttons</b>	Enabled ▼ If "Disabled", the buttons on the front panel for controlling power to the Powerpole are disabled. The NEXT and EXIT buttons on the panel are always enabled.
<input type="button" value="Save Config"/> <input type="button" value="Cancel Changes"/>	
<input type="button" value="Reboot Device"/>	

Figure 17

The backlight can be adjusted for energy savings.

The eFuse trip delay “Fuse Speed” can be set between “fast blow,” “normal,” and “slow blow” speeds.

Power on delay adds a start-up delay between each channel when the device is powered on to prevent inrush current spikes.

The watchdog timer is a network setting for an external network watchdog timer from the Ethernet connection.

The front panel button disables lock out the front panel controls to prevent the unit from being tampered with.

## Using DHCP Client

If the local network is being used by the DP-10i-100-MU has a DHCP server, it is strongly recommended to enable the DHCP client on the DP-10i-100-MU, as it will significantly simplify the network configuration required. The DHCP client of the DP-10i-100-MU is enabled by default. Refer to the manual of a gateway, routers or server in use to determine if DHCP is enabled or how to enable a DHCP server on the network.

The DHCP client of the DP-10i-100-MU can be enabled using the NEXT and EXIT buttons on the front of the DP-10i-100-MU. If DHCP is enabled, the IP address and connection status of the DP-10i-100-MU can be viewed in one of two ways:

- View the network status screen on the front of the DP-10i-100-MU. (*Figure 4*)
- View the DHCP client list of the DHCP server. Refer to the DHCP server manual for the router or server PC in use for additional instructions. The default name that will be displayed in the DHCP client list is “DP-10i-100-MU”, but this name can be changed by using the Configure web-page of the DP-10i-100-MU.

## Using Static IP (no DHCP Client)

If the network being used by the DP-10i-100-MU does not have a DHCP server, the static IP configuration of the DP-10i-100-MU has to be changed to be compatible with the DP-10i-100-MU. For example, if the IP range of the network is 10.0.\*.\* the IP address of the DP-10i-100-MU needs to be changed to a valid number in the range and the netmask needs to be changed to 255.255.0.0. If the IP range of the network is 192.168.100.\*, then the factory default settings of the DP-10i-100-MU would be valid. Changing the network configuration of the DP-10i-100-MU can only be done through a web browser. Therefore, commonly a PC IP address might need to be temporarily changed to the DP-10i-100-MU’s factory default 192.168.100.220 network range.

## Set-up Network Configuration in Windows

1. See the 'DHCP Toggle and Factory Reset' section in this manual for directions to disable the DHCP client on the DP-10i-100-MU.
2. Disconnect PC from any Ethernet networks.
3. Connect an Ethernet cable directly from the PC to the DP-10i-100-MU. Most modern PCs will detect this configuration and automatically perform a network crossover. If the PC does not perform this function, then an Ethernet crossover cable will have to be used.
4. Open the Control Panel from the Start Menu. (Figure 18 window will appear)
5. Make sure the Control Panel is in 'View by: Category' mode (see top left of Control Panel) and select View network status and tasks. (Figure 19 window will appear)
6. Select 'Change adapter settings' on the left side of the screen. (Figure 18 window will appear)
7. Right click on 'Local Area Connection' and select Properties. (Figure 19 window will appear)
8. Left click on Internet Protocol Version 4 (TCP/IPv4) and click on Properties button.

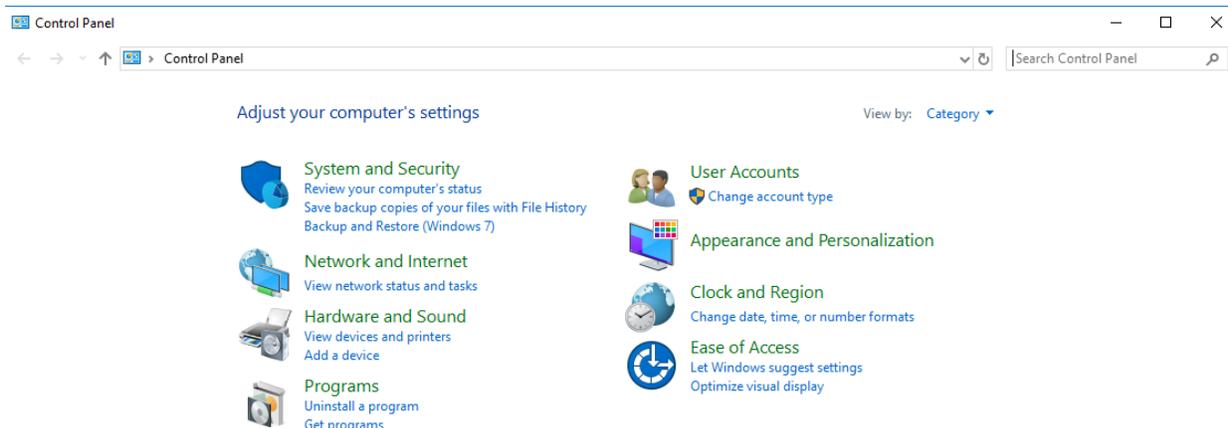
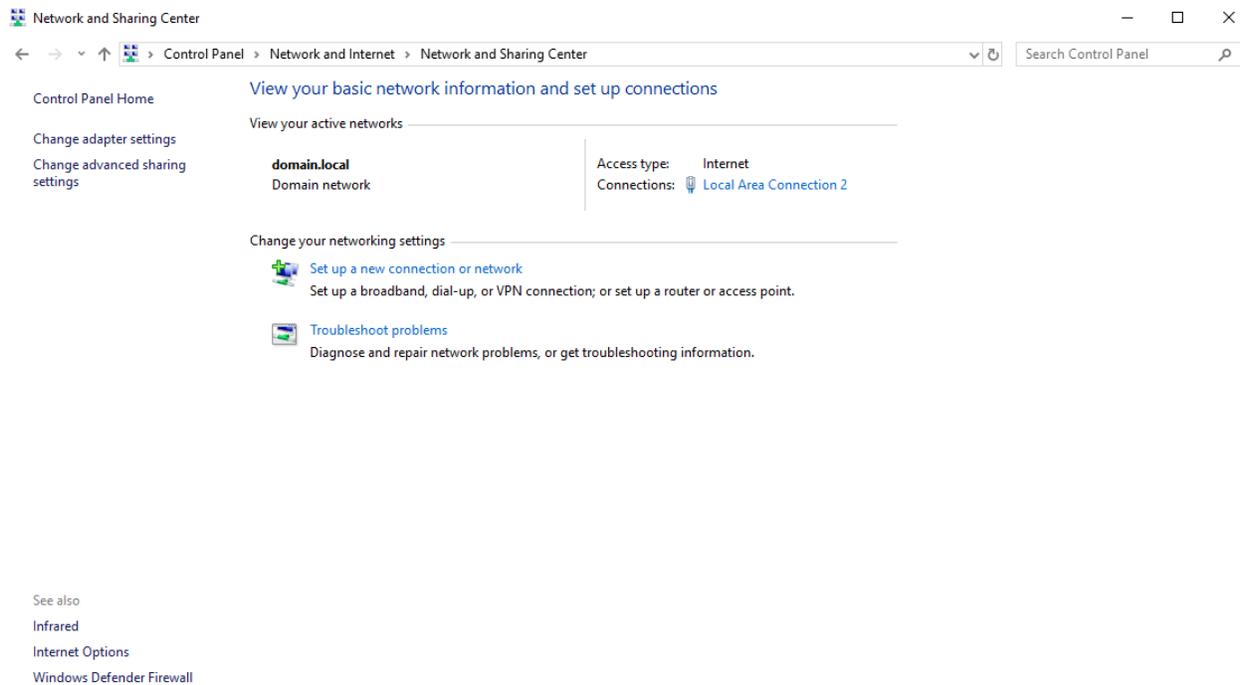


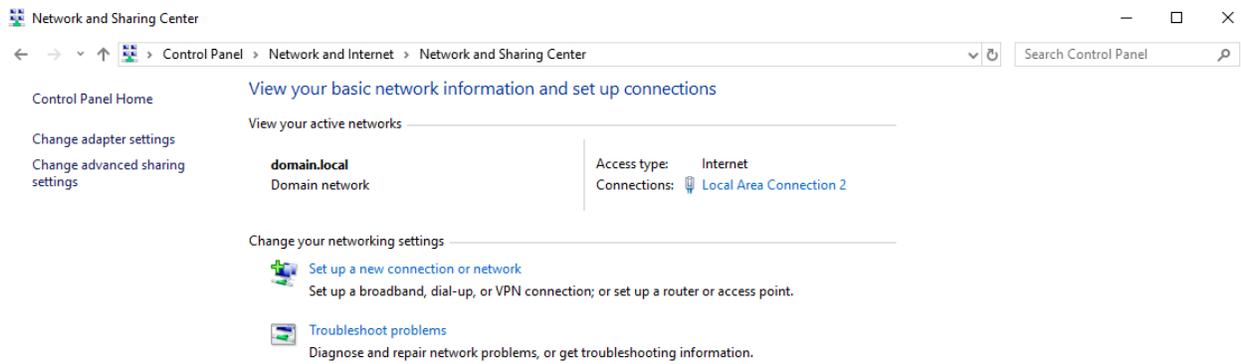
Figure 18



*Figure 19*

9. The Internet Protocol Version 4 (TCP/IPv4) window should be open. This screen configures the DHCP client or static IP address of the PC. Before any settings are changed, it is recommended to write down the old values so the PC can be restored back to normal operation after configuring the DP-10i-100-MU. Confirm the Use the following IP address button is selected. (*Figure 20* window will appear)

- a. For IP address, enter a value of '192.168.100.221'
- b. For Subnet mask, enter a value of '255.255.255.0'



See also  
Infrared  
Internet Options  
Windows Defender Firewall

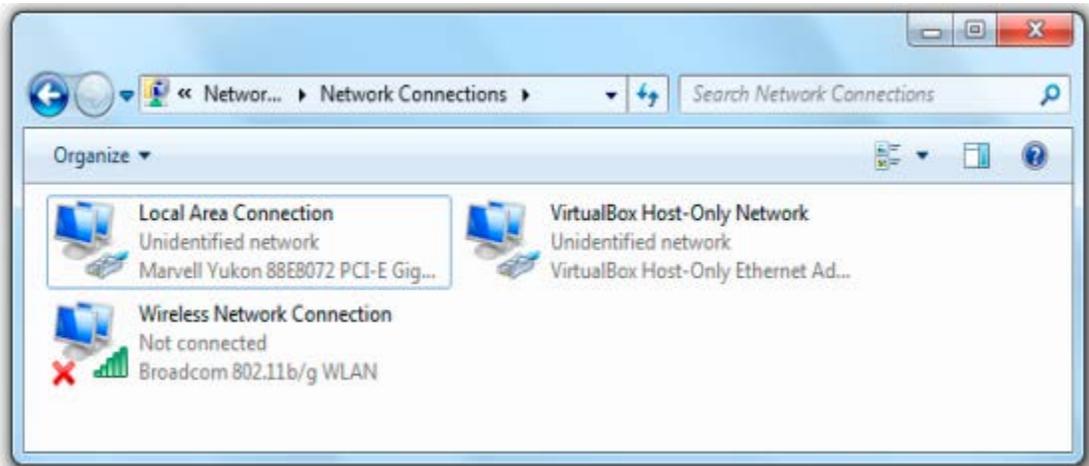


Figure 20

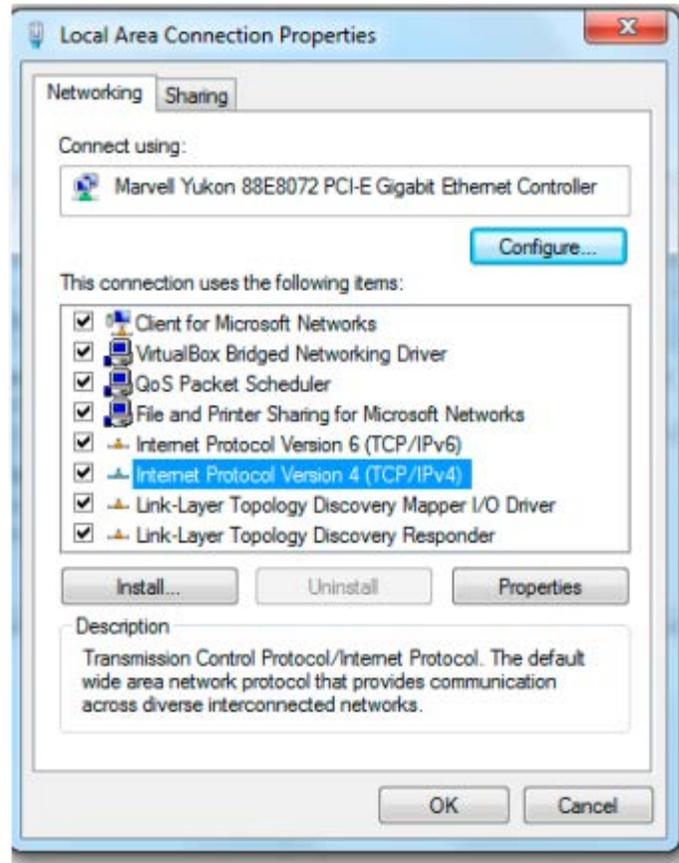


Figure 21

10. Click OK to save these settings.
11. Open a web browser to the address 192.168.100.220 to open the DP-10i-100-MU web-pages. Select the Configure web-page and configure the IP settings (IP Address, netmask, and gateway) to be compatible with your network. For example, if the network that the DP-10i-100MU is running on is a range of 10.0.0.\*, then an IP Address of 10.0.0.220 would be valid (if not already used on the network) with a netmask of 255.255.255.0. A screen similar to Figure 23 will appear.

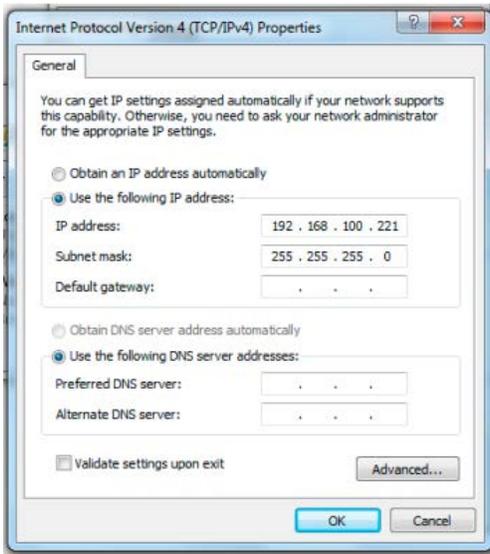


Figure 23

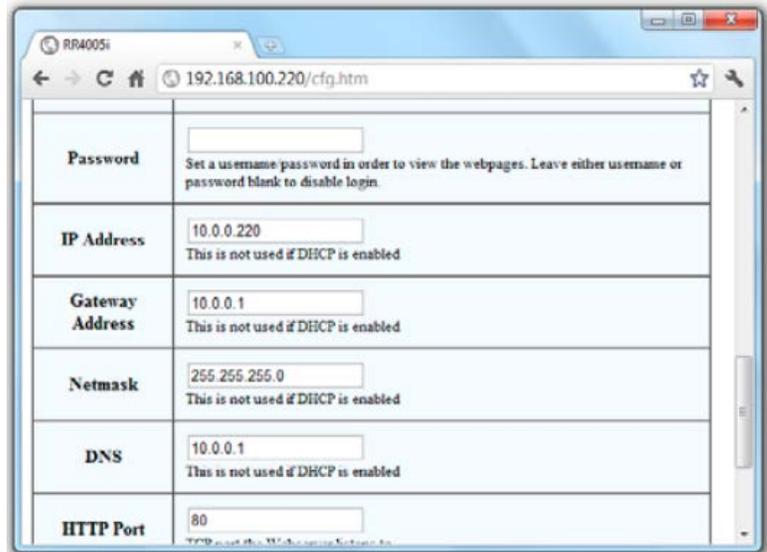


Figure 22

12. Click on Save Config button. The new network settings are now saved to the DP-10i-100-MU and will be applied on the next power-cycle. Power-cycle the DP-10i-100-MU.
13. Click back in the web browser to the Internet Protocol Version 4 (TCP/IPv4) page and return the network settings to the previous state.
14. Open the web browser and using the IP address set in Step 11, verify the settings are correct. The DP-10i-100-MU is now accessible from the network.

## Alerts

### Web Pages

The status and configuration of the DP-10i-100-MU can be viewed remotely using a web browser over the network connection. Each output channel can also be remotely controlled from a web browser.

There are four main web-pages, each with Help integrated within the page:

- Home – view power supply status (voltage), view status of each output channel (enabled, current draw) and turn ON/OFF each output channel.
- XML – raw XML information of the status of the power supply and output channel. Useful for interfacing with external logging software.
- Config – Set a descriptive name for DP-10i-100-MU, set a descriptive name for each output channel, set efuse point, set network configuration, set username/password, and more. The web pages can be password protected to prevent unauthorized remote access. The username/password can be set on the Config page.

## Section 5 | Warranty

*DuraComm warrants to the initial end user, each power supply manufactured by DuraComm to be free from defects in material and workmanship when in normal use and service for a period of three years from the date of purchase from an authorized DuraComm dealer.*

*Should a product manufactured by DuraComm fail or malfunction due to manufacturing defect, or faulty component, DuraComm, at its option, will repair or replace the faulty product or parts thereof, which, after examination by DuraComm, prove to be defective or not operational according to specifications in effect at the time of sale to the initial end user. The product that is replaced or repaired under the provisions of this warranty will be warranted for the remainder of the original warranty period, only, and will not extend into a new three year warranty period.*

*The limited warranty does not extend to any DuraComm product which has been subject to misuse, accidental damage, neglect, incorrect wiring not associated with the manufacturer, improper charging voltages, or any product which has had the serial number removed, altered, defaced, or changed in any way.*

*DuraComm reserves the right to change, alter, or improve the specifications of its products at any time, and by so doing, incurs no obligation to install or retrofit any such changes or improvements in or on products manufactured prior to inclusion of such changes.*

*DuraComm requires any product needing in or out of warranty service to be returned to DuraComm. All requests for warranty service must be accompanied by proof of purchase, such as a bill of sale with purchase date identified. DuraComm is not responsible for any expenses or payments incurred for the removal of the product from its place of use, transportation or shipping expenses to the place of repair, or return expenses of a repaired or replacement product to its place of use.*

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