# 48-Port ADSL 2/2+ IP DSLAM

IDL-4802 / IDL-4802-48

Quick Installation Guide

# Table of Contents

## *Package Contents*

### IDL-4802

- IDL-4802 Unit x 1
- AC Power Cord x 1
- CD x 1
- Quick Installation Guide x 1
- 2-Meter Telco-50 Cable x 4
- Console Cable x 1
- Rack-mounting Ear x 2
- Screw Package x 2
- Connect Tenon x 4
- RJ-45 Cable for Fan x 1

### IDL-4802-48

- IDL-4802-48Unit x 1
- DC Power Terminal Block x 1
- CD x 1
- Quick Installation Guide x 1
- 2-Meter Telco-50 Cable x 4
- Console Cable x 1
- Rack-mounting Ear x 2
- Screw Package x 2
- Connect Tenon x 4
- RJ-45 Cable for Fan x 1

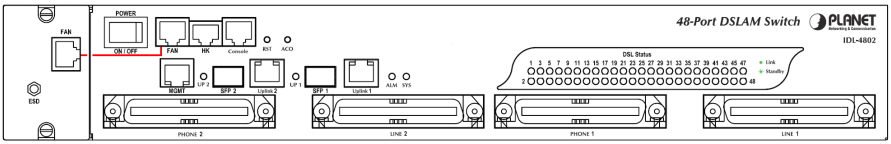
If any of above items are damaged or missing, please contact your dealer immediately.

| | |
|---|---|
|  Note | Using a power supply with a different voltage rating will damage and void the warranty for this product. |

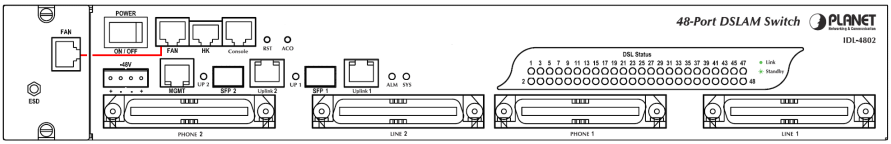
# *Overview*

## Front Panel

The front panels are shown below.




IDL-4802




IDL-4802-48

## Interface Definition

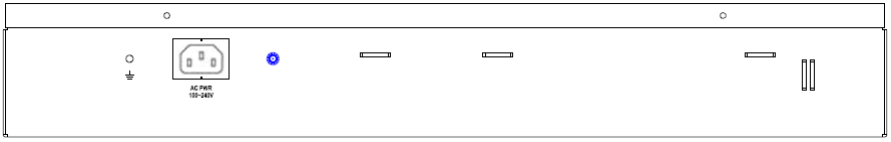
| Interface | Description |
|---|---|
| POWER | Power On / Off switch. |
| -48V | -48V DC Power plug-in.<br>(*IDL-4802-48) |
| FAN | RJ-45 port for connection with the RJ-45 port on the front panel of fan card to provide power to the fan. |
| HK | RJ-50 port for housekeeping inputs and one alarm contact output. |
| Console | RS-232 port for system configuration and maintenance. (9600, 8, N, 1) |
| RST | A hidden reset button for hardware resetting. |
| ACO | Alarm Cut Off |
| MGMT | Ethernet Port connected to LAN for providing system out-band Telnet control interface, such as system monitor, control or software upgrade. |
| Uplink 1 & 2 | Gigabit Ethernet electrical trunk ports. |
| SFP 1 & 2 | Gigabit Ethernet SFP trunk ports. |
| PHONE 1 & 2 | RJ-21 connector for connecting POTS lines. |
| LINE 1 & 2 | RJ-21 connector for connecting DSL lines. |

## LED Definition

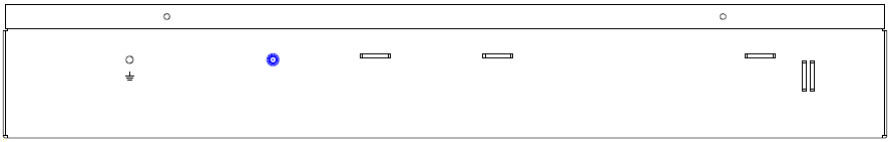
| LED | Color | | Description |
|---|---|---|---|
| Uplink | Orange | On | Uplink Port connect with 100/1000Mbps Ethernet link |
| | | Off | Uplink Port connect with 10Mbps Ethernet link |
| | Green | On | Active |
| | | Off | Inactive |
| | | Flash | Uplink Port Transmit / receive data |
| SYS | Green | | Normal Operation |
| | Red | | Self-test fail |
| ALM | Green | | Normal Operation |
| | Red | | To indicate the system alarm status |
| DSL status | Green | On | ADSL Port is activated and linked |
| | | Off | ADSL Port is Disabled |
| | | Flash | ADSL Port is activated but not linked |

## Rear Panel

The rear panels are shown below.



IDL-4802



IDL-4802-48

## Port Definition

| Port | Description |
|---|---|
| AC PWR | AC Power cord plug-in, 100 - 240VAC is allowed.<br>(*IDL-4802) |

## *Safety Instruction*

The following is the safety instructions for IP DSLAM before installing.

>> The maximum operating temperature of the IP DSLAM is 65ºC. Care must be taken to allow sufficient air circulation or space between units when the IP DSLAM is installed inside a closed rack assembly and racks should safely support the combined weight of all IP DSLAM.

>> The connections and equipment that supply power to the IP DSLAM should be capable of operating safely with the maximum power requirements of the IP DSLAM. In the event of a power overload, the supply circuits and supply wiring should not become hazardous.

>> The AC power cord must plug into the right supply voltage. Make sure that the supplied AC voltage is correct and stable. If the input AC voltage is over 10% lower than the standard may cause the IP DSLAM to malfunction.

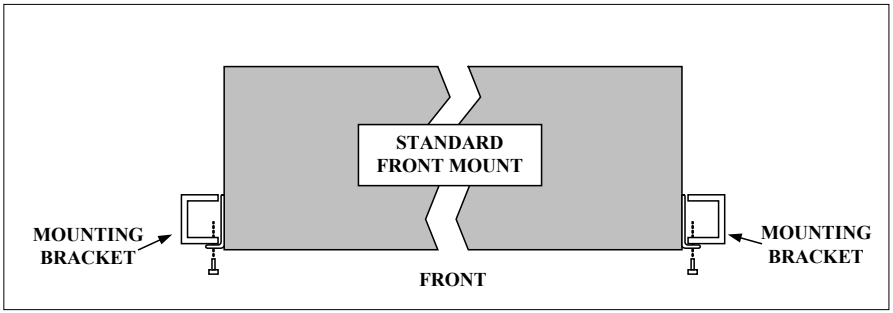
>> Generally, when installed after the final configuration, the product must comply with the applicable safety standards and regulatory requirements of the country in which it is installed. If necessary, consult for technical support.

>> A rare condition can create a voltage potential between the earth grounds of two or more buildings. If products installed in separate building are interconnected, the voltage potential can cause a hazardous condition. Consult a qualified electrical consultant to determine whether or not this phenomenon exists and, if necessary, implement corrective action before interconnecting the products. If the equipment is to be used with telecommunications circuit, take the following precautions:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet location unless the jack is specially - designed for wet location.
- Never touch un-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Caution when installing or modifying telephone lines (other than a cordless telephone) during an electrical storm. There is a remote risk of electric shock from lightning.
- Do not use a telephone or other equipment connected to telephone lines to report a gas leak in the vicinity of the leak.

# *Hardware Installation*

The PLANET IDL-4802 is a 1.5U high box-type IP DSLAM with rack-mountable enclosure. It can be installed in a standard 19-inch rack by using the mounting brackets provided. Mount the shelf on the rack using the large screws provided.

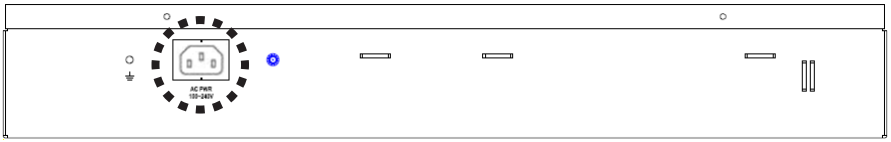



The procedures to connect and wire the system are as follows,

## 1. Power and Ground Connections

### Power Connections

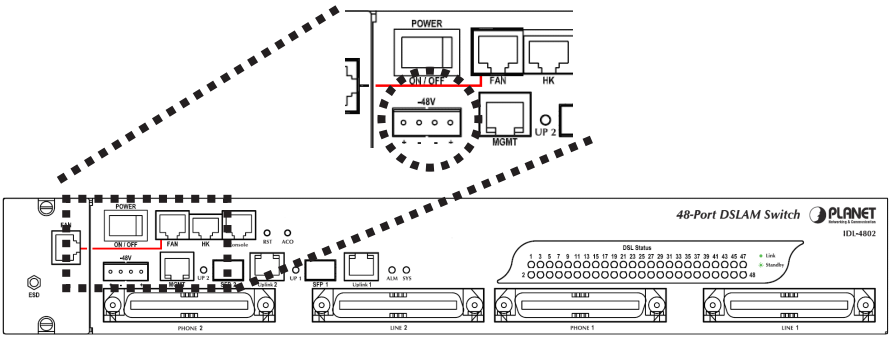
With IDL-4802, connect the AC power cord to the AC supply socket on the rear panel as below figure, and plug the cord into the external power source. The voltage must be 100 to 240V AC.



With IDL-4802-48, the DC power interface is a 4-pin terminal block with polarity signs on the front panel as below figure.

It can be powered from two –48V DC power supply. The DC power connector is a 4P terminal block; 2P is for accommodating one DC power input and other 2P is for accommodating another DC power input. The DC power should be connected to a well-fused power supply.

After completing chassis installation, please apply power to the fused power distribution panel feeding the chassis. When using a DC voltmeter, please check for proper voltage: -60V ~ -36V DC, and make sure that the polarity is correct.



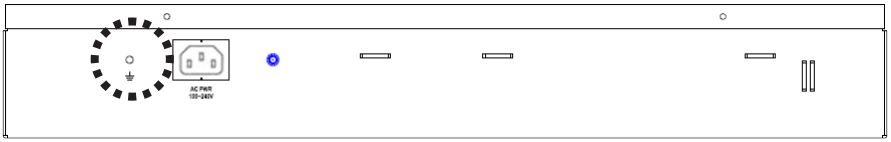

## Ground Connections

### ■ In Central Office:

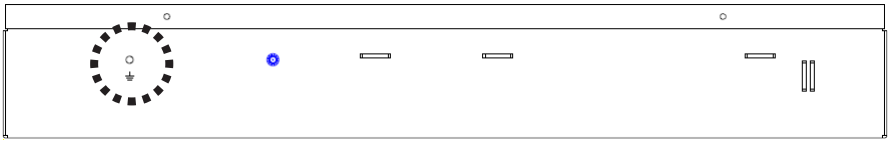
There should be a CO GND that is adequately grounded. If the measured resistance from the grounding screw (on the rear panel of the DSLAM, refer to below figure) to CO GND is less than 5 Ohm, then it can be assumed that the system is well grounded. If the measured resistance is larger than 5 Ohm, it is recommended to connect the grounding screw to CO GND using #14 or #12 AWG wire gauge conductor.

### ■ In Remote Cabinet:

The IDL-4802 should be grounded by connecting a #14 or #12 AWG conductor between the grounding screw (on the rear panel of the DSLAM, refer to below figure) and the earth ground or main grounding bar. The resistance between the chassis and the grounding bar should be less than 25 Ohm.



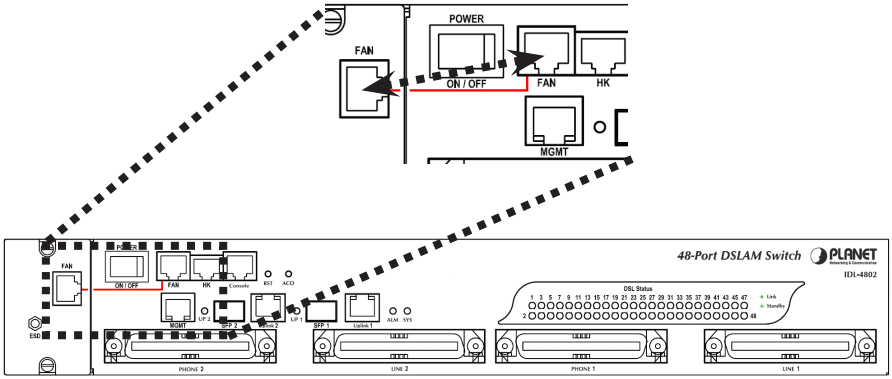
Grounding Screw of IDL-4802



Grounding Screw of IDL-4802-48

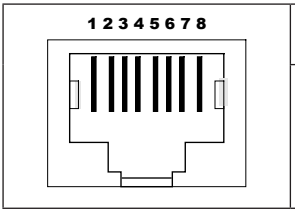
| | |
|---|---|
| Note | Ensure that all power sources to the device are turned off during the installation. |

## 2. FAN Cable Connection




There are two FAN ports on the front panel. One is on the FAN card; the other is beside the HK port. To make the fans work, you must use an RJ45-to-RJ45 connector cable to connect the two FAN ports.

**FAN Port RJ-45 pin assignment:**




| 3 , 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|
| GND | FAN ERR1 | FAN ERR2 | FAN ERR3 | FAN Status |

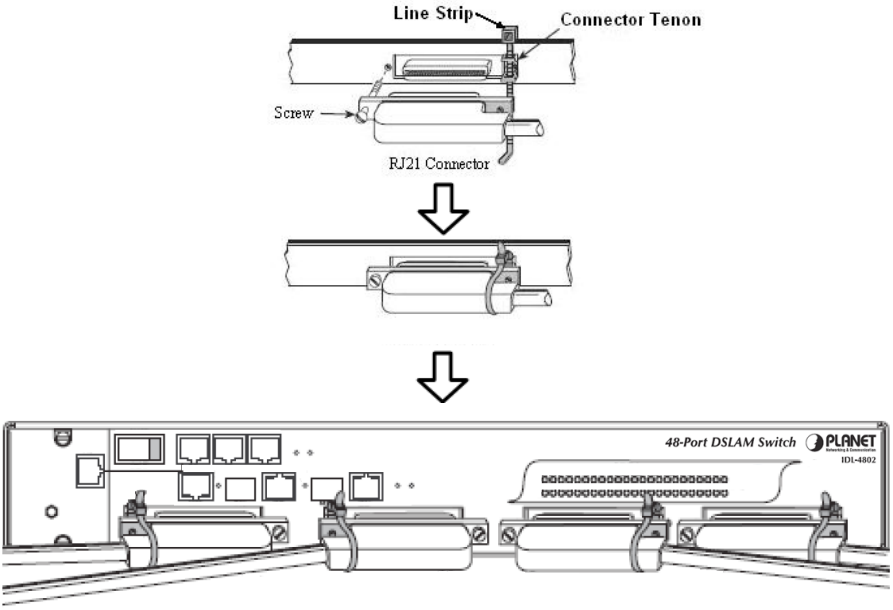
## 3. ADSL and POTS Connections

The IDL-4802 supports 48 ports ADSL subscribers per box. There are four RJ-21 50-pin female connectors on the front panel of the system. Two for ADSL lines and two for POTS interfaces.

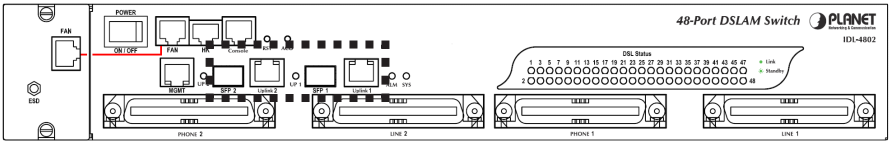
To connect the subscriber lines, use cables with the RJ-21 50-pin male connectors. When installing, just plug the end of cable with connector into the LINE and PHONE connectors on the front panel. The other end of the cable is generally tied to the MDF (Main Distribution Frame).

| | |
|---|---|
| Note | The MDF Patch panel is optional of standard package**.** |

Please plug-in the RJ-21 cable with connector tenon as below figures.




## 4. Uplink Interfaces Connections

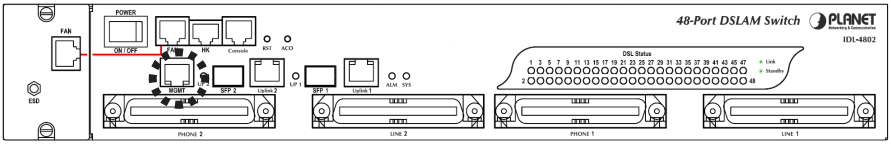



The system provides two types of trunk interfaces (two ports for each type). There are electrical (RJ-45) and optical (SFP) interfaces. When both electrical and optical ports are connected, system will automatically select the interface according to the priority setting (Fiber first or Copper first).

**SFP (Mini-GBIC):**

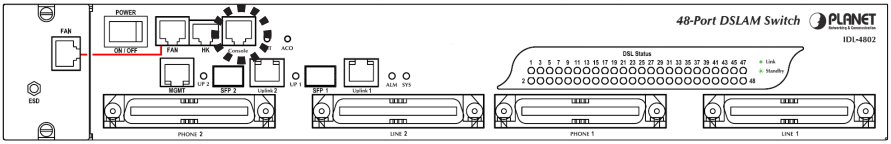
Prepare a proper SFP module and install it into the optical trunk port. Then you can connect fiber optics cabling that uses LC connectors or SC connectors (with the use of an optional SC-to-LC adapter) to the fiber optics connector on the trunk port.

## 5. Management Port Connection



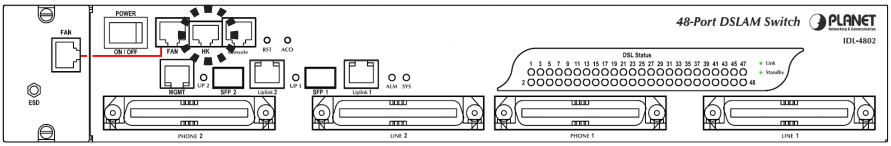

The IDL-4802 provides one RJ45 (MGMT) on the front panel for Ethernet interface connection. To connect the Ethernet interface to PC directly, an Ethernet crossover cable is required.

## 6. Console Port Connection




The Console interface on the front panel is the main control interface of the IDL-4802. To connect the host PC to the console port, a RJ45 (male) connector-to-RS232 DB9 (female) connector cable is required. The RJ45 connector of the cable is connected to the COM port of the DSLAM; the DB9 connector of the cable is connected to the PC COM port.

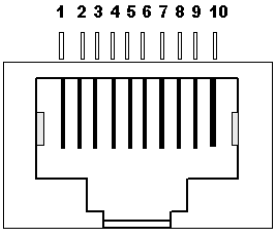
## 7. Housekeeping Connection




The IDL-4802 equips with a RJ-50 port (HK) on the front panel to provide four housekeeping inputs and one alarm contact output. Generally, housekeeping contacts can connect to environment-sensor-controlled switch to indicate the operation environment condition.

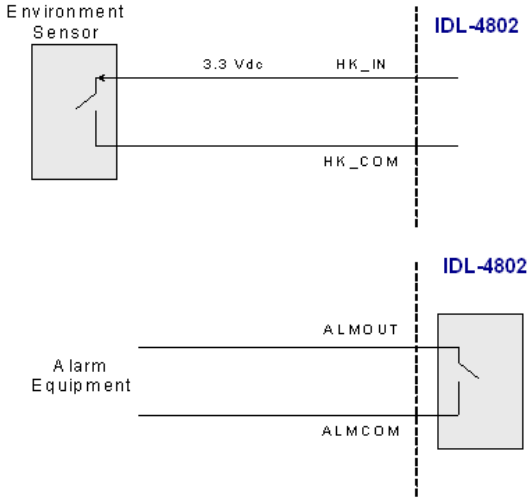
The HK circuit contains a photo coupler powered by the IDL-4802 to detect the "open" or "close" status of the loop between HK_IN and HK_COM (users don't need to feed 3.3v power into the circuit). As to the alarm output, there is a relay between ALMOUT and ALMCOM to control the status of the loop to be "OPEN" or "CLOSE" to the alarm equipment (close between ALMOUT and ALMCOM for alarm; open if no alarm).

**HK Port RJ-50 pin assignment:**




| | |
|---|---|
| 1 | ALMOUT |
| 2 | HK1IN |
| 3 | HK1COM |
| 4 | HK2IN |
| 5 | HK2COM |
| 6 | HK3IN |
| 7 | HK3COM |
| 8 | HK4IN |
| 9 | HK4COM |
| 10 | ALMCOM |

**Operation diagram of Housekeeping Inputs and Alarm Contact Output:**



# *WEB Configuration*

This section describes how to use Web Configuration Tool to maintain your IP DSLAM. The IDL-4802 contains a HTTP server. You can login and configure it by using your Web Browser.

**Preparation**

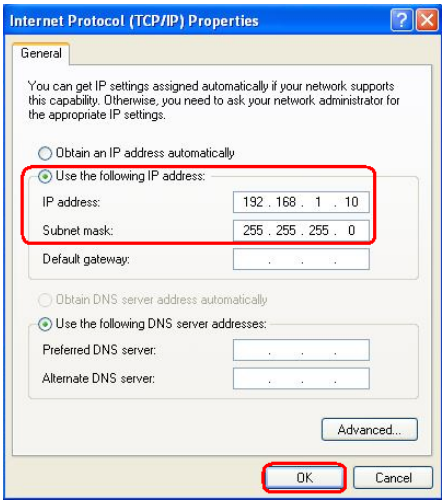
Before attempting to configure the IDL-4802, please ensure as below:

Set your computer's IP with the same network segment of the IP DSLAM.

**(For example: IDL-4802 default MGMT IP is 192.168.1.1 / 255.255.255.0)**

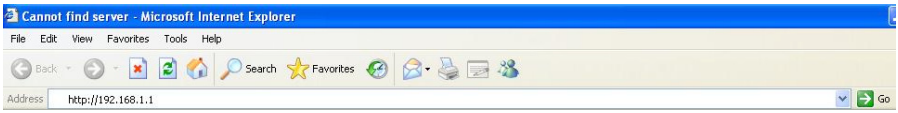
Then you can set computer's IP to:

**192.168.1.x / 255.255.255.0.** (The range for x is from 2 to 253)




## Step 1: Using your WEB Browser

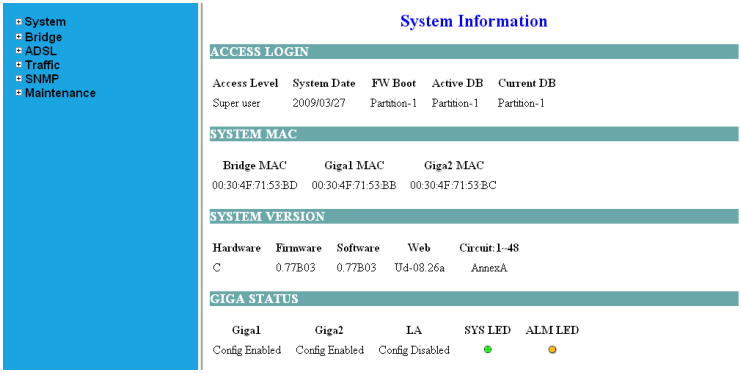
Open web browser and type **http://192.168.1.1** in the browser's address box. This IP is the default MGMT IP address of IDL-4802. Press Enter.



## Step 2: Login the IDL-4802

A login page will appear. Please type your username / password and click **"Sign in"**. (The default **username / password is admin / admin**)

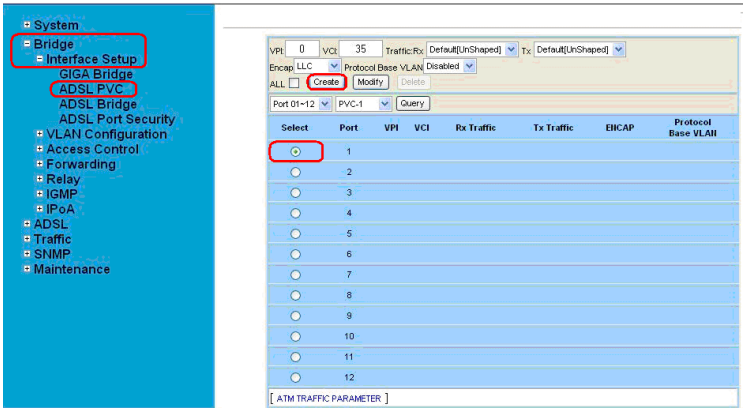

After you login the IDL-4802, you will see the system information as below.



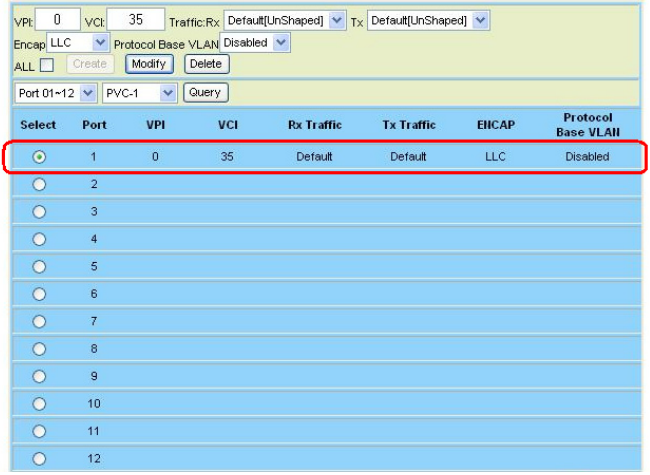
## Step 3: Configure the DSL PVC

Go to **"Bridge → Interface Setup → ADSL PVC"** setting screen, select the ADSL port and click **"Create"** to apply the PVC settings.

(For example, create PVC-1 to Port 1. The default **VPI / VCI** is **0 / 35**)

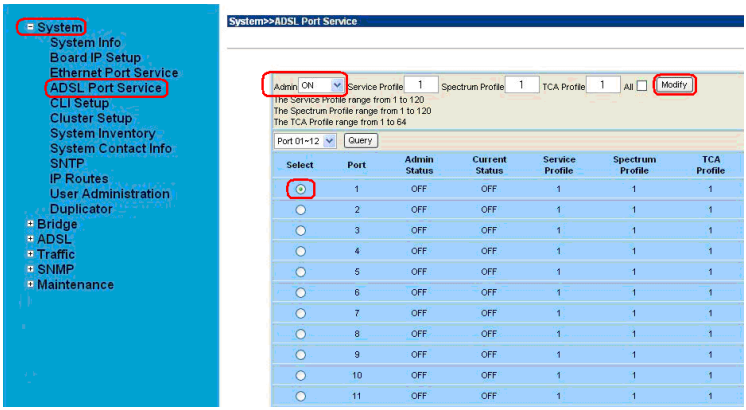



You can see the Port has been created.

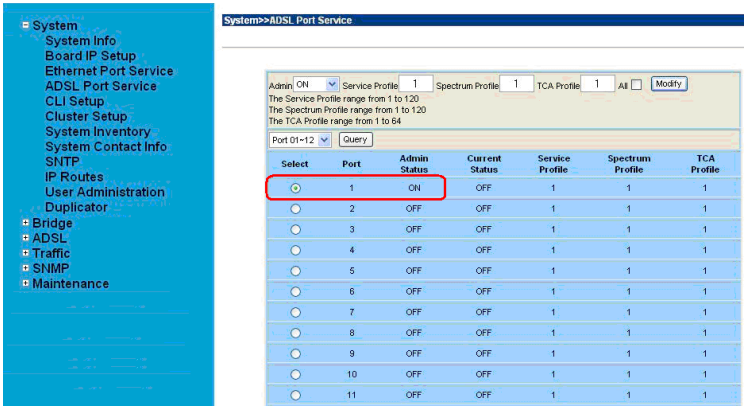


## Step 4: Enable the ADSL Port Service

Go to **"System → ADSL Port Service"** setting screen, select the ADSL port and Admin is **"ON"**. Click **"Modify"** to make this Port is ON.




You can see the Admin status became to ON.

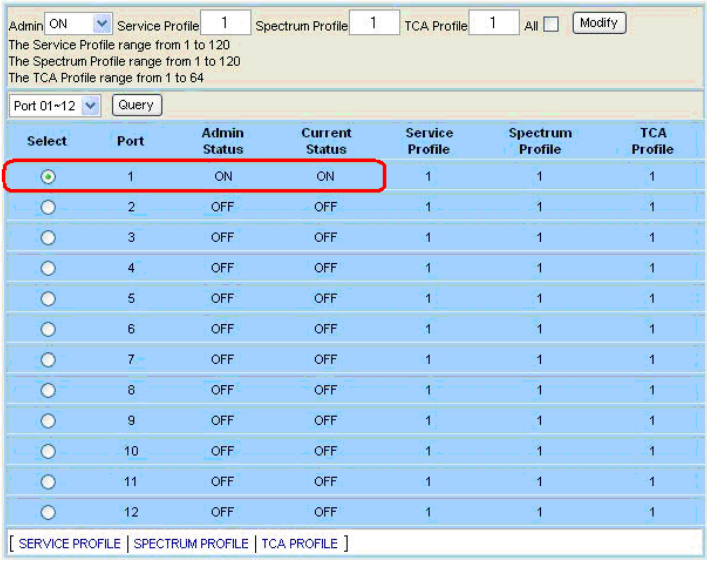


## Step 5: Connect the ADSL2/2+ CPE to Patch Panel

Connect the ADSL2/2+ CPE to Patch Panel and configure it, the VPI / VCI value must be the same with IDL-4802.

After finish setting, the CPE will establish the ADSL connection with IDL-4802. You can check the connection status as below figure. The Current Status is ON.

Now the clients can access to Internet through IDL-4802.

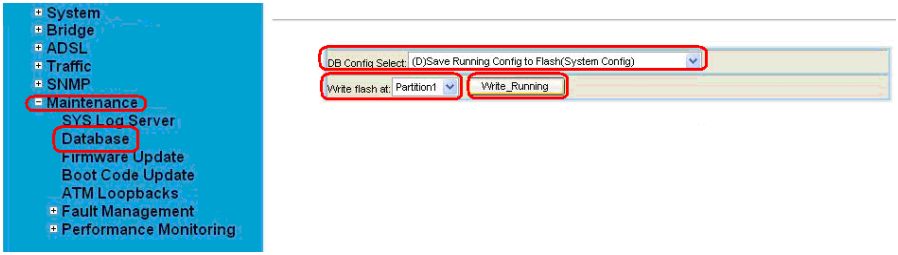


## Step 6: Save the running configuration to Flash

Remember to save your running configuration to the flash, otherwise the settings will be lost if you power-off IDL-4802.

Go to **"Maintenance → Database"** setting screen, select the **"(D) Save Running Config to Flash (System Config)"**. There are two partitions on flash, select your Partition which you want to save and click **"Write Running".** The configuration will save to the Flash.

| Note | Default Partition is **Partition1.** |
|---|---|



## *Further information*

For further detail configurations and information can be found in the user's manual CD. If you have any other questions, please contact the local dealer where you purchasing this product.

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