Getting Started Guide for DTE-3100

Powering Up

The first step to using your DTE-3100 is connecting it to a power source. The DTE-3100 is a PoE (Power-over-Ethernet) capable device, so if you have a PoE switch the unit will power up as soon as you plug-in the Ethernet cable[1]

If your switch does not support PoE, the alternative is connecting an external power supply to the auxiliary power input at the bottom of the unit. This power supply should deliver a 24DC voltage and be able to provide a minimum of 400mA.

A suitable power supply is available as optional add-on for the DTE-3100 and can be ordered from DekTec or yopur local distributor. The order code for this power supply is DTE-PWR1.

Setting up the initial IP address

After powering your device for the first time the next step is to setup the initial IP address. Out-of the box the DTE-3100 supports the following two mechanisms for acquiring an IP address:

- Automatically through DHCP;
- Automatically through link-local autoconfiguration.

NOTE: it is also possible to assign a fixed IP address to the unit, but setting a fixed IP address is only possible via the device web interface and before we can browse to the web interface the device need to receive its first IP address from a DHCP server or via link-local address protocol.

By default the DTE-3100 will first try to receive an IP address from a DHCP server. If no DHCP server is present or no IP address is assigned to the unit, it will auto assign itself an IP address from the link-local address range. The link-local address range (169.254.0.0/16) is a special IP address range from which IP devices can assign them-selves an IP address.

If the device has successfully received an IP address the assigned IP address will be shown in the bottom section of the display. This bottom section toggles between the IP address and the MAC address of the unit.

NOTE: An IP address of "0.0.0.0" means that the unit has not received an IP address.

To test if you can communicate with DTE-3100, please open a command-prompt and try to ping the unit (e.g. ping 192.168.39.22).

If the ping fails and your unit has received a link-local IP address (an IP between 169.254.0.0 – 169.254.255.255) you might first have to add and extra route entry to the route table of your PC.

To manually add a route entry on a Windows PC, open a command line prompt and execute the following command:

route add 169.254.0.0 MASK 255.255.0.0 <networkip>

Replace <networkip> with the IP address of the network card in your own PC; the new route entry will be added to the route table of this network card.

---

[1] It can take a few seconds (up to 30sec) before the PoE switch enables the power to the unit, so please wait shortly for the power to be applied

The device web interface

Now that your DTE-3100 has received its first IP address and you have verified that you can ping the unit, you should be able to browse too the homepage of the unit.

To browse too the homepage of your unit, open your favourite browser (e.g. Internet Explorer or Firefox), type in the unit's IP address (e.g. "http://192.168.39.22") and press enter. This will take you to the unit's homepage from which you will be able to configure and view the status of your DTE-3100.

The homepage contains the following tabs:

- Device Status: This tab shows the current status of the unit.
- Network Settings: This tab is used to configure the IP address and SNMP[2] settings of the unit.
  On this page you will be able to assign a fixed IP address to the unit.
- SMPTE Settings[3] This tab is used to control the SMPTE setting of your device. Here you can set the unicast or multicast IP address which should be forwarded to the ASI output.
- Application Switcher: This tab allows you to switch between the two possible modes of operation for the unit (see "" for more details).
- Firmware Upgrade: This tab can be used to upgrade the firmware of your unit.

NOTE: the default password used for the web pages is "DteWelcome"

Modes of operation

The DTE-3100 has two modes of operation called DTAPI- and SMPTE-mode.

In DTAPI-mode the unit operates as a remote ASI output device. The unit can be used as if it where a standard DekTec DVB-ASI output adapter, with as difference that the unit is connected to your PC via the network instead of via the PCI or USB bus. In this mode it is instance possible to use the StreamXpress player software to stream a file from disk to the ASI output of the DTE-3100.

NOTE It is also possible to write a custom application that that uses a DTE-3100 in DTAPI-mode. To write a custom application you will need to use the latest version of DekTec's C++ API called the DTAPI.

In SMPTE-mode the unit operates in standalone mode and can be configured to autonomously forward a TSoIP stream to it's ASI output. If the TSoIP stream uses a SMPTE-2022 FEC stream, the unit can be setup to use this FEC streams to recover any packets that might be lost in your IP network.

---

[2] SNMP settings are only available when the device is operation in SMPTE-mode.
[3] The "SMPTE Settings" tab is only available when the device is operating in SMPTE mode