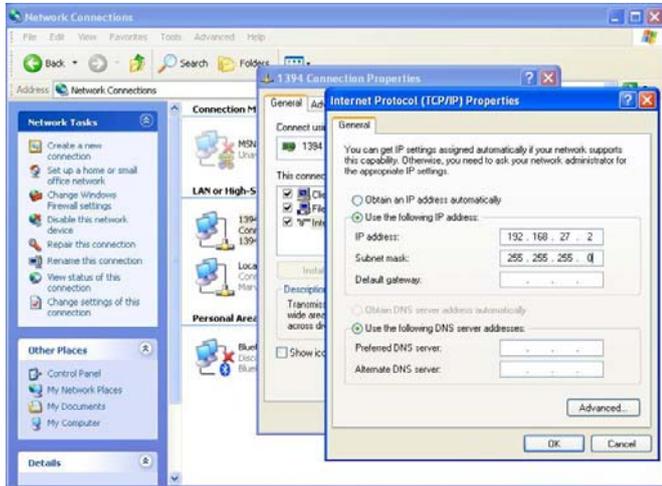


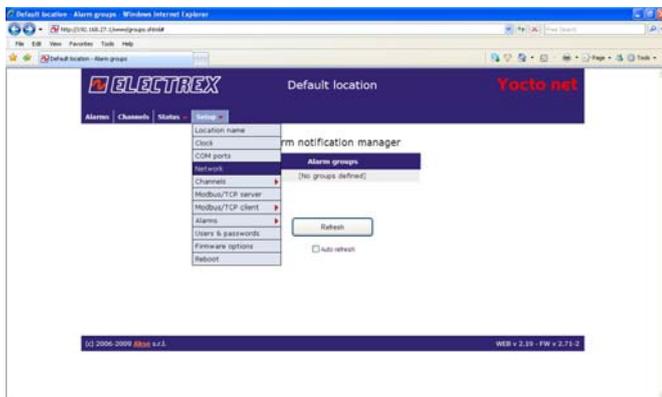
## Quick Guide for configuring a network of Yocto net and Electrex devices with Energy Brain software

### Case 1: PC directly connected to a Yocto net:[01]

1. Setup the PC with an IP address 192.168.27.x with “x” different from “1” (2 to 247). See in the bottom Note [02]



2. Open a browser (e.g. Internet Explorer) and digit 'http://192.168.27.1' (default address of Yocto net). The configuration Web page of Yocto net will appear. Then go to step 3.b.



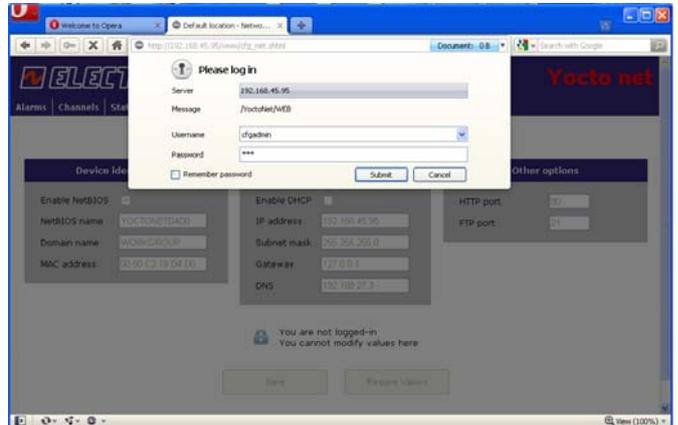
### Case 2: PC connected to a Ethernet or Internet network:

3. Modify the default IP address of Yocto net (refer to *Installation Instructions* for the Yocto Net on the Electrex web site [www.electrex.it](http://www.electrex.it) in English) with the one given by the IT Manager and unflag the DHCP option. To modify the IP address of Yocto net there are 2 ways:
  - a. Using the YoctoNetLocator application ( for PC with Windows XP operating system and firewall disabled); [03]
  - b. Connecting a PC directly to the Yocto net, temporarily disconnected from the Ethernet network, (see steps 1 and 2) than choose 'Setup' and 'Network' from the configuration web page and 'Login' (with all lowercase):

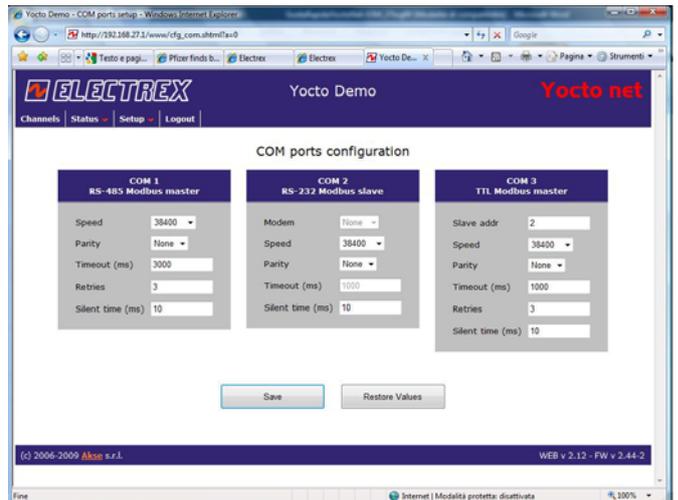
User ID: **cfgadmin**; Password: **cfg** [04]

To permanently change the IP address beside pressing Save it is mandatory to click on: **Click here to apply the changes (in the bottom row)**. The Yocto net will make a re-start that takes about 2 minutes.

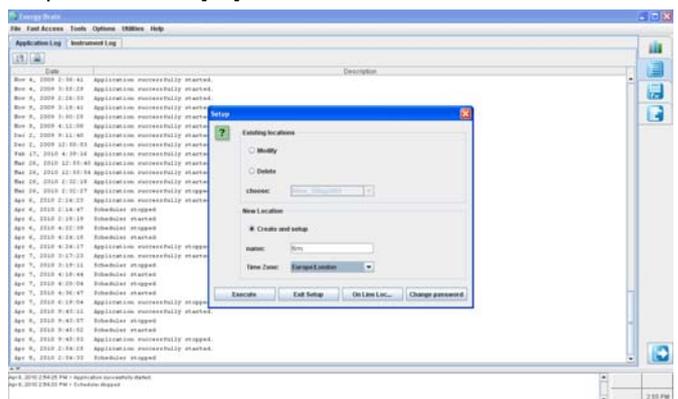
(see *Installation Instructions* for the Yocto Net on [www.electrex.it](http://www.electrex.it)).



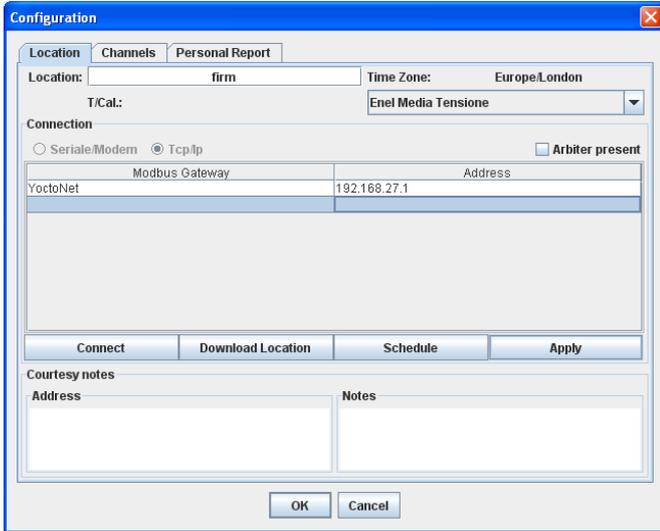
4. From the PC, in the browser, digit 'http:// IP address given to the Yocto net'. Then verify / modify the communication parameters of COM ports from the configuration web page of Yocto net (Setup / COM ports) to ensure the correct communication with the X3M (same speed, parity, etc.). [05]



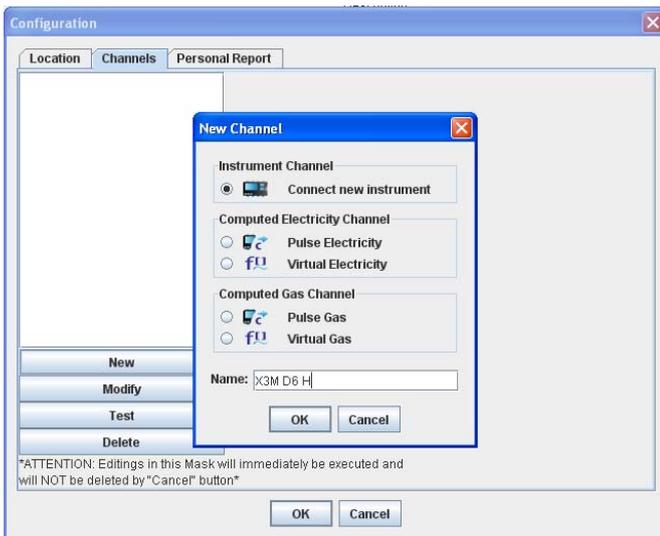
5. Run Energy Brain (version 5.5 or higher) and add a *New Location* (select *Create and Setup* then give a name and select the *Time Zone* e.g. for U.K. is Europe/London then pres Execute. [06]



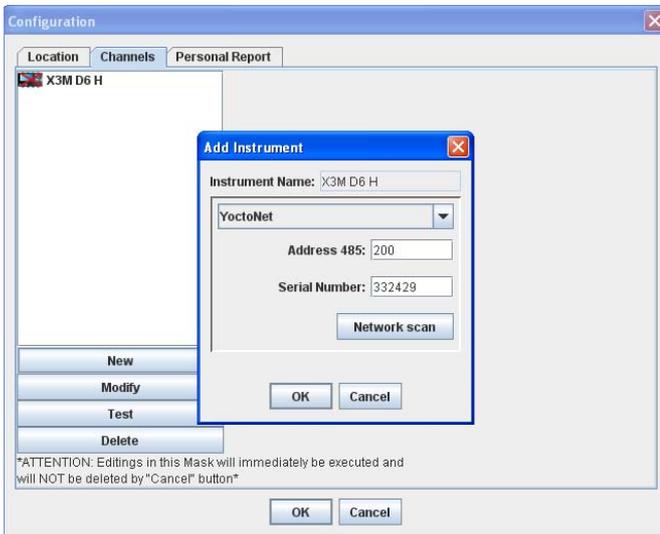
6. In *T/Cal.:* of the *tab Location* select your previously customized calendar [06-2] and flag the *TCP/IP* connection, then give a name (without blank spaces) to the *Modbus Gateway*, fill in the *Address* field with the IP Address of Yocto net and press **Enter**. Then press the button *Connect* (Apply changes: Yes).



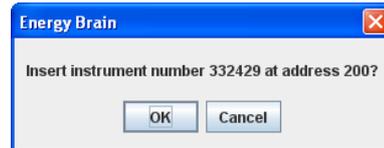
7. Select *New* from *tab Channels*, *Connect new instrument* and give it a *Name* then click *Ok*.



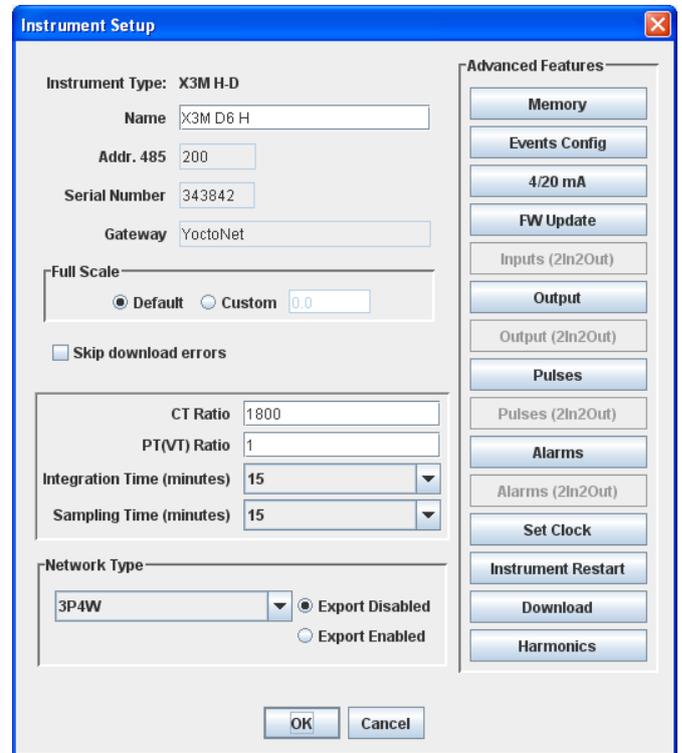
8. Write in the *Address 485* field the Modbus address (from 1 to 247) and the *Serial Number* of the device, then *OK*.



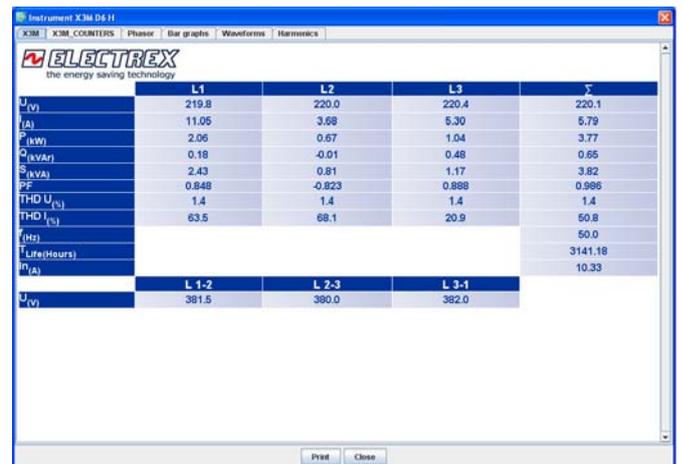
9. Confirm the assignment of 485 Modbus address.



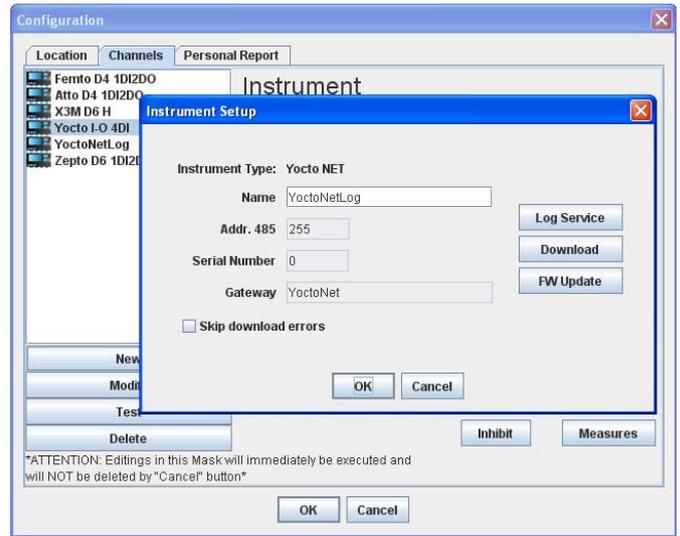
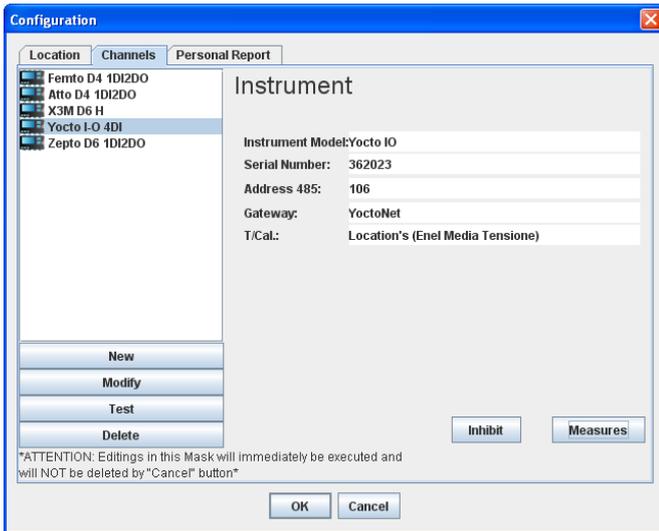
10. Verify / Modify the X3M configuration (e.g.: CT ratio, alignment of the meter clock with the PC clock, etc.) then give *OK*. [07]



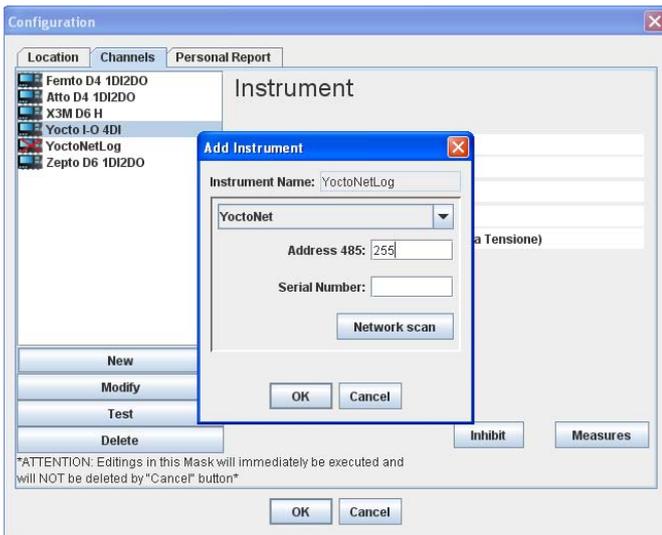
11. For a check you can click on button *Measure* of the *tab Channels* to see the instantaneous readings of the meter.



12. Repeat the procedure from point 7 to point 11 for all the other Electrex devices in Rs485 sub-network of Yocto net paying attention to give each a distinct 485 Modbus address. [08]

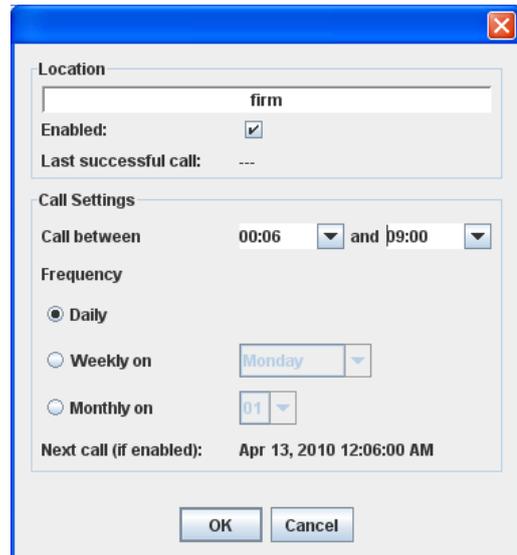


13. If Yocto net does not have the logging function, the procedure is ended, so give OK to exit, (then the software ask to setup the agenda for the automatic download of the data). If Yocto net should memorize the meter in the sub-network (logging service activated), insert in tab Channels the Yocto net as a last device with the same procedure described at point 12 (default address is 255), **without filling the Serial Number field.**



15. Give OK, selecting Yes or No for the automatic download by the Agenda and Exit to end the procedure.

14. Press the button *Log Service* then select each device you want to be logged by Yocto net log matching the desired profile (normally: Ea, Er Ind, Er Cap, e.g.; 32 bit) and OK.



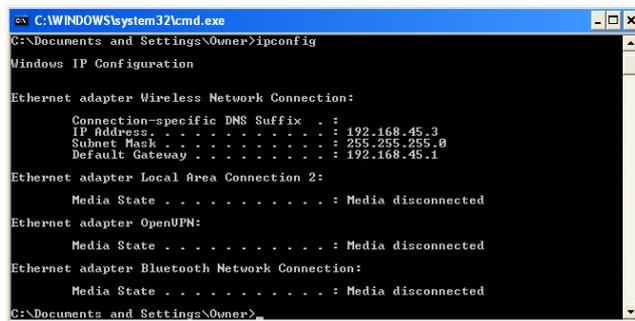
## Notes

Before starting the setup of the network pay attention to the wiring and prepare a note card with the main parameters of all the Electrex devices:

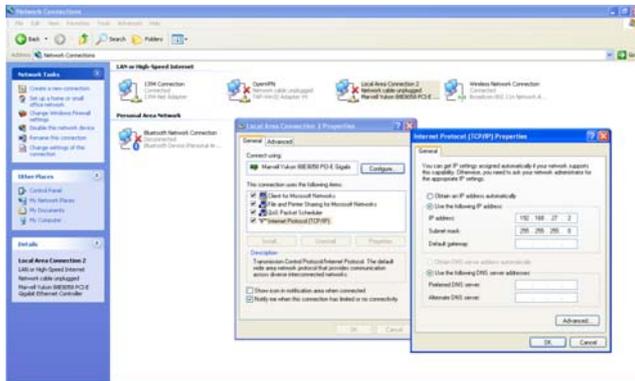
- name to give to the device (e.g. Transformer1);
- communication parameters (e.g. 38400, 8, n, 2), RS485 address (all distinct);
- CT ratio and eventually VT.

[01] Don't mind if the Electrex devices are connected or not connected to the Yocto net. Don't mind if the Ethernet cable is a straight-through or a crossover.

[02] One way to verify the IP address of the PC where you have installed the Energy Brain software is: press the button Start, select Run, digit *cmd*, then give the OK, digit *ipconfig*, press Enter and between the data you'll find the IPv4 address.



One way to modify the IP address of the PC is: press Start, Control Panel, Network Connections, click the right mouse button on 'Local Area Connection', select Properties, select 'Internet protocol (TCP/IP)' and press button properties. Modify the IP address in the field "Use the following IP address" to adapt to the IP of Yocto net.



[03] About YoctoNetLocator application refer to the following page and to the *Yocto net Installation Instructions document* on [www.electrex.it](http://www.electrex.it) in English.

[04] For the Yocto net with firmware version up to 2.08 (the version is in top right of the page), uppercase:

Username: **ELECTREX**; Password: **YOCTONET**

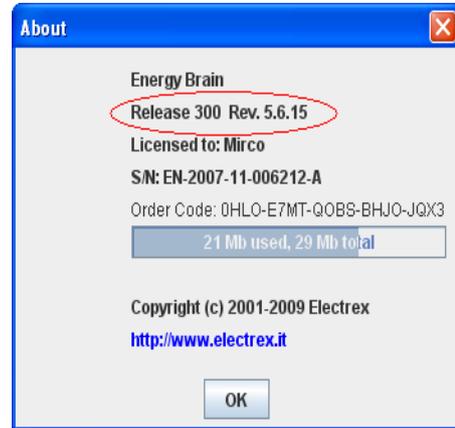
For Yocto net with firmware version from 2.09 (the version is in bottom right of the page), lowercase:

Username: **cfgadmin**; Password: **cfg**

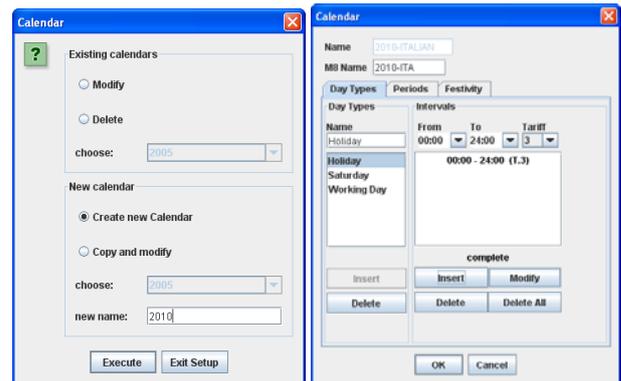
[05] In order to verify the configuration parameters of X3M or other Electrex devices refer to the appropriate *Installation Instructions document* available also on [www.electrex.it](http://www.electrex.it). Pay attention to the address given to the COM3 (TTL port and not RS485 network) used for X3M or

Flash connected directly to the Yocto net with a specific cable and not usable for devices in RS485 network.

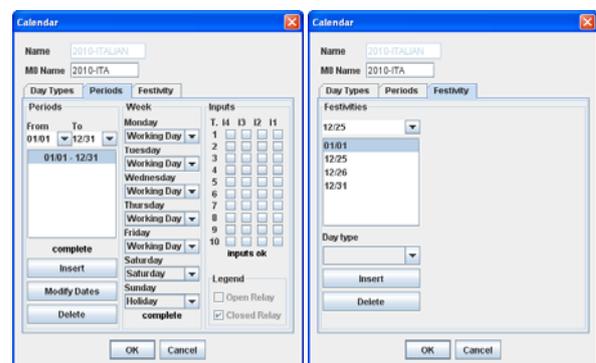
[06] To check the software revision of Energy Brain run the software, select *About..* from *Help* in the Menu and you will see the following window:



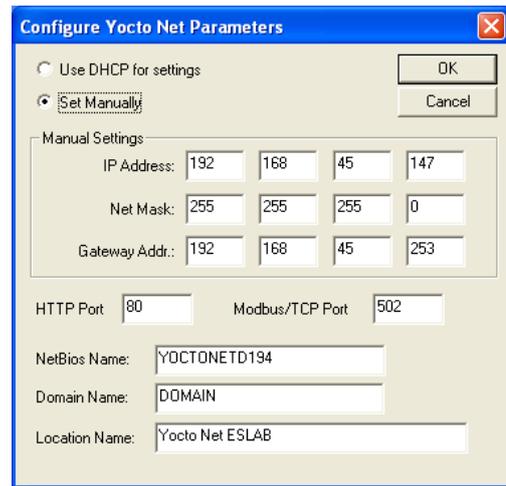
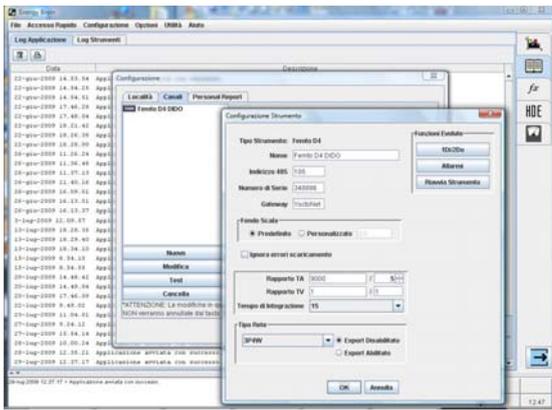
[06-2] In order to set up a customized calendar launch Energy Brain then click on Tools >> Calendar and follow the screenshot below:



Insert for each kind of day the tariff and its interval. Then set the Periods and Festivity as in the screenshots below :



[07] To modify the configuration of a device after the first setup: run Energy Brain, select the Location concerned and press *Execute*, select the Connection (e.g. Tcp/Ip) and press *Connect* then in tab Channels select the device you want to modify and press *Modify*. E.g. for Femto D4.



## YoctoNetLocator – User Guide

There are 2 versions of YoctoNetLocator:

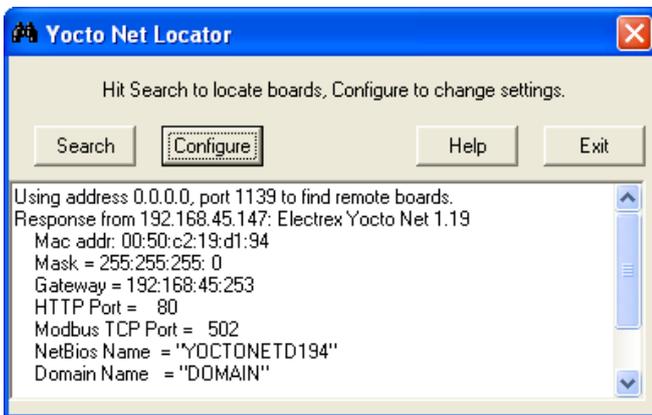
- 1) **YoctoNetLocator 1.02** for Yocto net with firmware release up to 2.08;
- 2) **YoctoNetLocator 4.02** for Yocto net with the firmware release from 2.09.

(If you do not know the firmware release of Yocto net execute both applications).

### 1) YoctoNetLocator 1.02

Execute YoctoNetLocator 1.02 from a PC, **with the Firewall DISABLED**, to see all the Yocto net connected and their IP address, Mac address, etc. Using a portable PC directly connected to the Yocto net (not in Ethernet network or Internet) is useful as this avoids all kind of software blocks.

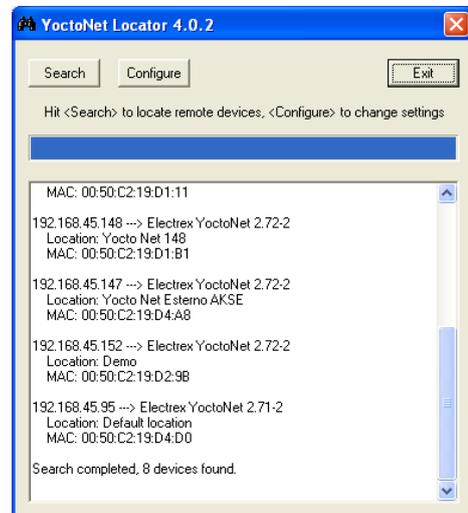
In the following example there is a “Yocto Net 1.19” that means firmware release 1.19.



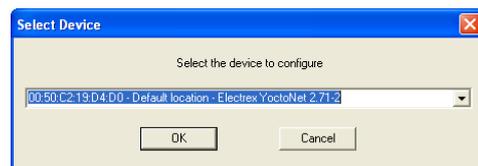
Pressing the button “Configure” with selected “Set Manually” you can replace the IP address with the one given by the Network Administrator.

### 2) YoctoNetLocator 4.02

The same if you launch the YoctoNetLocator 4.02 In the following example there are some “Yocto Net 2.71 or 2.72” that means firmware release 2.71 or 2.72.



If you click on “Configure”, and there are more than one Yocto net, a ‘Select Device’ menu will appear.



Modify the IP address with the one given by the Network Administrator and fill in Username and Password before pressing OK button. HTTP port must be 80 and Modbus TCP port must be 502.

