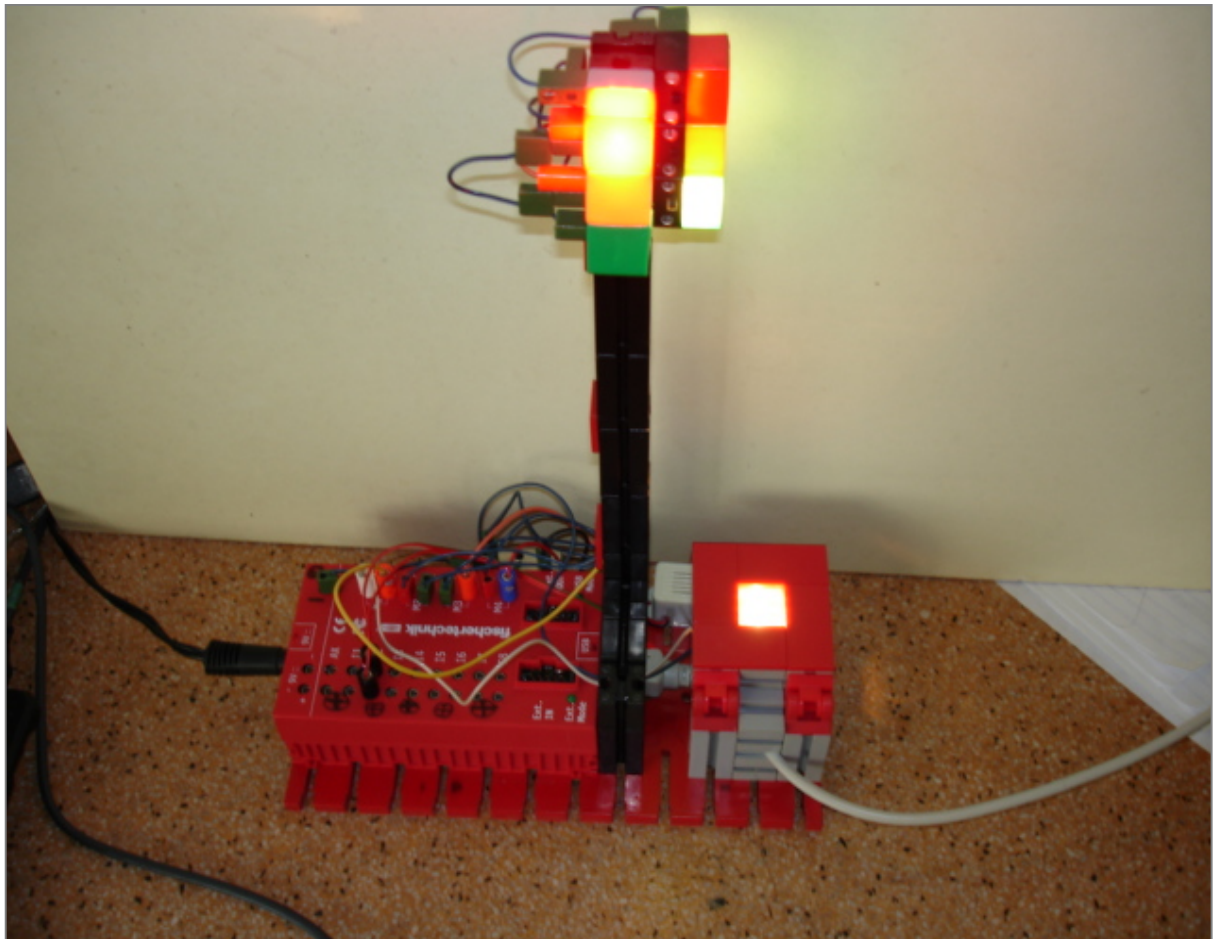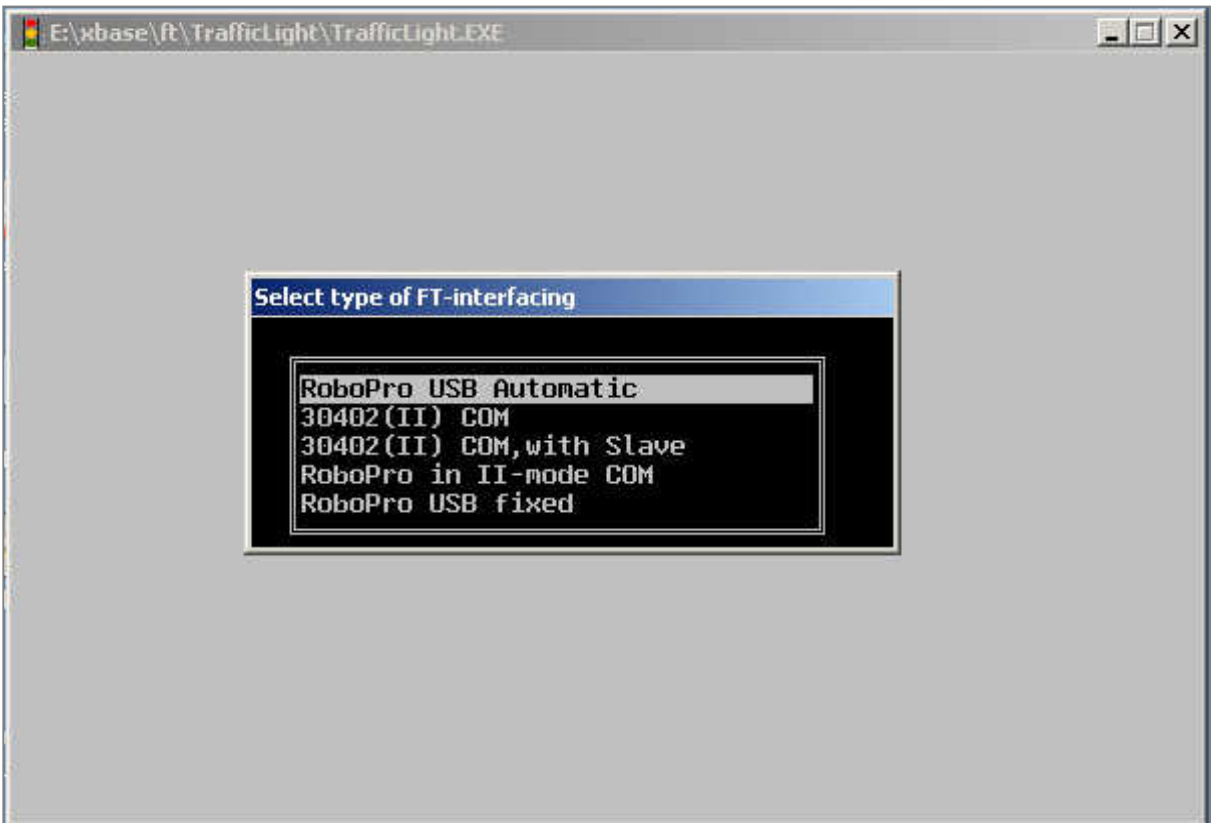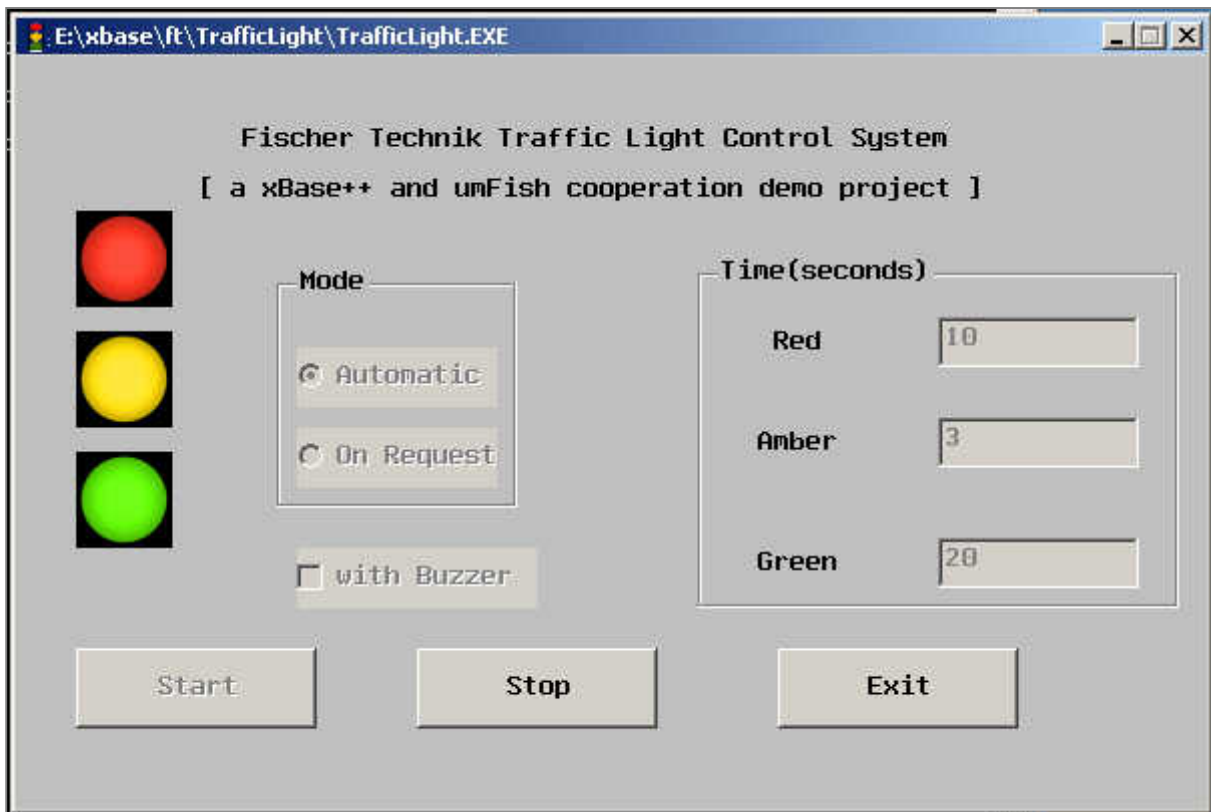# the TrafficLight Application

Demo Application uses **umFish** linkable object modules for **xBase++**
(www.ftComputing.de/xbase.htm)
(*by r.nooteboom2 @chello.nl*)
for w9x and XP

Fischer Technik Traffic Light Control System

[a xBase++ and umFish cooperation demo project]

Mode

- Automatic
- On Request

☐ with Buzzer

Time(seconds)

Red	10
Amber	3
Green	20

Start   Stop   Exit

Select type of FT-interfacing

```
RoboPro USB Automatic
30402(II) COM
30402(II) COM,with Slave
RoboPro in II-mode COM
RoboPro USB fixed
```

Description of the TrafficLight demo xBase++-umFish project

The *TrafficLight.prg* is an application that controls a traffic-light at a crossroad intersection . There is a trafficlight in the West-direction and one in the North-direction. Assumed is that the East-to-West road is a busy important one and the South-to-North road is a less used quiet one. The application has 2 working modes : 1) Automatic : the light sequence is processed automatically and continuously and an 2) OnRequest-mode : the light in the North-direction changes only to green if a request is made by pushing a button on the model, the traffic lights process then exactly one cycle of the light-phases(stages). That a request has been done is spotted by a white light inside the push button on the ft-model so a person can see that the request is already being processed.
A nice detail is that an optional buzzer(build in the model)-sound goes off when the North-direction-lights goes green ,this is an extra help for the visually handicapped.

Technical notes by the xBase++ program : In the Init-*AppSys()* procedure a GUI-*XbpDialog()*-window is created. The *main()*-routine consists only of the initialization-call for the interface (*FtRInit()*), the creation of the dialog-objects(xBase-parts) and contains the first main-eventloop/handler. The activate-codeblock of the Start-pushbutton starts the actual TraffifLight process(*StartTrafficLight()*) . The *StartTrafficLight()*-routine is in fact also a 2nd-eventloop-handler that walks through all the TrafficLightPhases contained in the array : *LightPhases_* created by the *CreatePhases()* routine.
All readable and clarified constant names are in the header file *TrafficLight.ch.*
This model is controlled with an USB RoboPro IO-Extension module which can be controlled by *umFish40.dll* via the xBase++ *ftroboii.obj(.prg)* wrapper module. But the model can also be made with the Intelligent Interface,the RoboPro or the older parallel interface.

All xBase++ umFish drivers can be found in the package : *umFish_xBase.zip.*

All sources of the TrafficLight-demo are also in *umFish_xBase.zip*

www.ftComputing.de/xbase.htm
(*by r.nooteboom2@chello.nl*)