# **Programming the SuperBrain controller**



Rev 1.7

## 1. Creating a new project:

- 1.1. Choose the database folder and by set the project's path by using Main-Menu and clicking on button.
- 1.2. Access Uniart\Bin and Run *WinBAK\_SBEx1*.exe or <u>hold</u> left "Alt" button and

click on the button.

- 1.3. In the database folder the following folders will be created automatically:
  - 1.3.1. UWP for Projects files.
  - 1.3.2. UWF for Programs files
  - 1.3.3. **SuperBrain** for all SuperBrain specials. In this folder the following folders will be created:
    - 1.3.3.1. **bmp** for ".bmp" files as graphic display on the LCD screen.
    - 1.3.3.2. **obj** for internal use of the program. Includes ".obj" files.
    - 1.3.3.3. ALL\_OBJ for internal use of the program. Includes ".obj" files.

#### 2. Establishing communication with SB controller:

- 2.1. Depends on the communication type (RS485 \ Ethernet TCP\IP) access C:Uniart\Bin and activate Appserver.exe for RS485 or Netserve.exe for Ethernet.
- 2.2. Setup the communication settings such as serial address, baud rate, parity and IP address. (For more details please check the Uniart manual).

#### 3. Programming the SuperBrain (SB) controller.

3.1. After running *WinBAK\_SBEx1* :

Open				×
			<b>=</b>	
101.UWP	📲 🖞 16.UWP	📲 301.UWP	📲 33.UWP	물 <b>법</b> 402.UWP 별
📲 11.UWP	📲 19.UWP	📲 302.UWP	📲 34.UWP	물 <b>월</b> 451.UWP 별
🗏 🖞 12.UWP	📲 201.UWP	📲 31.UWP	📲 🖞 35.UWP	뿔 <b>ీ</b> 51.UWP 별
<u> 📲 1</u> 3.UWP	📲 202.UWP	📲 311.UWP	📲 🖞 36.UWP	뿔 <b>ీ</b> 52.UWP 별
🗏 🖞 14.UWP	<u> 📲 2</u> 3.UWP	🗏 🖞 32.UWP	🗏 🖞 39.UWP	뿔 <b>ీ</b> 53.UWP 별
<u>₩</u> 15.UWP	<u><b>₩∰</b></u> 29.UWP	<u><b>≌∄</b></u> 321.UWP	<u> 📲 4</u> 01.UWP	<u>뿔∰</u> 54.UWP 멾
<				>
File Name:				Open
				Cancel



- 3.2. Select the project file you need, or create a new project file.
- 3.3. The following window will appear:
- 3.4. Use Winbak functions in order to prepare the application you need according to the project requirements (for more details about using Winbak check Winbak manual).

- CPU AppServe Type Descriptions and settings for System A (white areas) Description Input/Output Types PT1001 Input Ain1 3PT1000 Se Input Ain2 3PT1000 Se Input Ain3 3PT1000 Se Input Ain4 3PT1000 Se Input Ain5 3PT1000 Se Input Ain5 3PT1000 Se SecA-Ret Air SecB-Ret Air SecC-Ret Air SecD-Ret Air Descriptions and 5 Supply Air settings for System B nput Dinß 1Digit Input Din7 Input Din8 1Digital In 1Digital In (gray areas) Input Din9 Input Din10 Input Din11 Input Din12 Input Din13 Input Din14 Input Din15 Input Din16 Dk. Cancel Advance
- 3.5. IO setting and descriptions: please choose "SuperBrain New" type.

3.6. For setting the SuperBrain specials (HMI graphics and email) - press on: the "Setting the SuperBrain specials (HMI graphics and email) - press on: the



## 3.7. Alarm settings:

Alarms Definition





An option to copy alarms text from WinBak. This will delete all existing alarms descriptions.



Place the point in the required location with the mouse. Use fine locating if necessary.



3.9. Once finished save by clicking on the save button  $\square$ .

## 4. Preparing email alarms for SuperBrain TCP

- 4.1. The feature is supported by SB TCP 64 bit from bios version 367 and higher.
- 4.2. Activate WinbakSB and open the relevant UWP project file.
- 4.3. Open the WinbakSB properties screen and press on the mail definition button.

۹.			SUPER BRAIN	
Use Full IO !!	(Title)	4pipe	🗹 One Lang	uage
Description     Table       ✓ Ain 1     asfsdfsaga     ✓       ✓ Ain 2     fghdfhgdfgh     ✓       ✓ Ain 3     ∨m     ✓       ✓ Ain 4     ✓       △ Ain 5     □       △ Ain 6     6       △ Ain 7     7       △ Ain 8     8	Display 2 2 0 0 3 3 3 3 3 3	Din 51 (DiA-5) Din 52 (DiA-6) Din 53 (DiB-5) Din 54 (DiB-6)		Table
Description         Table         Time           Image: About 1         Image: About 2         Image: About 2         Image: About 3         Image: About 4         Image: About 4         Image: About 5         Image: About 5         Image: About 6         Image: About 7         Image: About 7         Image: About 8         Image: About 7         Image: Abo	P. Const 0 0 0 0 0 0 0 0 0 0 0 0 0	Dout 1     Dout 2     Dout 3     Dout 4     Dout 5     Dout 6     Dout 7     Dout 8	escription Table	Time P. Const.
Graphical Image Screen Properties		System Description		
Mail Definition				

4.4. The mail definition screen will appear.

🖷 Mail SetUp	
SuperBrain@ddc.co.il	
nassword 6	
Mail Subject	
Mail Data Line 1	
Mail Data Line 2	
Alarm Time : 4t41	
Mail Data Line 3	
Alarm Description : %a%l	
Mail Server	
server	
Status OFF Status ON	
%d = dd/mm/yy Mail Port	
%n = alarm number	
%I = New Line	

- 4.5. This screen allows defining: email definitions, alarm message, according to the following explanation:
  - 1) Use mail server mark "v" in order to activate the email server in the SB.
  - 2) Mail From the text in this row is what the client will see as the name of the email sender.
  - 3) Mail to the email address to send to.
  - 4) Mail user must be defined as in standard PC email definitions.
  - 5) Mail password must be defined as in standard PC email definitions.
  - 6) Mail subject the subject of the email message that the receiver will get (free text).
  - 7) Mail data lines 1,2,3 the body of the message (free text).
  - 8) Mail server must be defined as in standard PC email definitions.

- 9) Status ON, OFF free text that can be applied to the subject or to the body of the message in cases of alarm is on or off (please check paragraph 12).
- 10) First Alarm, Last Alarm the alarms number that will activate the email messages (for example alarms from number 5-17).
- 11) Status, send off mark "v" in cases that an email must be send also when the alarm is fixed.
- 12) Special signs and features:
  - a) %d if used in the subject or body of the message will add the date of the alarm.
  - b) %t if used in the subject or body of the message will add the time of the alarm.
  - c) %a must be used in the subject or body of the message includes the description of the alarm as defined is SB.
  - d) %n can be used in the subject or body of the message includes the description of the number alarm as defined is SB.
  - e) %i used to mark end of line when using free text in the body of the message.
  - f) %s can be used in the subject or body of the message includes the status messages as defined in paragraph 9.

# 5. Compiling and sending the program to controller.



SB Properties –	links to graphical settings.
Compile –	compiles the current project and creates an obj file in the obj folder
	without sending to the controller.
Send (All) –	Sending all projects in the working folder to the controller (if One
	File Only is marked only current applications will be sent).

## 5.2. Sending new BIOS/Firmware.

🥹 Send Fcode - SuperBrain 1.1				
Send BIOS to cpu Select file	CPU number Fcode description			
Port ARM (512K)	Comm. number 3 Line setting 4800,e,8,1 Send code to CPU (RS485)			
Errors	Send code to CPU (NetServer)			
M-CRC Send Via Appserver				

Stretch the Send window, select the BIOS file ("Select File") and send to controller ("Send BIOS to cpu"). Recommended: use external SendBios.exe software.