

BOVIBOOSTER | L4DL

ZEN QUICK GUIDE

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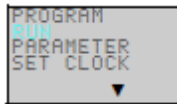


Everything described in this guide should only be performed by qualified personnel. Electrical shock may occur. Never touch the terminals while power is being supplied.

1. Changing operation mode RUN/STOP



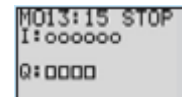
Press the **OK** Button to display the Menu Screen and press the **Down** Button to move the flashing cursor to **STOP**



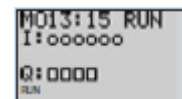
Press the **OK** Button to switch from **STOP** to **RUN** mode



Press the **ESC** Button to return to the **BB** Menu or Main Screen to observe input/output bit status.



Stop mode



Run mode

2. Selecting display language

There is a choice of 6 display languages. The default is English.

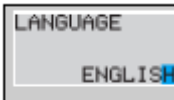
Operation to select german



Press the **OK** Button to display the Menu Screen



Press the **DOWN** Button 4 times to move the cursor to "LANGUAGE"



Press the **OK** Button to display the current language ("ENGLISH"). The final "H" will be highlighted and flashing



Press the **OK** Button to make the whole word "ENGLISH" flash. A different language can now be selected



Press the **UP** Button to select **GERMAN**

Use the **Up/Down** Buttons to select a language.

- SPANISH
- ITALIAN
- FRENCH
- GERMAN
- JAPANESE
- ENGLISH

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OK 1

```
LANGUAGE
SET?
OK/ESC
GERMAN
```

Press the **OK** Button to display a confirmation message

OK 1

```
RUN
PARAMETER
KALENDER
SPRACHE
▲▼
```

Press **OK** to complete the setting. The display language will change to German.

ESC 0

Press the **ESC** Button to return to the **BB** Menu

3. Setting the Date and Time

OK 1

```
PROGRAM
RUN
PARAMETER
SET CLOCK
```

Press the **OK** Button to display the Menu Screen.

OK 1

```
PROGRAM
RUN
PARAMETER
SET CLOCK
```

Press the **Down** Button 3 times and then press the **OK** Button to enter the **SET CLOCK** submenu.

OK 1

```
SET CLOCK
SUMMER TIME
```

Select **SET CLOCK** from the submenu and press **OK**

OK 1

```
SET CLOCK
yy/mm/dd
00/01/00
00:00(SA)
```

Press the **OK** Button to change from a highlighted cursor to a flashing cursor and enable data to be changed



```
SET CLOCK
yy/mm/dd
11:35(SU)
```

Set the date and time.
Use **Up/Down** Buttons to change setting.
Use **Left/Right** Buttons to move the cursor.
The day will automatically change when the date is set.

OK 1

```
SET CLOCK
SET?
OK/ESC
11:35(SU)
```

Press the **OK** Button to display a confirmation message.
Press the **OK** Button to confirm and complete the setting.

ESC 0

Press the **ESC** Button to return to the **BB** Menu

Days of the week
SU: Sunday
MO: Monday
TU: Tuesday
WE: Wednesday
TH: Thursday
FR: Friday
SA: Saturday



If the power supply is turned OFF for two days or more at 25°C, the date and time will return to default setting

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4. BB Controller parameter adjustments

Washing pressure adjustment



```
Disinf.:...
00000000
Press.:High.
Wash.:4.sec.
```

Press the **ALT** Button to enter the **BB** Menu



```
Disinf.:...
00000000
Press.:Low..
Wash.:4.sec.
```

Hold the **ALT** Button and press the **LEFT** Button to switch between High and Low Pressure

Washing time adjustment



```
Disinf.:...
00000000
Press.:Low..
Wash.:4.sec.
```

Press the **ALT** Button to enter the **BB** Menu



```
Disinf.:...
00000000
Press.:High.
Wash.:2.sec.
```

Hold the **ALT** Button and press the **DOWN** Button to switch between 2, 3 and 4 seconds washing-time

5. BB Controller/BB Pressure WDS "PROGR" parameter adjustments



```
PROGRAM
SUN
PARAMETER
SET CLOCK
```

Press the **OK** Button to display the Menu Screen. Select **PARAMETER** on menu screen



```
T X S A
TRG
RES 00.01
```

When **PARAMETER** is selected, the bits used by the BB are displayed and can be modified.



Press the **OK** Button to change the highlighted cursor to a flashing cursor.



Press the **LEFT** Button to move the flashing cursor to the bit type position.

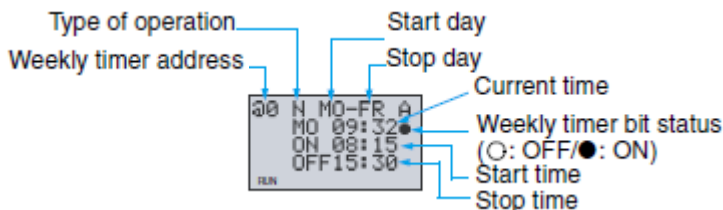


Press the **UP** Button to select the @ bit type.



Press the **OK** Button to confirm setting

A similar screen should appear on the display



Use the **LEFT/RIGHT** Buttons to move the flashing cursor, press the **OK** Button to select and confirm an operation and use the **UP/DOWN** Buttons to change parameter values

See preset configuration and details on next page

Preset **DISINFECTION** and **WASH**
"PROGR" settings:

	Relay	Set Value
DISINFECTION "PROGR" Relays @0 to @6	@0	Monday(MO) ON:23:59 OFF:00:00
	@1	Tuesday(TU) ON:00:00 OFF:23:59
	@2	Wednesday(WE) ON:23:59 OFF:00:00
	@3	Thursday(Th) ON:00:00 OFF:23:59
	@4	Friday(FR) ON:23:59 OFF:00:00
	@5	Saturday(SA) ON:00:00 OFF:23:59
	@6	Sunday(SU) ON:23:59 OFF:00:00
WASH "PROGR" Relays @7 to @d	@7	Monday(MO) ON:06:00 OFF:18:00
	@8	Tuesday(TU) ON:06:00 OFF:18:00
	@9	Wednesday(WE) ON:06:00 OFF:18:00
	@a	Thursday(Th) ON:06:00 OFF:18:00
	@b	Friday(FR) ON:06:00 OFF:18:00
	@c	Saturday(SA) ON:06:00 OFF:18:00
	@d	Sunday(SU) ON:06:00 OFF:18:00

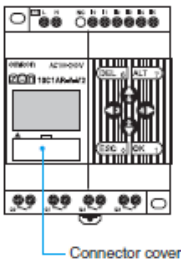
All @ Relays can be adjusted individually

The @a-@d are not available on the BB Pressure Booster WDS Controller

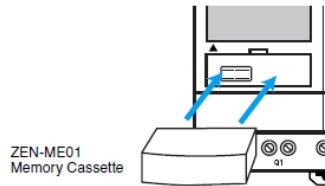
6. Transferring programs using memory cassette

Memory Cassettes are used to load new programs to ZEN CPU Units and to copy programs and settings from one CPU Unit to other CPU Units.

Always turn OFF the power supply to the ZEN before removing or mounting Memory Cassettes



Remove the connector cover on the front of the ZEN

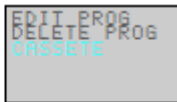


Mount the Memory Cassette

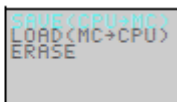
Turn power supply ON. Change the operation mode to STOP, see Section 1.



Mount the Memory Cassette
 Turn power supply ON
 Change the operation mode to STOP, see Section 1.



Select **CASSETTE**



Use the **UP/DOWN** Buttons to move the flashing cursor and press the **OK** Button to select an operation

Use the **LOAD** operation when uploading a new program from a Memory Cassette (MC) to the ZEN CPU Unit
 Remove Memory Cassette when finished loading the program, remember to turn OFF the power supply
 Operation mode may have to be changed to RUN, see Section 1.

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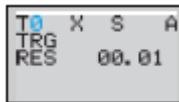
7. BB Pressure Booster working pressure adjustment v1.8



It may be necessary to adjust the working pressure to configuration 2 if the water supply is very poor. Use either configuration 1 or configuration 2, do not use other configurations than those shown. See configuration options below.



Press the **OK** Button to display the Menu Screen. Select **PARAMETER** on menu screen
Press **OK** to enter **PARAMETER**



When **PARAMETER** is selected, the bits used by the BB are displayed and can be modified



Press the **OK** Button to change the highlighted cursor to a flashing cursor



Press the **LEFT** Button to move the flashing cursor to the bit type position



BBPBWDS: Press the **UP** Button four times to select the **A** bit type
BBPBAXx: Press the **UP** Button two times to select the **A** bit type

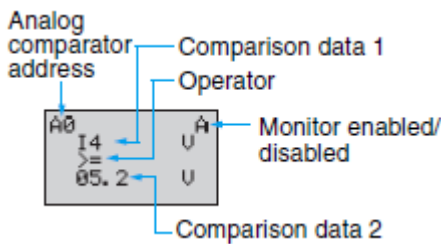


Press the **OK** Button to confirm setting

Press the **Right** button to move the flashing cursor to Comparison data 1.
Then press the **OK** button twice to move the cursor to Comparison data 2.

A similar screen should appear on the display

Use the **UP/DOWN** Buttons to change parameter values.



Press the **OK** Button to confirm setting.

See configurations below.

The comparison data 2 value X 2,5 = pressure in bar

Example (line 1) 3,4 V X 2,5 = 8,5 bar (line 2) 3,7 V X 2,5 = 9,25 bar

BB Pressure Booster A/AT	Pump	Pressure [bar]	Address	Comparison data 2 value
Configuration 1 (default) Working pressure [bar] 9-11,25 Gas pre-pressure [bar]: 7,5-8,5 Supply pressure [bar]: 2-6	Reset pressure	8,5	A0	03.4 V
	Set 1	9,25	A1	03.7 V
	Set 2	10	A2	04.0 V
	Set Max	10,75	A3	04.3 V
Configuration 2 (working [P] 1 bar lower) Working pressure [bar] 8,25-10,5 Gas pre-pressure [bar]: 7,5-8 Supply pressure [bar]: 1,5-3	Reset pressure	7,5	A0	03.0 V
	Set 1	8,25	A1	03.3 V
	Set 2	9	A2	03.6 V
	Set Max	9,75	A3	03.9 V
BB Pressure Booster WDS				
Configuration 1 (default) Working pressure [bar] 8.75-10.75 Gas pre-pressure [bar]: 8 Supply pressure [bar]: 2-6	Reset P > 8,75 bar for 6 sec.	8,75	A0	03.5 V
	Reset P > 10 bar for 4 sec.	10	A1	04.0 V
	Max reset pressure	10,75	A2	04.3 V
	Minimum supply pressure	0,75	A3	00.3 V
Configuration 2 (working [P] 1 bar lower) Working pressure [bar] 7.75-9.75 Gas pre-pressure [bar]: 7 Supply pressure [bar]: 1,5-3	Reset P > 7,75 bar for 6 sec.	7,75	A0	03.1 V
	Reset P > 9 bar for 4 sec.	9	A1	03.6 V
	Max reset pressure	9,75	A2	03.9 V
	Minimum supply pressure	0,75	A3	00.3 V

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8. Example on how to change parameter settings

This is just an example on how to switch between bit types and numbers and how to change parameter values. Do not set the values illustrated in this example in any Bovibooster ZEN

Selecting Parameters to display

Select
Parameters
on menu
screen.

```
T0 X S A
TRG
RES 10.00
```

When PARAMETER is selected, the settings for bits that are being used by the program are displayed.

OK

```
T0 X S A
TRG
RES 00.01
```

Press the **OK** button to change the highlighted to a flashing cursor

↑ / ↓

```
T1 X S A
TRG
RES 00.01
```

Use the **UP/DOWN** buttons to select another timer [T0]

←

```
T1 X S A
TRG
RES 00.01
```

When multiple parameters of the same type have been selected, use the **UP/DOWN** buttons to scroll through the numbers [T1]

Press the **LEFT** button to switch to another type, move the flashing cursor to the bit type position and use the **UP/DOWN** buttons to select another bit type

↑ / ↓

```
C0 A
CNT
RES 1500
DIR
```

Press the **LEFT** button to switch to another type, move the flashing cursor to the bit type position and use the **UP/DOWN** buttons to select another bit type

Setting and changing parameters

```
T0 X S A
TRG
RES 10.00
```

← →

```
T0 X S A
TRG
RES 10.00
```

Use the **LEFT/RIGHT** buttons to move the highlighted cursor to the parameter to be set

OK

```
T0 X S A
TRG
RES 10.00
```

Press the **OK** button to confirm the set position. The cursor will change to a flashing cursor

↑ / ↓

```
T0 X M:S A
TRG
RES 10.00
```

Use the **UP/DOWN** buttons to set the parameter

OK

```
T0 X M:S A
TRG
RES 10.00
```

Press the **OK** button to confirm the setting

Continued on NEXT PAGE

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```
T0 X M:S A
TRG
RES 10.00
```

Use the **LEFT/RIGHT** or **UP/DOWN** buttons to move the highlighted cursor to the parameter to be set



```
T0 X M:S A
TRG
RES 10.00
```

Press the **OK** button to confirm the set position. The cursor will change to a flashing cursor



```
T0 X M:S A
TRG
RES 12.34
```

Use the **LEFT/RIGHT** buttons to select the digit to be set.
Use the **UP/DOWN** buttons to set the value for each digit



```
T0 X M:S A
TRG
RES 12.34
```

Press the **OK** button to confirm the setting



Press the **ESC** button to complete the setting



If the **ESC** button is pressed while parameter settings are being input, the input to that point will be canceled and the settings will return to the original settings