

# **Cerberus**



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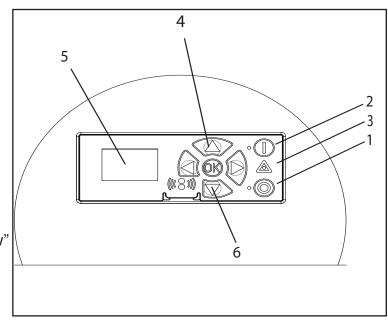
# 1. Description

This Chapter describes the operation of the control panel of the Cerberus Unit

#### 1. OFF

Button (1) switches OFF the unit.

- 2. ON/STANDBY
  Button (2) switches ON the unit.
- 3. ERROR Error light indicator (3).
- 4. NAVIGATION BUTTONS The four "arrow" navigation buttons (4) are used for navigation in the display menu. Pressing the "OK" button activates the menu and confirms any activity displayed.



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#### 5. DISPLAY

6. Manual foam - if extra foam is needed press and hold down button.

# 2. Display layout



(1) When switched on the display will show an arrow symbol in the top right corner equivalent to the active navigation buttons on the Display Module.

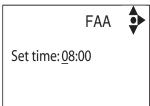
The arrows illustrate that it is possible to scroll up and down between the menus. Scrolling to the right makes it possible to enter a value. Set the value scrolling up (+) or down (-) to set the value higher or lower accordingly. Confirm by pressing ok.

(2) A letter combination for easy reference in connection with service work will appear in the top right corner of the display.

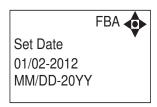
# 3. Modes

### 3.1 Power On

The very first time the unit is switched on, we recommend setting date and time in the settings menu, Time (FA), Date (FB). If date and time is not set, date and time will count from the pre-set default date and time.



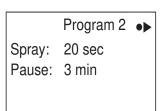
Set time, confirm by pressing "OK".



Set date, confirm by pressing OK button.

## 3.2 Standby/Run

The start up display will look as the below.



Green ON indicator light up. By default the green indicator will flash for 10 seconds before going "on". This can be changed in menu "delayed start".

In RUN mode green on indicator will be constant on, and the spray-time will start to count down to 0, the Cerberus unit will in this period be active.

#### 3.3 Power Off

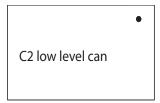


When the unit is off the display will only show a small dot in the top right corner.

In Off mode it is possible to access all menus without activating the unit by pressing the OK button on the panel.

Dot is equivalent to the OK confirm button on the panel.

## 3.4 Error/Warning



In case of an error/event, a description of the error will appear on the display screen, and the red error indicator will flash.

Press OK to remove the error text from the display, and return to the menu/startscreen. the ERROR indicator will still flash, OFF button will stop the error indicator flash

If an error occurs, the relay of terminal block "OUT1" will be activated (see electrical drawing in "Directions for Use").

To see further error/warnings, a list of errors/warnings and possible cause and remedy go to section 4.7.2.

## 4. Overview of Main- and Sub-menus

The control panel contains the below main menu screen displays. Scroll between the menus using the navigation buttons. Each main menu contains submenus which will be described subsequently.

#### 1. Password (A) (Default password 6802)

# Programs (B) Program 1 (BA) Program 1, Spray time (BAB) Program 1, pause time (BAC) Program 2 (BB)

Program 2, spray time (BBA) Program 2, pause time (BBB)

Program 3 (BC)
Program 3, spray time (BCA)
Program 3, pause time (BCB)

#### 3. Timer (C)

Timer (CA)
Start time (CB)
Stop time (CC)
Start days (CD)
Timer Program (CE)
Day/night Enable (CF)
Day start time (CG)
Day stop time (CH)
Day Program (CI)
Night Program (CJ)

#### 4. Release Signal (D)

Release signal on (DA)

#### 5. Delayed start (E)

Program 1 (EA) Program 2 (EB) Program 3 (EC)

#### 6. Settings (F)

Time (FA)
Date (FB)
Language (FC)
Reset (FD)
Reset counters (FDA)
Reset err. log (FDB)
Factory settings

Password (FE)
Password on (FEA)
Password (FEB)
Display Settings (FF)
Backlight intensity (FFA)
Display contrast (FFB)
Motion Sensor (FG)
LL warning activated (FH)
LLA Error act (FI)
Installation (FJ)

#### 7. Errors (G)

#### 8. Info (H)

Running Hours (HA) Valve on time (HB) No of Cycles (HC) Software version (HD)

#### 9. Communication (I)

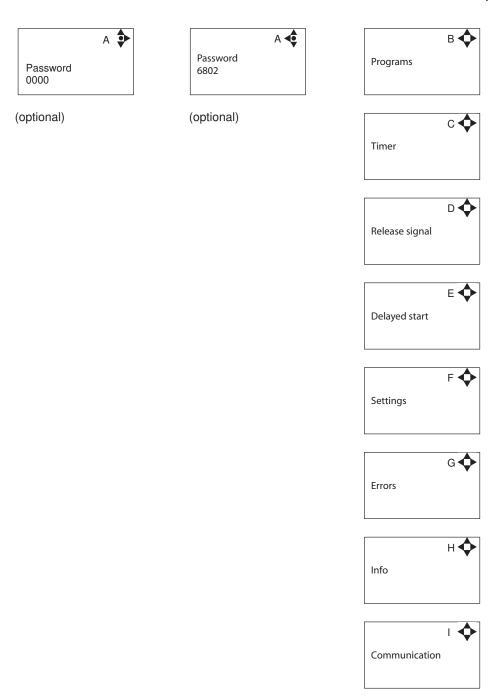
Firmware upgrade display by cable (IC) Firmware upgrade display by infrared (ID) Firmware upgrade controller PCB (IE)

## 4.1 Content of the Main menu

The control panel contains the below main menu screen displays.

Scroll between the menus using the navigation buttons.

Each main menu contains submenus which will be described subsequently.



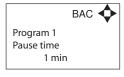
# 4.2 Content of the Programs menu

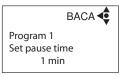














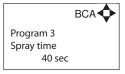


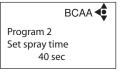




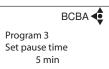




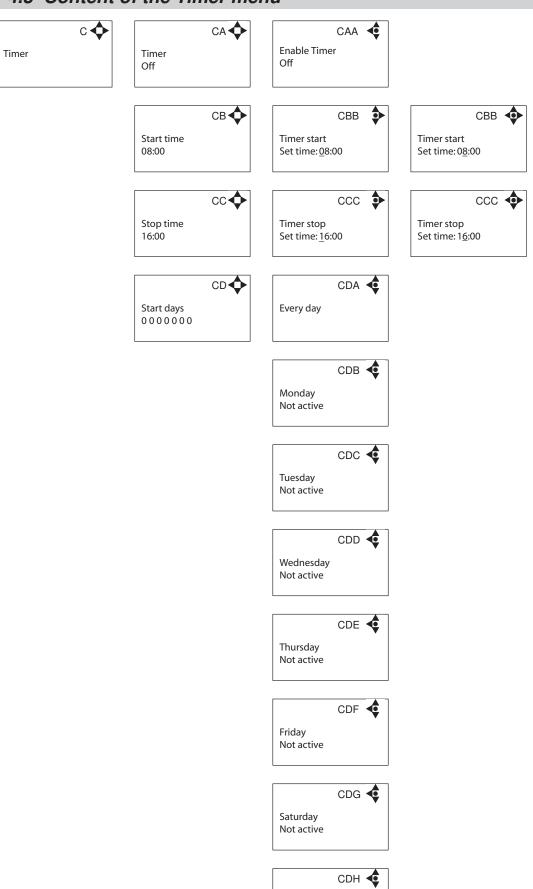








# 4.3 Content of the Timer menu



Sunday Not active

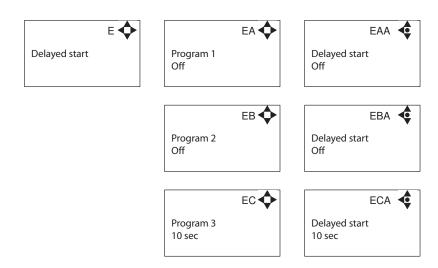


# 4.4 Content of the Release menu

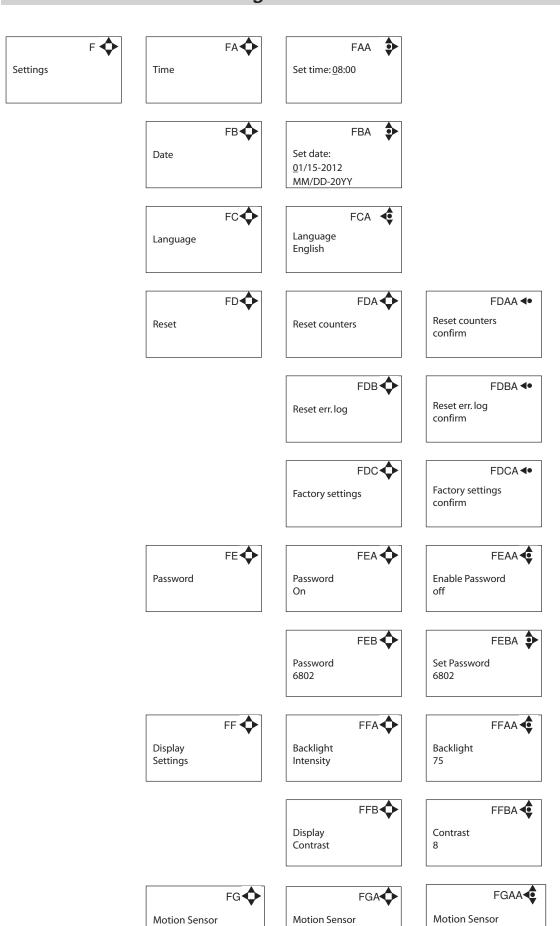


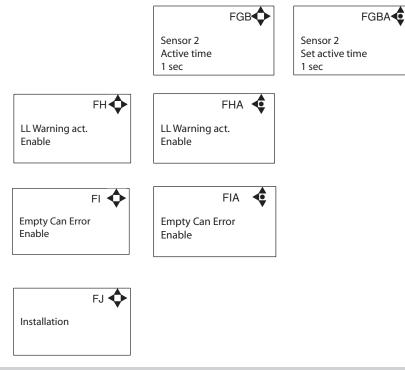
If enabled a signal of 5-10Vdc must be applied to terminal block "in", to release the unit (see electrical drawing in "Directions for Use").

# 4.5 Content of the Delayed start menu



# 4.6 Content of the Settings menu





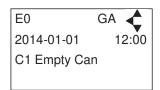
## 4.7 Content of the Errors menu





# 4.7.1 Example of Error log screen display

All error occurrences will be stamped with date and time. E indicates Error number.



The error log stores up to 30 occurrences. When max. memory is reached, the errors will be deleted according to "First in" First out" principle.

## 4.7.2 Error List

Error	Cause	Remedy
C1 Empty can	· ·	1. Press "OFF" fill liquid in can or replace can.
C2 Low level can	1. Can almost empty	1. Press "OFF" fill liquid in can or replace can.

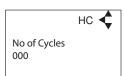
If an error occurs, the relay of terminal block "OUT1" will be activated (see electrical drawing in "Directions for Use").

# 4.8 Content of the Info menu











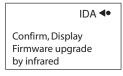
# 4.9 Content of the Communication menu















## 5. Upgrade Firmware

## 5.1 Upgrade using USB Cable

- Connect USB cable (Item No. 110001526) to PC USB port (Remove other USB cables connected to PC)
- 2. Connect Display cable to USB cable
- 3. In the menu go to, Communication-> Firmware upgrade Display by cable->Confirm, Display Firmware upgrade By cable and press "OK"
- 4. Display should now be looking like this:

Upgrade Ready Power Cycle and Start PC app.

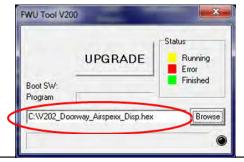
- 5. Disconnect display from usb cable and connect it again (Power cycle)
- 6. Make sure the Green "ON" led and the red "OFF" led at the display is both on, display is blank
- 7. Startup PC program FWU200.exe (can be downloaded from Nilfisk Food website)
- 8. Window should be looking like this



9. Press "Browse" button



- 10. Select the file you will use for upgrade. Software File can be downloaded from Nilfisk Food website. The name of the file should end with ".hex".
  - Ex V202\_Doorway\_Airspexx\_Disp.hex
- 11. When the file is located press "Open" in browser window
- 12. The file name will now be written in file text line



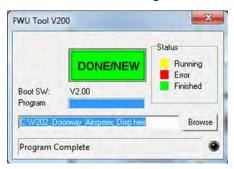
13. Press UPGRADE button in FWU 200 tool



14. After a short while the FWU tool should start upgrading, the upgrade button should turn Yellow and change to "RUNNING"



- 15. The progress bar "Program" must go to the end before the upgrade is complete (less than 1 minute)
- 16. When the upgrade is complete the FWU tool should be looking like this, Button turns Green and text changes to "DONE/NEW"



- 17. Now the display is upgraded
- 18. To verify software version in display, in the menu go to, Info->Software
- 19. Here you will find display software version and control software version (if display is not connected to a control board, control software will be V0.00)

## 5.2 Upgrade using IrDA Cable

- 1. Connect power to equipment (Doorway or Airspexx)
- 2. In the menu go to, Communication-> Firmware upgrade Display by Infrared->Confirm, Display Firmware upgrade By cable and press "OK"
- 3. Display should now be looking like this:

Upgrade Ready Power Cycle and Start PC app.

- 4. Turn Off equipment and turn it on again (Power cycle)
- 5. Make sure the All three led's are on (Green "ON", red "ERROR" and red "OFF") and the display is blank
- 6. Connect Irda module (Item No. 110001558) to PC USB port
- 7. Place Irda module on display module like this



- 8. Startup PC program FWU200.exe (can be downloaded from Nilfisk Food website)
- 9. Window should be looking like this

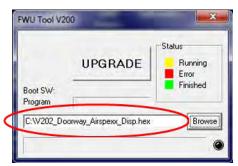


10. Press "Browse" button



- 11. Select the file you will use for upgrade. This file needs to be downloaded from the internet or copied from a mail etc. The name of the file should end with .hex. Ex V202 Doorway Airspexx Disp.hex
- 12. When the file is located press "Open" in browser window

13. The file name will now be written in file text line



14. Press UPGRADE button in FWU 200 tool



15. After a short while the FWU tool should start upgrading, the upgrade button should turn Yellow and change to "RUNNING"



- 16. The progress bar "Program" must go to the end before the upgrade is complete (less than 1 minute)
- 17. When the upgrade is complete the FWU tool should be looking like this, Button turns Green and text changes to "DONE/NEW"



- 18. Now the display is upgraded
- 19. To verify software version in display, in the menu go to, Info->Software
- 20. Here you will find display software version and control software version (if display is not connected to a control board, control software will be V0.00)

## 5.3 Upgrade Controller Board

- 1. Make sure display is connected to controller
- 2. Power up equipment
- 3. Go to menu Communication-> Firmware upgrade Controller PCB->Confirm, Firmware upgrade Controller PCB and press "OK"
- 4. Display restarts
- 5. After restart the display will start erasing the control board, display will start counting from 0% to 100%

Control upgr. Erasing 0%

6. When Erasing reaches 100%, the display will automatically start to program control board

Control upgr.
Erasing 0%
Programming 0%

- 7. Programming will now start to count from 0% to 100%
- 8. When programming reaches 100%, the programming is complete
- 9. The display will be looking like this

Control upgr.
Erasing 100%
Programming 100%
Power off unit

- 10. Turn Off equipment and turn it on again (Power cycle)
- 11. Now the control PCB is upgraded
- 12. To verify software version in display, in the menu go to, Info->Software
- 13. Here you will find display software version and control software version

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