TX Controller

Operation Guide

Version 1.7

Rev. 2015.05.29
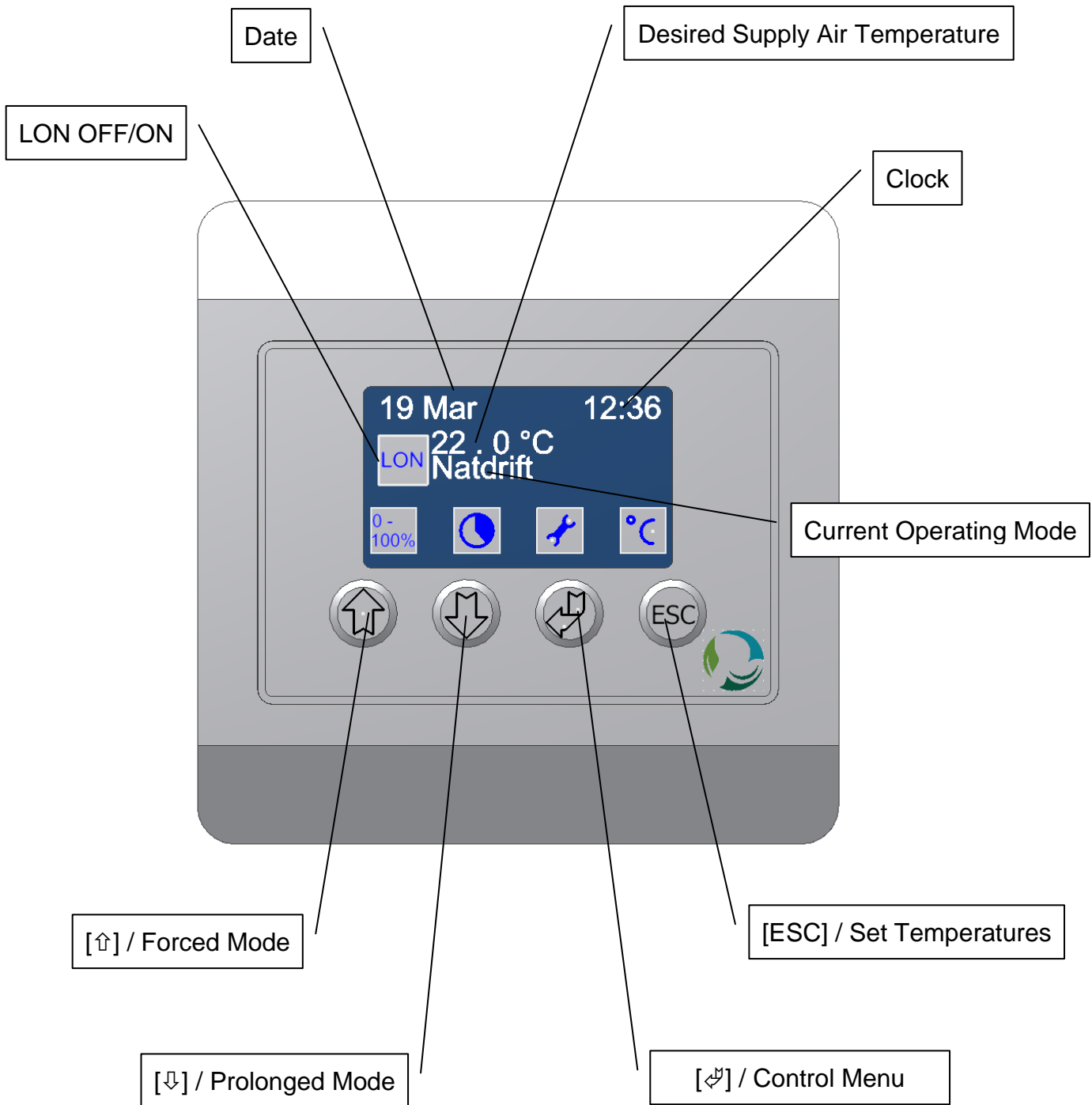
Table of Contents

Rev. 2015.05.29

1.0.0 Overview

Date

Desired Supply Air Temperature

LON OFF/ON

Clock

19 Mar   12:36

LON 22 . 0 °C
Natdrift

0 - 100%

Current Operating Mode

ESC

[⇧] / Forced Mode
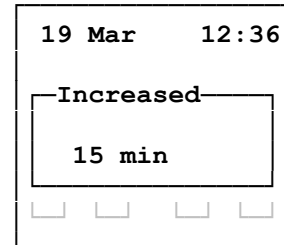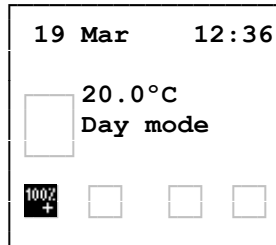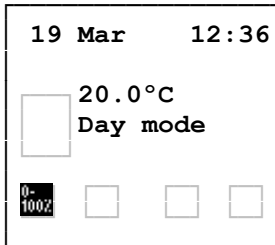
[ESC] / Set Temperatures

[⇩] / Prolonged Mode

[↵] / Control Menu

1.1.0 Forced Mode

From the Home Screen it is possible to select Forced Mode and to change the time setting for this mode. In Forced Mode the fans will run at full speed, which means that in the preset period of time the unit will provide a significantly higher air change rate.
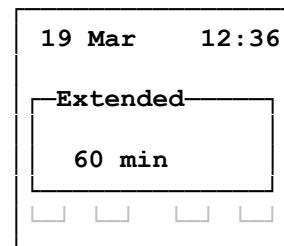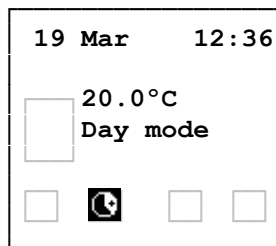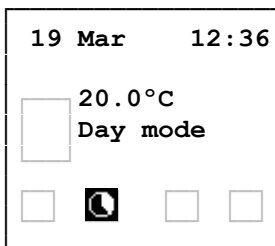
```
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│  19 Mar     12:36   │   │  19 Mar     12:36   │   │  19 Mar     12:36   │
│                     │   │                     │   │ ┌─Increased─────┐   │
│  ┌─┐ 20.0°C         │   │  ┌─┐ 20.0°C         │   │ │               │   │
│  │ │ Day mode       │   │  │ │ Day mode       │   │ │    15 min     │   │
│  └─┘                │   │  └─┘                │   │ └───────────────┘   │
│  ▣  ☐  ☐  ☐        │   │  ▣  ☐  ☐  ☐        │   │  ☐  ☐  ☐  ☐        │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
```

To activate Forced Mode press [⇧]. The symbol [▣] (0-100%) will be replaced by [▣] (100%+) to indicate that Forced Mode is active. The unit will now work in Forced Mode for the preset period of time or until [⇧] is pressed again.

To set the operating time first press [⇧] for about 3 seconds. Now set the time using [⇧] and [⇩]. Confirm by pressing [⏎] or cancel by pressing [ESC].

If this function is locked, see section 1.5.0.

1.2.0 Prolonged Mode

Using this function it is possible to prolong the operating time of the unit for a preset period of time. If a calendar setting has switched the unit to Standby, activating Prolonged Mode will run the unit in Day Mode for the preset period of time.

```
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│  19 Mar     12:36   │   │  19 Mar     12:36   │   │  19 Mar     12:36   │
│                     │   │                     │   │ ┌─Extended──────┐   │
│  ┌─┐ 20.0°C         │   │  ┌─┐ 20.0°C         │   │ │               │   │
│  │ │ Day mode       │   │  │ │ Day mode       │   │ │    60 min     │   │
│  └─┘                │   │  └─┘                │   │ └───────────────┘   │
│  ☐  ◑  ☐  ☐        │   │  ☐  ◑  ☐  ☐        │   │  ☐  ☐  ☐  ☐        │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
```

In order to activate Prolonged Mode press [⇩]. The symbol [◑] will be replaced by [◑] to indicate that Prolonged Mode is active. The unit will now run in Day Mode for the preset period of time or until another press on [⇩].
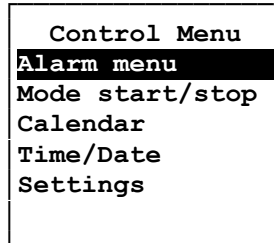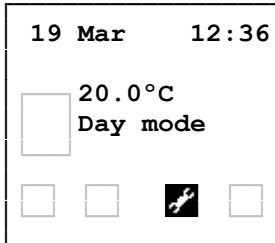
To set the time first press [⇩] for about 3 seconds. Now set the minute count using [⇧] and [⇩]. Confirm by pressing [⏎] or cancel by pressing [ESC].

If this function is locked, see section 1.5.0.

1.3.0 Control Menu

In the Control Menu all information and settings regarding the ventilation unit can be accessed. The content of the Navigation Menu is described in section 2.0.0.
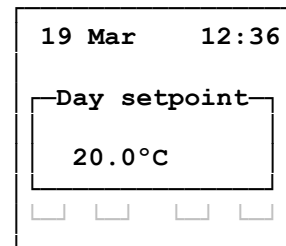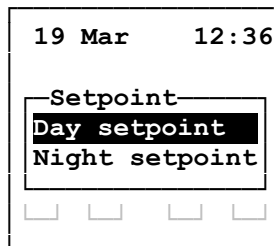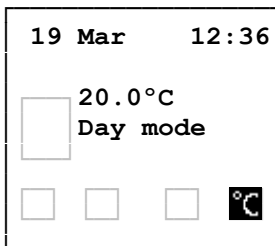
```
┌─────────────────────┐   ┌─────────────────────┐
│ 19 Mar      12:36   │   │    Control Menu     │
│                     │   │ Alarm menu          │
│  ┌─┐ 20.0°C         │   │ Mode start/stop     │
│  │ │ Day mode       │   │ Calendar            │
│  └─┘                │   │ Time/Date           │
│  ┌─┐ ┌─┐ ┌─┐ ┌─┐    │   │ Settings            │
│  └─┘ └─┘ └🔧┘ └─┘    │   │                     │
└─────────────────────┘   └─────────────────────┘
```

From the main screen you can access the Control Menu by pressing [⏎]. Use [⇧] and [⇩] to navigate through the listings, [⏎] to select and [ESC] to cancel or return to the previous menu.

If this menu is passcode protected, see section 1.5.0.

1.4.0 Temperature Setpoints

On the main screen the desired supply air temperature regarding the actual operating mode (Day Mode or Night Mode) is shown. To prevent the ventilation unit being the primary heat source, we recommend setting this temperature 1 to 2 °C lower than the desired room temperature.
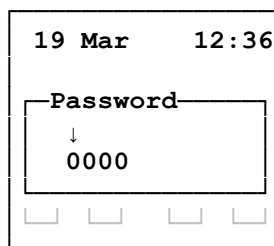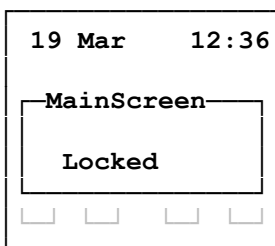
```
┌─────────────────────┐  ┌─────────────────────┐  ┌─────────────────────┐
│ 19 Mar      12:36   │  │ 19 Mar      12:36   │  │ 19 Mar      12:36   │
│                     │  │                     │  │                     │
│  ┌─┐ 20.0°C         │  │ ┌Setpoint────────┐  │  │ ┌Day setpoint────┐  │
│  │ │ Day mode       │  │ │Day setpoint    │  │  │ │                │  │
│  └─┘                │  │ │Night setpoint  │  │  │ │  20.0°C        │  │
│  ┌─┐ ┌─┐ ┌─┐ ┌°C┐   │  │ └────────────────┘  │  │ └────────────────┘  │
│  └─┘ └─┘ └─┘ └──┘   │  │ └┘ └┘ └┘ └┘         │  │ └┘ └┘ └┘ └┘         │
└─────────────────────┘  └─────────────────────┘  └─────────────────────┘
```

To set the desired supply air temperatures, first press [ESC]. Next, mark up the day or night setpoint using [⇧] and [⇩] and confirm by pressing [⏎]. Now set the desired temperature using [⇧] and [⇩]. Finally, confirm by pressing [⏎].

If this function is passcode protected, see section 1.5.0.

1.5.0 Keypad Lock

The main screen has 4 llevels of locking and depending on the level, the funktions forced- as well as prolonged mode will be locked. The Control Menu and the temperature setpoints will be passcode protected. For a more detailed description, see section 2.5.5.7

```
┌─────────────────────┐  ┌─────────────────────┐
│ 19 Mar      12:36   │  │ 19 Mar      12:36   │
│                     │  │                     │
│ ┌MainScreen──────┐  │  │ ┌Password────────┐  │
│ │                │  │  │ │      ↓         │  │
│ │  Locked        │  │  │ │  0000          │  │
│ └────────────────┘  │  │ └────────────────┘  │
│ └┘ └┘ └┘ └┘         │  │ └┘ └┘ └┘ └┘         │
└─────────────────────┘  └─────────────────────┘
```

To enter the passcode set each digit using [⇧] and [⇩] and confirm this by pressing [⏎].

2.0.0 Control Menu

In the Control Menu all information and settings regarding the ventilation unit can be accessed. The details of entering and navigating the menu is described in section 1.3.0.
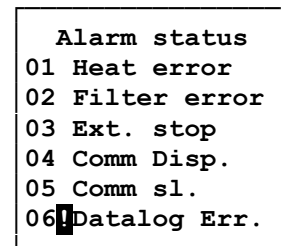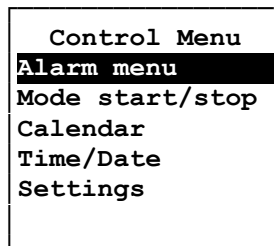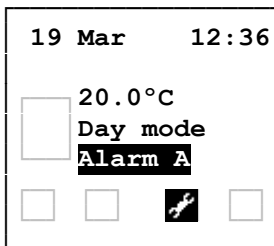
2.1.0 Alarm menu

In case of failure or demand of service on the unit, an alarm will occur. The cause of the alarm can be found in the Alarm menu.
A alarms will stop the operation of the unit until the error is rectified.
B alarms should be rectified but will not stop the operation of the unit.
C alarms will not occur on the display but can only be seen in the menu "Alarm status".

```
 19 Mar    12:36

   20.0°C
   Day mode
   Alarm A
```

```
   Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
   Alarm status
01 Heat error
02 Filter error
03 Ext. stop
04 Comm Disp.
05 Comm sl.
06 Datalog Err.
```

To access the alarm status go to "Control Menu" and select "Alarm menu". Active alarms will be marked "!". Browse the pages using [⇧] og [⇩] or exit the menu by pressing [ESC].
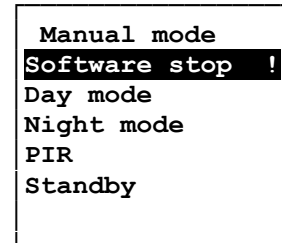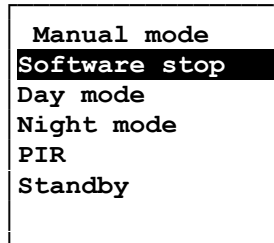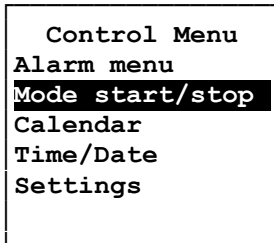
2.1.1 Alarm overview

Name	Type	Description	To alleviate
01 Heat error	A	Connection between terminals 41 and 42 on main PCB disconnected.	Check connection (Thermostat)
02 Filter error	B	Airfilter clogged om master unit	Replace air filters.
03 Ext. stop	C	Connection between terminals 29 and 30 on main PCB disconnected.	Kontroller forbindelsen (Interlock switch)
04 Comm Disp.	C	Communication error with display	Check connection
05 Comm sl.	C	Communication error with slave unit	Check connection and the master/slave settings on PCBs.
06 Datalog Err.	C	Write error on SD card	Insert or replace SD card
07 Heat sl.1	A	Connection between terminals 41 and 42 on slave PCB disconnected.	Check the connection on slave 1's PCB (Thermostat)
08 Heat sl.2	A	Connection between terminals 41 and 42 on slave PCB disconnected.	Check the connection on slave 2's PCB (Thermostat)
09 Heat sl.3	A	Connection between terminals 41 and 42 on slave PCB disconnected.	Check the connection on slave 3's PCB (Thermostat)
10 Heat sl.4	A	Connection between terminals 41 and 42 on slave PCB disconnected.	Check the connection on slave 4's PCB (Thermostat)
11 Heat sl.5	A	Connection between terminals 41 and 42 on slave PCB disconnected.	Check the connection on slave 5's PCB (Thermostat)
12 Filter sl.1	B	Airfilter clogged on slave unit 1	Replace air filters
13 Filter sl.2	B	Airfilter clogged on slave unit 2	Replace air filters
14 Filter sl.3	B	Airfilter clogged on slave unit 3	Replace air filters
15 Filter sl.4	B	Airfilter clogged on slave unit 4	Replace air filters
16 Filter sl.5	B	Airfilter clogged on slave unit 5	Replace air filters

2.2.0 Operation start/stop

2.2.1 Software stop

Software stop is a function that might be used when replacing filters. This function makes sure that no parts will move regardless of incoming start signals from sensors and switches.
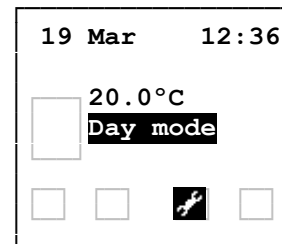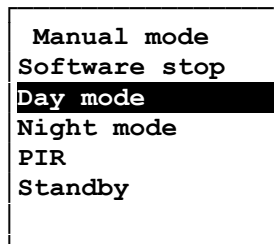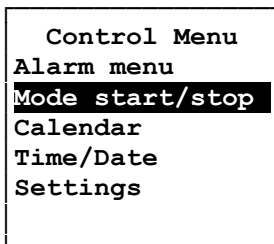
```
  Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
 Manual mode
Software stop
Day mode
Night mode
PIR
Standby
```

```
 Manual mode
Software stop  !
Day mode
Night mode
PIR
Standby
```

To activate this function go to "Control Menu", select "Mode start/stop" and the select "Software stop". An exclamation mark displayed after the text will indicate that this function is active.

To exit this menu and go to the Home Screen, use [⇧] and [⇩] to mark up another operating mode and confirm this by pressing [⏎].

2.2.2 Day Mode

In Day Mode the ventilation unit will use a standard setting providing the nominal air flow.
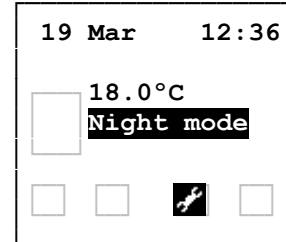
```
  Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
 Manual mode
Software stop
Day mode
Night mode
PIR
Standby
```

```
 19 Mar     12:36

      20.0°C
      Day mode


  □   □   ✦   □
```
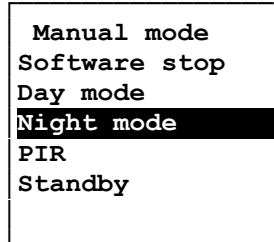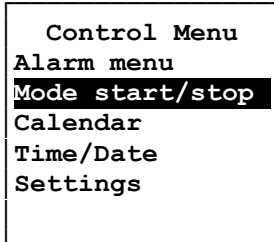
To select Day Mode go to "Control Menu" and select "Mode start/stop". Use [⇧] and [⇩] to mark up "Day mode" and confirm by pressing [⏎].

The controller will return to the home screen and after about 10 seconds the selected operating mode will be displayed.

2.2.3 Night Mode

In Night Mode the ventilation unit will be working at a standard setting providing approximately 20% of the nominal airflow.
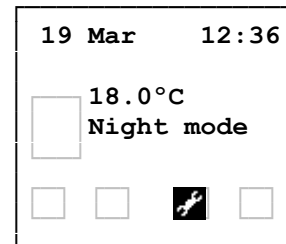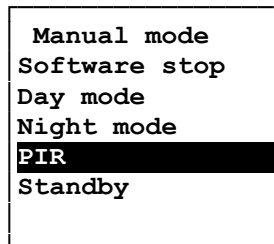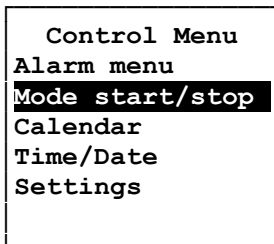
```
 Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
 Manual mode
Software stop
Day mode
Night mode
PIR
Standby
```

```
19 Mar    12:36

      18.0°C
      Night mode


         ⚒
```

To select Night Mode go to "Control Menu" and select "Mode start/stop". Use [⇧] and [⇩] to mark up "Night mode" and confirm by pressing [⏎].
The controller will return to the home screen and after about 10 seconds the selected operating mode will be displayed.

2.2.4 PIR

In order to run PIR mode, a presence sensor must be connected to the air handling unit. The unit will go to Night mode and switch to Day mode when the presence sensor is active. When the presence sensor goes inactive, the unit will stay in Day mode for 30 minutes and then switch back to Night mode.
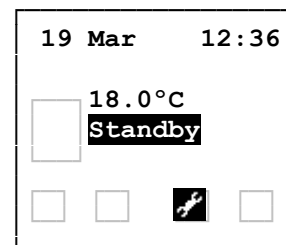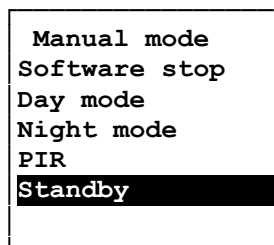
```
 Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
 Manual mode
Software stop
Day mode
Night mode
PIR
Standby
```

```
19 Mar    12:36

      18.0°C
      Night mode


         ⚒
```

To select PIR mode go to "Control Menu" and select "Mode start/stop". Use [⇧] and [⇩] to mark up "PIR" and confirm by pressing [⏎].
The controller will return to the home screen and after about 10 seconds the selected operating mode will be displayed.

2.2.5 Standby

When the unit is in Standby the fans will stop and all dampers will close

```
 Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
 Manual mode
Software stop
Day mode
Night mode
PIR
Standby
```

```
19 Mar    12:36

      18.0°C
      Standby


         ⚒
```
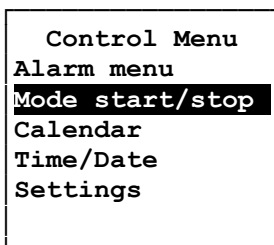
To select Standby go to "Control Menu" and select "Mode start/stop". Use [⇧] and [⇩] to mark up "Standby" and confirm by pressing [⏎].
The controller will return to the home screen and after about 10 seconds the selected operating mode will be displayed.

2.3.0 Calendar

Before using the calendar function, check the Time/Date settings, see section 2.4.0.
The calendar makes it possible to create 10 settings for each day of the week. The setting consists of day, clock and mode (Day mode, Night mode, Standby or PIR).

```
   Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
01 Monday
02 Tuesday
03 Wednesday
04 Thursday
05 Friday
06 Saturday
07 Sunday
```

```
        Monday
01 00:00 ---
02 00:00 ---
03 00:00 ---
04 00:00 ---
05 00:00 ---
06 00:00 ---
```

To set the calendar go to "Control Menu" and select "Calendar". Use [⇧] and [⇩] to mark up the day to modify and confirm by pressing [⏎]. Now use [⇧] and [⇩] to mark up the setting to modify and confirm by pressing [⏎]. Exit any time by pressing [ESC].

```
        Monday
01 00:00 ---
  ┌Monday────┐
  │          │
  │ 00:00 ---│
  │          │
  └──────────┘
06 00:00 ---
```

```
        Monday
01 00:00 ---
  ┌Mandag────┐
  │          │
  │ 07:15 Day│
  │          │
  └──────────┘
06 00:00 ---
```

```
        Monday
01 07:15 Day
02 00:00 ---
03 00:00 ---
04 00:00 ---
05 00:00 ---
06 00:00 ---
```

Use [⇧] and [⇩] to set the hour and confirm by pressing [⏎]. Now set the minutes using [⇧] and [⇩], confirm by pressing [⏎]. Finally, set the operating mode using [⇧] and [⇩], confirm by pressing [⏎]. Press [ESC] twice to return to Control Menu.
To reset all calendar settings, see section 2.5.5.5.

2.4.0 Time/Date

2.4.1 Clock

```
   Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
   Time/Date
Clock
Date
Day
DST OnOff
```

```
   Time/Date
Clock
  ┌Clock─────┐
  │    ↓     │
  │  12:36   │
  │          │
  └──────────┘
```

To set the clock go to "Control Menu" select "Time/Date" and then "Clock". Set the hours using [⇧] and [⇩], confirm by pressing [⏎]. Set the minutes using [⇧] and [⇩], confirm by pressing [⏎]. Press [ESC] to return to Control Menu.

2.4.2 Date

```
   Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
    Time/Date
Clock
Date
Day
DST OnOff
```

```
    Time/Date
Clock
┌─Date──────
│    ↓
   08.10.2013
```

To set the date go to "Control Menu", select "Time/Date" and then "Date". First set the date using [⇧] and [⇩], confirm by pressing [↵]. Now set the month using [⇧] and [⇩], confirm pressing [↵]. Finally set the year using [⇧] and [⇩], confirm by pressing [↵]. Press [ESC] to return to the Control Menu.

2.4.3 Day

```
   Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```

```
    Time/Date
Clock
Date
Day
DST OnOff
```

```
    Time/Date
Clock
┌─Day───────
│
    Tuesday
```

To set the day go to "Control Menu" and select "Time/Date" then "Day". Select weekday using [⇧] and [⇩], confirm by pressing [↵]. Press [ESC] to return to Control Menu.

2.4.4 DST OFF/ON

```
   Control Menu
Alarm menu
Mode start/stop
Calendar
Time/Date
Settings
```
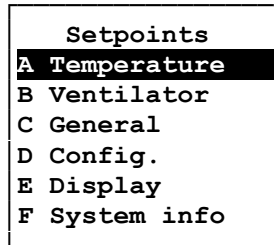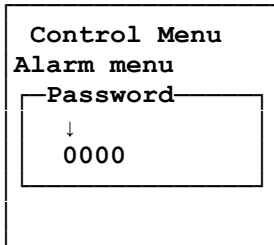
```
    Time/Date
Clock
Date
Day
DST OnOff
```

```
    Time/Date
Clock
┌─Setpoint─D26─┐
│
    1
```

To set DST (Daylight Saving Time) go to "Control Menu", "Time/Date" and then "DST OFF/ON". Set value to 0 (OFF) or 1 (ON) using [⇧] and [⇩], confirm by pressing [↵]. Press [ESC] to return to Control Menu.

2.5.0 Settings

In the Settings Menu all setpoints and parameters can be adjustet. Incorrect settings may cause irregular operation or stop the unit, so this menu is passcode protected. Passcode and parameter description can be obtained from your Turbovex retailer.

```
┌─────────────────────┐        ┌─────────────────────┐
│  Control Menu       │        │     Setpoints       │
│  Alarm menu         │        │ A Temperature       │
│  ┌─Password──────┐  │        │ B Ventilator        │
│  │               │  │        │ C General           │
│  │      ↓        │  │        │ D Config.           │
│  │     0000      │  │        │ E Display           │
│  │               │  │        │ F System info       │
│  └───────────────┘  │        └─────────────────────┘
│                     │
└─────────────────────┘
```

Set each passcode digit individually pressing [⇧] and [⇩], confirm by pressing [⏎].

2.5.1 Temperature

A1 Room temperature day (°C)
A2 Room temperature night (°C)
A3 Inlet temperature day min (°C)
A4 Inlet temperature day max (°C)
A5 Inlet temperature night min (°C)
A6 Inlet temperature night max (°C)

2.5.2 Ventilator

B1 Fixed speed day inlet (%)
B2 Fixed speed day outlet (%)
B3 Fixed speed night inlet (%)
B4 Fixed speed night outlet (%)
B5 Fixed speed increased inlet (%)
B6 Fixed speed increased outlet (%)
B7 Balance/max inlet air (%)
B8 Balance/max outlet air (%)

2.5.3 General

C1 Increased mode (min)
C2 Extended mode (min)
C3 PIR mode (min)
C4 Bypass on/bypass off/Auto water
C5 Bypass outdoor air minimum (°C)
C6 Bypass analogue max (°C)
C7 Demand driven control (OFF/ON)
C8 Demand driven outlet slave (OFF/ON)
C9 Demand driven start time (ses)
C10 Demand driven inlet min speed (%)
C11 Demand driven max-extract air follow (%)
C12 CO_2 control (OFF/ON)
C13 CO_2 day (ppm)
C14 CO_2 night (ppm)
C15 CO_2 room inside max (ppm)
C16 CO_2 max inlet speed (%)
C17 CO_2 max outlet speed (%)
C18 Calendar (OFF/ON)
C19 Heating (OFF/ON)
C20 Fan speed before valve closes (%)

2.5.4 Config.

D1 EL/Water heating (0=El, 1=Water)
D2 EL-heating after blowing time (sec)
D3 EL-heating periode time (sec)
D4 Boot time fan (sec)
D5 Ekstern comm. bus (OFF/ON)
D6 Standby increased/extended Button (OFF/ON)
D7 Temp primary KP
D8 Temp primary TI
D9 Temp primary TD
D10 Temp primary H
D11 Temp heat KP
D12 Temp heat TI
D13 Temp heat TD
D14 Temp heat H
D15 Software stop (OFF/ON)
D16 PIR NO/NC (0=NO, 1=NC)
D17 24VDC auto off (OFF/ON)
D18 Modbus address (1-247)
D19 Modbus baud rate (1=19200, 2=9600)
D20 Modbus parity (1=EVEN 2=ODD 3=NONE)
D21 Modbus stop bits (1=1 stopbit 2=2 stopbits)
D22 Fire OFF (OFF/ON)
D23 Filter timer (month)

2.5.5 Display

2.5.5.1 Info

This menu displays the version- og revision number of the controller and main PCB software. The controller version is displayed first, thereafter the PCB version.

```
    Setpoints
A Temperature
B Ventilator
C General
D Config.
E Display
F System info
```
```
   E display
E1 Info
E2 Languages
E3 Contrast
E4 Fact. Sett.
E5 Cal. reset
E6 SD save
```
```
    Turbovex

    Controller
    Revision I
Program version
   1.6 / 1.5
```

To view this menu, go to "Control Menu", "Settings" select "E Display" then "E1 Info". Press [ESC] twice to return to the Control Menu.

2.5.5.2 Language

```
    Setpoints
A Temperature
B Ventilator
C General
D Config.
E Display
F System Info
```
```
   E display
E1 Info
E2 Languages
E3 Contrast
E4 Fact. Sett.
E5 Cal. reset
E6 SD Save
```
```
   E display
E1 Info
 ─E2 Languages─

    English

E6 SD save
```

To select a language, go to "Control Menu", "Settings", "E Display" then select "E2 Languages". Select language using [⇧] or [⇩] and confirm by pressing [↵]. Press [ESC] twice to return to the Control Menu.

2.5.5.3 Contrast

Use this function to change the TX Controller display contrast.

```
    Setpoints
A Temperature
B Ventilator
C General
D Config.
E Display
F System Info
```
```
   E display
E1 Info
E2 Languages
E3 Contrast
E4 Fact. Sett.
E5 Cal. reset
E6 SD save
```
```
   E display
E1 Info
 ─E3 Contrast─

    Level 5

E6 SD save
```

To change the contrast go to "Control Menu", "Settings" select "E Display" then "E3 Contrast". Set contrast level using [⇧] and [⇩], confirm by pressing [↵]. Press [ESC] to return to the Control Menu.

2.5.5.4 Factory Settings

This function is created to get any Turbovex ventilation unit running at a common standard setting. However, since this controller is used for several different units, we recommend that you contact your Turbovex distributor in order to upload the correct setting to your unit.

```
    Setpoints          E display          E display
A Temperature      E1 Info            E1 Info
B Ventilator       E2 Language        ┌─Reset───────
C General          E3 Contrast        │
D Config.          E4 Fact. Sett.     │    OK
E Display          E5 Cal. reset      │
F System Info      E6 SD save         E6 SD save
```

To restore factory settings go to "Control Menu", "Settings", "E Display" and select "E4 Fact. Sett.". Confirm by pressing [⏎] twice or cancel by pressing [ESC].

2.5.5.5 Calendar reset

This function will delete all user-set calendar settings.

```
    Setpoints          E display          E display
A Temperature      E1 Info            E1 Info
B Ventilator       E2 Language        ┌─Reset───────
C General          E3 Contrast        │
D Config.          E4 Fact. Sett.     │    OK
E Display          E5 Cal. reset      │
F System Info      E6 SD save         E6 SD save
```

To reset the calendar go to "Control Menu", "Settings", "E Display" and select "Cal. reset". Confirm by pressing [⏎] twice or cancel by pressing [ESC].
When reset is confirmed, the controller software reboots and the calendar will be cleared.

2.5.5.6 SD save

When a SC card is mounted in the main PBC, all data will be logged and automatically saved every 6 hours. If the SD card is to be removed, the SD save function will save all logged data since the last automatic save.

```
    Setpoints          E display          E display
A Temperature      E1 Info            E1 Info
B Ventilator       E2 Language        ┌─Reset───────
C General          E3 Contrast        │
D Config.          E4 Fact. Sett.     │    OK
E Display          E5 Cal. reset      │
F System Info      E6 SD save         E6 SD save
```

To save the logged data to the SD card go to "Control Menu", "E Display" select "E6 SD save". Confirm by pressing [⏎] twice or cancel by pressing [ESC].
When reset is confirmed, the controller software reboots and the logged data is written to the SD card.

2.5.5.7 Lock Home Screen

The TX Controller has 4 levels of locking which allows you to set limited access to some or all functions. The passcode can be obtained from your Turbovex dealer.

Level 0: No keylock, all menus and settings are accessible.
Level 1: "Control Menu" access is passcode protected.
Level 2: "Control Menu" and "Set Temperatures" access is passcode protected.
Level 3: Control Menu" and "Set Temperatures" access is passcode protected, "Forced Mode" and "Prolonged Mode" keys are locked.

```
    Setpoints            E Display            E Display
A Temperature      Lock Mainscreen      Lock Mainscreen
B Ventilator                            ┌─Lock Level─┐
C General                               │            │
D Config.                               │     3      │
E Display                               │            │
F System Info                           └────────────┘
```

To set the lock level, go to "Control Menu", "Settings", "E Display" then "Lock Mainscreen". Select level using [⇧] and [⇩], confirm by pressing [⏎]. Press [ESC] to return to the Control Menu.

2.5.6 System Information

The System Information menu displays all actual unit data including temperatures, CO_2-level, fan speed, the degree of bypass damper opening, heating controller output, from where the unit is controlled and communication information.

```
    Setpoints            F System info        F System info
A Temperature      01 T1 : 5.0°C        07 In  : 20%
B Ventilator       02 T2 : 22.0°C       08 Out : 20%
C General          03 T3 : 25.0°C       09 BYP : 0%
D Config.          04 T4 : 7.3°C        10 PID : 100%
E Display          05 CO2: 800ppm       11 Startcount:2
F System Info      06                   12 Comm
```

To access this information go to "Control Menu", "Settings" and select "F System Info". Flip page using [⇧] and [⇩]. Press [ESC] to return to the Control Menu.

3.0.0 Wiring Diagram

The TX controller is supplied with 10 meter cable (AWM Style 2464 80ºC 300V 24AWG VW-1). If extended or replaced, the cable length should not exceed 20 meter.
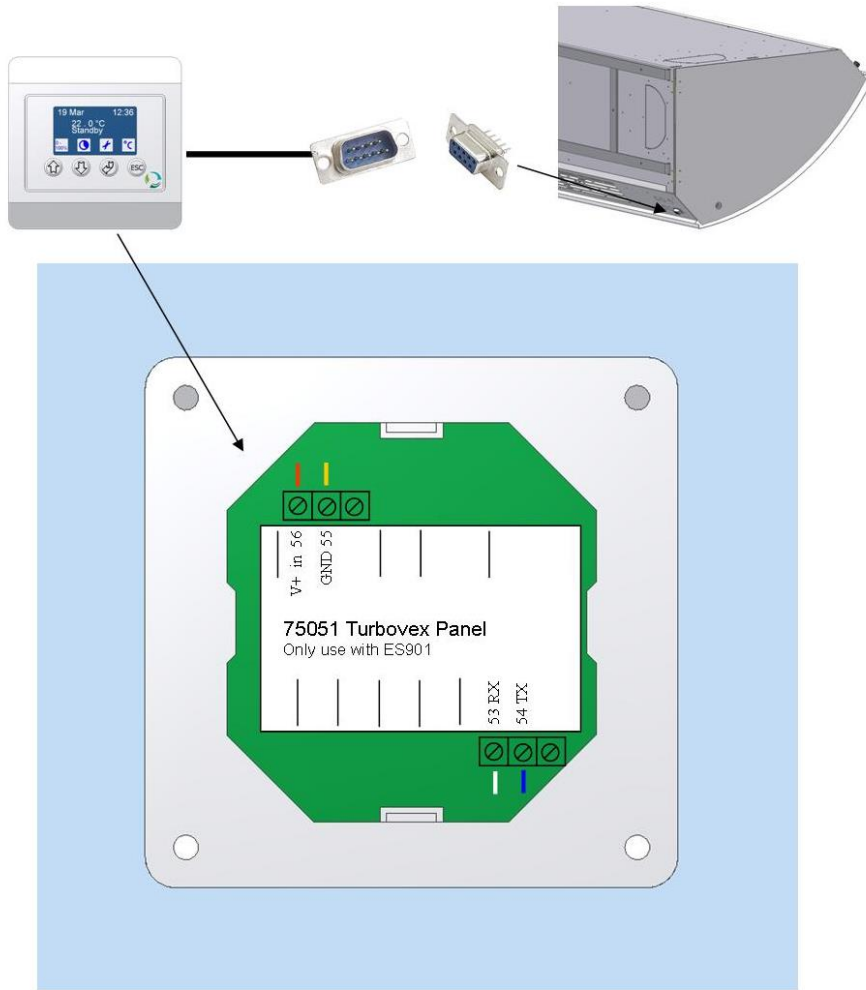
SUB 9 – No plug – Bet.panel

6 – White – 53
7 – Blue – 54
8 – Yellow – 55
9 – Red – 56