

INTRODUCTION

This document contains information about configuring CDT2000 carbon dioxide transmitter with a touchscreen user interface. Before reading this guide, check that the transmitter has been installed according to the installation instructions.

This document describes the menu structures of the transmitter and all the settings that can be adjusted in the menus. Plenty of screen shots and descriptions make the use of the transmitter simple and easy just by following this guide.

NAVIGATING THE MENU



3 Seconds

Press and hold the screen for three seconds to enter the setup menu.



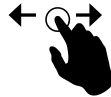
Go back to previous menu without changes



Slide your finger up/down to navigate between the modes



Accept changes and return to the previous menu

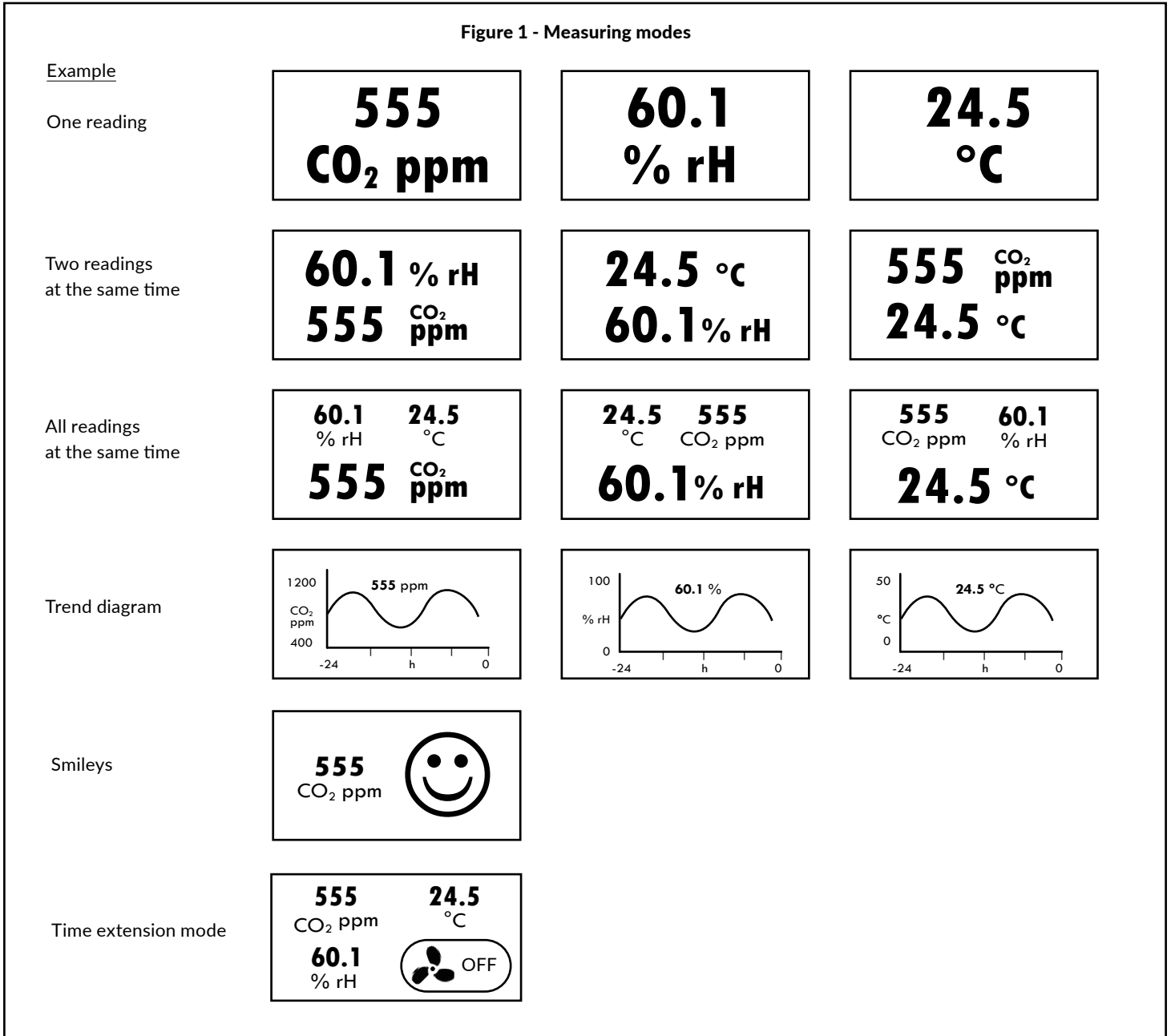


Slide your finger left/right to navigate between the parameters

Note that if the locking jumper has been installed, nothing will happen on the display. See more instructions about the locking jumper in the installation instructions.

STEP 1: MEASURING MODES

There are 14 different presentations that can be set for the screen display (see Figure 1). All values can be displayed individually or with different combinations or with trend diagrams. The CO₂ level can also be displayed with a smiley for easy indication of the air quality. One can choose all or just a few measuring modes and display them sequentially on the screen.



STEP 2: DISPLAY MODE

Press and hold the screen for three seconds to enter the setup menu.

The setup menu will appear on the screen (see Figure 2). Note that if the locking jumper has been installed, nothing will happen on the display. See more instructions about the locking jumper in the installation instructions.


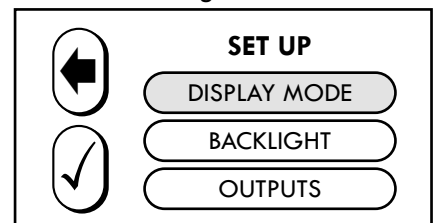
Press DISPLAY MODE. READING view will appear on the screen. Slide your finger left/right or up/down to navigate between the views (see Figure 3). Select the desired view and press  accept button to accept the view.

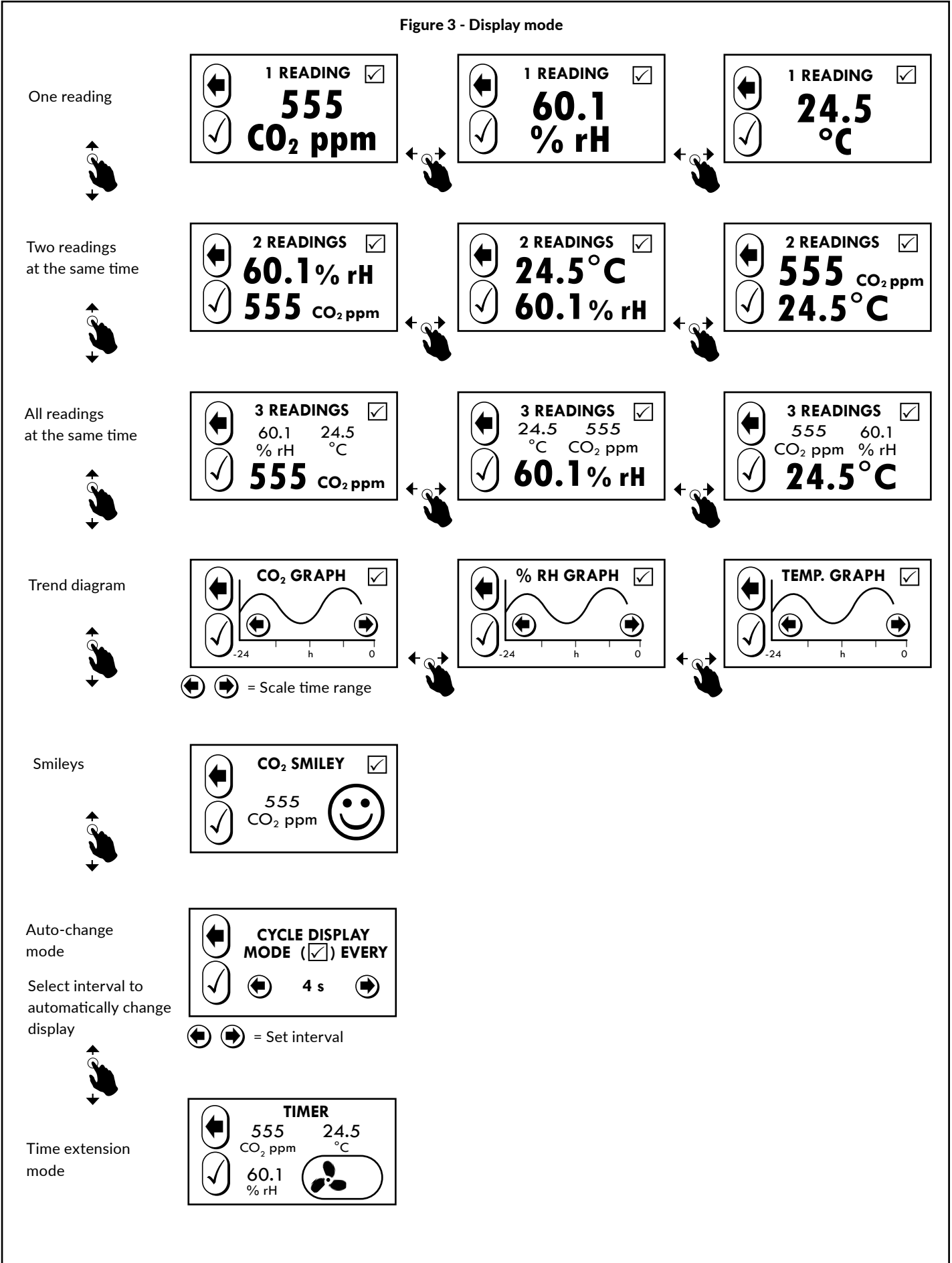


Figure 2



DISPLAY MODE CONTINUED

Figure 3 - Display mode



DISPLAY MODE CONTINUED

AUTO-CHANGE MODE

If you want different views to be displayed sequentially, check the box on the top-right corner of the view to add it (see Figure 4).

Figure 4



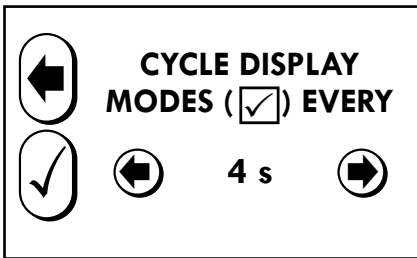
Check/uncheck upper-right box to include or exclude.



= Included in the Auto-change Mode.

= Excluded from the Auto-change Mode.

Note: Functions ONLY when Auto-change Mode is the selected Display Mode.

Figure 5

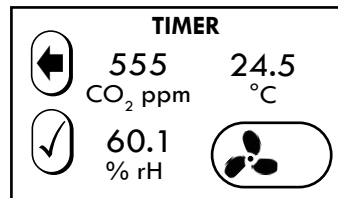


The auto-change mode (Figure 5) has to be selected in Display Mode menu to activate the sequential view. To activate auto-change mode, adjust the time between views, then press , accept button, to make changes or go back to the previous menu without changes by pressing .


TIME EXTENSION MODE

Time extension mode can be used to control an external device (e.g. ventilation unit boost) with relay control or via Modbus.

Figure 6



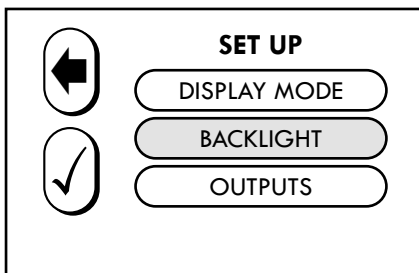
Time extension mode is selected in the DISPLAY MODE menu.

The duration of the time extension (OFF / 1:00 / 2:00 / 4:00 / 8:00) is set in the TIME EXTENSION mode by pressing the timer icon . At the end of the set time, the control switches off automatically if the measured value is within the set switching limits.

Time extension mode is only available if a relay is installed or Modbus is supported.

STEP 3: BACKLIGHT LEVEL

Figure 7a





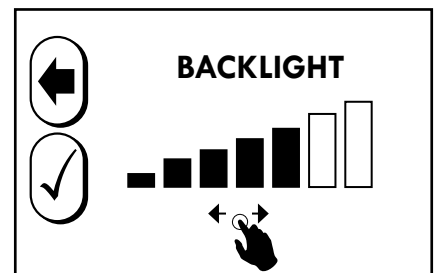
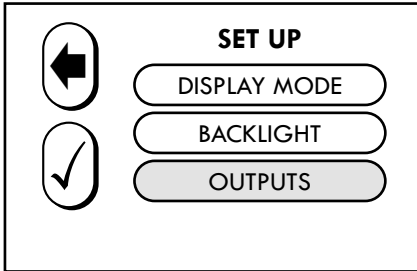
In the SET UP menu choose BACKLIGHT. Slide your finger left/right and select the suitable backlight brightness. Press  to accept the changes or go back to the previous menu without changes by pressing .

Figure 7b



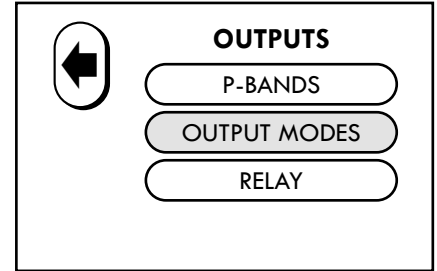
STEP 4: OUTPUTS

Figure 8a



In the SET UP menu choose OUTPUTS. Select P-BANDS to adjust the measurement ranges. Select OUTPUT MODES to choose between different output options. Select RELAY to configure a relay output. Selection is only available if a relay is installed.

Figure 8b

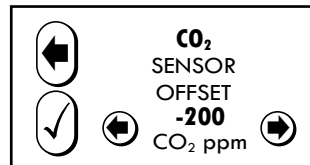


OFFSET

- 1) In the SET UP menu choose OUTPUTS.
- 2) Select P-BANDS.
- 3) Select the desired parameter and choose OFFSET.

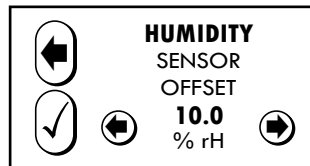
3.1) Adjust the CO₂ offset: ± 200 ppm. The offset feature enables field calibration. This is necessary in demanding applications that require annual calibration.

Figure 9a



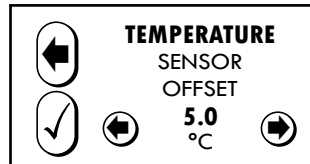
3.2) Adjust the humidity offset: ± 10 % rH. The offset feature enables field calibration. This is necessary in demanding applications that require annual calibration.



Figure 9b





3.3) Adjust the temperature offset: ± 5 °C.

Figure 9c



- 4) Press  to accept changes or press  to return to the previous menu without making changes.

OFFSET (MODBUS)

- 1) In the SET UP menu choose OUTPUTS.
- 2) Select REGULATOR.
- 3) Select P-BANDS.
- 4) Select OFFSET.
- 5) Select the desired parameter and adjust it (see figures 9a, 9b and 9c).
- 6) Press  to accept changes or press  to return to the previous menu without making changes.

STEP 5: P-BANDS

Press the desired parameter to adjust the output range. Pressing the screen will close the INFO view right away. If the screen is not pressed the INFO view will close after a few seconds.



Press HIGH LIMIT or LOW LIMIT to set the limits for the output (See Figure 10a). Press  to accept changes or press  to return to the previous menu without making changes. To change selection between current and voltage outputs see the installation instructions.

Figure 10b

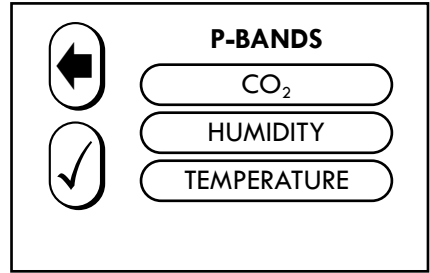
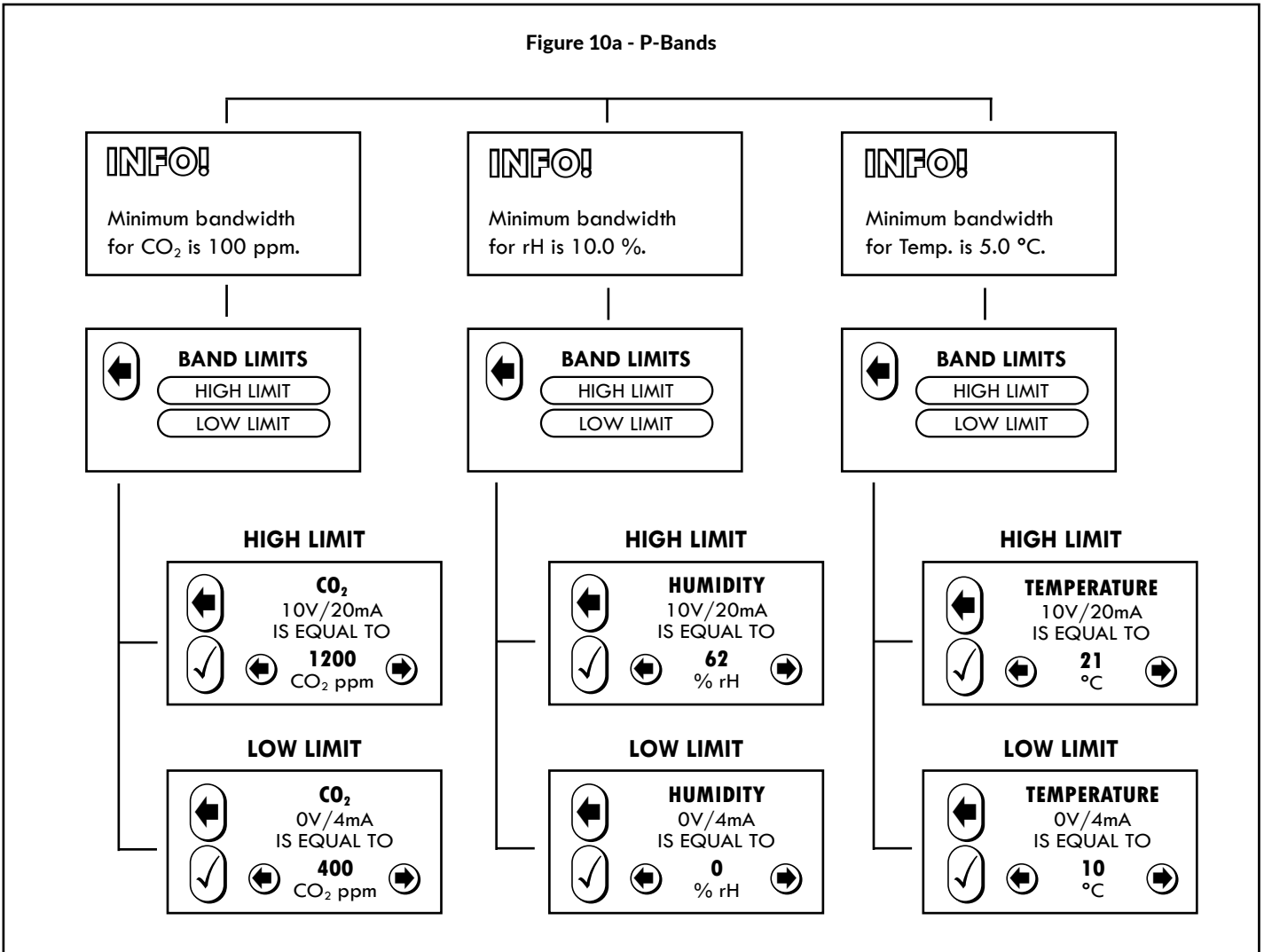


Figure 10a - P-Bands



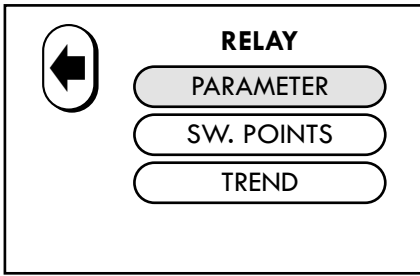
STEP 6: OPTIONAL OUTPUT MODE

Select MAX VALUE OUT to enable comparison between CO₂ and temperature values. The one that is higher will be output from the humidity terminal. This setting will thus disable the normal humidity output!

Select 0/2-10 V to choose between 0-10 V voltage output and 2-10 V voltage output.

STEP 7: OPTIONAL RELAY

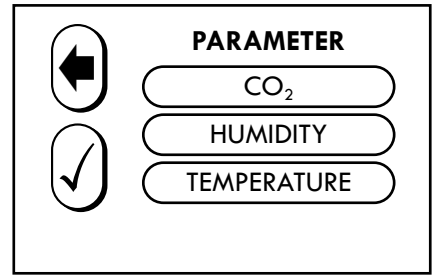
Figure 11



Menu is only available if a relay is installed.
Press PARAMETER to select the desired parameter.

Select the desired PARAMETER and press to accept the changes or return to the previous menu without changes by pressing .

Figure 12



Press SW. POINTS to set the relay's switching points. Set RELAY ON and RELAY OFF points and press to accept changes or return to the previous menu without changes by pressing .

Figure 13

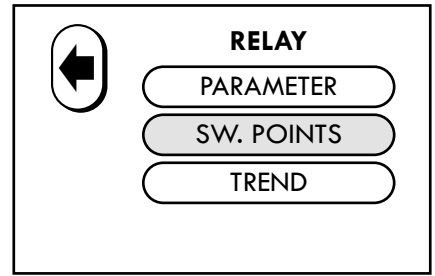


Figure 14 - SW. points

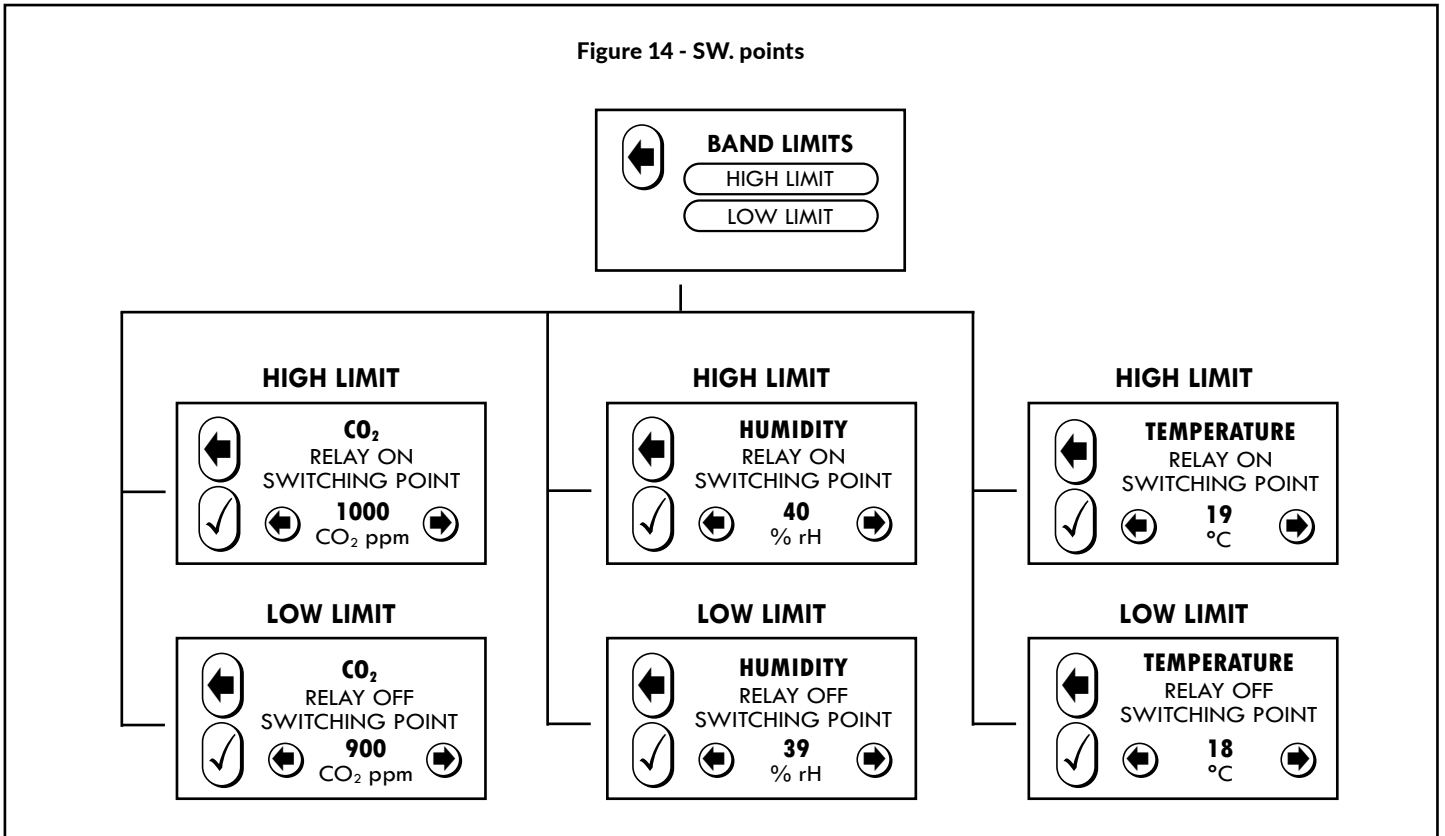
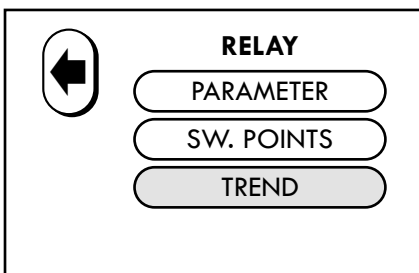


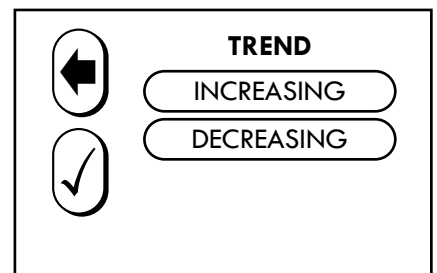
Figure 15



Press TREND to set the switching trend of the relay.

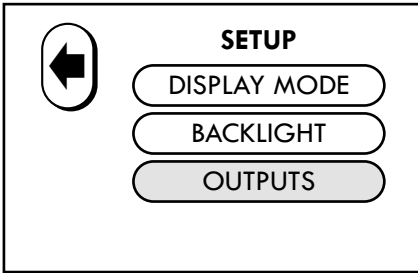
Select INCREASING or DECREASING and press to accept changes or return to the previous menu without changes by pressing .

Figure 16



STEP 8: OPTIONAL MODBUS

Figure 17

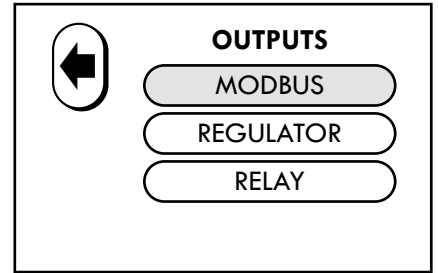


Menu is only available if MODBUS is supported.

Press OUTPUTS.

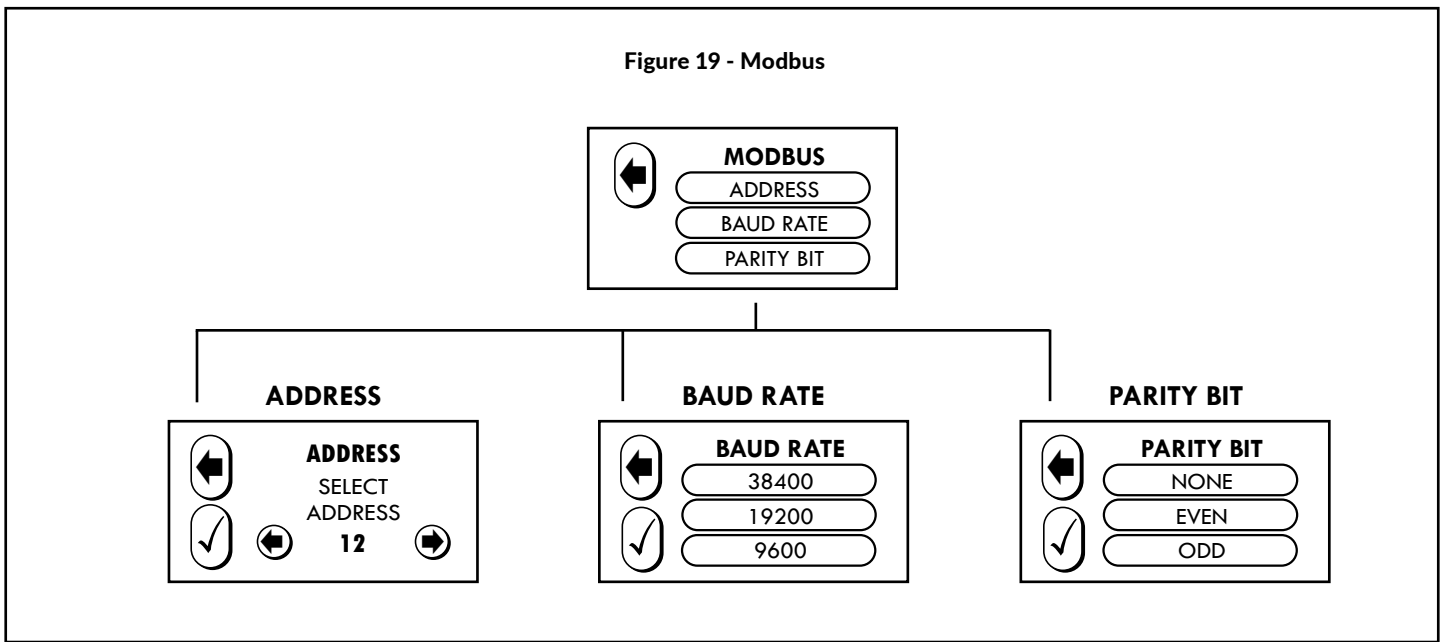
Press MODBUS.

Figure 18



Set ADDRESS, BAUD RATE and PARITY BIT and press to accept changes or return to the previous menu without changes by pressing .

Figure 19 - Modbus



Press REGULATOR to set the PARAMETER and P-BAND values.

Select the desired PARAMETER and press to accept changes or return to the previous menu without changes by pressing . Press P-BAND to set LOW and HIGH limits.

Figure 20

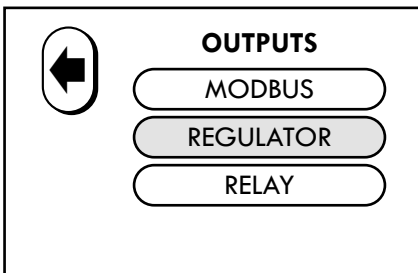


Figure 21

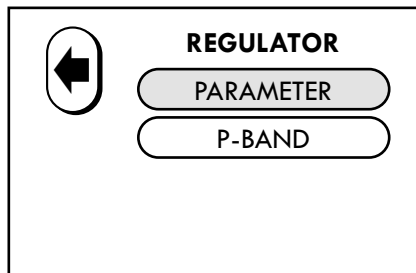
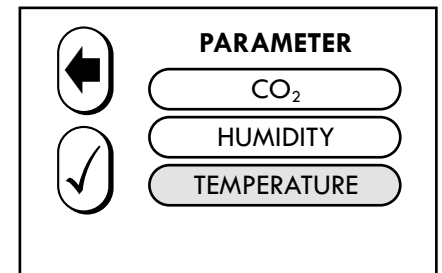


Figure 22



See Figure 10a for setting the P-Band.