# Process station with touch screen – User manual

Introduction

The IPCT.1 is a process station for heating, ventilation, and air condition systems. It is controlled over a 8" touch screen, which is located in the front panel. There is also a green POWER led which is on if the station is powered.

The touch screen consists of three areas:

* header panel

* control panel

* panel select bar.

The contents of the panels is customized and below are examples only.

header panel

control panel

panel switch bar
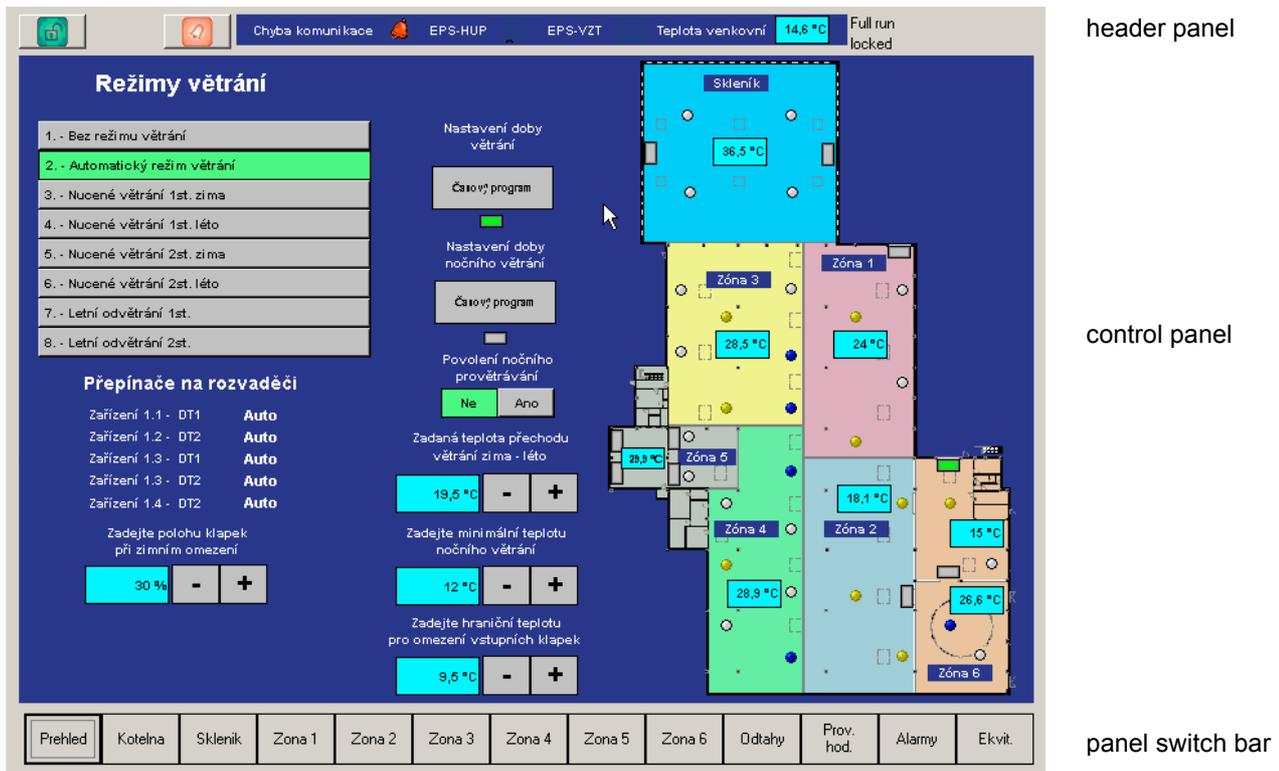
The header panel contains the information area, where are data which are common for the whole system, such as outside temperature, security status, communication error, number of alarms etc.

At the right there is program status message. It should be **Full run**.

Other possible messages:

Connecting: the touchscreen reads process data, temporary status

Not connected: it is not possible to connect to the runtime, error status

COMM ERROR: touchscreen connected to the process, there are not all values read from the bus (this may be a temporary status after process station startup)

Locked: controls are locked – user only can switch between the panels and browse through the values, it is not possible to make any settings. To change values, a PIN must be entered – see below.

Switching between panels

Gently touch touch the grey button with the panel name with your fingertip (not with nail) or with a special plastic stylus. The control panel switches to the selected panel.

Never use sharp objects, pens, etc. to touch the screen! The display may be irreversibly damaged and no warranty applies to those damages!

At large applications, it may take several seconds to refresh all the contents of the panel.

Login

To be able to set values, user has to log in with a 1 to 4 digits PIN. This PIN is set by the technician at the commissioning stage.

Invoke the login dialogue by clicking the „Unlock" button in the left part of the header panel.

Unlock

After the Unlock button is touched, a dialogue appears:

Tip:

Write your PIN here to remember it. If you do so, keep this manual at a safe place to prevent unauthorised access to the plant!

Touch the digits to enter the PIN. Each digit entered is indicated by an asterisk in the lower line. Confirm the code by touching the OK button, cancel the faulty enters by touching the Cancel button.

After successful login, the Clock icon appears. It makes possible to set the process station date and time.

Clock icon

Logout

Lock the panel and precvent it from unauthorised access by touching the „Lock" button.

It appears instead the Unlock button if the station is unlocked.

Lock

Change value

Digital and multistate values

A digital on-off switch may look like this:

The green value is the actual value („pressed" button), in this case the „Ano" status is active. To change the status, touch the grey button with the desired value.

Change the multistate value in a similar way – click the button with the desired status.

A special digital control is the **acknowledge button** – a button which returns back to its previous position after a certain time. It is used to reset alarms, start the party mode etc.

Analogue values

Analogue setters (usually setters of temperature, humidity, air quality) contain the „+" and „-" buttons.

Touch the „+" button to increase setpoint by a predefined step value, usually 0.5 K. Touch the button several times to reach the desired setpoint.

The same applies for the „-" button and decreasing the value.

Locked display

If the PIN is not entered the screen gives a warning message that informs the user that the PIN has to be entered first.

Time schedules

The weekly time schedules switch on and off the plant in predefined times. The times of status or value change are set up in the scheduler tables.

This table opens after the time scheduler button has been activated.

Time scheduler editing

Select the new status or value in the lower left corner and drag this value over the desired area of the scheduler. The time programme will be modified accordingly.

Example: At the above schedule we wish to modify the On time from 7 AM to 9 AM at weekends.

This action results in changing of the switch on times for Saturday and Sunday:
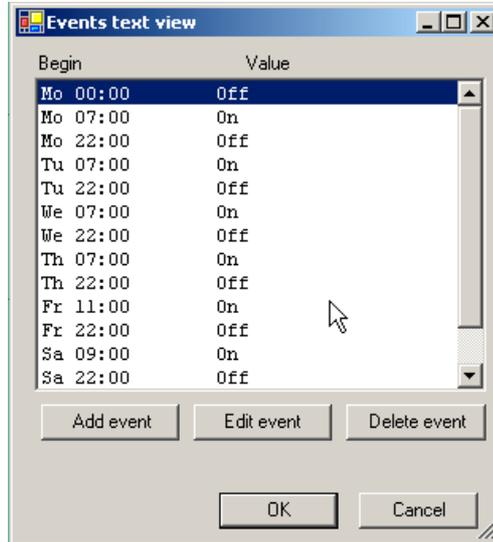
Store new values and close the dialogue by touching OK. To leave the dialogue without storing the values, touch the "Cancel" button.

Text view

Sometimes it may be more convenient to use the text view (e.g. for settings of very short intervals). Open the text view by touching the "Text mode" button.

Edit the events by touching the "Edit event" button. A dialogue opens for easy and

accurate setting.

Add a new event by the "Add event" button, delete unused events by selecting the event and touching the "Delete event" button.

The time schedulers are stored to the Flash memory and thus they are persistent to power dropouts.
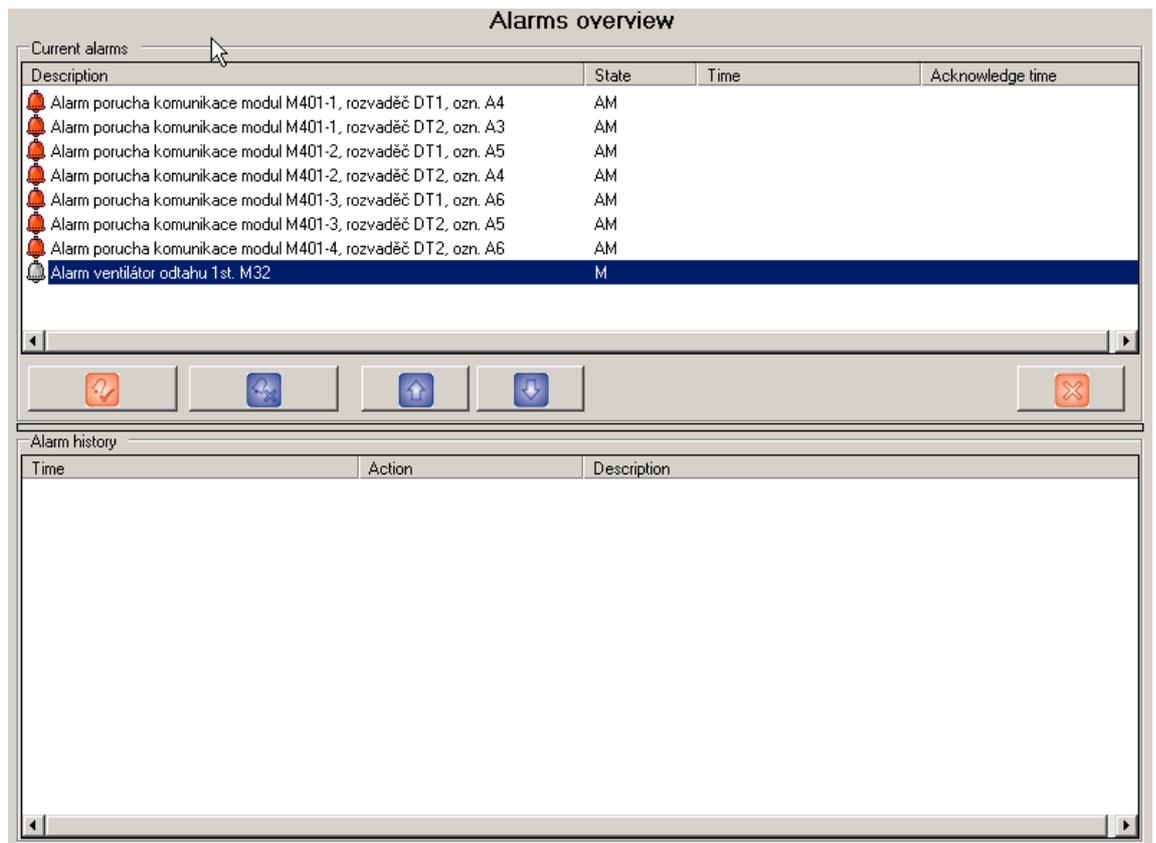
Alarms

Alarm overview

Alarm and error statuses are indicated as alarm messages in the alarm table. Open the alarm table by touching the "Alarm overview" button.

In the upper part of the table there are active and undeleted alarms, in the lower part you can find the alarm history (last 100 records). The alarms contain date and time tag, if they appeared while the touch panel was running. Alarms that appeared at the application start or shortly thereafter may not contain the time tag.

In the middle part, there are acknowledge and reset buttons:

Acknowledge　　　　Delete　　　　Up　　　　Down　　　　　　　　　　　　　　Close window

An example of the alarm table see below:

After the alarm appears, it is in the **Unacknowledged** state: the reason is active and nobody has acknowledged the alarm so far. This alarm must be selected by the buttons and acknowledged by the Acknowledge button. Then it changes its state to **Acknowledged**. However, it is still active.

After the alarm goes to inactive state, it changes to **Unreset**. It can be deleted from the table – reset – by the Reset button.

The *Time* and *Acknowledge time* columns show the time of the first occurence of the alarm and time when it has been acknowledged.

The alarm window closes touching the "Close window" button.

If an alarm appears, it is usually necessary to remove the cause of the alarm: set the motor protection, reset the safety thermostat or so. Check the technology first; some plants may not work properly until all alarms are reset (by which the user confirms that he has removed the alarm cause and put the plant into an operable state).

At some plants, it is possible to acknowledge and reset alarms directly in the panels by special buttons. Consult your software application engineer.