Field Control Layer Device

Touch LCD control panel

MST32V (H)

【Description】

MST32V (Temperature only) & MST32V-H (Temperature & Humidity) LCD display panel can be connected to the MSnet Port on Airtek controllers only. The large size back lit LCD panel has been designed for simple operation by the user. The panel allows the user to adjust Temperature Set point, ON/OFF, Fan Speed and Air Conditioning Modes, etc. The display panel can be mounted up to100 meters away from the Airtek Controller.

【Features】

- Microprocessor Operation.
- Connects to MSnet Modbus port (RS- 485 two-wire communication), 2 wires for DC power supply from the controller.
- Built in self wakeup function (Watch Dog).
- Selectable ON/OFF, Air Conditioning Mode (Auto/Cool/Heat/Fan only). Fan Speed (Auto/Lo/Med/Hi).
- Large size back light LCD panel for clear display of temperature and Set Point values, display resolution up to 0.1.
- Built-in temperature sensor, (Optional Humidity) can be read from the controller or use a hard wired senor on the controller.
- Temperature display selectable for Celsius or Fahrenheit units.
- Maximum and Minimum Set Point Lock function.
- Controller time clock can be displayed or disabled.
- 4 Levels of locking function to avoid unauthorized access.
- Animated Fan speed display.
- Soft Touch buttons for elderly access.

【Specification】

Model	Temperature element	Temperature sense range	Humidity element	Humidity sense range
MST32V	10KΩ Thermistor	0~50 ℃	NA	-
MST32V-H	CMOS semiconductor wafer	0~50 ℃	CMOS semiconductor wafer	0~100% RH

Power Supply	:	5VDC ， 35mA Max. Power supplied by MSnet port on the Airtek controller (V+, V-).
LCD Display	:	3.2” (42mm(W)*63(H)mm) , dynamic graphic display with LCD blue back light (STN).
Resolution	:	Resolution up to 0.1.
Microprocessor	:	High-speed microprocessor (MCU), 32K Flash memory storage.
Keypad	:	On/Off, Set temperature, unoccupied mode, Fan speed, Air conditioning mode (6 operation buttons). The buttons can be locked to prevent unauthorized access.
Communication	:	2-wire MODBUS RTU RS-485, communication speed 9600 bps, maximum length 100 meters.
Temp. Sensor	:	10KΩ NTC thermistor, measurement accuracy of ±0.25℃ in reading (Room temperature at 25 ℃).
CMOS Sensor	:	Temp. Accuracy ±0.4℃, humidity range 20 ~ 80% (±3%RH@25) >80% & <20%±5%RH (Room temperature at 25 ℃)
Environment	:	0 ~ 70□ ， 0 ~ 95%RH non-condensing.
Certificate	:	CE(EMC Directive 2004/108/EC).

【Installation】

- Ensure correct wiring connect to avoid equipment damage..
- Select local or remote temperature sensing.
- Do not run cables parallel with Display cable or in the same conduit with power cabling as it may cause interference.
- Mount the base plate on a flat surface otherwise the main display may pop off.
- Refer to the correct Airtek controller Technical Manual for correct operation.

【Wiring Diagram】

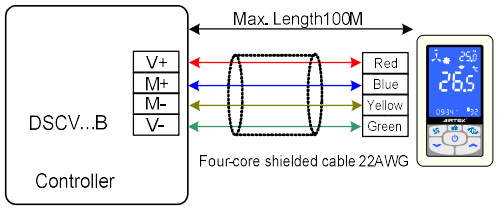

Figure 1 MST32V Display panel wiring diagram

【Keypad Diagram】

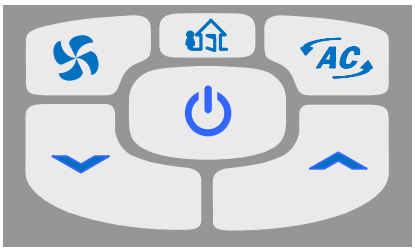

Figure 2 MST32V Display panel Keypad Diagram

【Parameters List】

General Parameter		Description	Read write	Advanced Parameter		Description	Read write	Advanced Parameter		Description	Read write
AV	0	Temperature sensing value	R	AV	11	Keyboard lock level	RW	AV	71	Set airflow upper limit	RW
AV	1	Humidity sensing value	R	BV	2	Temperature unit	RW	AV	72	Set airflow lower limit	RW
BV	4	air conditioning mode	R	BV	5	Humidity display	RW	AV	97	Damper stroke time	RW
BV	10	Forced output of airflow	R	AV	7	Sub display area Info	RW	AV	99	Duct Diameter size	RW
AV	8	Air flow sensing value	R	BV	12	Temperature sensing source	RW	AV	98	Correction factor	RW
AV	2	CO2 sensing value	R	BV	13	Humidity sensing source	RW	AV	20	Fan type	RW
BV	0	Leave mode	RW	AV	9	Set temperature upper limit	RW	AV	21	Fan off delay time	RW
BV	1	Equipment On-Off	RW	AV	10	Set temperature lower limit	RW	AV	22	Parallel Fan-on offset	RW
AV	3	Temperature setpoint	RW	AV	83	Unoccupied cooling mode temperature setpoint	RW	AV	23	Parallel Fan-on airflow	RW
AV	4	Air conditioning mode	RW	AV	84	Unoccupied heating mode temperature setpoint	RW	AV	24	Parallel Fan-off airflow	RW
AV	6	Fan speed setting	RW	BV	6	Parameter reset	RW	AV	30	Heater Type	RW
				BV	98	Motor direction	RW	AV	32	Floating Hot valve stroke time	RW
				AV	85	Proportion parameter	RW	AV	35	Auxiliary Heater-on airflow	RW
				AV	86	Integration Parameter	RW	BV	3	Independent control mode	RW

Note：1. Above listed parameters are for MST32V to communicate with DSCV...B controller.

2. Read/Write item in the above list,『R』means read only, 『RW』means Read/Write operation.
3. An Airtek controller reads the point and requires to be programmed to carry out the required functions.
4. Program the Airtek controller using the above BACnet object list.

【Dimensions】unit：mm