

Individual LCD Control Panel

【Description】

MST20S individual LCD control panel is designed to work with any type of AIRTEK DAC/DSC series controller which has MSnet port. It is a two-wire RS485 communication transmission interconnection with the controller. It may facilitate the user to access, examine, setting, change and confirm each kind of control parameter value from DAC/DSC controller, for example temperature value, humidity value, devices operation status, and alarm messages, enable output points start/stop, changing the temperature and humidity setting values, etc. MST20S has a 3 inch LCD with backlight and eight operation buttons, let user operate easily and friendly.



【Features】

- Use 16 bit microprocessor, high precise operation.
- Adopt RS-485 two-wire communication network (4 wires in total with power line), consists with MODBUS RTU format.
- Large size back light LCD panel. Convenience during the night operation.
- Selectable usage for air conditioning, central heating, constant temperature, constant temperature and humidity application.
- Can show temperature, humidity, dew point, temperature sets up a value, humidity sets up a value, fan coil running state and cooling, heating, de-humidify status.
- Can set temperature, humidity value and control fan start/stop. Celsius or Fahrenheit unit selectable for Temperature display.
- Can display DAC/DSC time format, time coincident by the time synchronization.
- Can manual control cooling, heating, humidify, dehumidify as benefit maintain and test. When manual operation, an icon will bring user's attention.
- Display alarm code voice alarm message for a new alarm. It has an alarm history for checking. The alarm history can be deleted by authorized personnel. A buzzer can turn off.
- Included self wakeup function (Watch Dog) when software is down.
- Password setting for a general operation and a parameter setting to prevent unauthorized operation.
- Has parameter mode, which can display and control input (AI/ BI) and output (AO/ BO) status and all inside parameter numerical value (AV/ BV) of the DPC. In parametric mode, output (AO/ BO) points permit priority control.

【Specification】

Power Supply	: 5~12VDC, 2VA. (Power source can be supply from DFC controller.)
LCD Display	: 64mm*40mm LCD display, Dynamic graphic display, Blue back light.
Microprocessor	: 16 bit high speed processor
Operational Keys	: 8 operation buttons
MSnet Port	: MODBUS RTU RS-485 bus, communication speed 9,600 bps, max. transmission distance 1200 meters.
Environment	: 0~50°C, 20~90%RH non-condensing.
Certificate	: CE (EMC Directive 2004/108/EC)

【Installation】

- Read and follow the installation instruction in this document for installation to prevent danger or damage results.
- Check if this product meets your application requirement.
- The installer should be a trained and an experienced technician.
- Turn off power when installation. Electric shock or equipment damage may cause serious injury.
- For optimal control effect, it is recommended to use AWG22 two-core shielded cable with exclusive EMT piping for transmission. Do not share the pipe with other power cable.
- Wall mounting the parts after wiring. Fix the parts with care. Make it flat without twist to prevent damage.

【Wiring Diagram】

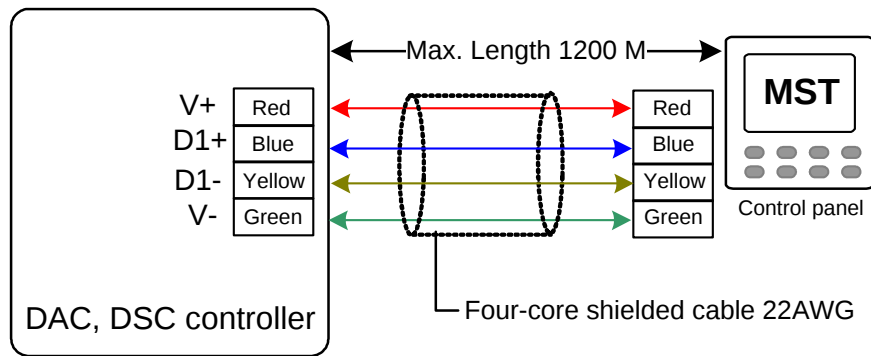


Figure 1 MST20S operation panel wiring diagram

【Parameters List】

Parameter	Description	Read write	Parameter	Description	Read write	Parameter	Description	Read write
AV 0	Temperature sensor value	R	AV 12	Humidity sets up low limit	R	BV 0	Motion control	RW
AV 1	Humidity sensor value	R	AV 13	Heating output	R	BV 1	Fan status	R
AV 2	Dew point sensor value	R	AV 14	Cooling output	R	BV 2	Temperature unit choice	R
AV 3	Temperature sets up	RW	AV 15	Humidify output	R	BV 3	Buzzer control	R
AV 4	Humidity set up	RW	AV 16	Dehumidify output	R	BV 4	Fire alarm	RW
AV 5	Enforced Heating control	RW	AV 17	Ices water output	R	BV 5	Fan off alarm	RW
AV 6	Enforced cooling control	RW	AV 18	Ordinary operates password	R	BV 6	Temperature high limits alarm	RW
AV 7	Enforced humidify control	RW	AV 19	Special parameter	R	BV 7	Temperature low limits alarm	RW
AV 8	Enforced dehumidify control	RW	AV 20	Switches alternative parameter	R	BV 8	Humidify high limit alarm	RW
AV 9	Temperature sets up high limit	R	AV 21	Control mode parameter	R	BV 9	Humidify low limit alarm	RW
AV 10	Temperature sets up low limit	R	AV 22	Time form factor	R	BV 10	Fan fails alarm	RW
AV 11	Humidity sets up high limit	R				BV 11	Filter dirty alarm	RW

Explanation: 1. Above listed parameters are for MST20S and DPC communication.

2. "Read/Write" item in the above list, "R" means read only, "RW" means MST20S will replace its value after its assigned operation.

3. All sensor value, output and alarm operation is working in DPC, not in MST20S.

4. MST20S displays and controls by following the above list.

【Dimensions】 unit : mm

