MMI Operation Panel   CATIC

Applications & Features

- MMI operation panel is designed for the display and operation of H, TTD, CD, CM & AVT products.
- Suitable for customers' installation, engineering commissioning or periodical equipment maintenance
- Working with a standard meter, it can recalibrate the connected transmitters in site
- High performance LCD display module and membrane keys with good stability and reliability
- 100% changeable and flexible installation
- Light housing and state of art design

Specifications

LCD1
Screen dimension: 39.5 X 52.0 mm
Display accuracy: 0.1°C, 0.1%RH, 1PPM
Display mode: single line, display with % bar and engineering unit
Back light: yellow-green light
Compatible product: TTD1, CDW, CMW

LCD2
Screen dimension: 39.5 X 52.0 mm
Display accuracy: 0.1°C, 0.1%RH
Display mode: Temp./RH two lines display
Compatible product: H1

MMI1
Display: with LCD1
Keys: 3 pcs
Compatible product: TTD, AVT, CD and CM series

MMI2
Display: with LCD2
Keys: 3 pcs
Compatible product: H series

Models

Code	Descriptions	Applicable products
LCD1	Single line display LCD module with back light, and front cover	TTD1, CDW, CMW
LCD2	2 lines for temp./RH display LCD module, with front cover	H1
MMI1	Single line display LCD module with back light + function keys under the slide front cover, with full installation box	TTD1/2/3/4, CDW, CDD, CMW, CMD, AVT
MMI2	2 lines for temp./RH display LCD module + function keys under the slide front cover, with full installation box	H1/2/3/4

Re: H2/3/4, TTD2/3/4, CDD& CMD and AVT can't be fixed installed LCD module, but they also can use MMI's adjustment & calibration functions. It means that for those products, MMI is just a portable operation panel, do not like H1,TTD1,CDW& CMW products which can be fixed installed on.

Keys Definition and function

Key	Definition and Function
●	**Setting:** parameter setting starting, confirming and saving
▶	**Bit Selection:** parameter value bit selection cycle(flash) **Decrease:** decrease or change parameter value
▲	**Increase:** Increase or change parameter value First / sign bit cycle 0-9, - , -1 Follow-up bit: cycle 0-9 Or change cycle in character such as ℃、RH、OUP、CO、CO2、P、Fetc

Note:

1. If user does not operate for a long time, the program will exit automatically.

2. Two methods for changing the parameters, **Bit Selection** and **Increase**, **Decrease** and **Increase**. Different products operate slightly differently; user an easily learn to o

Functions definition and code

No	Function	Description	Code		H	TTD	CD	CM	AVT
1	Reset	Restore the initial factory settings	999	999	√	√	√	√	√
2	Address	RS485 slave address	485	485	√	√	√	√	√
	Note:	Range: 1~32, default 1							
3	Calibration 1	Output/display value=original value + calibration value	161	161	√	√	√	√	√
	Note:	H series: temp., normal calibration range±2.0°C, RH only product does not apply this function. TTD series: temp., normal calibration range±2.0°C CDW/CDD series: CO_2, normal calibration range ±99ppm CMW/CMD series: temp., normal calibration range±5.0°C AVT series: temp., normal calibration range±5.0°C							
4	Calibration 2	Output/display value=original value + calibration value	162	162	√			√	√
	Note:	H series: humidity, normal calibration range±5.0%RH CMW/CMD series: CO, normal calibration range ±10.0ppm AVT series: air velocity, normal calibration range ±5MPS							
5	Range 1	Low range, high range	091	091	√*	√	√*	√	√
	Note:	H series: temp. range -40.0~0.0°C/50.0~100.0°C, default 0.0°C/50.0°C, RH only product does not apply this function. TTD series: temp. range -40.0~0.0°C/50.0~100.0°C, default 0.0°C/50.0°C CDW/CDD series: CO_2 range 0~9999ppm(low range 0ppm fixed), default 0~2000ppm CMW/CMD series: temp. range -10.0~0.0°C/50.0~60.0°C, default 0.0°C/50.0°C AVT series: default 0.0°C/50.0°C							
6	Range 2	Low range, high range	092	092				√*	√
	Note:	CMW/CMD series: CO range 0~400ppm(low range 0ppm fixed), default 0~100ppm AVT series: default 0/5MPS							
7	Relay 1	Parameter 1; set point 1; dead band 1	471	471		√	√	√	√
	Note:	TTD series: temp.: -40.0~100.0°C; ±8.0°C. Default temp./30.0°C/0.5°C CDW/CDD series: CO_2; 0~9999ppm; 0~9999ppm. Default CO_2/1000ppm/100ppm CMW/CMD series: temp.: -10.0~60.0°C; ±10.0°C; CO: 0~100ppm; ±10ppm. Default CO/9/3ppm AVT series: default 0°C,30°C,0°C,1.0°C							
8	Relay 2	Parameter 2; set point 2; dead band 2	472	472				√	√
	Note:	CMW/CMD series: temp.: -10.0~60.0°C; ±10.0°C; CO: 0~100ppm; ±10ppm. Default CO/25/5ppm AVT series: default 1MPS,5.0MPS,1.0MPS							
9	Relay reset	Relay 1/2 reset time	097	097				√	√
	Note:	CMW/CMD series: relay 1/2 reset time, range 0.0~25.5min, default 3.0min AVT series: relay 1/2 reset time, range 0.0~25.5min, default 3.0min							

Note：H series apply **MMI2** `8.8.8.8` . TTD, CDW/CDD, CMW/CMD series & AVT apply **MMI1** `8.8.8.8`

Operation instruction and process (Demonstrations)

（1） Reset: P999
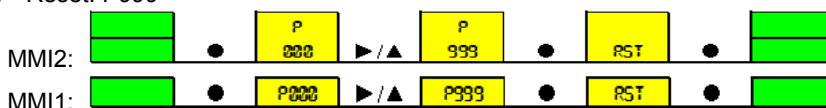
MMI2: [　] ● [P / 000] ▶/▲ [P / 999] ● [RST] ● [　]
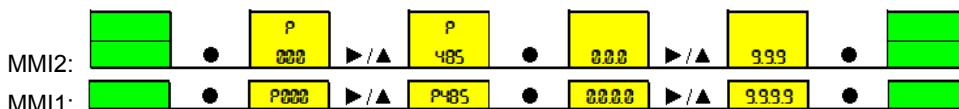
MMI1: [　] ● [P000] ▶/▲ [P999] ● [RST] ● [　]

In normal display, press key ● to display function code interface like "P000", press key ▶ and key ▲ cycle, set function code like "P999" and press key ● to confirm;

Then display like " RST", press key ● to confirm reset again;

Exit function operation and return normal display.

（2） RS485 slave address: P485

MMI2: [　] ● [P / 000] ▶/▲ [P / 485] ● [0.0.0.] ▶/▲ [9.9.9.] ● [　]

MMI1: [　] ● [P000] ▶/▲ [P485] ● [0.0.0.0.] ▶/▲ [9.9.9.9.] ● [　]

In normal display, press key ● to display function code interface like "P000", press key ▶ and key ▲ cycle, set function code like "P485" and press key ● to confirm;

Then display like " 001", press key ▶ and key ▲ to set; press key ● to confirm RS485 slave address;

Exit function operation and return normal display.

（3） Calibration 1: P161
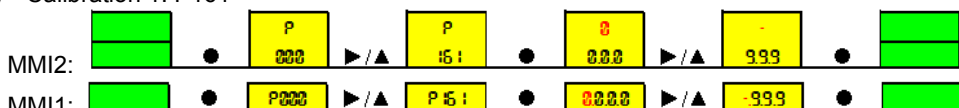
MMI2: [　] ● [P / 000] ▶/▲ [P / 161] ● [0 / 0.0.0.] ▶/▲ [- / 9.9.9.] ● [　]

MMI1: [　] ● [P000] ▶/▲ [P161] ● [0.0.0.0.] ▶/▲ [-9.9.9.] ● [　]

In normal display, press key ● to display function code interface like" P000"press key ▶ and key ▲ cycle, set

function code like "P161" and press key ● to confirm;

Then display like " 0.0", press key ▶ and key ▲ to set; press key ● to confirm calibration 1;

Exit function operation and return normal display.
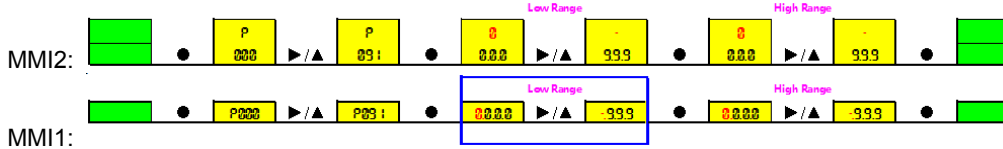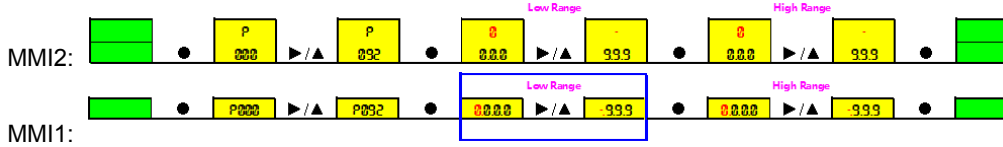
（4） Calibration 2: P162
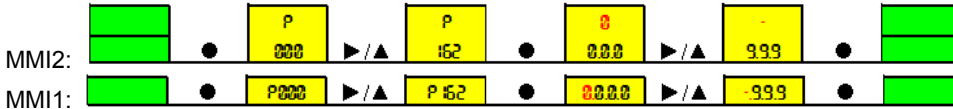
MMI2:

MMI1:

In normal display, press key ● to display function code interface like "P000□□□□", press key ▶ and key ▲ cycle, set function code like "P162" and press key ● to confirm;

Then display like " 0.0", press key ▶ and key ▲ to set; press key ● to confirm calibration 2;

Exit function operation and return normal display.

（5） Range 1: P091

MMI2:

MMI1:

In normal display, press key ● to display function code interface like "P000□□□□", press key ▶ and key ▲ cycle, set function code like "P091" and press key ● to confirm;

Then display like " 0.0", press key ▶ and key ▲ to set, press key ● to confirm low range 1;

Then display like " 50.0 ", press key ▶ and key ▲ to set, press key ● to confirm high range 1;

Exit function operation and return normal display.
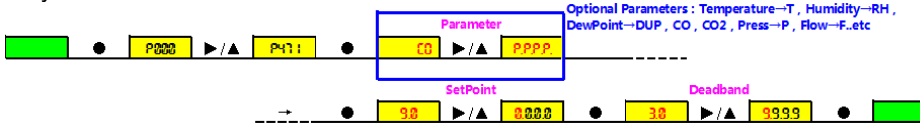
（6） Range 2: P092

MMI2:

MMI1:

In normal display, press key ● to display function code interface like "P000□□□□", press key ▶ and key ▲ cycle, set function code like "P092" and press key ● to confirm;

Then display like " 0.0", press key ▶ and key ▲ to set, press key ● to confirm low range 2;

Then display like " 50.0 ", press key ▶ and key ▲ to set, press key ● to confirm high range 2;

Exit function operation and return normal display.

（7） Relay 1: P471

Optional Parameters : Temperature→T , Humidity→RH , DewPoint→DUP , CO , CO2 , Press→P , Flow→F..etc

MMI1:

In normal display, press key ● to display function code interface like "P000", press key ▶ and key ▲ cycle, set function code like "P471" and press key ● to confirm;
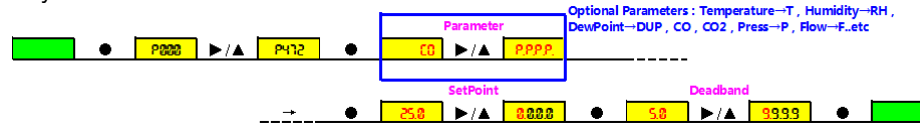
Then display like " CO", press key ▶ and key ▲ to set, press key ● to confirm parameter 1;

Then display like " 9.0 ", press key ▶ and key ▲ to set, press key ● to confirm set point 1;

Then display like " 3.0 ", press key ▶ and key ▲ to set, press key ● to confirm dead band 1;

Exit function operation and return normal display.

（8） Relay 2: P472

Optional Parameters : Temperature→T , Humidity→RH , DewPoint→DUP , CO , CO2 , Press→P , Flow→F..etc

MMI1：

In normal display, press key ● to display function code interface like "P000□□□□", press key ▶ and key ▲ cycle, set function code like "P472" and press key ● to confirm;
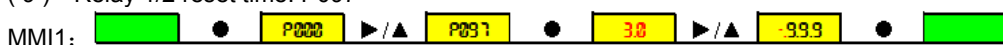
Then display like "CO", press key ▶ and key ▲ to set, press key ● to confirm parameter 2;

Then display like "25.0 ", press key ▶ and key ▲ to set, press key ● to confirm set point 2;

Then display like " 5.0 ", press key ▶ and key ▲ to set, press key ● to confirm dead band 2;

Exit function operation and return normal display.

（9） Relay 1/2 reset time: P097

MMI1：

In normal display, press key ● to display function code interface like "P000", press key ▶ and key ▲ cycle, set function code like "P097" and press key ● to confirm;

Then display like " 3.0 ", press key ▶ and key ▲ to set; press key ● to confirm relay reset time;

Exit function operation and return normal display.