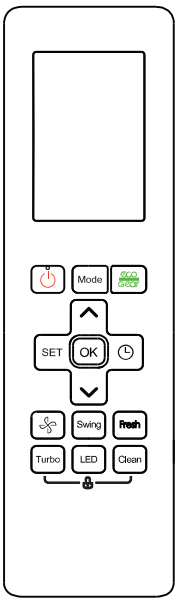
MUNDOCLIMA®

RG10 REMOTE CONTROLLER

Engineer mode manual



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English

RG10 Remote Controller – Engineer mode

1.1. Access the engineer mode

1) In power-on or standby mode, and in non-locked state, press the key combination "ON/OFF + Fan Speed" for 7s.

1.2. Enter the engineer mode to execute actions

1) When entering the engineer mode, the remote control will immediately transmit a special code for engineer mode entry.

2) After entering the engineer mode, the remote control will display icons of "Auto, Cool, Dry, Heat", and the Battery icon; at the same time, it will also display the numeric code of the current engineer mode (for the initial engineer mode, the numeric code displayed is 0), and all other icons are inactive.

3) In engineer mode, the value of the current numeric code can be adjusted circularly through the Up/Down key, with the setting range of 0 to 30. Each time the current numeric code is adjusted, the special code of the engineer mode will be transmitted with a delay of 0.6s. The code can also be transmitted by pressing "OK", and the special code of the engineer mode sent contains information of the currently displayed numeric code (if the numeric code is 0, the code to enter the engineer mode will be transmitted).

4) In engineer mode, other keys or operations are invalid except for the On/Off key, the Up/Down key, the OK key or executing the operation to exit the engineer mode.

Code	Query Content	Advanced Function Setting	
0	Error code	Error code history	Press "On/Off" for 2s to enter the Error Code History query, the code displayed is “Ch”, press "OK" to send the “Query error code history” code. Press "On/ Off" for 2s to exit.
1	Indoor Ambient Temperature “T1”	Power Down Memory	Press "On/Off" for 2s to enter the Power Down Memory setting, the code displayed is “Ch”, press "OK" to send the Query Power Down Memory code; press the Up/Down key to select 1 or 0 and press “OK” to confirm: 1 → power down memory exists; 0 → no power down memory. Press "OK" to confirm, and press "On/Off" for 2s to exit.
2	Indoor Pipe Temperature “T2”	Indoor Fan Control setting	Press "On/Off" for 2s to enter the Indoor Fan Control setting after the pre-set temperature is reaches, the code displayed is “Ch”, press "OK" to send the Query Indoor Fan Control setting code; press the Up/Down key to select 1 to 11: 1 → Stop the fan; 2 → Minimum fan speed; 3 → Set the fan speed; 4 → Thermal running for 5min; 5 → Thermal running for 10min; 6 → Thermal running for 15min: 7 → Thermal running for 20min; 8 → Thermal running for 30min; 9 → Thermal running for 40min: 10 → Thermal running for 50min; 11 → Thermal running for 60min; Press "OK" to confirm, and press "On/Off" for 2s to exit.

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Code	Query Content	Advanced Function Setting	
3	Outdoor Pipe Temperature “T3”	Mode setting	Press "On/Off" for 2s to enter the Mode setting, press the Up/Down key to select: CH → Cool and heat, Auto + Cool + Dry + Heat + Fan; HH → Heat only, Heat + Fan; CC → Cool only without Auto, Cool + Dry + Fan; nU → Cool and Heat without Auto, Cool + Dry + Heat + Fan. Press "OK" to confirm, and the mode selected can be memorized when the remote control is powered down and powered on; and press "On/Off" for 2s to exit. When the remote control does not burn any parameters, the mode setting will not be memorized.
4	Outdoor Ambient Temperature “T4”	Min. Set Temperature setting	Press the "On/Off" for 2s to enter the Min. Set Temperature setting, press the Up/Down key to select "16°C~24°C", press "OK" to confirm, and the Min. Set Temperature can be memorized when the remote control is powered on and power lost; and press "On/Off" for 2s to exit. When the remote control does not burn any parameters, the Min. Set Temperature will not be memorized.
5	Discharge Temperature “TP”	Max. Set Temperature setting	Press "On/Off" for 2s to enter the Max. Set Temperature setting, press the Up/Down key to select "25°C~30°C", press "OK" to confirm, and the Max. Set Temperature can be memorized when the remote control is powered on and power lost; and press "On/Off" for 2s to exit. When the remote control does not burn any parameters, the Max. Set Temperature will not be memorized.
6	Compressor Target Frequency “FT”	Multi-split Cooling and Heating Preference	Press "On/Off" for 2s to enter the Multi-split Cooling and Heating Preference setting, the code displayed is “Ch”, press "OK" to send the Query Multi- split Cooling and Heating Preference setting code; press the Up/Down key to select: H → Heating preferred; C → Cooling preferred; A → Master settings. Press "OK" to confirm; and press "On/Off" for 2s to exit.
7	Compressor Running Frequency “Fr”	/	/

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Code	Query Content	Advanced Function Setting	
8	Current “dL”	/	/
9	Current AC Voltage Uo	/	/
10	Current indoor capacity test state Sn	/	/
11	Installation Card Info	Min. Desired Cooling Frequency setting	Press "On/Off" for 2S to enter the Min. Desired Cooling Frequency setting, the code displayed is Ch, press "OK" to send the Query Min. Desired Cooling Frequency setting code; press the Up/Down key to select the minimum cooling frequency desired. Press "OK" to confirm; press "On/Off" for 2s to exit.
12	Set Speed Pr of the outdoor fan	Min. Desired Heating Frequency setting	Press "On/Off" for 2s to enter the Min. Desired Heating Frequency setting, the code displayed is “Ch”, press "OK" to send the Query Min. Desired Heating Frequency setting code; press the Up/Down key to select the min. desired heating frequency value. Press "OK" to confirm; and press the "On/ Off" for 2s to exit.
13	Opening Lr of EEV	Max. Running Frequency setting	Press "On/Off" for 2s to enter the Max. Running Frequency setting of the restricted area 6 in the cooling mode T4, the code displayed is “Ch”, press "OK" to send the Query Max. Running Frequency setting code of the restricted area 6 in the cooling mode T4; press the Up/Down key to select the limit. Press "OK" to confirm; and press "On/Off" for 2s to exit.
14	Actual Running Speed ir of the indoor fan	/	/
15	Indoor Humidity Hu	Outdoor Forced Running Frequency setting	Press "On/Off" for 2s to enter the Outdoor Forced Running Frequency setting, the code displayed is “Ch”, press "OK" to send the Query Outdoor Forced Running Frequency setting code; press the Up/Down key to select the outdoor forced running frequency. Press "OK" to confirm; and press "On/Off" for 2s to exit.

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Code	Query Content	Advanced Function Setting	
16	Set Temperature TT after compensation	One-Key Recovery	Press "On/Off" for 2s to enter One-Key Recovery, the code displayed is “rS”, then press "OK" to send the One-Key Recovery code, the mode setting of the remote control will recover to "Cooling and heating", the min. temperature recovers to 16°C, and the max. temperature recovers to 30°C. Press "On/ Off" for 2s to exit.
17	Indoor Dust Concentration dT	/	/
18	WIFI Signal Intensity	/	/
19	Outdoor DC Bus Voltage	Cooling Frequency Threshold Settings	Press "On/Off" for 2s to enter the Cooling Frequency Threshold Settings; press the Up/Down key to select the cooling frequency threshold. Press "OK" to confirm; and press the "On/Off" for 2s to exit.
20	Indoor Target Frequency oT	Heating Frequency Threshold Settings	Press "ON/OFF" for 2s to enter the Heating Frequency Threshold Settings; press the Up/Down key to select the heating frequency threshold. Press "OK" to confirm; and press "On/Off" for 2s to exit
21	/	Cooling Temperature Compensation Value Settings	Press "On/Off" for 2s to enter the Cooling Temperature Compensation Value Settings, the code displayed is “Ch”, then press "OK" to send the Query Cooling Temperature Compensation Value code; press the Up/Down key to select the cooling temperature compensation value then. Press "OK"; and press "On/Off" for 2s to exit.
22	/	Heating Temperature Compensation Value Settings	Press "On/Off" for 2s to enter the Heating Temperature Compensation Value Settings, the code displayed is “Ch”, press "OK" to send the Query Heating Temperature Compensation Value code; press the Up/Down key to select the heating temperature compensation value. Press "OK"; and press "On/ Off" for 2s to exit.
23	/	Max. Cooling Air Speed setting	Press "On/Off" for 2s to enter the Max. Cooling Air Speed setting, the code displayed is “Ch”, press "OK" to send the Query Max. Cooling Air Speed code; press the Up/Down key to select the max. cooling air speed. Press "OK"; and press "On/Off" for 2s to exit.
24	/	Min. Cooling Air Speed setting	Press "On/Off" for 2S to enter the Min. Cooling Air Speed setting, the code displayed is "Ch", press "OK" to send the Query Min. Cooling Air Speed code; press the Up/Down key to select the minimum cooling air speed. Press "OK" to confirm; press "On/Off" for 2s to exit.

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Code	Query Content	Advanced Function Setting	
25	/	Max. Heating Air Speed setting	Press "On/Off" for 2s to enter the Max. Heating Air Speed setting, the code displayed is "Ch", press "OK" to send the Query Max. Heating Air Speed code; press the Up/Down key to select the maximum heating air speed. Press "OK" to confirm; press "On/Off" for 2s to exit.
26	/	Min. Heating Air Speed setting	Press "On/Off" for 2s to enter the Min. Heating Air Speed setting, the code displayed is "Ch", press "OK" to send the Query Min. Heating Air Speed code; press the Up/Down key to select the minimum heating air speed. Press "OK" to confirm; press "On/Off" for 2s to exit.
27	Reserved	/	/
28			
29			
30			

Note:

1. After entering the frequency limitation settings of channels 11~13, 15, 19, and 20 in engineer mode, if "--" is displayed in the numeric area of the remote control, it indicates that the frequency limitation is cancelled. If Channel 11/12 is selected, the maximum frequency limit is 50 and the minimum is 10, and the conversion rule is "...49, 50, --, Ch, 10, 11...49, 50...". If Channel 13 is selected, the maximum frequency limit is 150 and the minimum is 20, and the conversion rule is "...149, 150, --, Ch, 20, 21...149, 150...". If Channel 15 is selected, the maximum frequency limit is 250 and the minimum is 10, and the conversion rule is "...249, 250, --, Ch, 10, 11...249, 250...". If Channel 19/20 is selected, the frequency values for cooling and heating are recovered to 75 by default; the maximum frequency value is 84 and the minimum is 40, and the conversion rule is "...83, 84, --, 40, 41 ...83, 84...". The limit frequency value can be increased in a cyclic manner by pressing the Up key, and it can also be decreased in a cyclic manner by pressing the Down key. Each time you press "OK", the special code for the limit frequency will be transmitted immediately by the remote control, and the transmitted special code for the limit frequency contains the current limit frequency information.

2. In engineer mode, press the Child Lock key at the same time for 5s to transmit the remote control code for locking the indoor unit.

1.3. Return to the previous engineer mode in Channels 1~30 settings of the engineer mode

1) In Channel 1~30 settings of the engineer mode, long press the On/Off key to return the previous engineer mode.

1.4. Exit of engineer mode

1) In engineer mode, press the key combination of "On/Off + Fan speed" for 2s;

2) The engineer mode will be exited if there are no valid key operations for continuous 60s.

2.1. Error code of engineer mode

Display	Error Information
EH00/EH0A	Indoor unit EEPROM parameter error
EL01	Indoor / outdoor unit communication error
EH bA	Communication error between indoor unit and indoor external fan module
EH30	Parameters error of indoor external fan
EH35	Phase failure of indoor external fan
EH36	Indoor external fan current sampling bias fault
EH37	Indoor external fan zero speed failure
EH38	Indoor external fan stall failure
EH39	Out of step failure of indoor external fan
EH3A	Low voltage protection of indoor external fan DC bus
EH3b	Indoor external fan DC bus voltage is too high fault
EH3E	Indoor external fan overcurrent fault
EH3F	Indoor external fan module protection/hardware overcurrent protection
EH03	The indoor fan speed is operating outside of the normal range
EC51	Outdoor unit EEPROM parameter error
EC52	Condenser coil temperature sensor T3 is in open circuit or has short circuited
EC53	Outdoor room temperature sensor T4 is in open circuit or has short circuited
EC54	Compressor discharge temperature sensor TP is in open circuit or has short circuited
EC55	IGBT temperature sensor TH is in open circuit or has short circuited
EC0d	Outdoor unit malfunction
EH60	Indoor room temperature sensor T1 is in open circuit or has short circuited
EH61	Evaporator coil temperature sensor T2 is in open circuit or has short circuited
EC71	Outdoor external fan overcurrent fault
EC75	Outdoor external fan module protection/hardware overcurrent protection
EC72	Outdoor external fan phase failure
EC74	Outdoor external fan current sampling bias fault
EC73	Zero speed failure of outdoor unit DC fan
EC07	The outdoor fan speed is operating outside of the normal range(
EL0C	Refrigerant leak detected
EH0E	Water-level alarm malfunction
PC00	IPM malfunction or IGBT over-strong current protection
PC10	Over low voltage protection
PC11	Over voltage protection
PC12	DC voltage protection
PC02	Top temperature protection of compressor or High temperature protection of IPM module

PC40	Communication error between outdoor main chip and compressor driven chip
PC41	Current Input detection protection
PC42	Compressor start error
PC43	Lack of phase (3 phase) protection
PC44	No speed protection
PC45	341PWM error
PC46	Compressor speed malfunction
PC49	Compressor over current protection
PC06	Compressor discharge temperature protection
PC08	Outdoor current protection
PH09	Anti-cold air in heating mode
PC0F	PFC module malfunction
PC30	System overpressure protection
PC31	System pressure is too low protection
PC03	Pressure protection
PC0L	Outdoor low ambient temperature protection
PH90	Evaporator coil temperature over high protection
PH91	Evaporator coil temperature over low Protection
PC0H	Condenser high temperature protection
PH0C	Indoor unit humidity sensor failure
LH00	Frequency limit caused by T2
LH30	Indoor external fan current limit
LH31	Indoor external fan voltage limit
LC01	Frequency limit caused by T3
LC02	Frequency limit caused by TP
LC05	Frequency limit caused by voltage
LC03	Frequency limit caused by current
LC06	Frequency limit caused by PFC
LC30	Frequency limit caused by high pressure
LC31	Frequency limit caused by low pressure
LH07	Frequency limit caused by remote controller
--	Indoor units mode conflict(match with multi outdoor unit)

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