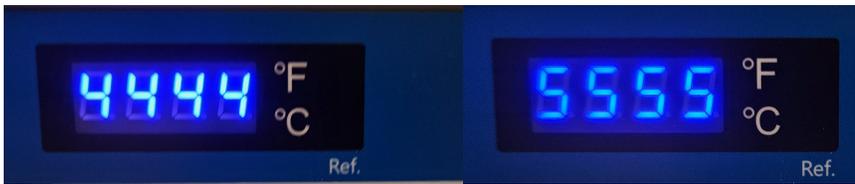


Quick Set-up for Date and Time without Passcode
Medical Pro Under-Counter Refrigerators

version 1



version 2



Year	n		22	example: 2022
Month	y		11	example: November
Day	r		7	example: 7th
Hour	5		23	example: 11pm (Military)
Minute	F		22	example: 22 minutes
	Normal Time	Military Time	Normal Time	Military Time
	12 AM	0	12 PM	12
	1 AM	1	1 PM	13
	2 AM	2	2 PM	14
	3 AM	3	3 PM	15
	4 AM	4	4 PM	16
	5 AM	5	5 PM	17
	6 AM	6	6 PM	18
	7 AM	7	7 PM	19
	8 AM	8	8 PM	20
	9 AM	9	9 PM	21
	10 AM	10	10 PM	22
	11 AM	11	11 PM	23

Step **A** : Plug your Medical Pro refrigerator into a dedicated wall outlet with the correct voltage/ amperage. Do not use extension cords or power surge adapters.

Step **A1** : Toggle the on/off power switch to the ON position located in the back of the unit.

Step **A2** : Toggle the on/off battery backup switch to the ON position as well.

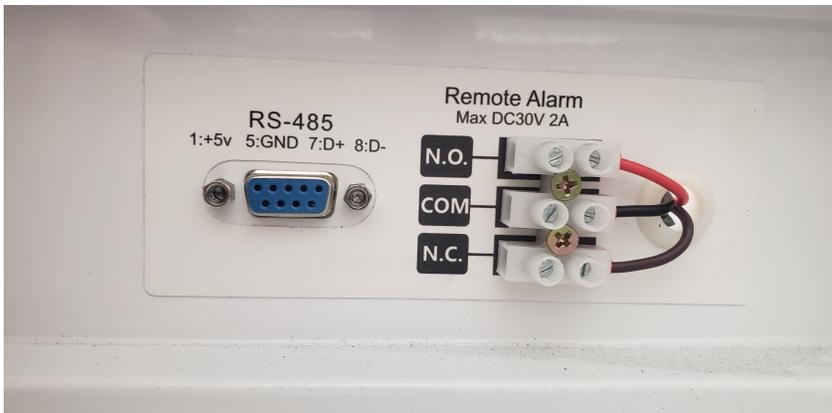
Step **B** : Immediately upon toggling both the power switch and the backup battery switch the digital controller will bypass the normally required passcode for 60 seconds so you can easily set the date and time and start the data logger. The controller will begin counting up 4444, 5555 etc. When it stops at the letter “n” you can start programming the date and time correctly.

Step **C** : Following the chart to the left, set each value to the current date and time. Simply enter the correct value for each parameter and press set to confirm, followed by pressing the up arrow to advance to the next parameter. When done press and hold check mark  to save all parameters, a tone/beep will follow.

Step **D** : LoF Flashing

Upon completion of setting the date/time you will immediately see “LoF” flashing on the display. This “LoF” flashing means you need to activate the data recorder. Immediately press and hold the check mark  and up arrow together for more than 3 sec, a beep/tone will follow when completed. “LoF” will disappear from the screen when done correctly.

Quick Start Guide
Medical Pro Under-Counter Refrigerators



Step 1: Plug your Medical Pro refrigerator into a dedicated wall outlet with the correct voltage/ amperage. Do not use extension cords or power surge adapters.

Step 2: Toggle the on/off power switch to the ON position located in the back of the unit.

Step 2a: Toggle the on/off battery backup switch to the ON position as well.

Step 3: Connect Normally Open, Normally Closed, Common Dry Contact if desired to external source. The load-bearing capacity of the terminal is 30V, 2A DC

Step 4: Silence Alarms
Upon start up, the unit will immediately display and alarm "H I" until the glycol temperature falls below 8°C. To temporarily silence the alarm simply press the check mark/ mute button once . You will need to periodically silence the alarm until the temperature as been achieved.



Please read through individual steps first to familiarize yourself with the process as the controller may time out due to inactivity

Step 5 : Set Date and Time via Factory mode (passcode required): REFER TO STEPS A~D ABOVE TO SET DATE AND TIME WITHOUT NEEDING A CODE

Press and hold the up and down arrows together from the home screen for 3 seconds until you see 0000, then release

Press the up arrow until password "XXXX" (call factory for password) is achieved, press and release check mark once to confirm

Year	n		22	example: 2022
Month	y		11	example: November
Day	r		7	example: 7th
Hour	5		23	example: 11pm (Military)
Minute	F		22	example: 22 minutes
	Normal Time	Military Time	Normal Time	Military Time
	12 AM	0	12 PM	12
	1 AM	1	1 PM	13
	2 AM	2	2 PM	14
	3 AM	3	3 PM	15
	4 AM	4	4 PM	16
	5 AM	5	5 PM	17
	6 AM	6	6 PM	18
	7 AM	7	7 PM	19
	8 AM	8	8 PM	20
	9 AM	9	9 PM	21
	10 AM	10	10 PM	22
	11 AM	11	11 PM	23

Press and hold check mark for more than 5s, you will see parameter "nAll", however continue to hold until you reach the factory mode 0000 password screen, release and press the up arrow until "XXXX" (call factory for password) is achieved. Press the check mark to confirm. You will now see "PS2", press the down arrow until you reach "n" parameter. Following the chart to the left you can now update parameters "n" through "f" to the correct date and time. Simply enter the correct value for each parameter and press set to confirm, followed by pressing the up arrow to advance to the next parameter.

When done press and hold check mark to save all parameters, a tone/beep will follow.



Step 5a : LoF Flashing

Upon completion of setting the date/time you will immediately see "LoF" flashing on the display. This "LoF" flashing means you need to activate the data recorder. Immediately press and hold the check mark and up arrow together for more than 3 sec, a beep/tone will follow when completed. "LoF" will disappear from the screen when done correctly.



Important: All the temperature parameters are factory pre-set specifically to store vaccines between 2°C~8°C. The end-user does not have to change or modify any of these parameters. Please call factory to discuss any modifications listed below.



Please read through individual steps first to familiarize yourself with the process as the controller may time out due to inactivity

Step 6 : Set Point

Press and hold the up and down arrows together from the home screen for 3 seconds until you see 0000, then release

Press the up arrow until password "XXXX" (call factory for password) is achieved, press and release check mark  once to confirm



Step 6a

Press and hold check mark , until you see parameter "nAll", then release

Press the up arrow to scroll to the "SEt" parameter and press the check mark  to view current setting. (example: 5°C)

****Note:** The compressor will cycle according to three parameters. "SEt" (located in user mode), "rd1" (located in factory mode), "rd2" (located in factory mode). The cut-in temperature is "SEt" plus (+) "rd1" and the cut-out is "SEt" minus (-) "rd2". Do not change rd1/rd2 without speaking to a factory technician as unauthorized changes may result in short cycling the compressor causing damage. See full list of parameters on Page 5/6

Definitions:

rd1=cut-in differential

rd2=cut-out differential



Step 7 : Changing Display from Celsius to Fahrenheit

Press and hold the up and down arrows together from the home screen for 3 seconds until you see 0000, then release

Press the up arrow until password "XXXX" (call factory for password) is achieved, press and release check mark  once to confirm

Press and hold check mark , until you see parameter "nAll", then release

Using the up arrow, scroll to the "CF" parameter and press the check mark  to view current setting (0=C, 1=F), change as desired. Press and hold check mark  to save

****Note:** Changing CF=1 will only change the display temperature in F. All other user/factory setting will remain in C and can not be changed. Unit will operate normally but for user preference the display temperature can be viewed in Fahrenheit, all else will remain the same.

User Mode Parameter Lists (example only)

User Settings			
Description	Symbol	Set Value	Actual Calculated Value
Max	ñ A l l	24.2	
Min	ñ i n	3.1	
Clear	CLr	1	
Set	Set	4.0	
High Glycol Set Temp (Set + H)	H	4	8°C
Low Glycol Set Temp (Set - L)	L	2	2°C
Year	n	22	example: 2022
Month	y	11	example: November
Day	r	7	example: 7th
Hour	5	23	example: 11pm
Minute	F	22	example: 22 minutes
Print Interval	Pt	20	20 minutes
High temp ambient alarm	tH1	50.0	
Door heater mode	P1	1	
	P2	2	
Level 1 Password	PS1	5	
Hardware version	b1	1.0	
Software version	b2	1.4	
Normal Time	Military Time	Normal Time	Military Time
12 AM	0	12 PM	12
1 AM	1	1 PM	13
2 AM	2	2 PM	14
3 AM	3	3 PM	15
4 AM	4	4 PM	16
5 AM	5	5 PM	17
6 AM	6	6 PM	18
7 AM	7	7 PM	19
8 AM	8	8 PM	20
9 AM	9	9 PM	21
10 AM	10	10 PM	22
11 AM	11	11 PM	23

Factory Parameter Lists (example only)

Factory Settings							
Description	Symbol	Set Value					
Level 2 Password	PS2	22		Humidity sensor correction	H2	10	percentage %
Alarm/Control Sensor	tP1	3.4		Min humidity sensor value	H3	99	percentage %
Upper Sensor	tP2	5.0		Over limit humidity	H6	0	
Lower Sensor	tP3	---		Battery	bAt	1	
Ambient Sensor	tP4	19.8		Temp data record time	SCY	10	
Evaporator Sensor	tp5	---		Year (Changeable)	n	22	
Condenser Sensor	tp6	---		Month (Changeable)	y	11	
Condenser Alarm	tH2	60.0		Day (Changeable)	r	8	
Probe calibration	Ad1	0.0		Hour (Changeable)	5	23	
Probe calibration	Ad2	---		Minute (Changeable)	F	49	
Probe calibration	Ad3	---					
Probe calibration	Ad4	5.0					
Probe calibration	Ad5	---					
Probe calibration	Ad6	---					
Cut-In Differential	rd1	1.4					
Cut-Out Differential	rd2	1.4					
Comp startup delay	t1	3	minutes				
Cond fan stop delay	t2	5	minutes				
high temp alarm delay	t3	10	minutes				
door open delay	t4	1	minutes				
comp error fault runtime	t5	7					
comp error fault offtime	t6	6					
defrosting interval	t7	8	hours				
defrosting time	t8	15	minutes				
door heat time mode	t9	3					
	P3	1					
	P4	1					

Alarm Codes

Alarm Code	Error Description
H1	High temperature alarm
L1	Low temperature alarm
H2	Alarm for high ambient temperature
H3	Condenser overheat alarm
do	Door opening alarm
PF	Power failure alarm
bL	Battery low alarm
Er	The recorder is not connected
LoF	The recorder is not started
EE	Communication failure