

CONTROLLER

HTR-10

USER MANUAL





Contronics Engineering B.V., Ambachtsweg 8, 5492 NJ Sint-Oedenrode, The Netherlands, hereby declares that the product HTR-10, produced and delivered by Contronics Engineering B.V., are in accordance with the following CE directives:

EMC-Directive : 2014/30/EU

Directive for low-voltage electrical installation : 2014/35/EU

1. PREFACE

This user manual contains the operating and installation instructions for the HTR-10 model controller.

2. INTRODUCTION

The HTR-10 is a room hygrostat and remote control for the HU-xxx series of humidifiers. It features a very accurate in-built humidity sensor and temperature sensor. The humidity sensor is also very accurate in the higher regions of relative humidity. An built-in heating element within the sensor element ensures that the sensor remains dry when the dew point is reached. The core feature of the electronics is a programmed microchip designed by Contronics. The electronic circuit board is protected against moisture.

3. CONTENT OF THE DELIVERY

When you receive the controller, the package must contain the following items:
 HTR-10
 3-meter cable with plug
 Wall-mounting bracket
 User manual

4. ASSEMBLY

The cable with plug that accompanies the HTR-10 is normally placed at the bottom. The alternative is to place the cable in the centre, at the back of the controller.

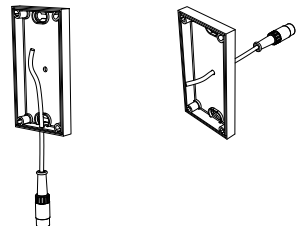


Figure 1. Cable normal and alternative.

The HTR-10 can be mounted in a number of ways using the accompanying wall-mounting bracket:

1. Mounted directly on to a wall. Cable is at the bottom.
2. In a wall-mounted box. Cable must be in the centre, at the back.

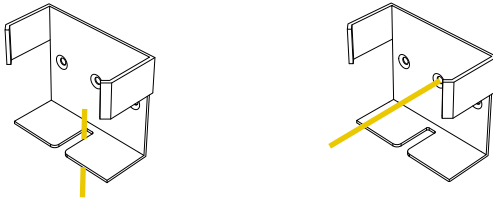


Figure 2. Possibilities for using wall-mounting bracket.

5. CONNECTIONS

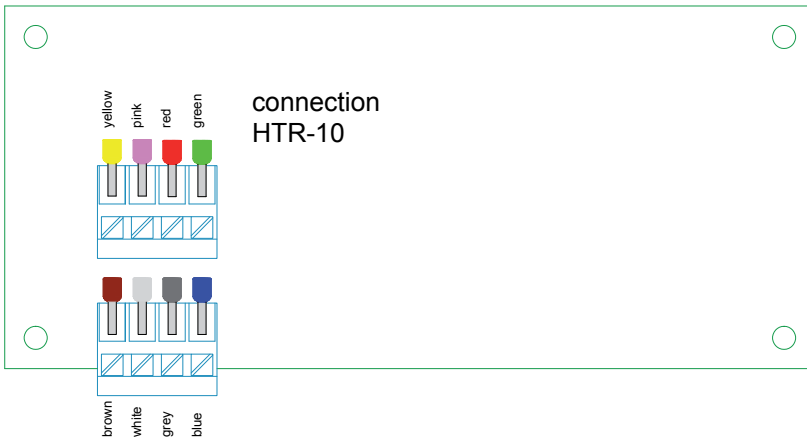
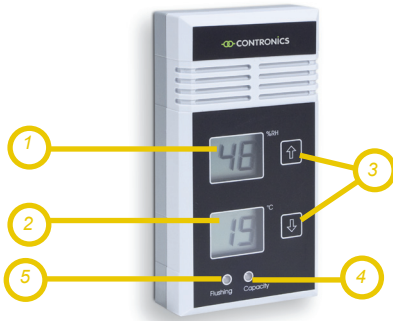


Figure 3. Connections.

6. FEATURES



1. LCD with current relative humidity.
2. LCD with current temperature.
3. Operating buttons.
4. Blue LED indicates the current capacity of the humidifier (identical to the blue LED on the front panel of the humidifier).
5. Green LED flashing:
Waterreservoir being filled.
Green LED on:
Humidifier in flushing cycle.

7. SETTINGS

Configure control mode

Determines whether controller must operate based on capacity or in hygrosstat mode.

Press  and  simultaneously for 10 seconds.

The upper screen shows the index 11.

The lower screen shows:

0 = Capacity control;.


1 = Hygrosstat control. (factory setting)

Change the mode:

Press  and  simultaneously for 3 seconds.

The screen will now flash.

Press  or  to change.

Press  and  simultaneously for 3 seconds to confirm.

Press  to return to the start screen.

Configure parameters

Determines how the controller reacts.

Press  and  simultaneously for 5 seconds.

The upper screen shows the index 1.

The lower screen shows the parameters:


1 = humidity offset



2 = temperature offset






3 = minimum capacity

4 = maximum capacity

5 = bandwidth

Press  to go to the required parameter.

Change the configuration of the parameters:
 Press  and  simultaneously for 3 seconds.
 The screen will now flash.


Press  or  to change the setting.
 Press  and  simultaneously for 3 seconds to confirm.
 Press  multiple times to return to the start screen.



Installation menu 1				
Index	Setting	Minimum	Maximum	Factory setting
1	Humidity offset	-9 %	30 %	0 %
2	Temperature offset	-9 °C	10 °C	0 °C
3	Minimum capacity	0 %	99 %	0 %
4	Maximum capacity	0 %	99 %	99 %
5	Bandwidth*)	1 %	20 %	10 %



*) this setting cannot be read or changed in capacity mode.




Installation menu 2				
Index	Setting	Minimum	Maximum	Factory setting
11	Mode 0 = Capacity	0 %	99 %	99 %
11	Mode 1 = Humidity (factory setting)	0 %	99 %	85 %

8. OPERATION

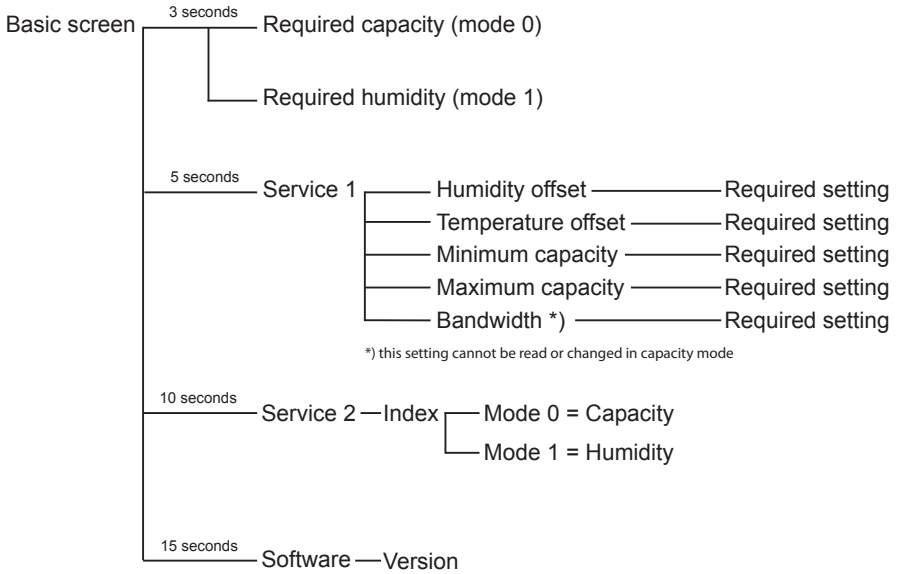
Configuring the humidity (in hygostat mode) or capacity (in capacity mode):
 Press  for 3 seconds.

The upper screen shows the setting.
 Press  and  simultaneously for 3 seconds.
 The screen will now flash.

Change setting using  or .

Press  and  simultaneously for 3 seconds to confirm.
 Press  return to the start screen.

9. MENU OVERVIEW



10. TECHNICAL DATA

Supply voltage	Via HU serie Contronics (12 V DC)	
Dimensions	L 125 x W 65 x H 30 mm	
General		
Temperature	Minimum -10 °C	Maximum + 50 °C
Humidity	< 100% (not condensing)	
Humidity		
Resolution	0,5% RH min.	
	0,3% RH typical	
Absolute accuracy	10 - 90%	< 2% RH
	0 - 10%	2 - 4% RH
	90 - 100%	2 - 4% RH
Range	0 - 100%	
Reaction time	4 sec.	
Stability	< 1% per year	
Temperature		
Resolution	0,04 °C min.	
	0,01 °C typical	
Absolute accuracy	0,5 °C at 25 °C	
Range	- 40 °C min. +70 °C max.	

DISCLAIMER

Contronics works continuously on the further development of its products. We therefore reserve the right to modify the design, construction and technology of the product at any time. For this reason, no claims can be made based on the data, illustrations and description in this user manual.

Additional, up-to-date information is available on www.contronics.nl



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