



HUMOR 20



FEUCHTEKALIBRATOR

HUMIDITY CALIBRATOR

CALIBRATEUR D'HUMIDITÉ

**Bedienungsanleitung
Konfigurations- & Messsoftware**

**Manual
Configuration & Measurement Software**

**Notice
Logiciel de Configuration et de Mesure**



JLC International
Phone: 215-340-2650
Fax: 215-340-3670

948 Lenape Drive Town Center, New Britain, PA 18901
email: jlcusa@jlcinternational.com
www.jlcinstrumentation.com & www.jlcinternational.com

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HUMOR 20 CONFIGURATION- AND MEASUREMENT SOFTWARE

The software is developed by E+E Elektronik®, to make the humidity calibrator HUMOR 20 more versatile to customer requirements, to record measurement values and to generate appropriate outputs.

1 INSTALLATION



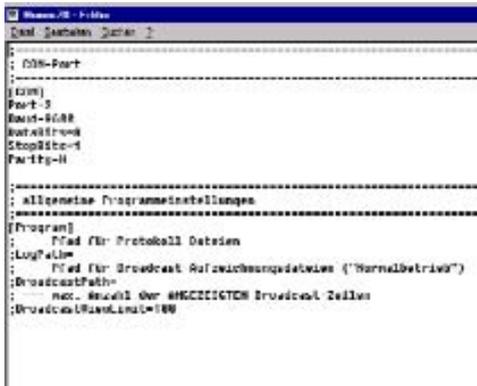
1. Insert the enclosed CD-ROM in the drive of your PC.
2. Close all other currently active programs.
3. Open the file "Setup.exe" with a double-click.
4. Follow the instructions on the screen.

2 CONFIGURATION SOFTWARE

After the HUMOR 20 has been connected with the PC via the serial interface and the software has been started, the input window opposite appears.

Remark:

If the connection between the humidity calibrator and the PC cannot be established, modify the interface settings (COM 1 or COM 2) in the file "HUMOR20.ini".

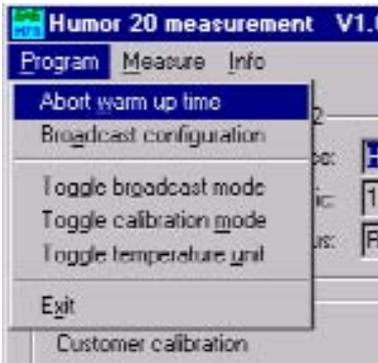


3 MENU BAR

3.1 Program

In the pull-down menu "Program" all functions for configuring the humidity calibrator are found according to customer requirements or for exiting the program.

Abort warm up time:



Possibility to interrupt the warm-up time (20 min), but is not recommended.

For calibration purposes the warm-up time should be observed under all circumstances in order to achieve precise measurement results.

Broadcast configuration:



In Broadcast Mode the measured values from HUMOR 20 as well as all error messages are recorded continuously in a Log-file and displayed simultaneously on the monitor screen.

The function "Broadcast configuration" thereby determines the required recording interval in "Toggle broadcast mode".

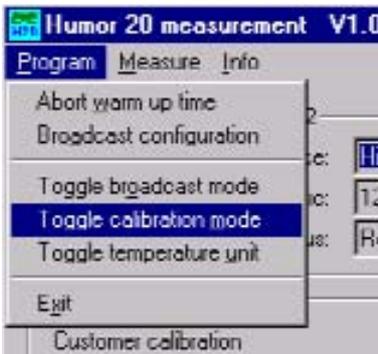
Toggle broadcast mode:



In Broadcast Mode, the calculated reference value, the measurement chamber temperature and any existing fault reports will be displayed on the monitor or written into a log-file according to the selected time interval.

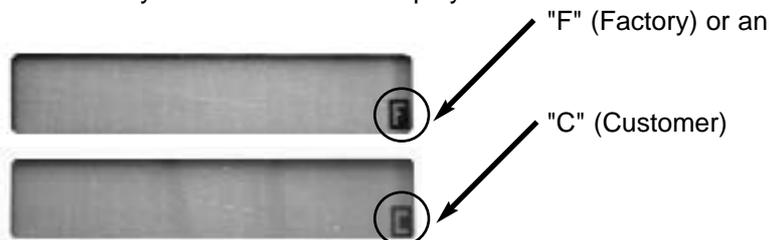
Log-File: A secondary table titled "broadcast" is automatically set up in the program window. One file is generated for each day (yyyymmdd.txt) in this table. The above mentioned data is stored in these files, which allows this data to be retrieved at a later time.

Toggle calibration mode:

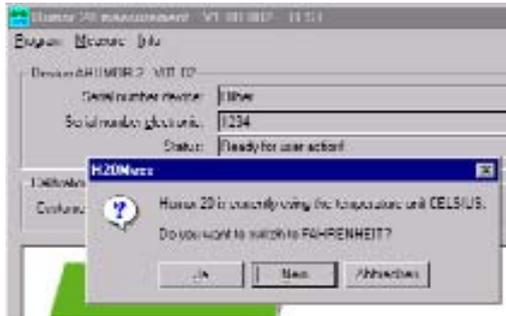


The humidity calibrator has 2 calibration modes: a factory (default) calibration and a customer calibration.

The current calibration mode is indicated in the Start menu of the software and also by a "F" or "C" in the display.



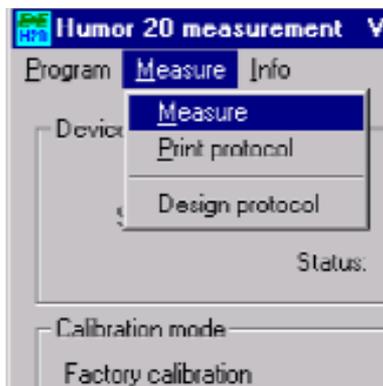
Toggle temperature unit:



The displayed temperature units can be toggled between degrees Fahrenheit and degrees Celsius.

Exit:

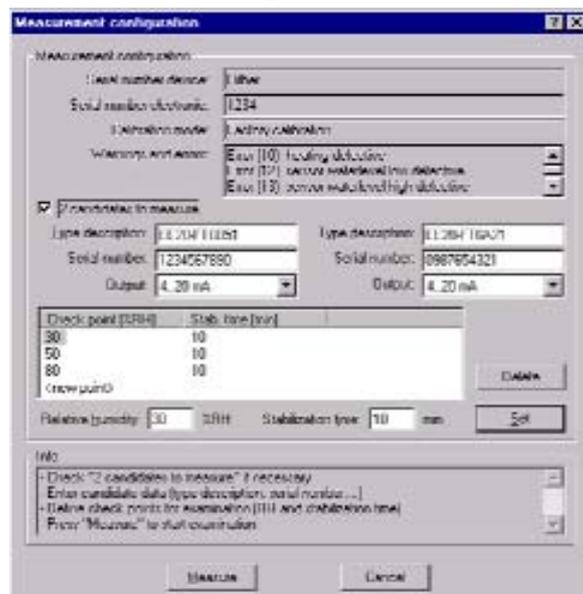
The function "Exit" terminates the program.



3.2 Measure

In the menu "Measure" you can configure the measurements and create resp. customize a measurement protocol.

Measurement Configuration:



In the input window you will find reference data for the used humidity calibrator (the reference) and have the option of defining the type designations, serial numbers and output signals of 2 candidates.

Important: All data entered here are automatically transferred to the measurement protocol and assigned to the respective measurement results.

In addition, at this point the required RH - check points and the associated stabilization time of the intended measurement can be defined.

The values required are to be entered in the input fields and confirmed with "Set".

To delete measurement points, these must be selected and removed with "Delete".

After exact definition of the test samples and the intended measurement points, the measuring operation can be started with the button "Measure".

Measurement Execution:



The window opposite supports the entire measurement sequence:

To begin, select the required candidate and the corresponding output signal on the preselection switch of the HUMOR 20. Subsequently the first check point can be set on the pressure controller of the humidity calibrator.

After this the defined stabilization time is started with the "Start" button. Afterwards the respective measurement data are registered with the function "Set" and then transferred to the measurement protocol.



Important:

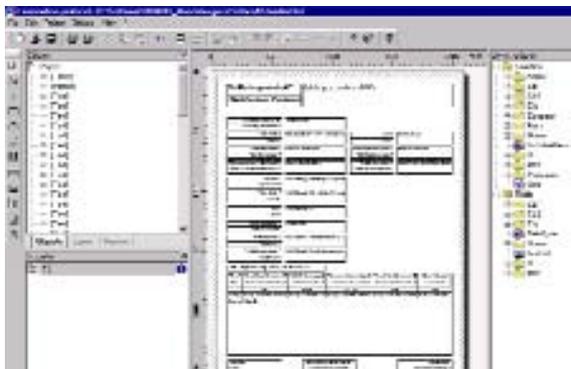
The instructions in the text field "Info" notify you continuously about the next operating step and guide you through the entire measurement sequence.

Design Protocol:



The measurement software also provides the opportunity of creating a measurement protocol automatically.

A ready-made form is thereby defined and, after complete measurement (MEASUREMENT EXECUTION), automatically complemented with the measured values determined. Immediately after the measuring operation is finished a clear protocol can be created.



E+E Elektronik provides a standard-design protocol, which is opened after selecting the function "Design protocol". This standard-design simply can be adapted to customer requirements.

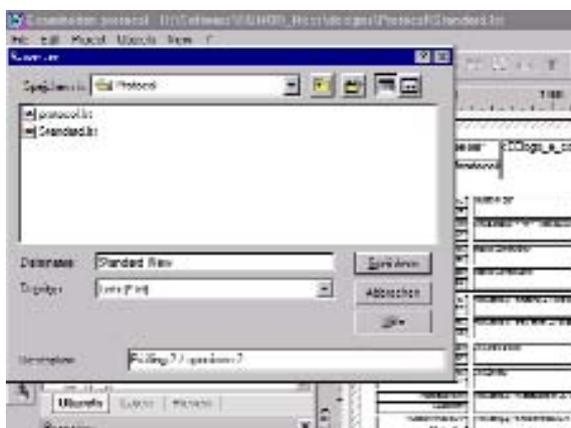
In order to create a complete customer-specific layout of the measurement protocol, due to the variety of options and functions it is necessary to study the Help text of the Protocol - Designer precisely. We therefore recommend the following method:



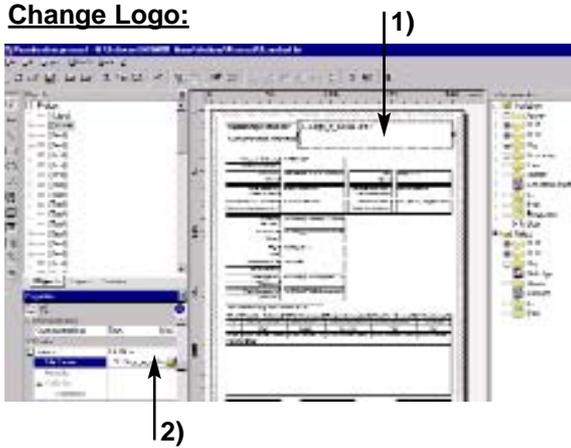
To keep the work involved in designing the form / protocol to a minimum, only the text fields and/or the logo of the standard design should be modified.

To do this, as a first step select the menu "File - Save as" and save the standard - protocol under a different, freely-selectable filename.

So that the standard-design remains unchanged, now open the Protocol-Designer again and select the file just created for individual design and editing.

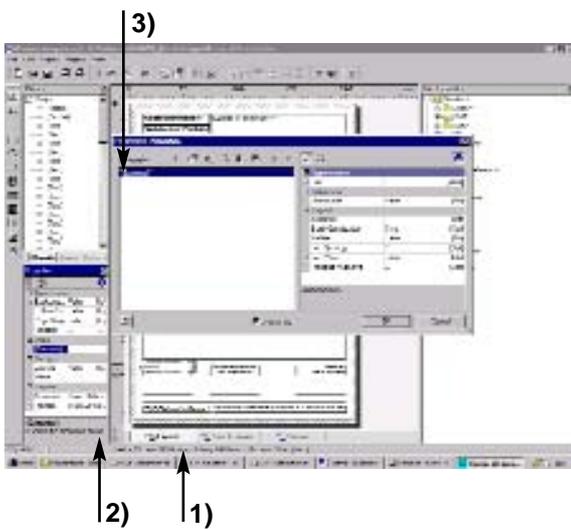


Change Logo:



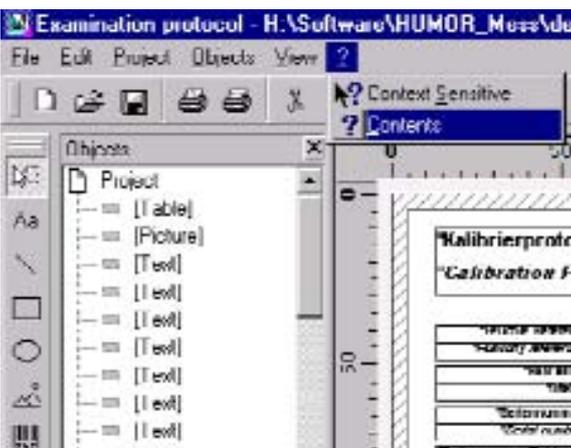
To position your individual logo on the protocol, select the place holder (arrow 1). By clicking on the path specified in the menu "Properties-Data-Source-File Name" (arrow 2) you can incorporate your logo into the protocol design.

Change text fields:



To change the text in the measurement protocol, select the required text field (arrow 1) and click on the symbol in the menu "Properties - Data - Contents" (arrow 2). In the Pop-up window "Paragraph Properties" you can modify the text and its formatting as you wish (arrow 3). As a result, with little effort you have the opportunity of replacing the German text with the language of the respective country.

New Protocol-Design:



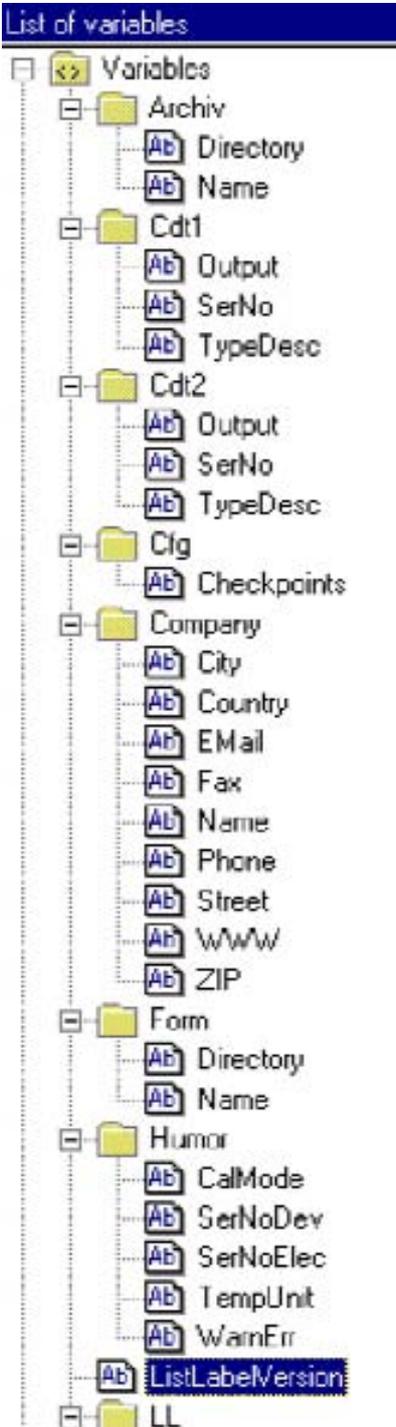
If you wish to create a completely new protocol design, you will find all relevant information in the Help text of the Protocol-Designer.

For further enquiries, please contact the E+E Elektronik customer service.

3 DEFINITION OF VARIABLES

To simplify the design of your own measurement protocol, the list below provides an overview of the most important variables and fields as well as their content.

Variables: Contents can be incorporated directly into the form design.
Fields: Contents of fields can in addition be incorporated in every row of a table dependent on the number of measurement points (dynamic).



Variables: Their content can be added directly into measurement protocols.

Candidate 1:
 Output signal
 Serial number
 Type

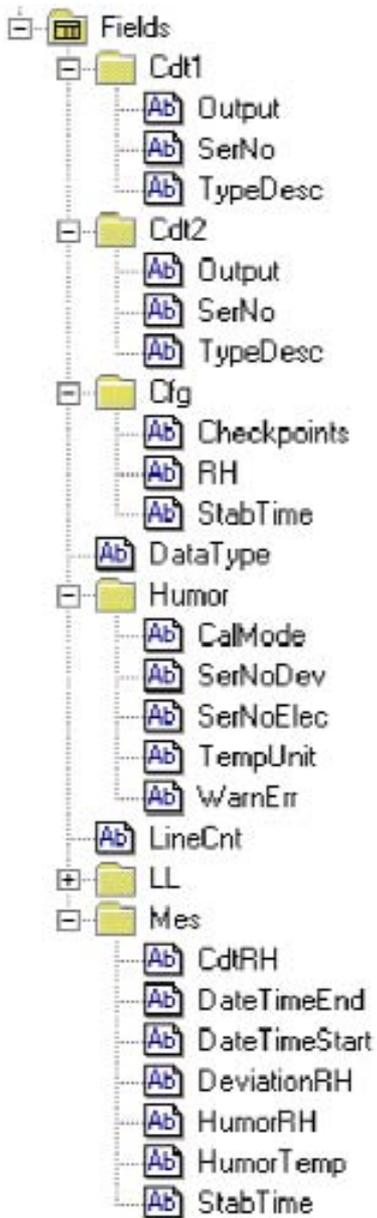
Candidate 2:
 Output signal
 Serial number
 Type

Number of measurement points

Company: customer-specific data can be assigned with the following variables:

City
 Country
 Email
 Fax
 Contact person
 Telephone
 Street
 Internet address
 Postcode

Humor: the HUMOR used can be described in more detail with the following variables
 Current operating state (Customer - / Factory Calibration)
 Serial number of the device
 Serial number of the integrated electronics
 used temperature unit
 occurring warnings or error messages



Fields: Their content can be inserted in dynamic tables of the measurement protocol

Candidate 1:

Output signal
Serial number
Type

Candidate 2:

Output signal
Serial number
Type

Humor: the HUMOR used can be described in more detail with the following variables

Current operating state (Customer - / Factory Calibration)
Serial number of the device
Serial number of the integrated electronics
used temperature unit
occurring warnings or error messages

Determined measured values per measurement point:

Measurement result candidate
End of the stabilization time
Start of the stabilization time
Deviation of the candidate to the Humidity - reference value of the HUMOR 20
Humidity - reference value - HUMOR 20
Temperature - measured value HUMOR 20
Stabilization time