

ACTIVE-ELECTRODE







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1 Foreword

This quick start guide contains short information on how to use the B 55 BL active electrode. It also provides an overview of the Hydromettes to which the active electrode can be connected.

The manual contains only parts of the legal and safety information as well as parts of the application instructions and has been shortened for better readability.

A complete digital version of the operating instructions for the connectable Hydromettes with all relevant information is available on our homepage in the download area.

Only use the device if you have read and understood all legal and safety information as well as the application instructions in the complete operating instructions for the respective Hydromette.



1.1 Explanation of the General Warnings

The following danger levels are used in this quick start guide to indicate potentially dangerous situations and important safety instructions:

Danger Level	Description		
DANGER	Danger / Indicates a hazardous situation which, if not avoided, will result in death or serious irreversible injuries.		
WARNING	Warning / Indicates a hazardous situation which, if not avoided, could result in death or serious irreversible injuries.		
CAUTION	Caution / Indicates a hazardous situation which, if not avoided, could result in minor or moderate injuries.		
1	Indicates important information.		
INFORMATION			



2 Description of the Product

The B 55 BL active electrode is an electronic building moisture indicator for non-destructive building material moisture measurement.

The electrode uses the dielectric constant / radio frequency principle of measurement. The versatile ball sensor is used to **sense moisture in building materials** of any kind as well as to **determine the moisture distribution** in walls, ceilings, and floors - an ideal pre-tester for all CM devices, resistance measuring devices and other material-destroying measuring methods.





3 Specifications

3.1 Technical Data

Storage conditions: + 5 to + 40 °C

- 10 to + 60°C (for a short time)

Operating conditions: 0 to + 50 °C

- 10 to + 60°C (for a short time)

< 85 % R.H. non-condensing

Dimensions (without cable): 210 x 50 x 35 (L x W x H) mm

Weight (with cable): approx. 164 g

Protection class: III

Protection rating: IP20

3.2 Prohibited Environmental Conditions

Condensation. humidity continuously too high (> 85% R.H.)
 and wetness

Permanent presence of dust and combustible gases, vapours or solvents

Ambient temperatures continuously too high (> +50 °C)

Ambient temperatures continuously too low (< 0 °C)

3.3 Measuring Range

Scan mode: 0 to 200 Digits

Materials: Observe the operating instructions for the

respective Hydromette!



4 Usable Hydromettes

4.1 Hydromette CH 17



The active electrode B 55 BL must be connected to the measuring device via the 3.5 mm jack receptacle. Ensure that the octagonal plug is firmly seated. The measuring device automatically recognises the connected accessories.



To measure, a measurement mode must first be selected by touching on the touch display, here an example of selecting the basic measurement.

The basic measurement offers a pure measuring function without the option of saving measured values in the device. It is intended for quick measurements that do not require documentation of the results.





Touching the "+" symbol takes you to the sensor selection.

Sensors that are connected to the measuring device are visually high-lighted and can be selected.



To activate the capacitive measuring mode, the "B 55 BL" symbol must now be selected. The selection is confirmed by pressing the "Confirm" button.

For all information, read the complete operating instructions for the Hydromette CH 17 on our homepage (in **English**: pdf. file with **EN** extension):

https://www.gann.de/en/products/handhelds/electronic-moisture-meters/ch-17#downloads





4.2 Hydromette BL UNI 11



The Hydromette BL UNI 11 and the B 55 BL active electrode must be connected to each other via the 3.5 mm jack receptacle. Ensure that the octagonal plug is correctly seated.

The Auto-Sensor technology now recognises the connected electrode. To activate capacitive measurement, the measuring

button must be pressed for **longer** than 2 seconds. The device now starts in the measuring menu or main menu. The measuring process can be performed here. The capacitive measurement remains active until the active electrode B 55 BL is replaced by another electrode or TF stick and its measuring mode is activated.

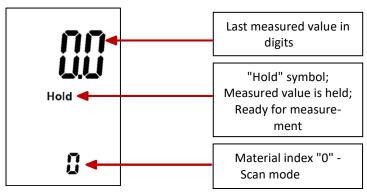


Figure 4-1: Scan mode display



For all information, read the complete operating instructions for the Hydromette BL UNI 11 on our homepage (in **English**: pdf. file with **EN** extension):

https://www.gann.de/en/products/handhelds/electronic-moisture-meters/blue-product-series/bl-uni-11#downloads



4.3 Hydromette BL E



The active electrode B 55 BL must be connected to the measuring device via the 3.5 mm jack receptacle. Ensure that the octagonal plug is firmly seated. The measuring device now automatically recognises the connected accessories. To activate the capacitive measuring mode, press the "M" button for longer than 2 seconds.



In conjunction with the active electrode B 55 BL, the Hydromette BL E only works in digit scan mode (setting "c 0"). A material setting or direct display in weight or CM % is not possible.



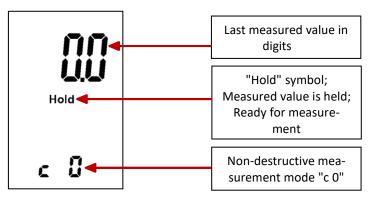


Figure 4-2: Capacitive measuring mode "c 0" display

To (re-)activate the BNC socket or the resistance-based measurement, the accessory must be unplugged from the 3.5 mm jack receptacle and the measurement button pressed for **longer** than 2 seconds.

For all information, read the complete operating instructions for the Hydromette BL E on our homepage (in **English**: pdf. file with **EN** extension):

https://www.gann.de/en/products/handhelds/electronic-moisture-meters/blue-product-series/bl-e#downloads





5 Using the Active Electrode B 55 BL

To prevent the user's hand from influencing the electrode, only the lower half of the electrode may be covered by the hand during the measurement and control process. The upper half of the electrode must remain free.

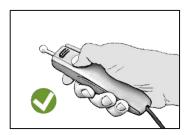


Figure 5-1: Proper handling



Figure 5-2: Improper handling

INFORMATION

Measure:

Press the measurement button "M" for longer than 2 seconds, and scan the area to be inspected. The electrode must rest firmly on the building material and be held as vertically as possible (approx. 90°) to the area. A

measuring process is carried out as long as the measurement button is pressed. After releasing the "M" button, the measuring process is interrupted and the "Hold" symbol is displayed.





Measurements in drill holes lead to faulty measurements. This results in an overlay of the measuring field and thus an increase in the measured value.

Figure 5-3: Incorrect use – measurement in drill hole



In corner / edge / angle areas, a distance of approx. 8 - 10 cm from the corner / edge / angle must be observed.

Figure 5-4: Correct use of distances when measuring



Figure 5-5: Incorrect use in corner/angle area

Measurements directly in the corner / edge / angle area lead to an overlapping of the measuring field and thus change the measured value!



5.1 Orientation Values

The following data serves as an orientation guide for anticipated display value:

Residenti	al spaces	Cellars (c	Cellars (old buildings)			
dry	20 - 40 Digits	dry	40 - 60 Digits			
moist	80 - 140 Digits	moist	100 - 150 Digits			



Dew point undershoots or condensation on the surface to be measured can cause higher display values and thus make the wall appear more humid than is actually the case! It is therefore always advisable to carry out an additional indoor climate measurement and

dew point calculation (Hydromette BL Compact TF-IR 2, TF 3 & RH-T). This can prevent misinterpretations. If readings exceed 130 digits, condensation or the presence of liquid water may already be starting to form, depending on the bulk density.

Depending on the height of the covering, metal in the subsurface (iron reinforcements, wires, pipes, stucco bars, etc.) can raise the measurement value. This should be considered when evaluating the displayed values in relation to the covering.



6 Appendix

6.1 Display/Conversion Values (Digits) depending on the Raw Material Density

	Corresponding Relative Air Humidity in %							
	3095100							
Bulk density	Display in Digits [*]							
kg/m³	very dry	normal dry	semi dry	moist	very moist	wet		
up to 600	10 – 20	20 – 40	40 – 60	60 – 90	90 – 110	above 110		
600 – 1200	20 – 30	30 – 50	50 – 70	70 – 100	100 – 120	above 120		
1200 - 1800	20 – 40	40 – 60	60 – 80	80 – 110	110 – 130	above 130		
above 1800	30 – 50	50 – 70	70 – 90	90 – 120	120 – 140	above 140		

^{*} Digital values are dimensionless measurement values and not real moisture values as a percentage!

- Subject to technical changes-



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