

### Preface

This *HEG neuro Connector* (referred to as *Connector* in this manual) establishes the connection between *HEG neuro* and a *ProComp*® from Thought Technology. This allows the *HEG neuro* to also be integrated as a sensor in the professional work with *BioGraph® Infiniti* in order to use the advantages of the HEG as a very easy-to-use method and to combine it with other parameters.

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### Note

In these instructions, terms are used as follows: *Connector* = HEG neuro Connector **ProComp**<sup>®</sup>:

representative for all encoders from Thought Technology, i.e. also *FlexComp*.

### Safety instructions

The *connector* was developed for connecting the *HEG neuro* to a *ProComp®*. Use for other purposes is not intended and therefore not permitted.

- **Caution** Protect the connector from rain / water drops and high humidity.
  - Note Do not tear at the cable. This could tear off. A connection to the *ProComp* is then no longer possible.

### **Connecting the connector**

To connect the *HEG neuro* to a *ProComp*<sup>®</sup> it is necessary to ,interconnect' the *connector*.

 Determine in *BioGraph®* Infiniti at which channels the HEG input signals are expected. *Example:* Here, the sensor cables are expected at channels G and H.



2. Insert both plugs into the corresponding channel sockets of the *ProComp®* which is switched on and connected to the computer. The plugs are each marked with an arrow. In addition, there is a protrusion there. This must be inserted into the recess of the channel socket. The upper lamp on the *connector* starts to flash green.

Pay attention to the assignment:

- Channel **HEG Red** -> red triangle
- Channel **HEG Infrared** -> white triangle





3. Press **Repeat** in *BioGraph®* to update the sensor check in the channel set. The error message should now have disappeared.

	Physic	al Channel Set of 1 ProComp In	finiti encoders with ProComp Infin	iti Communication Protocol.	
chancel	Description	Expected Sensor	Wrong Sensor Type	Replacement Signal Value	Emulating sensor
1G	1G: HEG Red	MediTECH HEG Red		1	
1H	1H: HEG Infrared	MediTECH HEG IR		1	

**Note:** If *BioGraph* shows the adjacent information in the ,Wrong Sensor Type' field, the plugs have been inserted the wrong way round. Pull out the plugs and plug them in correctly.

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## **Establishing the connection**

After you have connected the *connector* (it should now flash green) to the *ProComp®*, it must be connected to the HEG neuro.

- 1. Place the *connector* close to the *HEG neuro*.
- 2. Switch on the *HEG neuro*. To do this, press the key on the *HEG neuro*. The upper lamp starts to flash green.



**Recommendation:** The *HEG neuro* should not yet be placed on the head of the person being trained so that the *connection* establishment works well. After a few seconds, the *HEG neuro* and the *connector*, find each other'. You can recognize this by the fact that the upper lamp on the *connector* lights up continuously green. In addition, the lower lamp starts to glow orange.



**Note:** If the connector flashes slowly, it searches for up to 30 seconds for the HEG neuro to which it connected the last time. If it does not find it, it starts flashing faster and searches for another HEG neuro in the vicinity.

### **Training start**

After the *connection* between the *HEG neuro* and the *connector* has been established, the *HEG neuro* can be attached to the head of the person being trained. Follow the instructions in the *HEG neuro* manual.

1. Switch on the connector. Press the key on the connector. The upper lamp lights up green, the lower lamp turns blue. The lamp on the HEG neuro starts to light up continuously. The photoelectrodes on its back (on the forehead of the person being trained) light up.



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#### 2. Now start the training session in *BioGraph®*.

# **Important:** Keep to the order of the steps. Then, right at the beginning of the training session, measured values of the *HEG neuro* will already be taken into account.

## End of training

To end a training session, please follow the sequence of these steps:

- **1.** Stop the training session in *BioGraph®*.
- 2. Switch off the *connector*. This ends the measurement on the *HEG neuro* at the same time.
- **3. Remove the** *HEG neuro* from the head of the person being trained. Depending on the charge status of the *HEG neuro*, it can be charged. To do this, follow the steps described in the instructions for the *HEG neuro*.

### **Questions and troubleshooting**

Error	Suggested solution
The connector	It is possible that the Connector and
flashes green after	the <i>HEG neuro</i> have already connec-
being plugged	ted without you noticing.
into the ProComp	
and then lights up	
orange.	

The HEG neuro
does not light up,
although the con-
nector lights up
orange.

Are there possibly several *HEG neuros* in the vicinity? Perhaps the *connector* has connected with another *HEG neuro*. The range is about 10 m and can also penetrate walls. Or is your *HEG neuro* possibly not sufficiently charged? Charge it and try to establish the connection again.

When using two HEG neuros, the connection fails. What now?	When re-establishing the connec- tions, make sure that they are esta- blished one after the other. Check the control of the first <i>HEG neuro</i> before establishing the second connection.
When I press the key on the connec- tor, nothing hap- pens.	Is the <i>connector</i> connected to the <i>Pro-Comp</i> <sup>®</sup> ? The <i>connector</i> does not have its own power supply or storage, so it does not contain any power without being connected to the <i>ProComp</i> <sup>®</sup> .

### Technical data

Power supply	7.2 V via cable to the ProComp®
Operating current	9 – 13 mA
Sampling rate	64 sps via wireless connection
Connections	Cable to the ProComp®
Dimensions (W x H x D in cm)	5 x 4.5 x 1.5 + cable (21 cm)
Weight	25 g
Housing protection class	IP 20

Operation			
Ambient temperature	+10 °C up to +40 °C		
Relative humidity	30% up to 75%		
Air pressure	700 - 1,060 hPA		
Storage and transport			
Ambient temperature	+ 10 °C up to +50 °C		
Relative humidity	20 % up to 95 %		
Air pressure	700 - 1,060 hPa		

### Storage and care

- Store the connector in the softcase packaging in which it was delivered. This protects it against damage and dust. The plastic housing is then more durable.
- Dust can be removed with a dry cloth or a very soft brush.
- Note The *connector* housing is glued and not intended to be opened. Opening it is not permitted and will void any claims against *Medi*TECH.

### Disposal

The *connector* consists of plastics and electronic components and can be disposed of or recycled accordingly.



The *connector* does not contain a battery or re- chargeable battery.

Contact your local recycling company to find out what disposal is required for these components. This may vary from region to region.

Alternatively, you can return the *connector* to the address given on the back of these instructions.

### Contact and further information

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