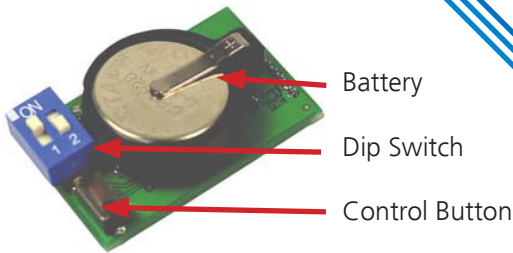
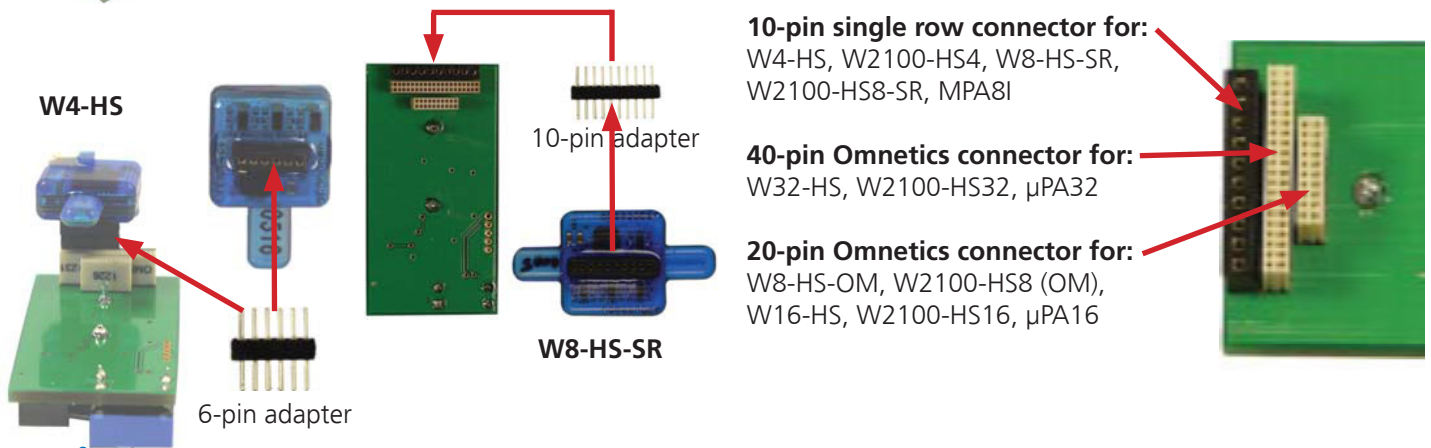


## ME / W-SG

### Signal Generator for the ME-Systems and the basic and advanced Wireless-Systems



The ME/W-Signal Generator is a very convenient tool for users of the basic and advanced Wireless-Systems and for users of ME-Systems. Use the ME/W-SG instead of setting up a complete experiment for training, controlling, and troubleshooting purposes.



**10-pin single row connector for:**  
W4-HS, W2100-HS4, W8-HS-SR, W2100-HS8-SR, MPA8I

**40-pin Omnetics connector for:**  
W32-HS, W2100-HS32,  $\mu$ PA32

**20-pin Omnetics connector for:**  
W8-HS-OM, W2100-HS8 (OM), W16-HS, W2100-HS16,  $\mu$ PA16

Connect the W4-HS with the provided 6-pin double row adapter in correct orientation into the ME/W-SG. Please see the picture.

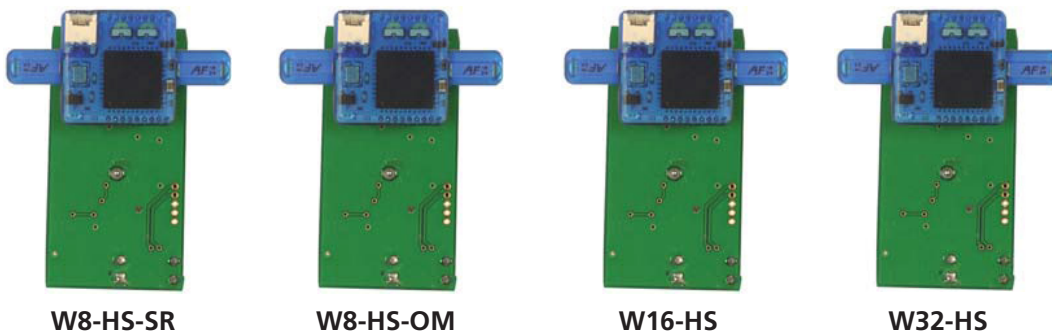
### Basic Wireless-System

**W4-HS:** Connect the W4-headstage with the provided 6-pin adapter in correct orientation to the single row connector of the ME/W-SG. Please see the pictures above.

**W8-HS-SR** with single row connector: Connect the W8-HS-SR headstage with the provided 10-pin adapter to the single row connector of the ME/W-SG. The orientation of the W8-headstage with single row connector does not matter.

**W8-HS-OM and W16-HS:** Connect the W8-HS-OM with Omnetics connector and the W16-headstage according to the guide posts to the 20-pin Omnetics connector as shown on the photos below.

**W32-HS:** Connect the W32-headstage to the 40-pin Omnetics connector. The orientation of the W32-HS does not matter.



W8-HS-SR

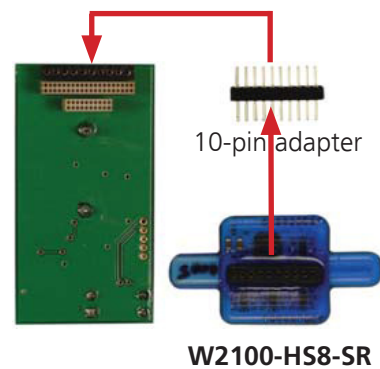
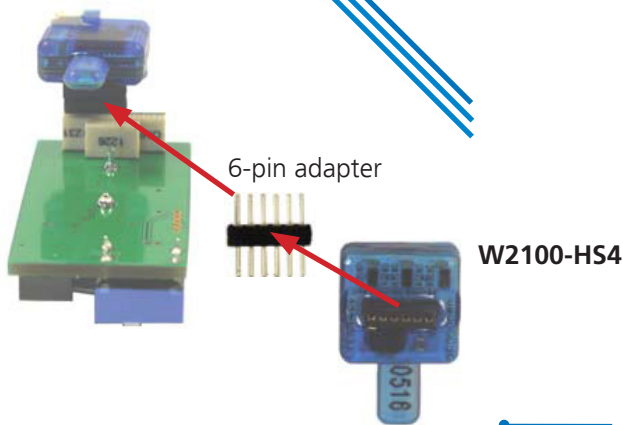
W8-HS-OM

W16-HS

W32-HS

ME / W-SG

Signal Generator for the ME-Systems and the basic and advanced Wireless-Systems



Connect the W2100-HS4 with the provided 6-pin double row adapter in correct orientation to the ME/W-SG. Please see the picture.

**W2100-System**

**W2100-HS4:** Connect the W2100-HS4-headstage with the provided 6-pin adapter in correct orientation to the single row connector of the ME/W-SG. Please see the pictures above.

**W2100-HS8-SR** with single row connector: Connect the W2100-HS8-SR headstage with the provided 10-pin adapter to the single row connector of the ME/W-SG. The orientation of the W2100-HS8-SR with single row connector does not matter.

**W2100-HS8 (OM)** and W2100-HS16: Connect the W2100-HS8 (OM) with Omnetics connector and the W2100-HS16-headstage according to the guide posts to the 20-pin Omnetics connector as shown in the photos below.

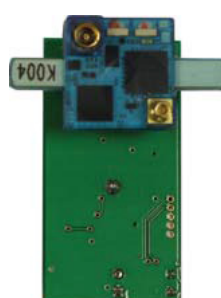
**W2100-HS32:** Connect the W2100-HS32-headstage to the 40-pin Omnetics connector. The orientation of the W2100-HS32-headstage does not matter.



W2100-HS8-SR



W2100-HS8-OM



W2100-HS16



W2100-HS32

## ME / W-SG

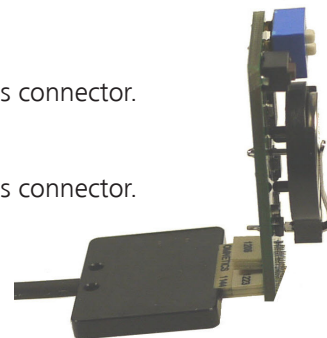
Signal Generator for the ME-Systems and the basic and advanced Wireless-Systems

### ME-System

#### Micro Preamplifier System

**μPA16:** Connect the μPA16 of the ME-System to the 20-pin Omnetics connector. Please orientate the μPA16 according to the guide posts.

**μPA32:** Connect the μPA32 of the ME-System to the 40-pin Omnetics connector. The orientation of the μPA32 of the ME-System does not matter.

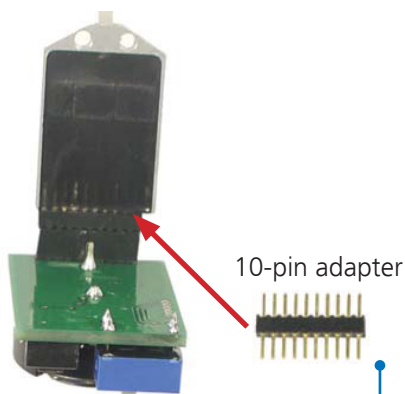


**μPA32** connected to the ME/W-SG.  
The orientation of the μPA32 of the ME-System does not matter.

### ME-System

#### Miniature Preamplifier System

**MPA8I:** Please insert the MPA8I headstage together with the adapter in correct orientation into the 10-pin single row connector as shown on the photo beside. The MPA8I headstage is equipped with an 11-pin connector, that is why one of the pins is not connected. The bottom of the MPA8I headstage (black side) must show to the bottom of the signal generator. The free pin of the 11-pin connector must be on the right side.



**MPA8I** headstage connected to the ME/W-SG




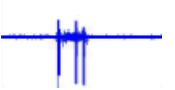
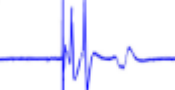


Please connect the MPA8I headstage with the provided 10-pin double row adapter in correct orientation to the ME/W-SG.

**MPA32I:** Please note that the MPA32I cannot be connected to the ME/W-SG.

## ME / W-SG

### Signal Generator for the ME-Systems and the basic and advanced Wireless-Systems

Switch ME/W-SG on: Press the control button.  
Switch off: Press control button longer than two seconds.

Switch 1	Switch 2	Press Button slowly n times	Signal Source	Signal Type
OFF	OFF	1 The MEA-SG is on	Artificial sine waves (1.75 mV) 0.005 Hz <b>Note: Sine waves &lt; 1 Hz might not be visible because of the hardware filter bandwidth.</b>	
		2	Sine wave 0.01 Hz	
		3	Sine wave 0.03 Hz	
		4	Sine wave 1.23 Hz	
		5	Sine wave 12.5 Hz	
ON	OFF	1 The MEA-SG is on	Hippocampal slice EPSP	
		2	Hippocampal slice Population spikes	
		3	Hippocampal neurons Spikes	
OFF	ON	1 The MEA-SG is on	Heart ECG Atrium	
		2	Heart ECG Ventricle	
		3	Cardiomyocytes Ventricle FP	
ON	ON	1 The MEA-SG is on	Retina ERG with spike	