

6-Well Microelectrode Array

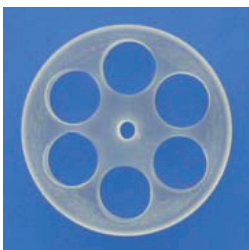
60-6wellIMEA200/30iR-Ti

Layout

Technical Specifications

Advantages

- 60-6wellMEAs are developed, for example, for safety-pharmacological screenings of drug induced QT-prolongation.
- The 60-6wellMEA allows running six experiments with identical surrounding conditions at once.
- Two types of macrolon rings are available: Rings with triangular chambers and rings with round chambers.



(tcr) Triangle chamber ring with 6 wells
OD 30 mm, ID 27 mm, height 10 mm of each well.
Volumetric capacity of each well: Approximate 700 μ l.

(rcr) Round chamber ring with 6 wells:
OD 30 mm, ID of the wells 8 mm, height 10 mm of each well.
Volumetric capacity of each well: Approximate 500 μ l.



Temperature compatibility	0 - 125 °C
Dimensions (W x D x H)	49 mm x 49 mm x 1 mm
Base material	Glass
Track material	Ti (Titanium)
Contact pads	TiN (Titanium Nitride)
Electrode diameter	30 μ m
Interelectrode distance (center to center)	200 μ m
Electrode height	Planar
Electrode material	TiN (Titanium Nitride)
Isolation material	Silicon nitride 500 nm (PEVCD)
Electrode impedance	< 100 k Ω
Electrode layout grid	3 x 3 electrodes
Number of recording electrodes	54 (9 electrodes in each well)
Number of reference electrodes	6, one internal reference electrode (iR) in each well
Software	
Multi Channel Experimenter	MEA Configuration
MC_Rack	Configuration
Channel map	6 Well MEA.cmp

6 Well MEA Perfusion Chamber

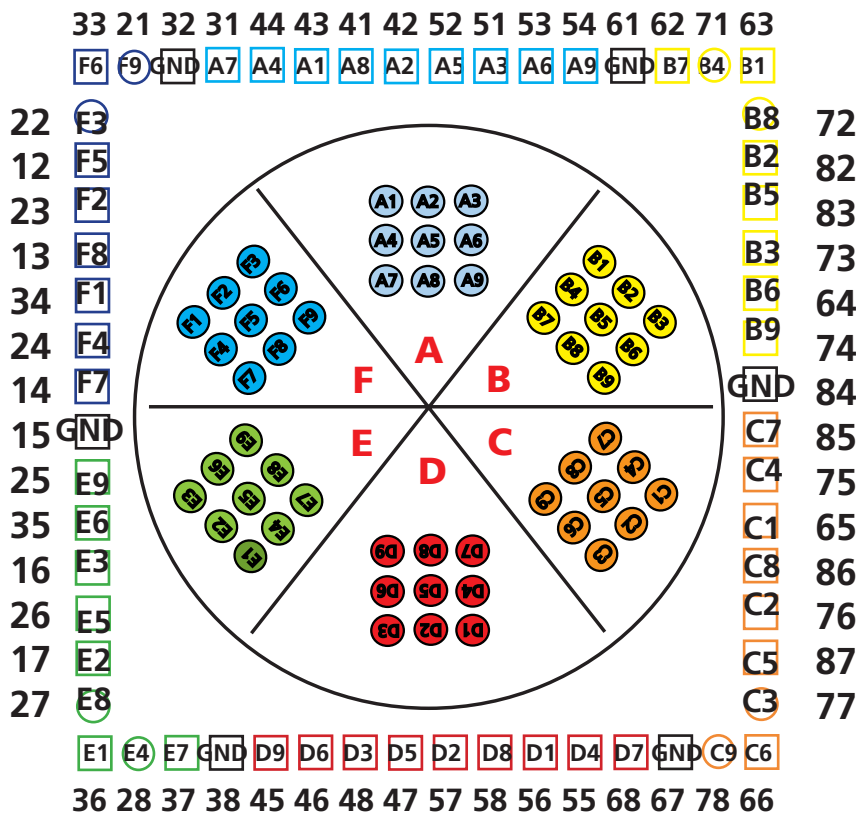
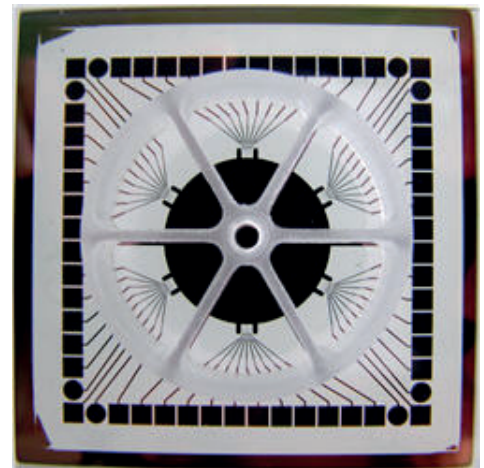
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Numbering

The letter-digit code is the electrode identifier and refers to the position of the electrode in the 60-6wellMEA. The digit codes are the amplifier pin numbers. Please make sure to select in the data acquisition program MC_Rack in "Data Source Setup", "Source layout" „Configuration" and the channel map „6 Well MEA".



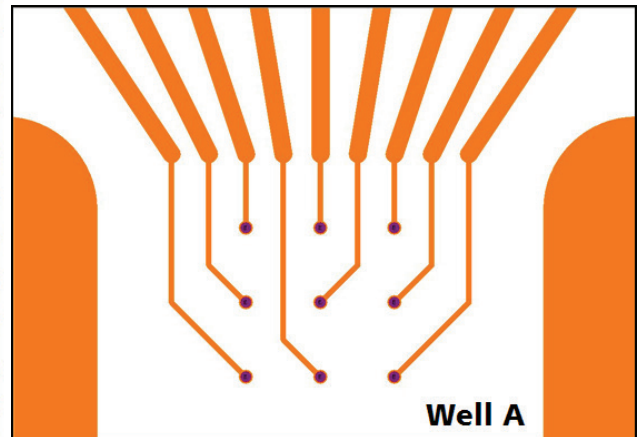
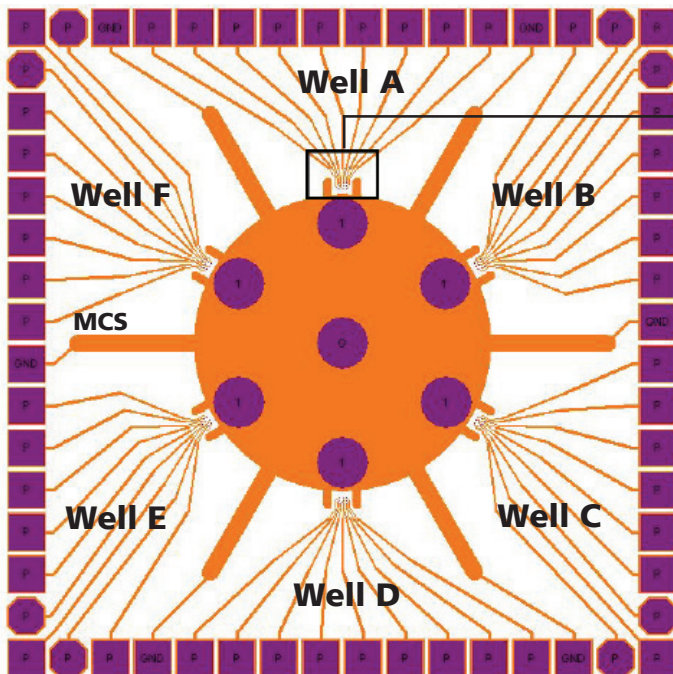
The MEA is not symmetrical and has to be inserted into the amplifier with well A on top as shown in the picture.

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Important: Please insert the 60-6wellMEA into the MEA amplifier with the writing on the MEA chip (in this example MCS) on the left side viewed from the front, with the sockets of the MEA1060 amplifier or the articulation of the MEA2100 headstage is in the back.



MEA amplifier pin numbers (digit) and correspondent electrode identifier code (letter-digit) inside each well.

	A	B	C	D	E	F
1	43	63	65	56	36	34
2	42	82	76	57	17	23
3	51	83	77	48	16	22
4	44	71	75	55	28	24
5	52	73	87	47	26	12
6	53	64	66	46	35	33
7	31	62	85	68	37	14
8	41	72	86	58	27	13
9	54	74	78	45	25	21
GND	32	61	84	67	38	15

