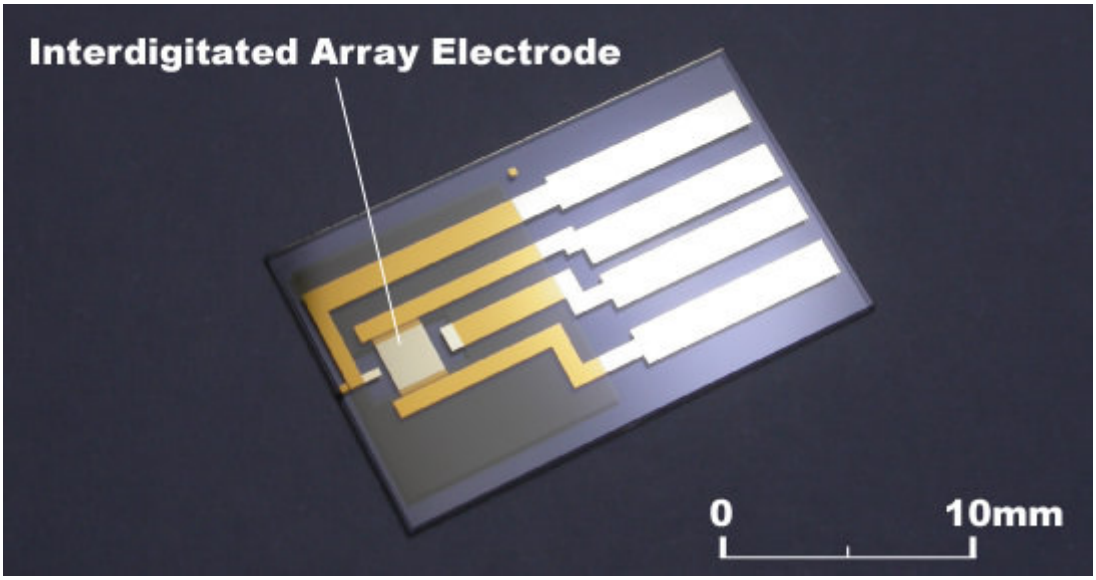
ALS

IDA(Inter Digitated Array) Electrode

Cyclic Voltammetry Measurement using IDA Electrode



Inter digitated 65 pairs of generator / collector electrodes set off electrochemical RedOx cycling continuously as fig.1 shows. This reaction significantly boosts sensitivity of the electrode. Furthermore, samples are preserved when Dual(Red-Ox) Mode is chosen - Not like as Single Mode eat up samples at measurements.

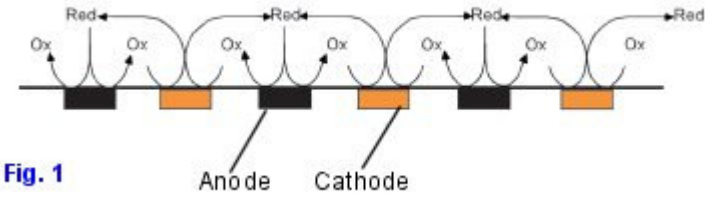


Fig. 1

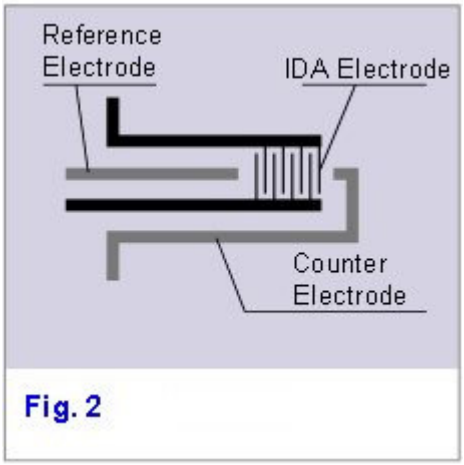


Fig. 2

Fig.3 shows voltammograms of ferrocene samples ((a),(c):10μL , (b),(d):0.2μL) using IDA electrode ((a),(b): Dual mode , (c),(d): Single Mode). As they indicate, measureing mode makes obvious difference on their response. Dual mode reinforces reduction current at collector electrodes with increase of oxidation current at generator electrodes. At the measurement(d), response is scarcely obtained because the sample was consumed during the experiment.

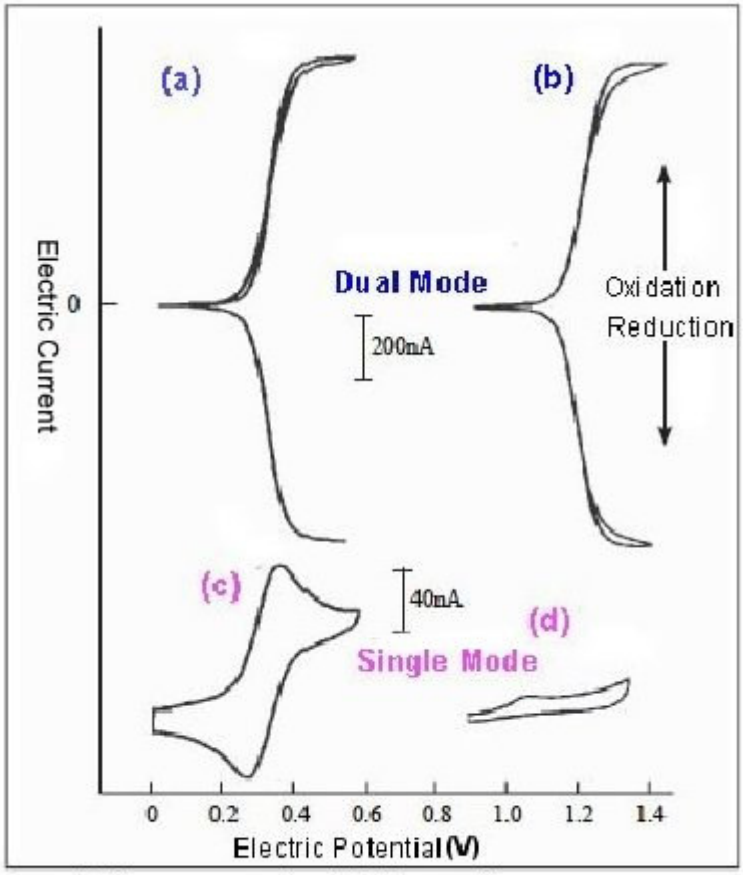


Fig.3 **Voltammogram by IDA Electrode**
Sample : Ferrocene (a),(c): 10μL, (b),(d): 0.2μL
Measurement Mode : (a), (b): Dual, (c), (d): Single

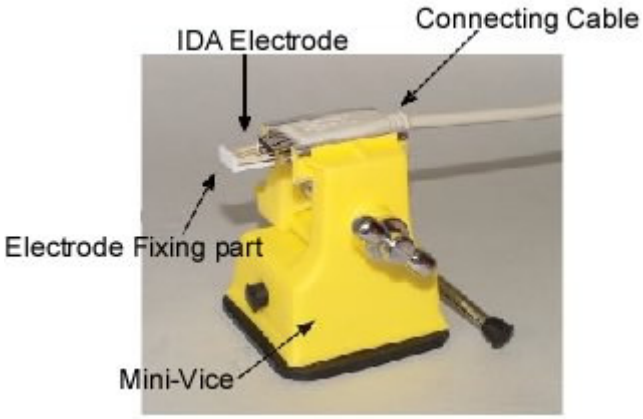
Catalog No.	Description	Width(μm)	Interval(μm)	Length(mm)	Number of feet(pairs)
010379	IDA electrode (Au)	10	5	2	65
010380	IDA electrode (Pt)	10	5	2	65
010381	IDA electrode (Carbon)	10	5	2	65
011884	IDA electrode (ITO)	10	5	2	65

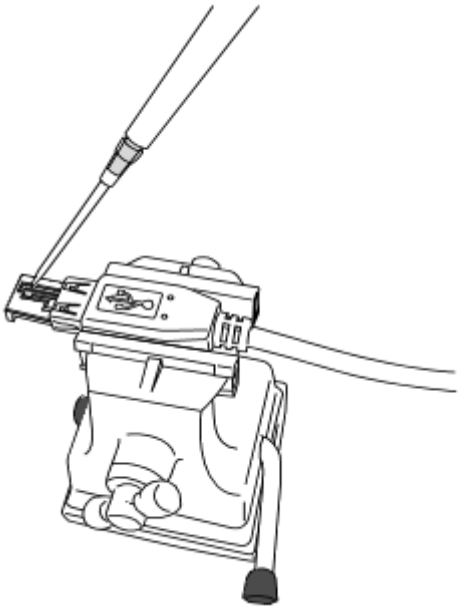
IDA Eledtrode Connecting Cable kit

This device can be used as a substituting item of a connecting part of IDA Electrode.

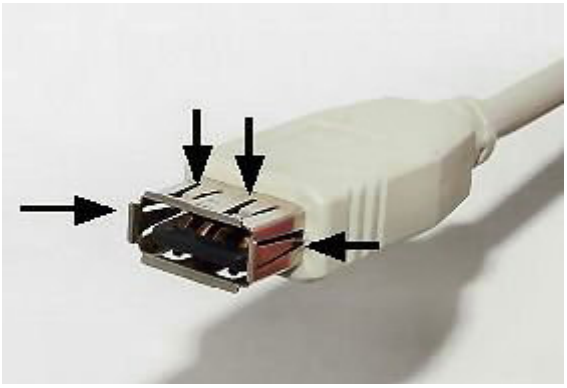
Catalog No.	Description
011122	Cable kit for IDA electrode
Components	
Connecting Cable	
Electrode fixer	
Mini Vice	

Please treat IDA Electrodes with care especially when you insert and remove them since it consist of quartz glass.





If you had a difficulty in setting up of an IDA Electrode into a connector at the cable, loosening the four grippers of the connctor(shown in a figure below) with a tweezer would work.



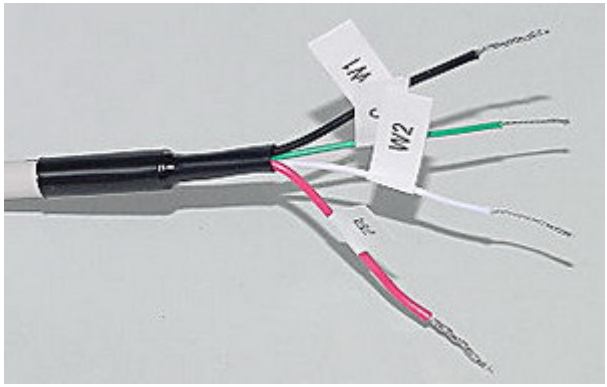


Figure in right shows wire assembly of connecting cable.

In order to avoid abrasion on a connector part of the electrode, please insert and remove it accoring to the following order:

[IDA Electrode Set Up Sequence] (1)Put the IDA electrode into the connector (2)Insert the white color electrode fixer into the connector	**[IDA Electrode Remove Sequence]** (1)Remove the white color electrode fixer from the connector (2)Remove the IDA electrode from the connector