

Coulometric titration method

“Quick Chlorine Demand-Checker” Model CD-2000



Enable measuring Chlorine Demand quickly and simply

In the past, the amount of chlorine to be added to water was determined by measurement of residual chlorine in water. The CD-2000 enables measuring the amount of chlorine consumed by ammonia, iron, manganese and other organic materials and providing advance information as “Chlorine Demand” in raw water. A corresponding amount of chlorine is added, for clean water with a consistent level of residual chlorine. We recommend this CD-2000 for both daily control and research purposes.

Features

- Measure Chlorine Demand in drinking water, waste water, rivers, lakes, dams, wells and sea water quickly and easily.
- Accurate measurement without interfered by turbidity or color of the water.
- Allows determination of volume of chlorine to be added (correct volume of chlorine can be determined in advance).

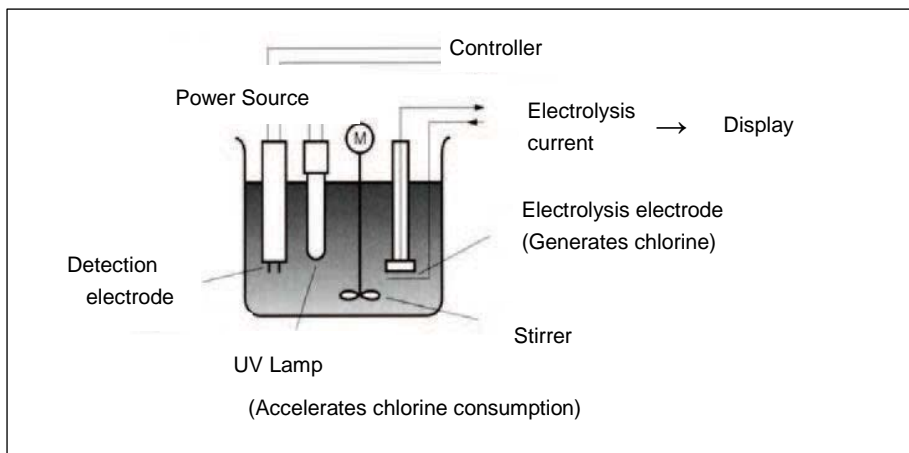
Application

- Daily control and Monitoring of chlorine treatment.
- Check Chlorine Demand during/after natural disasters (such as floods caused by heavy rain).
- Can be used for chlorine consumption reaction research.

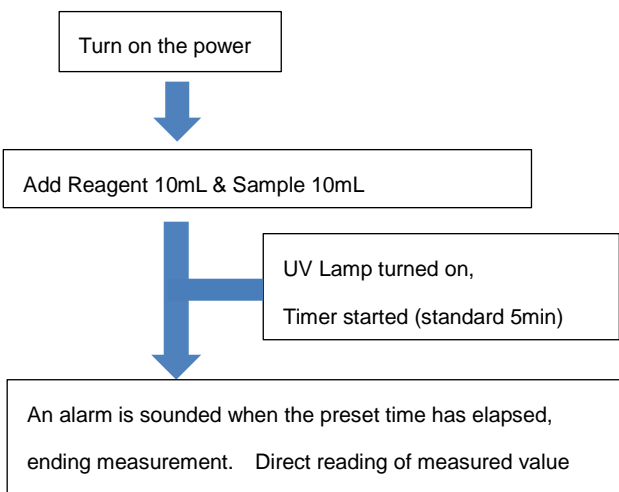


CENTRAL KAGAKU CORP

■ Measuring Diagram



■ Procedure



Measuring principle: Coulometric titration method

CD-2000 adopts the coulometric titration method for measurement. This method electrochemically determines the end point of the reaction between the measuring object and the component generated by electrolysis of the reagent that rapidly and quantitatively reacts with the measuring object. The concentration of the measuring object component can be calculated from the electric charge (current x time) consumed till the end point of the reaction.

■ Main Specifications

Measurement principle	: Coulometric titration method (acceleration of chlorine consumption reaction by ultra-violet light)
Measurement range	: 0.01 – 20.00mg/L
Measuring time	: 5 min. standard (variable between 1- 99 minutes)
Precision	: ± 1 mg/L (20 mg/L standard solution)
Electrodes	: Electrolysis electrode: platinum – platinum Detection electrode: platinum – silver
Sample Volume	: 10 mL
Reagent Volume	: 10 mL
Data storage	: 50 data
Data output	: RS-232C x 1 port
Power supply	: AC100 – 240V, 50/60Hz
Dimension	: 310(W) x 270(D) x 300(H) mm
Weight	: approx. 5kg



CENTRAL KAGAKU CORP

Shouei Bldg., 3-23-14 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan
TEL. +81-3-3812-9186, FAX. +81-3-3814-7538, URL:<http://www.aqua-ckc.jp>