

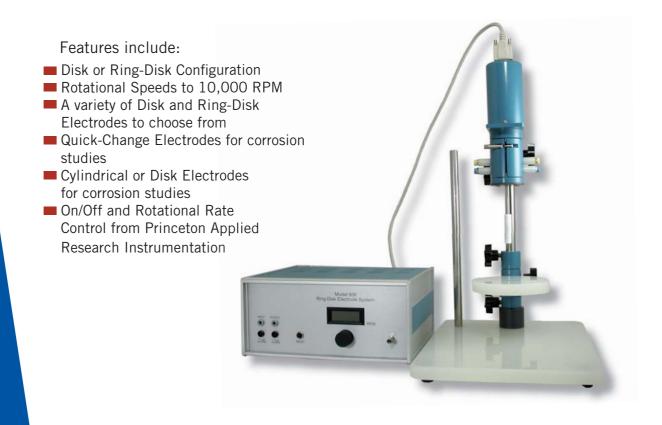
# **636**Electrode Rotator

The Princeton Applied Research Model 636 Electrode Rotator is a high performance system giving you rapid acceleration and excellent speed control. The Model 636 may be connected to any of the Princeton Applied Research electrochemical instruments. It can be used as a simple rotating disk electrode or as a rotating ring-disk electrode. The outstanding specifications of the Model 636 make it the ideal choice for your laboratory.

The Model 636 is suitable for use in hydrodynamically modulated systems. Its solid state controlled servosystem allows the electrode speed to follow an input signal with minimum distortion. This excellent performance is due to the use of a high speed, low inertia, permanent magnet DC motor and a high voltage, bipolar power supply. The rotational speed is adjustable to within 1% of the input setting 50 to 10,000 RPM. A voltage signal proportional to the rotational speed is available as an output.

A variety of electrodes is available for the Model 636. The user can choose from Pt, Au, and glassy carbon for disk work. For custom electrode materials, please contact the factory for availability.

While many users are interested in the behavior of a species in solution at an inert electrode, the corrosion scientist is concerned about the behavior of many different active electrodes. The needs of this group have been answered by the use of our Quick-Change electrode assemblies. An investigator can choose a disk geometry or a cylinder geometry and have the electrode machined out of the metal of interest. The rotator is designed to accept different arbors to accommodate these two options. For corrosion studies a special disk assembly that allows the user to insert the disk of his choice is available.



### Accessories

The Model 636 is supplied without electrodes or arbor. The ordering information for arbors, electrodes and accessories is supplied below.

#### **Permanent Disk Electrodes**

Requires Arbor Numbers RDE0027

Electrode Type	Part Number
Platinum	RDE004
Gold	RDE005
Glassy Carbon	RDE008

#### **Quick-Change Disk and Cylinder Electrodes**

Requires Arbor Part Number RDE0027

Description	Part Number
Disk Electrode Assembly	RDE0001
Disk Installation Tool	RDE0002
Cylinder Electrode Assembly	RDE0011

#### **Ring-Disk Electrodes**

Requires Arbor Part Number RDE0070

Electrode Type	Part Number
Platinum Disk Platinum Ring	RDE0071
Glassy Carbon Disk-Gold Ring	RDE0072
Glassy Carbon Disk-Platinum Rir	ng RDE0073

## Specifications

Power	115 V AC or 230 V AC, 50/60 Hz, factory
	connected
Weight	Body with Base 23lbs
	Control Unit 11.5 lbs
Operating Temperature	10 to 40°C
Control Unit Dimensions	11 3/8" W x 10 1/8" D x 5 3/4" H
Base Dimensions	11" W x 15" D x 3/4" H
Motor	1/50 HP permanent magnet DC
Motor Power Supply	+45 V DC, -20 V DC
Speed Control	Closed loop servo-system. Temperature
	compensated tach generator mounted on
	motorshaft, providing rotational speed
	information
Speed Range	50 RPM to 10,000RPM
Precision	Better than ±1%



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