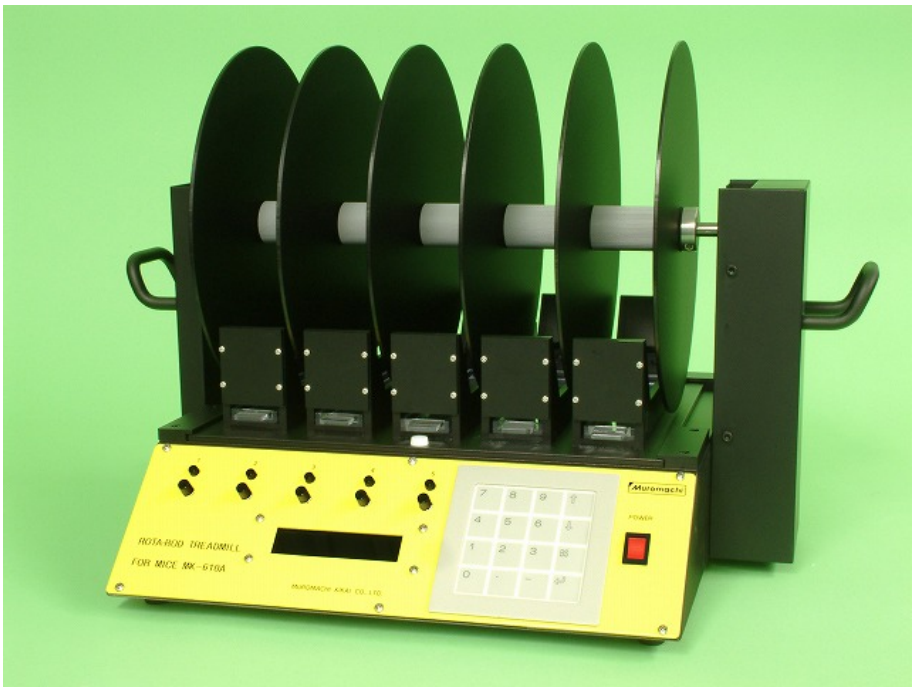
MODEL MK-610A

ROTA-ROD TREADMILL FOR MICE



MK-610A is used to assess the effect of drugs, brain damage, diseases on motor-coordination or fatigue resistance. Rod is divided into five (5) sections and each section can be used independently. Keypad and all the switches and indicators are located on the inclined front panel. **In addition to the conventional constant speed mode (MODE A), the 2 acceleration modes (MODE B and C) and the programming mode (MODE D) are included in the standard system.**

Main Features

- Every parameter setting can be easily done with the keypad.
- Each counter gets started or reset independently.
- In MODE A the revolving speed can be set for the range of 1 - 20 rpm by 1 rpm steps. When animals stop running and fall off the rod onto the plates, the counting stops and staying time on the rod is displayed on LCD. Falling is detected by photo-beam.
- Speed and acceleration rate are programmable.
- Cleaning work is very easy since plastic trays are provided with each division for excrements.
- The RS-232C interface is provided on the rear panel. Using the attached DCS-610 Data Collection Software (Windows Version) the data obtained can be exported to a personal computer and stored as a CSV file.
- Printer is available as optional extra in two types ----- Thermal and Dot-Impact. When printer is connected, test results will be printed out at the same time when animals fall.

MUROMACHI KIKAI CO., LTD.

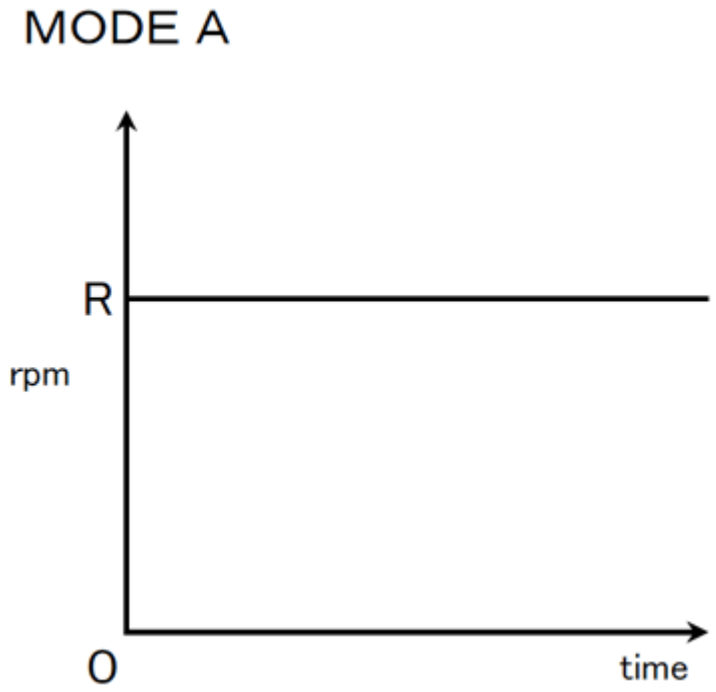
SPECIFICATIONS

MAIN UNIT	
Number of Lane	5
Rod Diameter	30 mm
Material of Rota	Polyvinyl Chloride
Flange to Flange Distance	57 mm
Display	20 characters x 2 Lines
RS232C Output Port	Baud Rate : 9600 bps Connector : D-sub 9Pin Male
Power	AC 85-130V 50 or 60 Hz
Dimension	530W x 350D x 365 mmH
Weight	Approx. 10 kg

MODE A

MODE A is the constant speed mode. (1 - 20 rpm by 1 rpm steps)

Measurement in each lane starts and ends independently. When animals stop running and fall off the rod onto the plates, the counting stops and staying time on the rod is displayed on LCD.



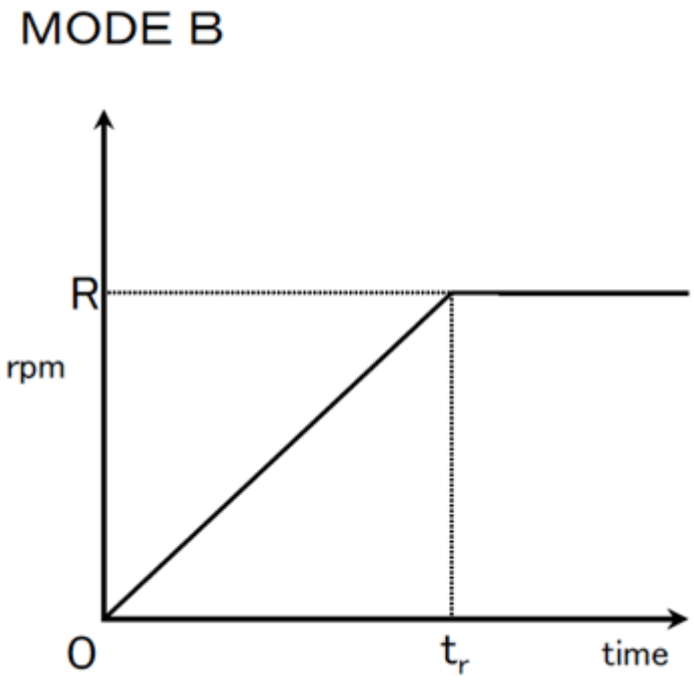
PARAMETER	
Test Number	Can be entered up to 10 digits
Number of Revolution	1-20 rpm (by 1 rpm steps)
Cutoff Time	0-999 sec (by 1 sec steps)

LCD	Time elapsed in each lane, Number of revolution
Outputs	Date, Mode, Test Number, Number of Revolution, Cutoff Time, Start and End Time in Each Lane, Staying Time on Rod

MODE B

MODE B is the acceleration mode I.

Select number of revolution to reach finally and accelerating duration from the list below. (75 combination is available) Acceleration gets started for all the lanes when the rotor is in a state of complete stop. When the animal falls, time measurement of the corresponding lane will be stopped. When it reaches the preset number of revolution, it keeps on revolving at the speed. When all the animals fall, the measurement will be terminated and the rotor drum will come to a complete stop.



PARAMETER	
Test Number	Can be entered up to 10 digits
No. of Revolution to Reach	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80rpm (Select either)
Accelerating Time	60, 120, 180, 240, 300 sec (Select either)
LCD	Time elapsed in each lane, Operation mode
Outputs	Date, Mode, Test Number, Number of Revolution to Reach finally, Accelerating Time, Start and End Time in Each Lane, Staying Time on Rod, Number of Revolution when animals fell

Example : Number of revolution to reach finally and accelerating time are 40 rpm and 60 sec, respectively

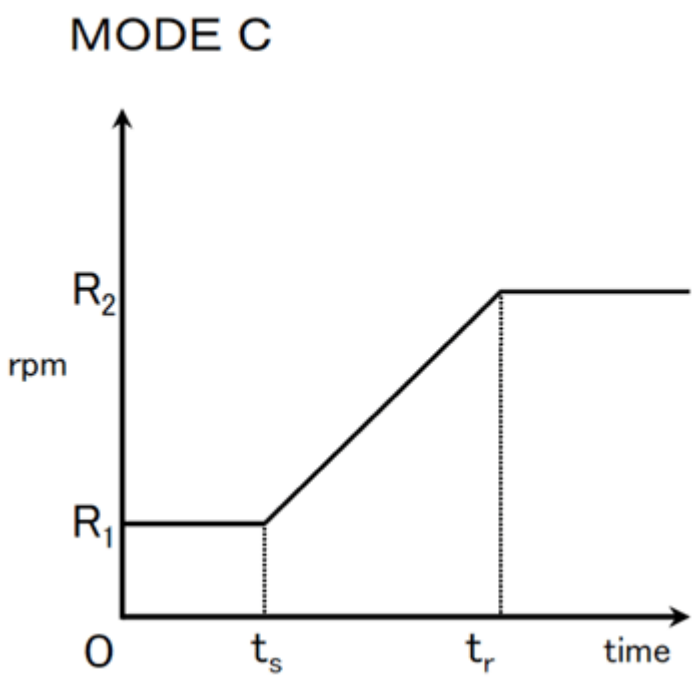
The rotor starts acceleration so that it will reach 40 rpm in a period of 60 seconds. When it reaches 40 rpm, it keeps the speed of 40 rpm. In this case number of revolution will reach 10 rpm in a period of 15 seconds and 20 rpm in 30 seconds.

MODE C

MODE C is the acceleration mode II.

Select number of revolution to reach finally and accelerating time from the list. (45 combination is available)

Measurement in all the lanes starts at the same time when the rotor is revolving at the speed of 1/10th of the number of revolution to reach finally. When the animal falls, time measurement of the corresponding lane will be stopped. When it reaches the preset number of revolution, it keeps on revolving at the speed. When all the animals fall, the measurement will be terminated and the rotor drum will come to a complete stop.



PARAMETER	
Test Number	Can be entered up to 10 digits
No. of Revolution to Reach	10, 15, 20, 25, 30, 35, 40, 45, 50 rpm (Select either)
Accelerating Time	60, 120, 180, 240, 300 (Select either)

LCD	Time elapsed in each lane, Operation mode
Outputs	Date, Mode, Test Number, Number of Revolution to Reach finally, Accelerating Time, Start and End Time of Each Lane, Staying Time on Rod, Number of Revolution when animals fall

Example : Number of revolution to reach finally and accelerating time are 40 rpm and 60 sec, respectively

The rotor starts acceleration when the rotor is revolving at the speed of 4 rpm so that it will reach 40 rpm in a period of 60 seconds. When it reaches 40 rpm, it keeps the speed of 40 rpm. In this case number of revolution will reach 13 rpm in 15 sec and 22 rpm in 30 sec.

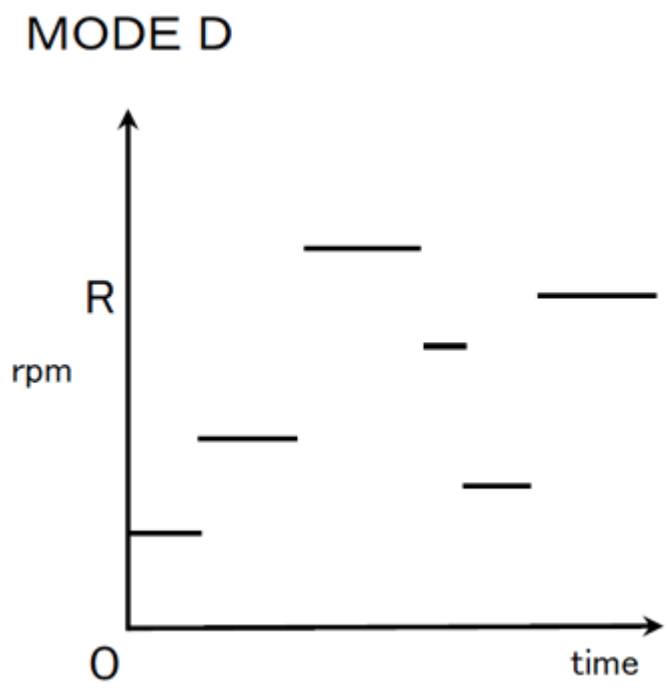
Difference between MODE B & MODE C

	No. of revolution at the start of measurement	Pattern
MODE B	0 (Complete stop)	75
MODE C	1/10 of number of revolution to reach finally	45

MODE D

MODE D is the programming mode.

Number of revolution and revolving duration can be programmed up to 6 steps. Measurement of each lane starts at the same time when the rod is in a state of complete stop. When animals stop running and fall off the rod onto the plates, the counting of each lane stops and staying time on the rod is displayed on LCD. The measurement will be terminated and the rotor drum will come to a complete stop either when all the animals fall or the preset program is finished.



PARAMETER	
Test Number	Can be entered up to 10 digits
Number of Step	Up to 6 steps
Number of Revolution	1-60 rpm (by 1 rpm steps)
Duration	1-3600 seconds for each step Total duration must be up to 3600 sec

LCD	Time elapsed in each lane, Operation mode
Outputs	Date, Mode, Test Number, Programmed Contents, Start and End Time in Each Lane, Staying Time on Rod, Number of Revolution at the step executed when animals fall

The Standard System Includes:	
MK-610A Main Unit	1
DCS-MRR Data Collection Software (Windows Version)	1
RS232C Communication Cable (1.5 m) with 9pin Female Connectors	1
Dust Cover	1

NOTE: MK-630B Single-Lane Rota-Rod Treadmill for Rat & Mouse and MK-670 for Rats & Mice are also available.

Specifications are subject to change without notice.

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