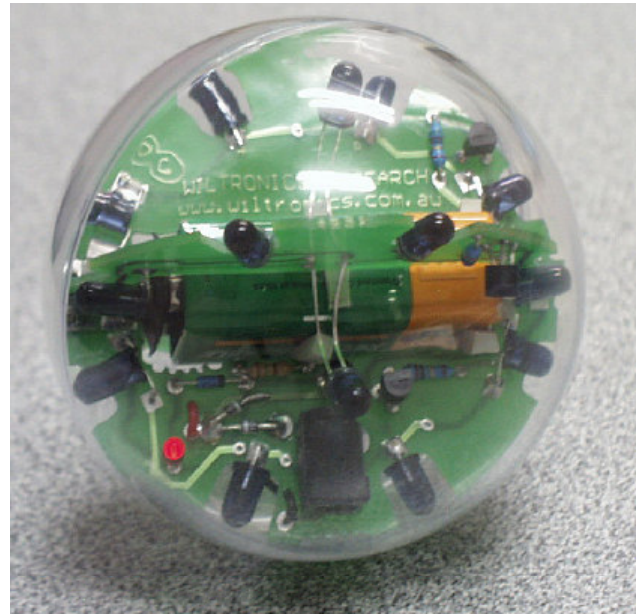


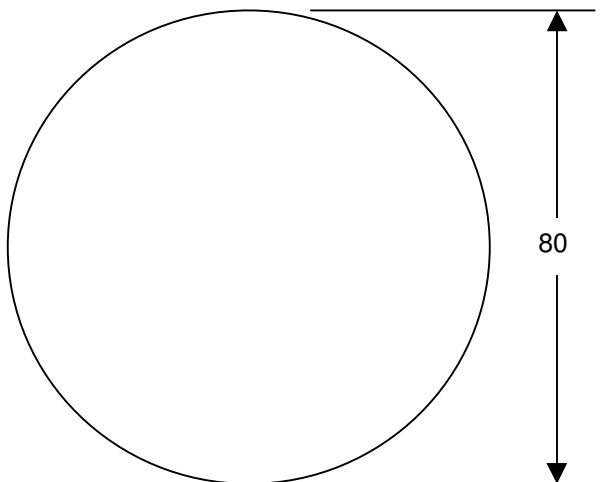
The RoboBall™ Mk2 is designed to emit infrared light so that it can be found by an infrared detector. The ball has been designed to be used with pre-programmed robots competing in the 'RoboCup Junior' \* competitions.

### Features of the RoboBall™ Mk2:

- High radiant intensity
- Continuous output (not pulsed)
- No blind spots
- Visible red led 'on' indicator
- Constant output (whilst red led is 'on')
- Over 50 min run time (with fully charged battery)
- Internal rechargeable battery
- Ball switched on by removal of charging plug
- Can be charged by a standard Ni-cad charger



### Mechanical Specifications



- Diameter =  $80.0 \pm 0.5\text{mm}$
- Weight = 105 g

### Optical Specifications

- Infrared Peak wavelength  $\lambda_p = 940\text{nm}$
- Spectral Bandwidth  $\Delta\lambda = 45\text{nm}$
- Radiant Intensity  $E_e = 12\text{mW/sr}$
- Direct Spherical Coverage  $\geq 75\%$
- Continuous Output (not pulsed)

Made in Australia

### Electronic Specifications

- Infrared leds powered from current source for constant output
- Constant infrared output whilst red led is 'on'
- Integral rechargeable battery
- Run time  $\geq 50$  min (with fully charged battery)
- Unit switched on by removal of charge plug
- Charge socket = Std DC type with 2.1mm pin

### Battery Specifications

- Nickel Metal Hydride (NiMH)
- Cell Size = 9V
- No memory effect
- Manufacturers Part No. GP17F8H
- Nominal Voltage = 8.4V
- Capacity = 170mAh
- Rechargeable with standard NiCad charger
- Standard recommended charge rate for maximum charge capacity = 14hrs @ 15mA

### Spare Parts Available

BA3130	9V NiMH Battery 170mA/h
RO2135	RoboBall plastic outer casing
RO2138	RoboBall Charger Lead
BC1202	Universal NiCad Battery Charger (240VAC Australia & NZ Only)

RoboBall™ Design & Specifications

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\*RoboCup Junior is a Registered name of the

RoboCup Federation