

# NAME Giant Robotic Praying Mantis

## Introduction

The giant robotic praying mantis is a ferocious predator that ambushes its prey.

Its awesome front legs can stretch forward and spring back to trap its prey, even small frogs.

It has super sensors - including two compound eyes (plus three simple eyes) that can see 220 degrees and ultrasonic ears that don't hear well but feel vibrations.

This specimen is a must have for any zoo seeking to thrill!

**You can't sneak up on it.... but it can sneak up on you... maybe?!**

## Proportions

Key Item	Length on A4 image (mm)	Length on construction (mm)	Proportion
Head	10	150	15
Prothorax	25	500	20
Abdomen length	50	840	16.8
Abdomen height	20	440	22
Back legs			
Coxa	8	120	15
Femur	27	385	14.3
Tibia	25	375	15
Tarsa +foot	8	200	14.3
Front two legs			
Femur	20	330	16.5
Tibia	20	410	20.5
Tarsa +Foot	25	400	16
Coxa 1 to Coxa 2	25	375	15
Coxa 2 to Coxa 3	7	100	14.3

**Comment:** The measurements have been taken from the centre of the joints. Some of the aluminium lengths stick out a bit. The Prothorax is wider as this praying mantis is a pregnant female.

## Equipment Used

Items	Quantity	Items	Quantity
700mm Aluminium	9	Nuts and Bolts	108
400mm Aluminium	14	Bread knives	2
200mm Aluminium	21	Grapefruit	2
Axles	8	Knitting needles	2
Crank Handle	1	Saw	2
Red Joiners	22	Round pillow	1
Gears	3	3 beads	3
Blue Joiners	124		

Consumables purchased on build: \$0

