

The Garmendale Range for theme parks and attractions

1. Shotgun Gates
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3. Electric Cars
4. Motion Master 6 - 3DOF
5. Immersive Tunnel System
6. QuadStar Aerial Roundabout
7. QuadTrack Tracked Dark Ride
8. Tracked Trains and Transportation
9. Electric Tractor Ride
10. MagTrack AGV Ride
11. Ride refurbishment

Garmendale Engineering

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www.garmendale.co.uk

GARMENDALE
World Class Theme Park
ENGINEERING

The Garmendale Shotgun Gates Range



A shotgun gate system for any application

The shotgun gates range by Garmendale is flexible enough for any application. From controlled entry systems, to easy exit gates our systems improve safety, throughput and are ultra-reliable for years of trouble free operation.

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The Garmendale Shotgun Gates Range



The most reliable gates in the world with exceptional flexibility of finishes

As you can see above, the RG11 Shotgun gate range has literally thousands of possible combinations to suit your needs. They can be designed to cover almost any width, height and finish. From simple powder coating to fully themed finish and powered by the traditional pneumatically operated gates, or our new electrically powered gate range.

Technical Specification

Gate System: RG11

Power: Pneumatic or Electric

Handing: Left or Right

Width: To your specification

Length: To your specification

Finish: Painted, powder coated, distressed or polished

All of these specifications are flexible to meet your own requirements

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Shotgun Gates Range Selector

RG11-SF-1300-600-L



RG11-TF-1300-600



RG11-SB-1300-600



RG11-FB-1300-600



RG11-SF-1300-600-R



RG11-DF-1300-600



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The Garmendale Electric Boat Range



A range of boats available for any IP

The Garmendale electric boat range is available in a huge range of specifications and design, suitable for users aged 5 years-adult.

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The Garmendale Electric Boat Range



Technical Specification

The boat body consists of a 2 piece GRP unit, comprising of GRP seat and back pad fitted with a steering wheel. At the front of the boat under the hatch there is a charging socket to enable the boat to be plugged in for charging and a battery status gauge.

The batteries are located at the rear of the vehicle in GRP housing below the rear hatch cover. Within the body there is one stainless steel handle and two stainless steel bar handrails to the front of the cockpit.

The drive is via a submerged motor drive and propeller unit, positioned at the bow protected with a stainless steel guard. This unit not only provide the drive but direction of travel via a shaft coupling through the hull of the boat onto the steering coupling controlled via the steering wheel in the cockpit.

Max speed 4 knots

Power 3x6v

Capacity 2-3 people

Ride duration variable

No. of vehicles variable

Passenger/User age 0.9m with adult/1.2m lone rider

Throughput 300-1,000 p/h

Operating time 10 hours

Recharge time 12 hours

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The Garmendale Electric Car Range



A range of cars available for any IP

The Garmendale electric car range is available in a huge range of specifications and design, suitable for children aged 5-13 years.

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The Garmendale Electric Car Range



The chassis of the car is fabricated from mild steel S275JR and welded to BS EN 15614 and comprises of a fully welded chassis complete with drive train bracketry, steering mechanism, axle and axle mounts, battery compartments, on board charging unit, on board controller, radio link and finished in black semi gloss paint.

The vehicle body will be a 1 piece GRP unit, comprising of seat, floor and cockpit area includes an ergonomically designed padded seat and backrest, safety lap belt and soft touch steering wheel, It can be designed to suit almost any IP from planes, trains to automobiles. All 4 wheels are within the boundary of the body and include solid rubber tyres with roller bearings.

Each vehicle has individual driver steering with operator override via radio control. They are fitted with bumpers to all four sides to avoid minor damage.

Technical Specification

Max speed 4 mph

Power 2x12v

Capacity 1 person with individual belt

Ride duration variable

No. of vehicles 1-100

Passenger/User age 3-13 years

Learner Driver 3-5 years

Driving School 6-13 years

Throughput Variable

Operating time 7 hours

Recharge time 12 hours

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The Garmendale Motion Master Six 3DOF ride system



A 3DOF ride system for track or immersive tunnel

The Motion Master Six is a 3DOF ride system for six passengers that is designed to run on an indoor track or immersive tunnel experience.

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The Garmendale Motion Master Six 3DOF ride system



The MotionMaster 6 (MM6) is a 6 seater 3 DOF (Degree of freedom) central guided dark ride system. Travelling along the continuous track from the loading station into the ride area. Designed to rotate, pitch and roll simultaneously, travelling in a forward motion, carrying 6 passengers in two rows of three forward facing seats.

Each vehicle is made from a one piece GRP body capable of carrying 6 passengers seated in individually shaped seats, moulded into a bench style arrangement, and individually monitored and automatically released lap bar system.

The vehicles are designed for passengers with a minimum height of 1.0m. Each vehicle is fitted with a PLC system which will control the vehicle through the ride via the Ride Control System (RCS).

Technical Specification

Speed 0.1-2m/s

Power 415v AC

Capacity 6 people per vehicle

Ride duration 2 minutes 50 seconds to 4 minutes 20 seconds

No. of vehicles 8-16

Passenger/User height to 1.0m with adult/ 1.2m lone rider

Throughput 980-1,220 p/h

Radius: 3.5m

Body length: 2.1m

Body width: 1.7m

Max yaw: 360

Yaw rotation speed: 0-11rpm

Max roll: 12

Max roll speed: 12 per second

Max pitch: 10

Max pitch speed: 12 per second

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The Motion Master 30 3DOF ride system



A 3DOF motion base system for track or immersive tunnel

The Motion Master Thirty is a fully electric 3DOF motion base ride system for up to 30 passengers that is designed to run on an indoor track or immersive tunnel experience.

Garmendale Engineering

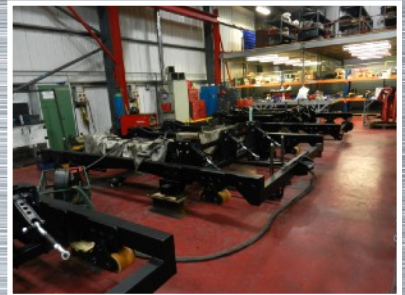
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The Motion Master 30 3DOF ride system



The MotionMaster 30 (MM30) is a 30 seater 3 DOF (Degree of freedom) central guided dark ride system. Travelling along the continuous track from the loading station into the ride area. Designed to rotate, pitch and roll simultaneously, travelling in a forward motion, carrying 30 passengers in five rows of six forward facing seats.

The Motion Platform Immersive Tunnel ride system comprises two identical independent track based themed vehicles, each with 3DOF motion platforms beneath. The vehicles travel along the track from the loading station into a screened show area. The motion vehicles are synchronised with the show media for the duration of the ride. The vehicles reverse back into the loading station.

Each vehicle / motion platform has a passenger carriage on top that has 5 rows of 6 passengers (30 per vehicle). The vehicles are designed for passengers with a minimum height of 1.1 m and a maximum weight of 75 kg.

Technical Specification

Speed 0.1-0.5m/s

Power 415vac / 160 amp

Capacity 30 people per vehicle

Ride duration variable

No. of vehicles 1-2

Passenger/User height to 1.1m with adult/
1.2m lone rider

Throughput 720-1,440 p/h

Working radius: 3.5m

Body length: 5.6m

Body width: 3.0m

Max roll: 10°

Max roll speed: 5° per second

Max pitch: 10°

Max pitch speed: 5° per second

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The Garmendale QuadStar Aerial Roundabout



An aerial ride with individual lap bars for all riders

The QuadStar offers individual rider control up to 3.4m height and lap bars for all with full containment for riders as small as 0.9m. It is built to BSEN 1090.

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The Garmendale QuadStar Aerial Roundabout



Technical Specification

The QuadStar Ride comprises of a central supporting column on to which are mounted ten equally spaced arms rotating at 3.5 m/s. At the end of each arm are 10 themed vehicles. Each vehicle is equipped with a control joystick to allow the "pilot" to fly the vehicle. Each vehicle is capable of flying up to 3.4m high.

The system allows two ride cycle settings. On start of the ride cycle there will be two full revolutions before the rider control joystick becomes active. At the end of the ride cycle all arms will lower to the bottom position with one full deceleration revolutions until the ride has stopped.

Each vehicle contains two rows of two seats with each seat capable of carrying a guest with a minimum height of 0.9 m and a maximum of two adults at any one time.

Rotational speed 3.5 m/s

Power 43kW/400vAC/3ph/50Hz

Capacity 40

Ride duration Variable

No of vehicles 10

Height restriction Up to 0.9m with adult/1.2m as lone rider

Throughput with 2min ride 600 people per hour

Diameter 14.6 m

Operating envelope 16.0 m

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The Garmendale QuadTrack Tracked Dark Ride



A Tracked dark ride system for any IP

The QuadTrack is a dark ride system to work on a 1.8-3m radius track that is flexible enough to work with any brand or IP.

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The Garmendale QuadTrack Tracked Dark Ride



Technical Specification

Great value, lightweight and super-flexible

The QuadTrack was designed as a great value, lightweight and robust solution for tracked dark ride applications. It's fully electric and features individual lap bars for all occupants. The track is made to your own specification and can be designed to run beautifully in even the most compact spaces.

You choose the theming

The QuadTrack can be themed to match almost any brand or IP. It doesn't matter if you'd prefer it to be a conventional motor vehicle, Santa Sleigh or even an animal theme, our chassis can fit around your idea or your IP.

Max speed 0.3-1.2 m/s

Power 48v DC

Capacity 2/4/6/8 people per vehicle

Ride duration variable

No. of vehicles 6-20

Passenger/User age 0.9m with adult/1.2m lone rider

Throughput 150-1355 p/h

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Tracked Trains and Transportation Systems



Trains have been at the heart of Garmendale since the business started in 1980

Garmendale Trains range in scale from 15" gauge up to the much larger 24" gauge and can be manufactured to almost any finish or to match a brand specific IP

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Tracked Trains and Transportation Systems



In 1980, Garmendale initially built trains and people movers for others under contract but with more than fifty completed builds around the world, we created our own tracked train and people movers range.

The range stretches in scale from 15" gauge up to the much larger 24" gauge. Power can be electric, gas or even diesel and they can be manufactured to almost any finish or to match a brand specific IP. Our theming teams have created some beautifully themed trains around the world.

From the images on here, you can see we have built the bright and colourful, beautifully traditional and even the pre-distressed look. But our biggest build to date has been the stunning Snowden Mountain Railway, where we designed and built the new rolling stock from scratch. The brief was to create a lighter, stronger carriage with a target weight of ten tons. Not only did we meet this, but the finished unladen weight was under seven tons.

If you can imagine it, then our team can probably build it.

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The Garmendale Electric Powered Tractor Ride



The Tractor ride is one of Garmendale's oldest ranges and some have been in operation for over ten trouble-free years

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The Garmendale Electric Powered Tractor Ride



The Tractor Ride by Garmendale is quiet and efficient in operation and yet simple to maintain. We can say this with some degree of confidence as some of our tractor rides have already been in operation in themed attractions for over ten trouble free years, having just undergone routine maintenance.

The design of the ride system is flexible enough to fit to almost any track length or configuration; If you're looking for an indoor track with tight corners, that's no problem. Equally, if you have expansive ideas and a large outside area then that's no problem either. Our design team can work with your ideas and create a solution that's just right for your attraction.

Technical Specification

Max speed 1.2 m/s

Power 48v DC

Capacity 4 people per vehicle

Ride duration variable

No. of vehicles Min 6 up to 25

Passenger/User age up to 0.9m with adult/1.2m lone rider

Throughput 350-1,000 p/h

Track length min 80m up to 1,000m

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Garmendale MagTrack AGV Dark Ride System



The MagTrack is an AGV Dark ride system designed to run indoors following a 50mm magnetic strip

The cars are guided around a programmable pre-defined route and designed to carry four passengers

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Garmendale MagTrack AGV Dark Ride System



Each MagTrack car is designed to carry two adults and two children but the system is flexible enough to work with any group formation.

It is powered by a 24 v @165Ah power pack, designed to run the car for 8 hours per day. The chassis system has been cleverly designed however so you can perform a quick change with a replacement battery pack in just a few minutes which allows extended running for those extra busy days.

As with all of our ride systems, the vehicles can be themed to match almost any IP or brand requirement. So whether you're looking for a Tank, Turtle or even a specific motor vehicle, our theming team can match your demands and build a MagTrack ride around it.

The ride can also run on an optical track system.

Technical Specification

Max speed 0.3-1.2 m/s

Power 48v DC

Capacity 4 people per vehicle

Ride duration variable

No. of vehicles 8-12

Passenger/User age 0.9m with adult/1.2m lone rider

Throughput 300-1,000 p/h

Operating time 8 hours

Recharge time 12 hours

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Ride refurbishment and upgrade by Garmendale



From simple onsite upgrades to complete ride refurbishments

Whatever the problem, Garmendale have the refurb or upgrade solution. We have been in the business of ride refurbishment since our very early days and our immensely experienced team are always ready to go.

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Ride refurbishment and upgrade by Garmendale



With a combination of highly specialised field engineers and fully equipped workshop team, Garmendale can refurbish and upgrade rides with the minimum of fuss and the maximum of quality. You can rest assured that it will be done to the right standard and within your timeframe and agreed budget. If you have a refurb or upgrade to discuss, please give us a call.

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