

## Introduction

The **Timpdon Electronics GigaRad** model railway radio points system is a development of the **GigaRad** radio control system for vehicles, specifically designed for the control of points and signals on both garden and indoor layouts.

It uses the same 2.4 GHz radio technology, with a range of 100 metres. However, because data transmission protocols are different, a **GigaRad** point control transmitter is not inter-operable with **GigaRad** vehicle control receivers, and vice versa.

It is designed solely around the use of standard small RC servos for point motors and semaphore signal operating mechanisms, which we at **Timpdon** consider provides the most economical, reliable and realistic means of point and signal control, both indoors and outdoors.

For each point or semaphore signal, you require only a small self contained receiver/controller with built in aerial, a servo and a 4.8 V or 6 V battery for power. As power levels are low, a set of 4 x AA re-chargeable or non-rechargeable batteries are perfectly adequate, and will give reasonable battery life.

For indoor layouts, operation from a central 5V power source distributed to all points is also possible.

For more detailed general information on the **GigaRad** radio system, refer to **Technical Note 19 - GigaRad Radio Control System**.

## Points System Components

For your layout, you will need one **GigaRad** Points Transmitter, Model **GPTX10**



This will control:

- Up to 12 sets of individually controlled points.
- Up to 12 user settable routes, each of which can set or reset any number of points by a single switch operation.
- Binding of transmitter to receivers, setting of point numbers and calibration of point set and reset positions. No access to receivers is required.

In addition, for each point or signal, you will need a suitable point or signal controller. At present, there are three models in the range:

<b>GPRX6</b>	Point controller	Single point servo output
<b>GPRX7</b>	Point controller	Single point servo output plus two additional switched outputs to indicate Set and Reset positions. These may be used for direct control of interlinked colour light signals or, via <i>Timpdon Electronics</i> <b>ServoSwitches</b> model <b>SCS1</b> , for the control of interlinked semaphore signals.
<b>GPRX8</b>	Signal Controller	Single servo output to control a semaphore signal arm. Similar to the <b>GPRX6</b> , but with extended servo rotation range, and faster rotation speed.