



# THE PROTOFOUR MANUAL

4. 0. (1)

## SECTION 4. INSTRUCTION LEAFLETS.

### 4. 0. WHAT IS PROTOFOUR ?

PROTOFOUR

PROTOFOUR is a model railway construction system, and an associated set of standards, in 4mm/ft scale (1:76.2). Together with a range of equipment it is designed to offer the closest possible approach to correct scale proportions, with complete reliability of running and ease of construction.

In the design of Protofour, carried out by a group of modellers under the name of the Model Railway Study Group, traditional approaches to modelling standards were abandoned as defective, and a completely fresh start made from data used in prototype railways. As such it is not possible to equate Protofour with other model railway systems; it is in a category of its own, breaking fresh ground.

Firstly, the factors governing the successful operation of model railways were analysed, and then a complete structure of dimensions was built up, starting from a correctly proportioned wheel and rail contour. In this way, pitfalls of other systems using deformed wheel and rail contours have been avoided.

Secondly, the basic equipment for the construction and operation of the system was designed and produced. This process is still underway, and the range of equipment is constantly expanding. The most important feature of the range of parts is that each item is designed to fit into the pattern of dimensions, and therefore it will always match all other parts in the range. Great care is taken to ensure the precision, authenticity and accuracy of each item.

In conjunction with the range of parts, techniques have been developed which enable the amateur constructor and the novice to assemble items such as track with a precision previously unattainable, even by experts. These techniques are so simple that they allow the assembly of faultless equipment without so much as a single measurement. Furthermore, they reduce the time taken in construction to the very minimum, eliminate unnecessary waste of materials, and virtually guarantee the satisfactory operation of the finished unit. Wherever possible the characteristics of the prototype have been faithfully reproduced. Perhaps the most important feature of all is the complete reliability and realistic nature of the running which is obtained.

The range of parts is backed by a range of literature and instruction sheets, and these, together with conversion tables and other useful data, form part of the Protofour Manual.

The system is at the beginning of a long period of development. As 'Protofour' is a Registered Trade Mark, and equipment designed by the MRSG is manufactured and sold by a single firm, there is no question of duplication of equipment and other unco-ordinated operations as appear in other fields.

The interests of the Protofour modeller are catered for by the Protofour Society. Members may participate in the activities of the Society to any degree that they feel inclined. The Society is managed by an Executive Committee and is not dependent on the voluntary efforts of members, who are free to get on with the business of modelling. However, suggestions for the production of specific items of equipment are processed by the Executive Committee and are referred to the Management Committee for consideration, and so the modeller can have a direct influence on the course of the Hobby.

Protofour models have been exhibited under the auspices of the Protofour Society, and the realistic running achieved has been the cause of much favourable comment.

The basic parts produced for Protofour operations may be used in conjunction with other correctly scaled equipment. A modeller wishing to change from semi-scale modelling to Protofour has only to change the wheels of his 4mm scale vehicles and to build new track, which will enhance the appearance of all the equipment that he retains for use on the new layout.

Protofour modelling features the following basic equipment :

- \* A Manual containing Conversion Tables, Instruction Leaflets and other basic data.
- \* Correctly scaled rail and track parts; simple and accurate track construction using a unique jig system based on the use of special paper templates.
- \* Scale switches and crossings with inbuilt and permanent electrical bonding in place of wires.
- \* Full technical notes with photographs and diagrams, that enable a newcomer to modelling to work as successfully as an expert.
- \* Scale wheel tread and flange contours, steel tyres on all wheels.
- \* Carriage and wagon wheels mounted on pointed axles and running in coned brass bearings.
- \* Locomotive bogie and tender wheels mounted on correct diameter axles.
- \* Locomotive driving wheels mounted on tapered axles for precise adjustment and true running.
- \* Top quality materials, simple to use, and an expanding range of parts and equipment.

Protofour is a 'Hi-Fi' model railway system, and as with all quality products, the initial cost is a little higher than average. However, the return in terms of reliable running, trouble-free operation, realism and economy of materials adequately compensates for the additional expense.

Protofour merits your attention; it could easily be your idea of the perfect scale model railway.