

LEGO® Train: The story of an obsession (I)

1966-1986

By Manticore

Pictures by www.brickset.com, www.bricklink.com and LEGO Systems A/S

For a Spanish child in the 70s and 80s, talking about LEGO® with other kids of his own age was pretty much mission impossible. If in addition to that you wanted to talk about TRAIN, the results were even more tragic. In those days we had N - scale model trains and little else. But LEGO trains? What are you talking about? But they did exist, boy did they exist!

In 1985 I was so lucky as to get a German catalogue which showed the 4.5V and 12V TRAIN sets of that time. To give you an idea, the look on my face was that of a child who discovers toy paradise:



Trains, engines, switches, crosses, lights... INCREDIBLE!! Unfortunately, in the 80s it was impossible to buy TRAIN sets in Spain. And anyway, the weekly pocket money I got from my parents wouldn't have allowed for much. That's what you get when you grow up in a big family.

As time went by and on-line shopping became possible I have been able to mitigate my childhood desires and wishes. So much so that at present I consider myself a fashion victim of this theme and I'm considering legal action against the LEGO Company for designing such spectacular and at the same time charming sets.

As a tribute to this theme, in this special CITY issue of our magazine, we will have a closer look at the different TRAIN systems and their most emblematic sets. Due to the huge

number of sets and pictures the article will be divided into two parts: The first, from the beginnings till 1986 will cover the 4.5V and 12V systems. The second, for the next issue of this magazine, will include the 9V, RC and more recent Power Functions systems.

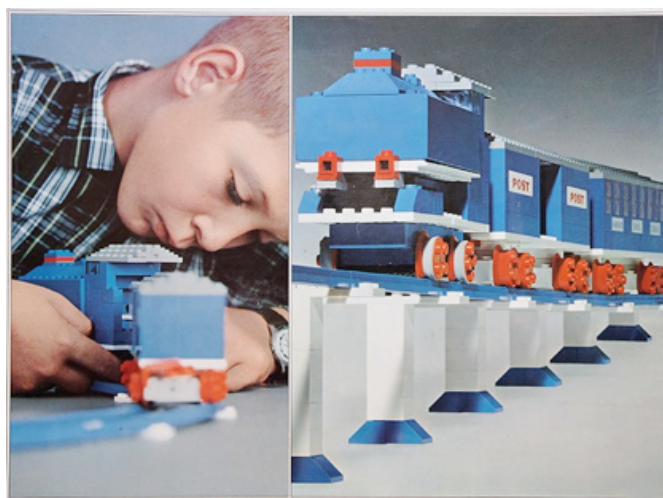
For this first part I have used some pictures from www.brickset.com and www.bricklink.com

But lets' start at the beginning.

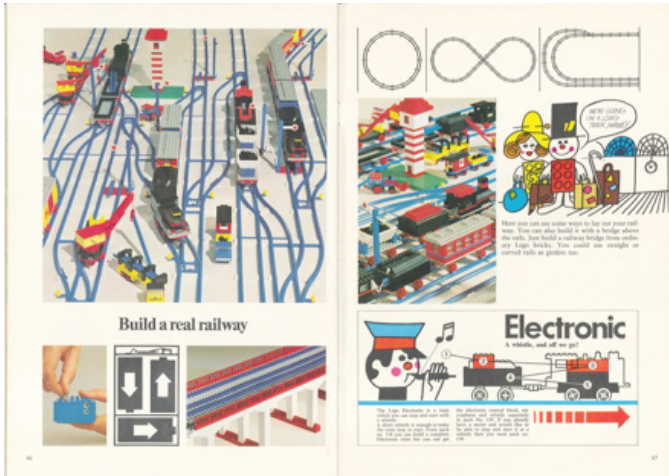
THE 4.5V SYSTEM

As a matter of fact, the first trains LEGO designed didn't include a motor. If you wanted it to move you had to push the engine and/or wagons. It was the 111 set from 1966, with a rather simple design that laid the foundations of everything that was to come after. The width of the tracks for example: 6 studs. It has been kept that way from the very beginning and has been used in all the systems that have been developed later.

Except for this exception, TRAIN sets included a 4.5V motor for traction on the wheels of the engine, which used to have a rubber band to improve traction. The battery box for these motors was heavy cargo for a freight train. Take a look at the first set (113) with a 4.5V motor:



That same year (1966) and with the first sets that included a 4.5V motor, sets with straight and curved tracks were launched to make larger circuits. A year later switches and crossings were available.



From then on, as you may imagine, the number of sets increased; and the design of those sets become more and more realistic. Just compare the set 116, from 1967:



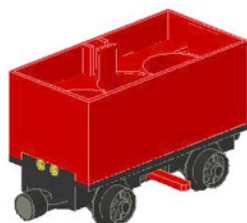
with set 7722 from 1985, the last one with the 4.5V system:



The 4.5V motor colour changed from blue to black; and the 4 brick height of the first motor (in 1967) was reduced to 3 1/3 a year later.

The battery box also evolved. From 1972 onwards wagons were designed to include it.

In 1969 set no 139 appeared on the market, allowing you to reverse the direction of the engine with the sound of a



whistle. Quite a pre-MINDSTORMS experience.

Another, more rudimentary option was given in set 157.



With a system that LEGO® would re-use years later in the MONORAIL sets, the engine direction was inverted when passing over these tracks with direction changer.

Apart from that there was only a change in the colour of the rails, which went from blue in the first sets to a more realistic grey in 1980.

The 4.5V system lasted almost 20 years. However it wasn't the only system for long, as it shared much of its 12V system. In 1969 the first 12V motor appeared on the market and with it a complete revolution for model train lovers.

THE 12V SYSTEM

Unlike the 4.5V system, the 12V system motors got current directly from a metallic rail that was placed right in the centre of the tracks. This rail in turn was connected to a transformer that served as speed regulator. As an example, set 724, from 1972:

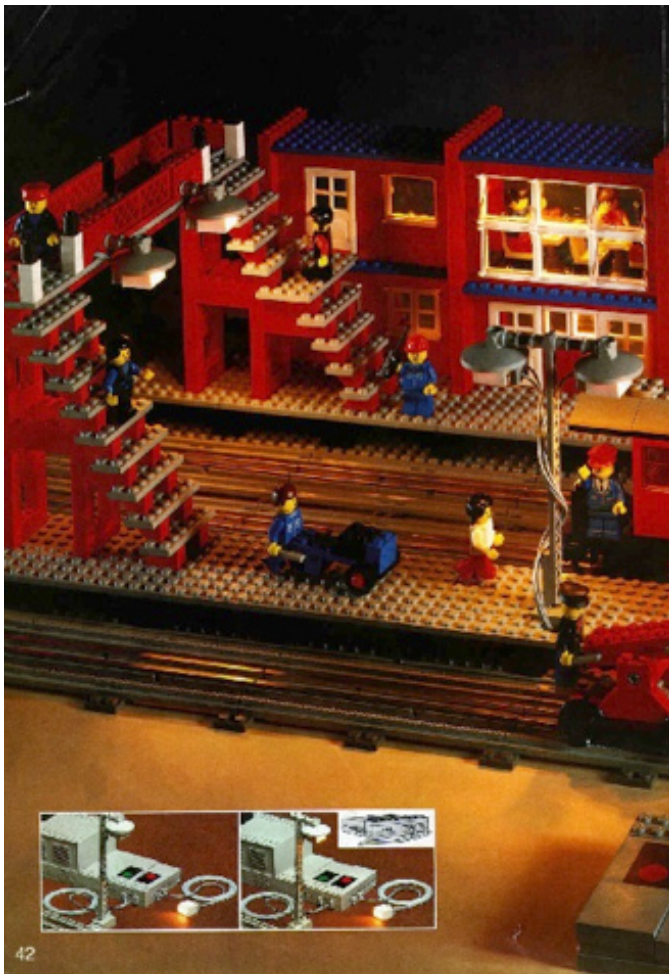


The first advantage was that the battery box, which was inexorable, pulled by any 4.5V train, was no longer necessary. The 12V system, thanks to its higher voltage, allowed several trains to run on the same tracks with a single transformer. Finally there was a way to control the speed of a train with a simple turn of the regulator.

But the main advantage became apparent in 1980. That was when the 12V extension sets appeared. Switches, signals, lights and even a wagon uncoupler (a year later)... and all of it remote controlled!!! Finally the dream of having a LEGO train layout with a central control station for EVERYTHING came true. In the following two images from the 7777 book, you can see the amount of control that was possible with the 12V system. and how with a single transformer you could supply current to a number of light bricks, allowing a more realistic appearance of night scenes.



Set 7750 (1980): Steam engine I still think this set is marvellous, even though it only contains the “basic” pieces from that time (especially bricks, plates and slopes). Today we have a wide palette of pieces to create almost any object, but I insist that this set was a small work of art.



Set 7755 (1983): Diesel locomotive Together with another diesel engine (7760 from 1980) they make a veritable collectors duo. I don't even want to have a look at what a set like this goes for almost 30 years after it was launched.



After praising the technical possibilities of this system I realise I haven't mentioned the 12V train sets themselves. This is when I start to feel dizzy. The first sets were not very different from the 4.5V system as far as design and style were concerned. But from 1980 till the end of the 12Vsystem (in 1986), LEGO® came up with new must have TRAIN set every year.

Set 7740 (1980): Inter-City Passenger Train The style is more similar to the 80s sets (although the design of the pantograph is still a long way off from what we have today). It is very similar to set 7725, another passenger train, but in red which was launched one year later.

Set 7745 (1985): High-Speed City Express Passenger Train For me this is THE 12V set. This is something very personal, and probably the result of the hours, days, months, even years I spent poring over the 1985 catalogue I mentioned at the start of this article. Although the younger ones among you may think this set is excessively “retro”, its simple design and the wedge shape have always fascinated me. The pantograph is better and the red-white-black colour combination is spot on. Getting this train isn't just hard because of the price, but because of its availability.

7745



And I almost forget the cargo trains, 7730, 7727 and 7735. Now let's have a look at some other important elements in any TRAIN display: train station, level crossings, cargo stations and wagons.

TRAIN STATIONS (4.5V and 12V)

With respect to the stations, the difference between the two systems was rather unclear. It is simply a case of changing the tracks that come in the set to make a station that was officially catalogued for one system belongs to the other.

However, this article will respect the criteria of the LEGO® Company, which included 4.5V rails in all pre-1986 sets, and no electric rails, so they are all considered 4.5V train stations.

Let's start with the first one, set 148 (1975):



Of a rather simple and minimalistic pre-minifig design, the set was a clear starting point for later stations.

In 1980 LEGO launched the 7822 set, a cosy station that is not in any way inferior to any of the better known ones.



The footbridge that crosses the tracks gives it a special touch that has been recovered recently (in 2010) in set n° 7937. The height of the station is quite limited in my opinion. It may have been due to this footbridge that the height of the station itself was limited to a single floor. An extra level would have made it almost perfect.

I love the boxes of these sets, especially the rear part, which, just like the B-sides of the old 45 rpm vinyl disks (singles), used to hide little treasures. In our case that would come in the shape of images of alternative constructions.



And three years later, in 1983, LEGO launched the 7824, another 4.5V station, once again red, once again full of minifigs which must have been the delight of the kids of that time... and currently of one AFOLs or two:



The footbridge from the previous model was eliminated, but an additional floor was added, making the station more realistic. With its nine minifigs it was impossible to get bored.

As you can see, LEGO only considered including 4.5V system rails in each case. By simply adding the central electric rail you could use the 12V motors.

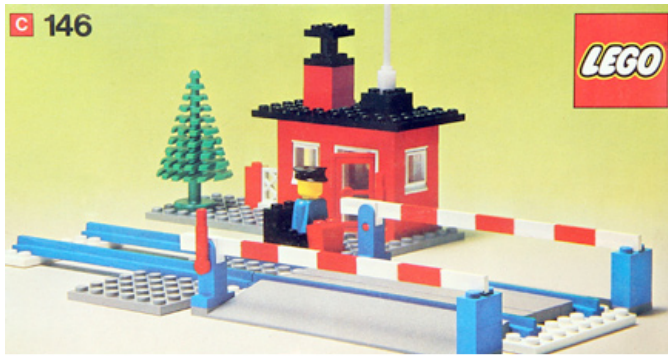
LEVEL CROSSINGS (4.5V and 12V)

Another key element of any TRAIN layout is the level crossing with barriers. If we go back to its origin, we find the first set that contained one, 158, which was launched in 1969.

A simple mechanism that incorporated a platform for the rails. As can be seen, the central part came prepared for inserting a 12V electric rail.



Another quite similar set (the barriers are the same as in set 158) but which included a little house for the man in charge of changing the switch, is 146 from the year 1976.



A special mention for set 7834, which in my opinion was the most charming one of its kind:



The house captures the essence of the 80s which marked my childhood, with only 30-40 pieces. It was launched in 1980 and in this case came with an electrified 12V switch. The cypress tree makes the set even more expensive nowadays.

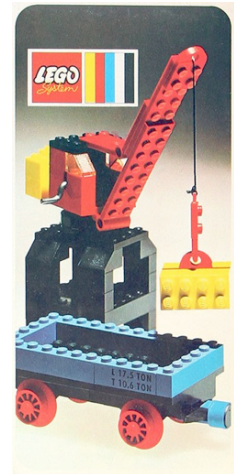
Another similar set is the 7835 from 1985, but the real totem of the level crossings appeared one year earlier. That was set #7866:



The true value of this set is not its looks (I prefer 7834, but the fact that the barriers could be remote controlled: an exclusive feature of the 12V system. Additionally it is the first level crossing to include two parallel tracks.

CARGO STATIONS (4.5V and 12V)

Another very typical set in a TRAIN layout is a cargo station. With a crane and a special cargo wagon and you have a cargo station. The first set of this kind appeared in 1972 and recreates a harbour crane. The set number is 132:



A few years later in 1976, set number 149 was released; a simple refinery or cargo station for fuels:



But the authentic cargo station had its origin in 1978 with this model of a cargo station, set number 165:



As you can see, we still have the typical blue rails of the older 4.5V system, but the design of the crane is maintained for several years. For example in set 7823, which appeared in 1986, but still had the essence of 165?

However, although I have never hidden my preference for sets from the 80s, in this case I must recognise that the best cargo station appeared in 1995: it was the 4555, from the 9V which we will have a closer look at in the next issue.

7823



Another type of station that doesn't include the typical harbour crane on rails can be seen in these two sets: 7838 (from 1983) and 7839 (from 1986).

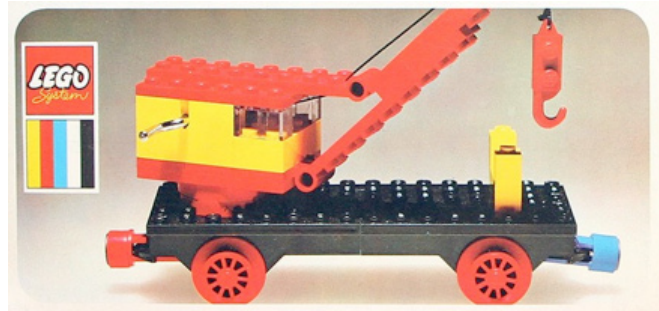
Like in the previous sections, let's start with the oldest set, even though their style is quite retro. In 1966 we find set numbers 152 and 153, which consisted of a simple platform with wheels so you could design your own wagon.

The first true wagon as an individual set arrived in 1969 with set numbers 123, 124 and 125. Set 123 recreated a passenger wagon.



As you can see, the aesthetics of that time were quite different from those used now, but it serves as a reference.

Years later a simple wagon with crane appeared in set 128.



It of course doesn't look much like the unsurpassable 4552 (in the next issue...), but again this is a pioneer set. Another very typical wagon is the tank wagon; and although the first one appeared in set 136, I can't pass up the opportunity to show you the most beautiful one of all, the 7813:

7838



7839



This last one recreates a cargo station for vehicles; and although the wagon the cars are loaded onto is rather discreet, the set itself is really nice.

7813



SPECIAL WAGONS (4.5V and 12V)

We'll end this first TRAIN article with the extension sets that consisted in individual wagons to expand our relatively short trains. Of course a complete train set can only include one or two wagons in addition to the engine or locomotive. If we want a more realistic train, the extension sets are the way to go.

To finish off this article, what better than choosing the most beautiful and endearing wagons of all. They are, of course, from the 80s, and although nearly 30 years have passed since then, they would still fit in nicely with any current train. A

