A Guide to Getting Started with Track Extension Packs

This guide is not an official Hornby document.

The author is a member of the forum and not employed by Hornby.

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Contents

1) Introduction **3**

2) Train Set Ovals **3**
Fig 1 Basic Train Set Ovals 3

3) Train Set Mats **4**
Fig 2 Midimat & TrakMat R8217 4

4) Hornby's Track Extension Packs **5**
Fig 3 Track Extension Pack A 5
Fig 4 Track Extension Pack B 6
Fig 5 Track Extension Pack C 7
Fig 6 Track Extension Pack D 8
Fig 7 Track Extension Pack E 9
Fig 8 Track Extension Pack F 10

5) Connecting Power – Analogue DC Control **11**
Fig 9 Basic Oval & Track Extension Pack A 12
Fig 10 Track Extension Pack B 13
Fig 11 Track Extension Pack C with ONE controller. 14
Fig 12 Wiring the R8201 Link Wire kit 15
Fig 13 Track Extension Pack C with TWO controllers 16
Fig 14 DC Controllers Twin or Dual 17
Fig 15 Custom Made Power Connecting Wires 17
Fig 16 Track Extension Packs D, E & F 18

6) Connecting Power – Digital DCC Control **19**
Fig 17 Connecting a Digital DCC Controller to your layout. 22

7) Hornby's Accessory Packs **23**
Fig 18 Hornby's Five Optional Accessory Packs 23

8) Troubleshooting your layout **27**

Appendix – Product Links **31**

1) Introduction

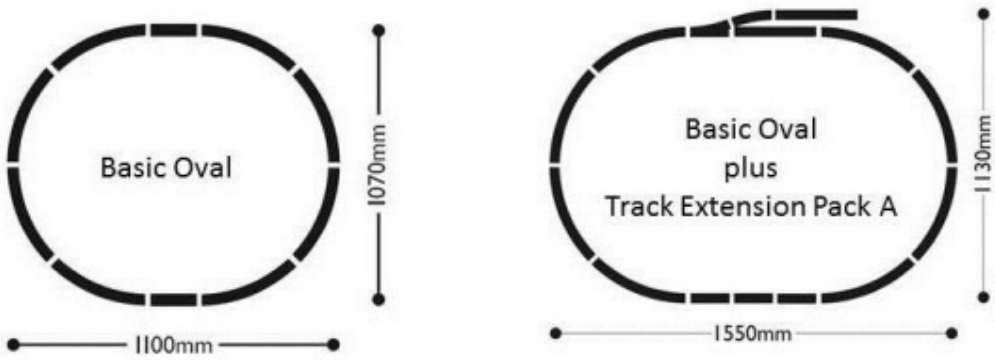
Ninety percent of the information contained in this guide can be found somewhere on the Hornby website product and support pages. This document has two objectives, firstly to consolidate the various disparate content of that 90% information into one document and secondly to provide the missing 10% of information that Hornby have not yet documented in the public domain.

In particular, the missing 10% of undocumented information relates primarily to recommendations and suggestions with regard to the Analogue DC controller power connection location and design considerations.

This document addresses this 'missing information' oversight in section 5).

2) Train Set Ovals

Fig 1 Basic Train Set Ovals



Depending upon which trainset has been purchased. It will either contain the track pieces to construct a simple basic oval or have the basic oval plus Hornby's Track Extension Pack A.

The dimensions shown above are the overall dimensions of the track layout going track edge to track edge. These measurements are less than the size of Hornby's scenic track mats. It would be recommended that any base board that is deployed is based on being large enough to accommodate a Hornby track mat to give adequate clearance around the edge of the track layout.

3) Train Set Mats

Fig 2 Midimat & TrakMat R8217

Midimat
1600mm x 1180mm
Basic Oval plus
Track Extension Packs A to D

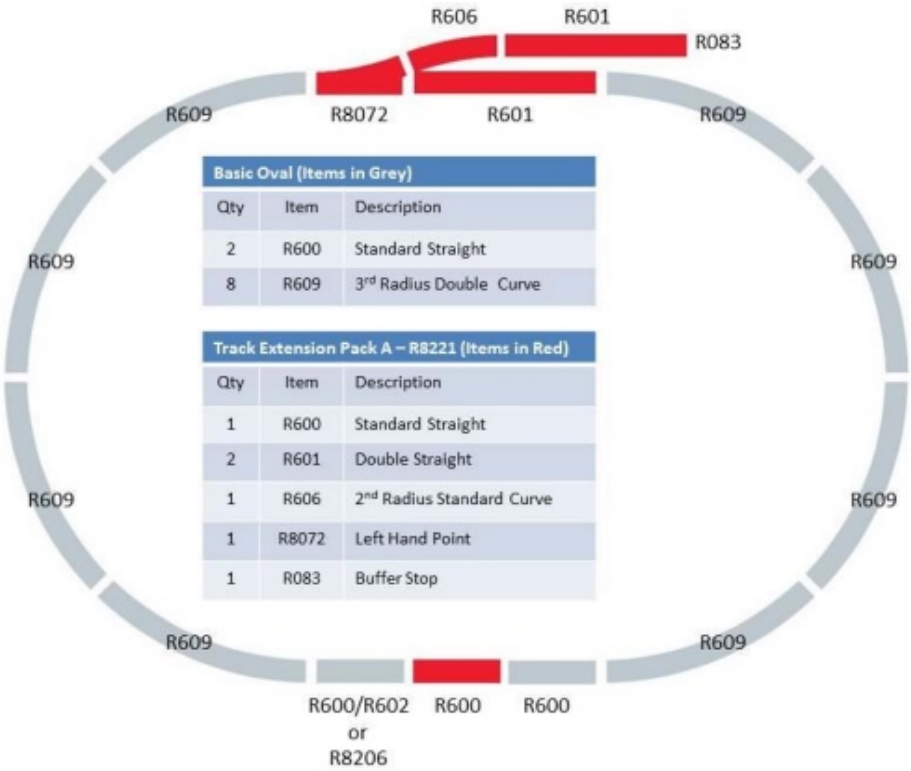
TrakMat - R8217
1800mm x 1200mm
Basic Oval plus
Track Extension Packs A to F

The Hornby Midimat is the basic track mat that is shipped in Train Sets (when included). It can accommodate the basic oval plus Track Extension Packs from A to D. The Hornby Train Set included Midimat is not orderable as a separate item.

If the intention is to add Track Extension Packs E, or E and F, then you will need to purchase the Hornby TrakMat R8217.

4) Hornby's Track Extension Packs

Fig 3 Track Extension Pack A



Basic Oval (Items in Grey)		
Qty	Item	Description
2	R600	Standard Straight
8	R609	3rd Radius Double Curve

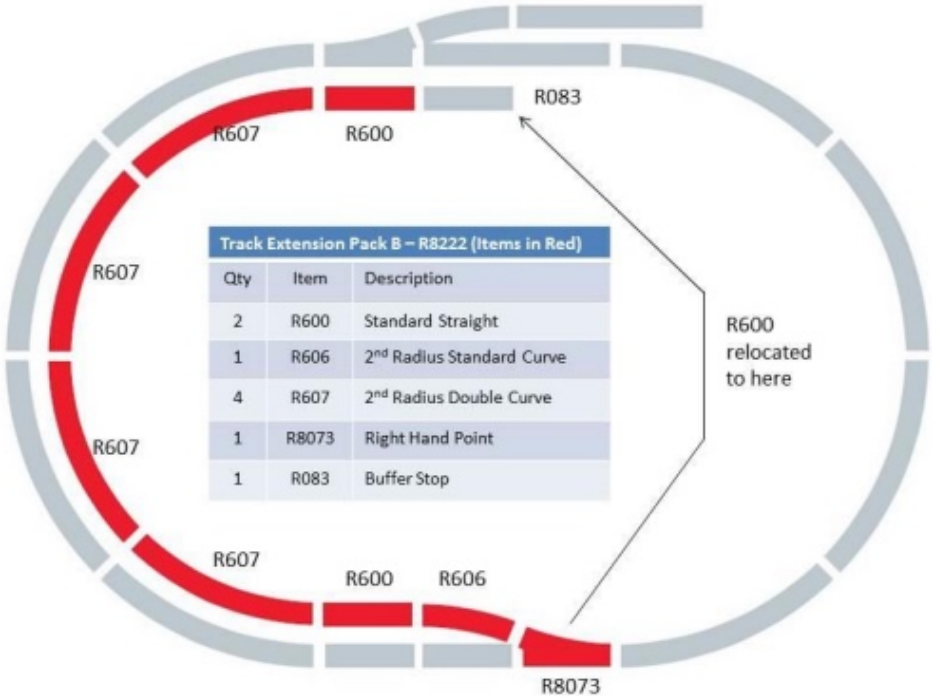
Track Extension Pack A – R8221 (Items in Red)		
Qty	Item	Description
1	R600	Standard Straight
2	R601	Double Straight
1	R606	2nd Radius Standard Curve
1	R8072	Left Hand Point
1	R083	Buffer Stop

This Basic Oval plus Extension Pack A as shown in Fig 3 above, is the track layout that is supplied in the majority of Train Sets. Depending upon the set, the power connection from the controller to the track will be either a R600 Standard Straight with a R602 Power Clip OR a R8206 Power Track piece that has the standard straight track and the clip function integrated into one single track piece.

If the Train Set is a Digital set, then the track power connection supplied with the set will be the R8241 DCC Power Track – see section 6).

Note: If the purchased train set only included the basic oval as shown in section 2), then the Hornby Track Extension Pack A - R8221 can be purchased as a separate item.

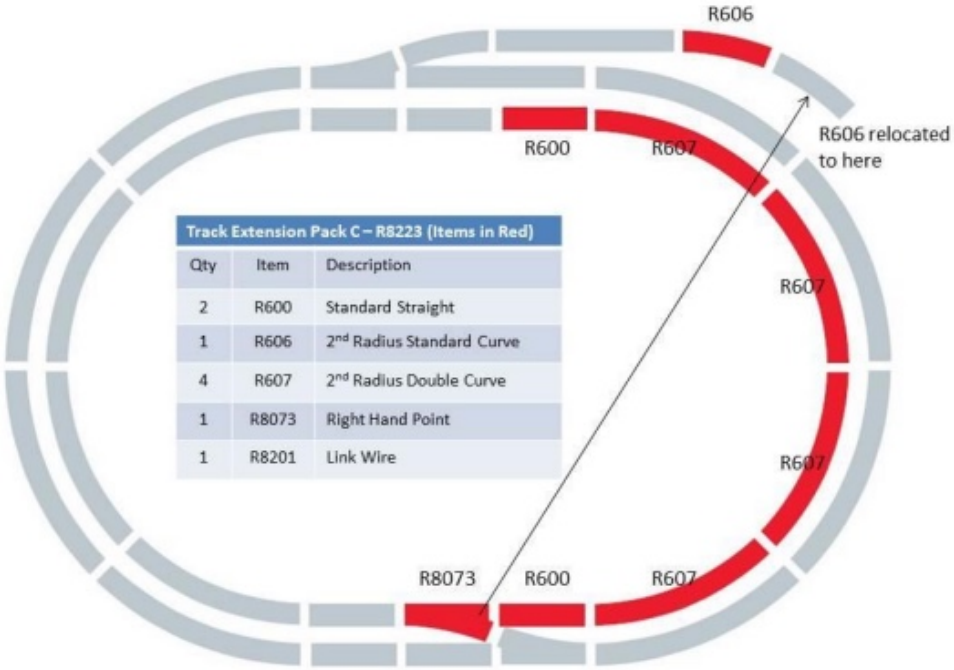
Fig 4 Track Extension Pack B



Track Extension Pack B – R8222 (Items in Red)		
Qty	Item	Description
2	R600	Standard Straight
1	R606	2nd Radius Standard Curve
4	R607	2nd Radius Double Curve
1	R8073	Right Hand Point
1	R083	Buffer Stop

This Extension Track Pack B provides a second siding to run inside the outer oval. This pack progresses the layout towards the creation of a second inner oval. In order to minimise wastage, the R600 displaced by the new R8073 Right Hand Point is relocated to the end of the newly created inner siding.

Fig 5 Track Extension Pack C

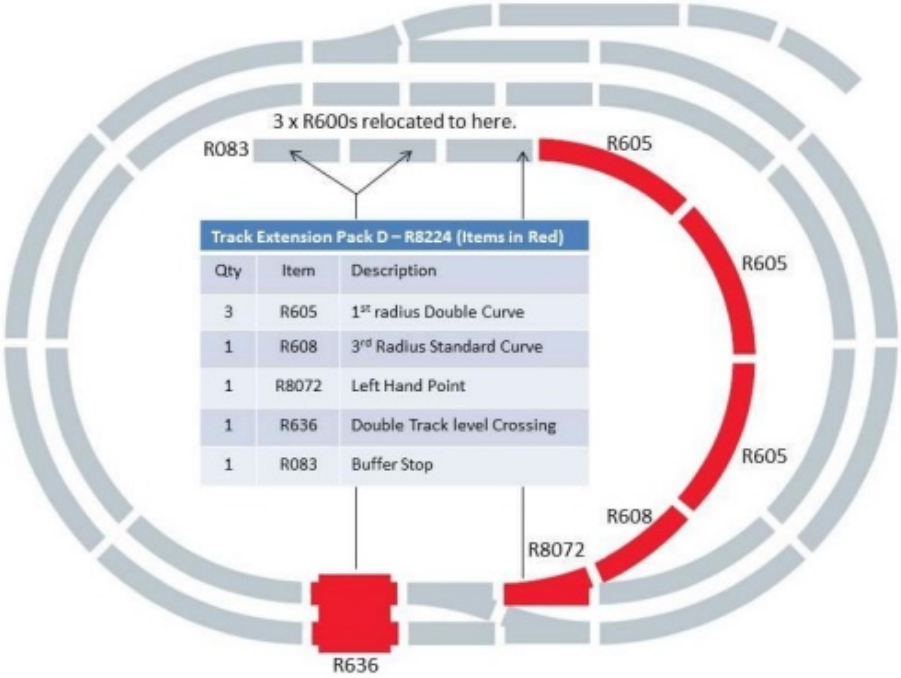


Track Extension Pack C – R8223 (Items in Red)		
Qty	Item	Description
2	R600	Standard Straight
1	R606	2nd Radius Standard Curve
4	R607	2nd Radius Double Curve
1	R8073	Right Hand Point
1	R8201	Link Wire

This is the first Track Extension Pack that creates a second inner oval. A layout with two ovals has particular requirements for power distribution and connectivity. These are covered in greater depth in section 5).

The R606 track piece displaced by the new R8073 Right Hand Point is relocated to the end of the outer oval siding.

Fig 6 Track Extension Pack D

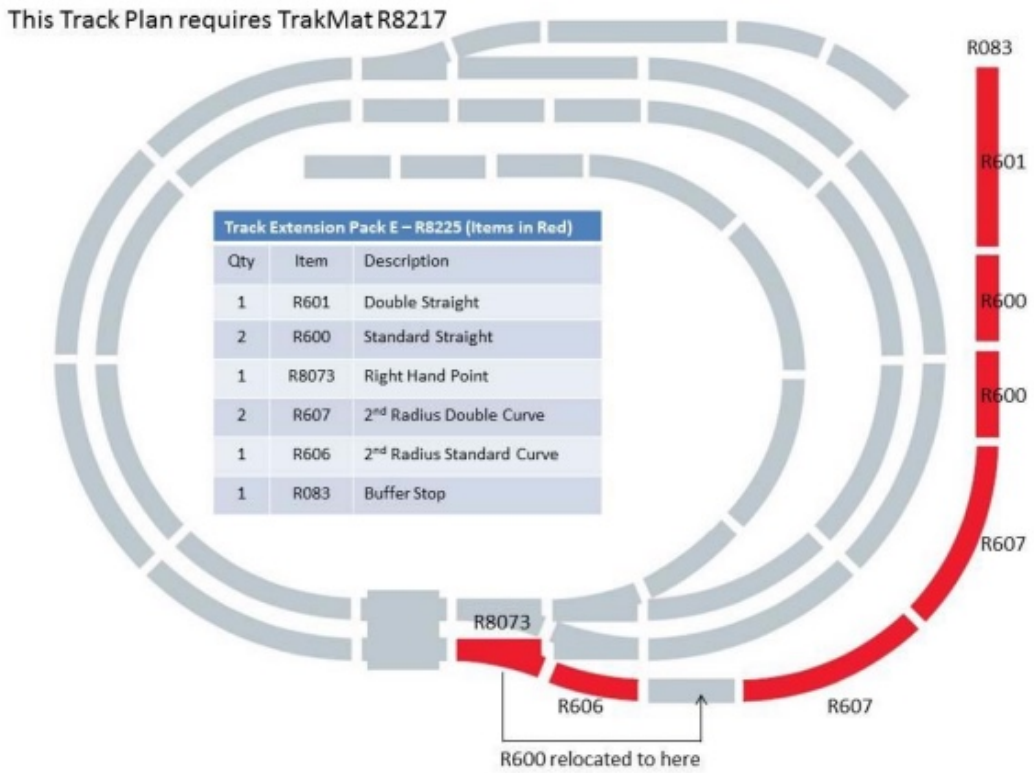


Track Extension Pack D – R8224 (Items in Red)		
Qty	Item	Description
3	R605	1st radius Double Curve
1	R608	3rd Radius Standard Curve
1	R8072	Left Hand Point
1	R636	Double Track level Crossing
1	R083	Buffer Stop

With the previous Extension Track Pack C, two concentric ovals were created. The new Extension Track Pack D re-instates a new more tightly curved inner siding. The radius of this new siding is based on 1st Radius curves. It should be noted that some longer wheelbase rolling stock is not recommended for use with 1st Radius curves. This shouldn't affect the majority of freight type wagons and shunters that have much shorter wheelbases.

The new R636 Double Track Level Crossing and R8072 Left Hand Point displace three existing R600 Standard Straight track pieces that are relocated to the end of the new inner oval siding.

Fig 7 Track Extension Pack E



Track Extension Pack E – R8225 (Items in Red)		
Qty	Item	Description
1	R601	Double Straight
2	R600	Standard Straight
1	R8073	Right Hand Point
2	R607	2nd Radius Double Curve
1	R606	2nd Radius Standard Curve
1	R083	Buffer Stop

The Extension Track Pack E creates a new outer siding on the outer oval. The new R8073 Right Hand Point displaces the existing R600 Standard Straight that is relocated to become part of the new siding track.

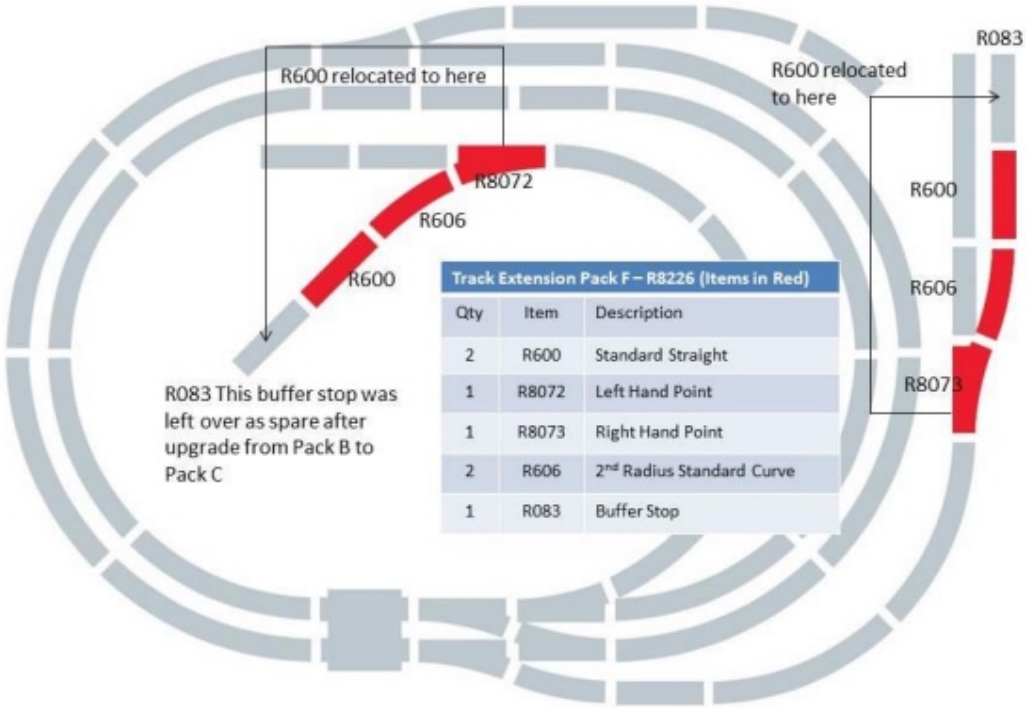
This extension pack throws up a bit of a conundrum. As now there are no Standard Straight track pieces in the outer oval where a “Power Track” piece can be located.

One solution could be to swop over two of the R600 Standard Straights in the inside siding with the R601 Double Straight in the outside oval just to the right of the upper point. Then use one of these upper oval R600 track positions for the “Power Track” piece. The issue with that is that the lead from the controller will be difficult to route there if the controller is located at the bottom of the layout.

The option proposed in section 5) Fig 16 is to use a track “Power Clip” instead, as this can be fitted to a curved track piece and keeps the controller(s) co-located together in the lower part of the layout.

Fig 8 Track Extension Pack F

This Track Plan requires TrakMat R8217



Track Extension Pack F – R8226 (Items in Red)		
Qty	Item	Description
2	R600	Standard Straight
1	R8072	Left Hand Point
1	R8073	Right Hand Point
2	R606	2nd Radius Standard Curve
1	R083	Buffer Stop

Extension Track Pack F is the last of the available Hornby track extension packs and completes the full capability of the TrakMat design. This track plan and the preceding Extension Track Pack E track plan are not suitable for the original Midimat included with some Train Sets.

5) Connecting Power – Analogue DC Control

In an Analogue DC (Direct Current) train set. The train controller manipulates the power being applied to the track. Increasing the power makes the locomotive go faster, turning the power off makes the locomotive stop and reversing the polarity of the power makes the loco go in the other direction.

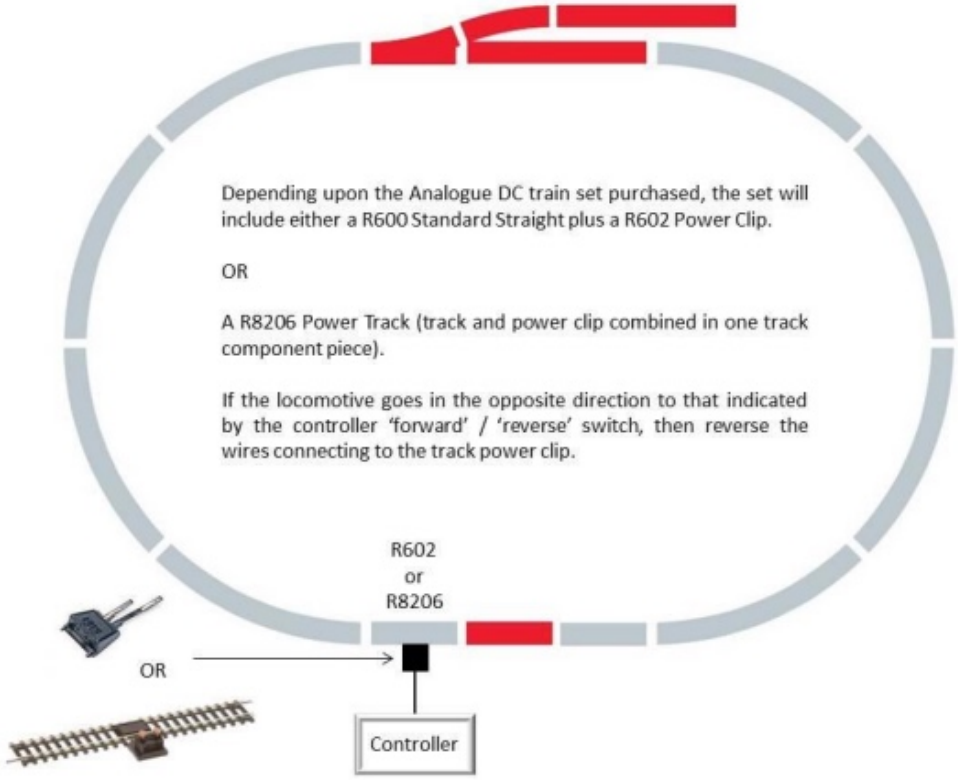
If the entire layout is one single electrical circuit, then the controller can only control one single locomotive. Yes, you could put a second locomotive on the track, but that locomotive would only replicate the same movements as the first locomotive. This is the fundamental difference between Analogue DC control and Digital DCC control (Digital Command Control). In Digital DCC, the controller controls the individual locomotives not the track and is covered in more detail in section 6).

In order to create some form of control for more than one Analogue DC locomotive, the track needs to be broken into multiple circuits that can be switched in and out of the layout as required. This is one function of the track point. The points act as electrical switches. They direct the track power in the direction to which they are switched. Thus, if the point is switched to provide a route into the siding, then that siding becomes electrically powered. You can then drive the locomotive into the siding under power from the controller. When the point is switched away from the siding to provide the straight ahead route on the oval, then the power to the siding is disconnected. Thus, a locomotive can remain stationary and parked in the siding whilst another locomotive goes round the adjacent oval.

As the layout becomes more sophisticated, say for example adding a second loop, then to maximise the playability factor it is desirable to add a second controller and split the layout into two distinct controller circuits. One controller circuit is the outer loop and its directly attached sidings and the second controller circuit is the inner loop and its directly attached sidings, with each siding's power being controlled by the point position. Each controller can now operate a locomotive independently from one another as long as each locomotive remains on its own distinct controller track circuit.

The Figs in this section describe the options for creating this control functionality for each of the different Hornby Track Extension Packs as the layout design progresses.

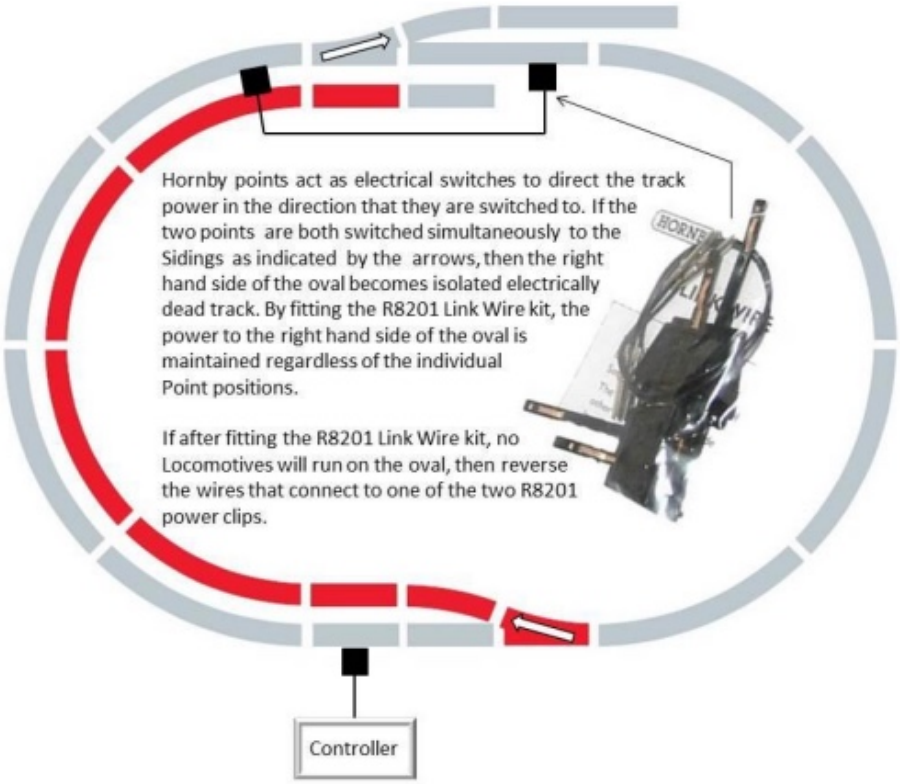
Fig 9 Basic Oval & Track Extension Pack A



This is the most basic controller connectivity; the single oval is controlled by a single controller. The power to the siding is controlled by the point position.

Depending upon the initial Analogue DC train set that is purchased, the track power connection will either be a R600 Standard Straight with R602 Track Power Clip OR a R8206 Power Track.

Fig 10 Track Extension Pack B

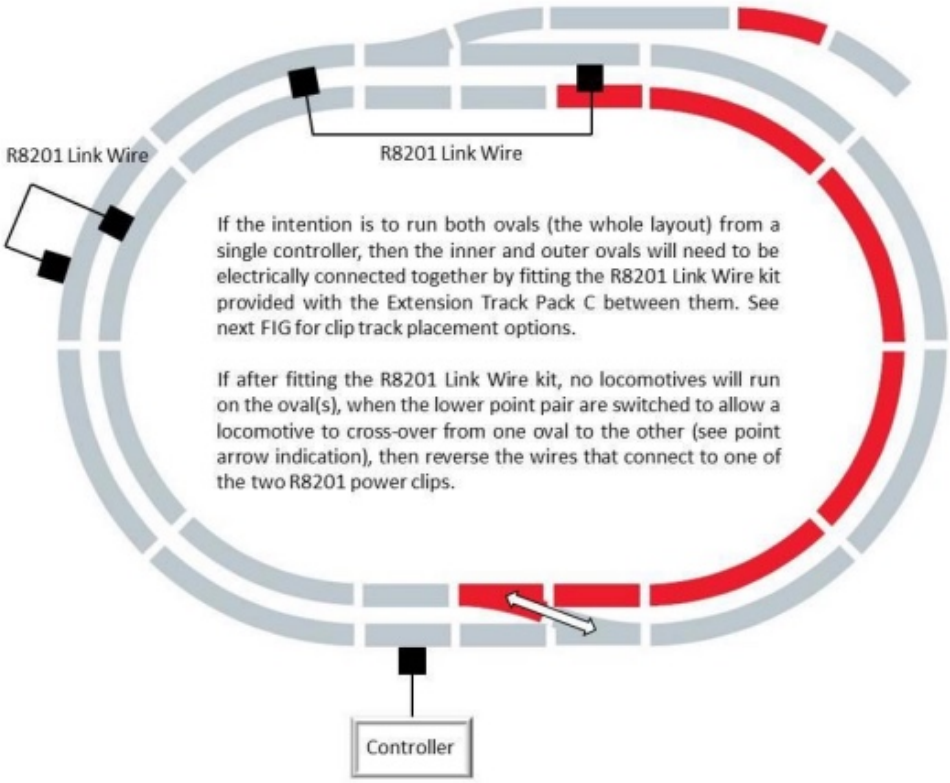


Again, nothing too complicated here. One controller controls a single oval. The one minor issue is that the right hand side of the oval can become electrically isolated when both points are thrown to the sidings. This can be alleviated by fitting a Hornby R8201 Link Wire kit. See the embedded text in the Fig 10 drawing for more detail.

Note: The wires included in the R8201 Link Wire kit are short. And will need to be lengthened to fit the track positions shown in the drawing above. Longer wires can be created by either:

1. Cutting the supplied wires in half and inserting an additional length of wire into the middle. The joints could be soldered and covered with heat shrink tubing OR just joined together via screw down terminal strips.
2. Making complete new wires by terminating new longer wires with Hornby X8011 Pin Terminals (no soldering required as the terminal pins can be crimp terminated). See Fig 15 (Page 17) for information on X8011 Pin Terminals.

Fig 11 Track Extension Pack C with ONE controller.

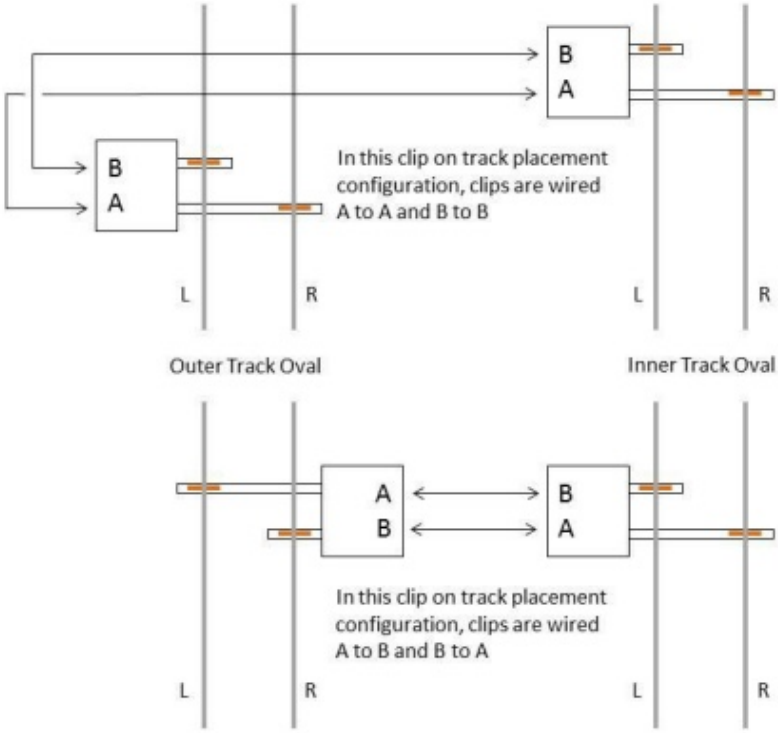


This is where controlling your layout by an Analogue DC controller starts to get a bit more complicated. If the intention is to run the whole layout by a single Analogue DC controller, then additional Hornby R8201 Link Wires will need to be installed. These are included within the Track Extension Pack C packaging.

If the intention is to deploy two Analogue DC controller circuits, one controller on each oval. Then refer to Fig 13.

See Note on previous Fig 10 regarding R8201 Link Wire kit.

Fig 12 Wiring the R8201 Link Wire kit

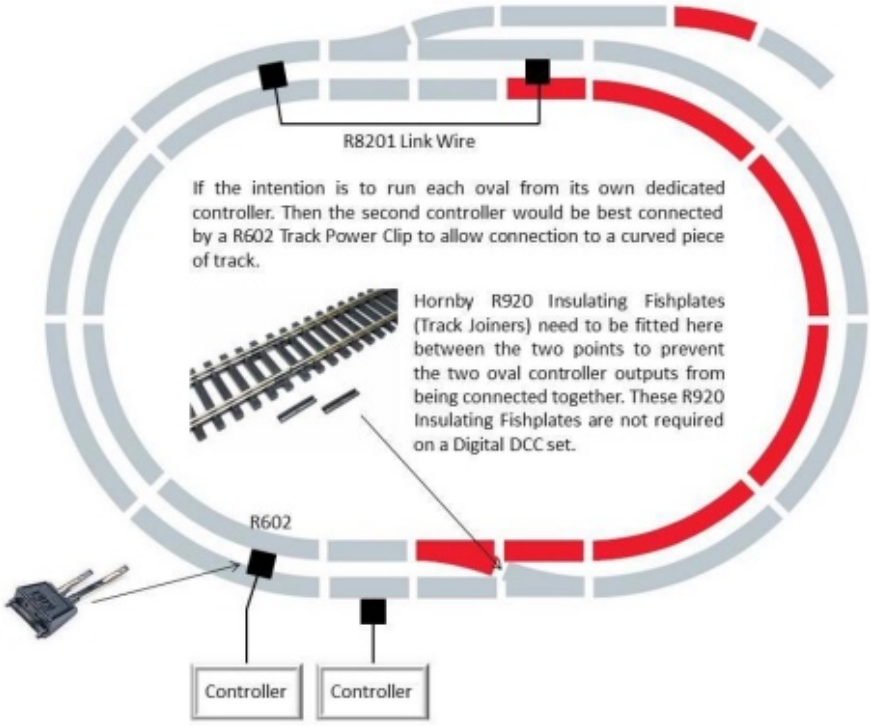


This particular Fig represents the R8201 Link Wire kit that is used to connect the two ovals together first shown in Fig 11, when a single Analogue DC controller will be used for the whole layout.

The L & R refer to the Left & Right rails on the Outer & Inner Oval Track. If you finger trace the connections between the two tracks, you will see that the two left rails connect electrically together and the two right rails connect electrically together.

If you make an error wiring the R8201 Link Wire kit that results in the left rails being connected to the right rails, then you will get a short circuit and all locomotives will stop when the points that link the two ovals together are thrown to create a route between them.

Fig 13 Track Extension Pack C with TWO controllers



In the opening text at the start of section 5) – the following sentence is written:

"*Each controller can now operate a locomotive independently from one another as long as each locomotive remains on its own distinct controller track circuit.*"

In Fig 13, each of the two ovals is a "*distinct controller track circuit*". In order to keep these two track circuits (ovals) distinct, it is necessary to electrically isolate them by fitting R920 Insulating Fishplate track joiners between the points facing each other at the location indicated on Fig 13.

If these R920 joiners are omitted then the two controller outputs will be in electrical contact with each other when the points are thrown to create a crossover route between the two ovals. The sophisticated electronics of modern DC controllers are less forgiving than older controller technology, so they will adversely interact with each other when their outputs are in electrical contact. The R920 joiners prevent this happening.

When you want to drive a locomotive from one oval track circuit to the other, you match the settings (speed and direction) of the two controllers, and the locomotive will automatically pick up its power from the other controller as it passes over the crossing.

See Note on previous Fig 10 regarding R8201 Link Wire kit.

Fig 14 DC Controllers Twin or Dual

In an Analogue DC train set, one R8250 will normally be provided in the train set box. If two controllers are required for a twin oval layout, then either a second R8250 will need to be purchased along with a P9000 Power Supply Unit. Or the original R8250 could be replaced with a R8012 HM2000 Dual DC Controller. The HM2000 has a much higher current rating than the R8250 and is a much more sophisticated controller.

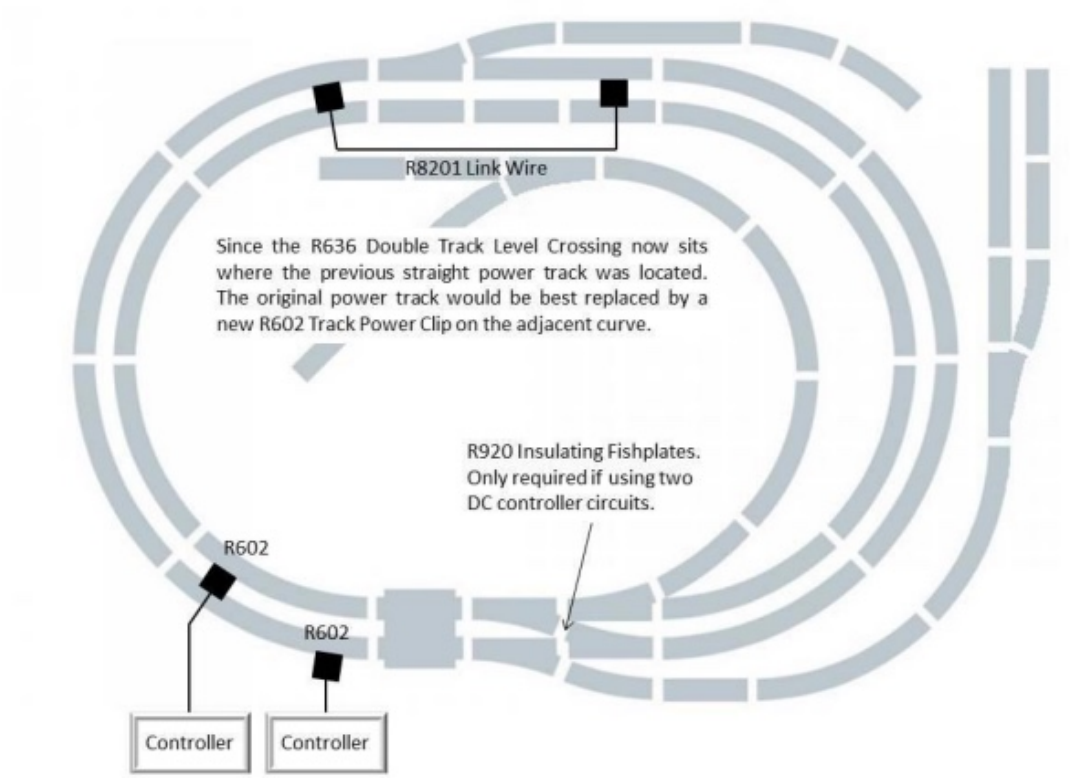
Fig 15 Custom Made Power Connecting Wires

Not that it should become necessary, but if a requirement arises where it would be desirable to make custom power wires, or shorten existing ones. Then Hornby have produced a Terminal Pin spares pack **X8011**, this pack contains 50 terminal pins that can be crimped and/or soldered to wires.

These pins can be used with a range of Hornby products such as:

R8201 Link Wire kits
R602, R8242 Power Clips
R8206, R8241 Power Tracks
R044, R046 & R047 Switches

Fig 16 Track Extension Packs D, E & F



Two Controllers - Fig 16 above shows a dual oval layout with two control circuits, thus R920 Insulating Fishplates are shown fitted for the reasons explained in Fig 13.

To simplify the controller connections, R602 Power Clips are recommended as these will fit on the curved track pieces.

Single Controller - If the intention is to control this layout design from a single controller, then the R920 Insulating Fishplates can be considered optional. In a single Analogue DC controller design, the R8201 Link Wire kit between the two ovals will need to be fitted as first shown in Fig 11 & Fig 12.

Note: Fitting R920 Insulating Fishplates with a single controller will not provide any negative impact on the layout, provided that the R8201 Link Wires are fitted. Fitting the R920 Insulating Fishplates at the early track laying stage provides an easier upgrade path to two controller Analogue DC control, as the points will not need to be lifted to retrofit the R920 joiners at a later date.

See Note on previous Fig 10 regarding R8201 Link Wire kit.

6) Connecting Power – Digital DCC Control

As briefly mentioned in the opening text in section 5), the Digital DCC (Digital Command Control) train layout uses the DCC controller to control the individual locomotives and not the track circuit. In DCC, the whole layout is one single contiguous electrical track circuit (including the sidings).

As previously documented, points act as electrical switches to switch power in the direction that the point is switched to. So in order to circumnavigate this electrical point switching feature, all points on a Digital train set layout should have 'Digital Point Clips' R8232 fitted to the points (see Fig 17). Any points that are provided as part of a Digital Train Set will have any included points pre-fitted with these clips. The track points that are provided in the Extension Track Packs do not have these clips, which then need to be ordered separately. The R8232 product is a pack of 20 clips, enough for 10 individual points.

<u>Locomotive Digital DCC Decoders.</u>

In their product descriptions, locomotives may be classified as:

- DCC Suitable or Capable
- DCC Ready
- DCC Fitted or on-board

DCC Suitable or Capable means that the locomotive was built at the factory for use on an Analogue DC layout, but the motor and internal electro / mechanicals are suitable for converting to DCC using a DCC decoder that is terminated with wires. The DCC conversion requires 'soldering skills' and a certain level of experience. This type of DCC conversion may not be suitable for novices.

DCC Ready means that the locomotive has been built at the factory to be controlled either by DC or optionally DCC. A socket has been provided inside the locomotive that has been factory fitted with a 'blanking' plug that allows the locomotive to be used 'out of the box' on an Analogue DC layout. This 'blanking plug' can be removed and replaced by a 'plug-in' DCC decoder to upgrade it to work on a Digital DCC controlled layout. This DCC decoder out of the packet will have the manufacturers default DCC 003 address (see later in this text). This upgrade does not require the use of soldering to perform the upgrade.

DCC Fitted or on-board this means that the locomotive has been pre-fitted with a Digital DCC decoder at the factory. The locomotive 'out of the box' will have the manufacturers default DCC 003 address pre-configured in it (see later in this text). The software configuration of the factory fitted DCC decoder will usually mean that it will run on an Analogue DC layout as well, but this feature can be switched off by the user if deemed necessary using the Digital DCC Controller (but not with the Select, the Select controller does not have this capability).

In Digital DCC train layouts, the track is supplied with **FULL** power all of the time, regardless as to whether the locomotives are moving or stationary. Each Digital DCC locomotive contains a Digital DCC decoder. The Digital DCC controller tells each locomotive DCC decoder what to do. Move forward, move backwards, go faster, go slower, stop etc.

To prevent **all** the locomotive Digital DCC decoders from reacting to the Digital DCC Controller commands at the same time, each locomotive DCC decoder needs to be given a different and unique Digital address. Every locomotive that is fitted with a decoder when taken out of the box will have the same Digital address, namely 003.

Therefore when operating more than a single locomotive on a Digital DCC train set layout, the 003 DCC address of each additional locomotive will need to be changed to a new address that is unique for your particular layout. It is not within the scope or remit of this document to describe how to perform this decoder re-addressing. This information will however, be contained within the documentation that came with your particular Digital DCC Controller.

Digital DCC Controllers.

Hornby produce three Digital DCC Controller products:

- Elite - R8214
- RailMaster with eLink - R8312
- Select - R8213

Elite is a full featured Digital DCC Controller that has two knobs for controlling two locos simultaneously. There may be many more than two locomotives on your layout. Any of which can be quickly re-assigned to one or other of the control knobs with a few button presses. This way the Elite Controller can control as many locomotives as you have on your layout (within reason). The Elite is fully compatible with R8144 RailMaster software that can be purchased separately. When combined with RailMaster, the user gets the unique ability to use either the Elite knobs OR the RailMaster throttles to control locomotives simultaneously in real time.

RailMaster with eLink is a Digital Controller / Software package that performs all the tasks that Elite can do, but from a PC screen user interface. The eLink itself has no knobs and buttons on it and cannot perform any train control functions on its own. Train control has to be done via the PC screen. Of course, it goes without saying that the PC is not provided as part of the product. The RailMaster with eLink digital controller is provided with many of Hornby's Digital DCC Train Sets.

Select is the basic entry level Digital DCC Controller provided with some entry level Digital Train Sets. It has ONE single controller knob that can be assigned to a limited number of locomotives. Thus several locomotives can be controlled simultaneously but only one at a time. It has limited capability to perform the complex DCC decoder configurations that the other two Digital DCC Controllers can do with ease.

Clarification regarding Digital DCC control.

This applies to all three of the Digital DCC Controllers documented above. The locomotive decoder remembers the last command it was given. So let's say you call up locomotive (A) and start it running round one of the ovals. Because the locomotive remembers this command, you can leave it circling the oval and re-assign the DCC controller to a different locomotive (B). You can now drive this second locomotive, say out of a siding and on to the second oval and set it running around the other oval. You can now re-assign the DCC controller to a third locomotive (C), say a shunter for example, and use the controller to perform shunting tasks in the sidings. Meanwhile, the other two locomotives on the layout carry on performing their last commanded task, until commanded to do otherwise.

You can then quickly re-assign the Digital DCC Controller to any one of these three locomotives in real time and modify their DCC instructions on the fly to change the action that have been previously been told to perform. Only the selected locomotive DCC address will respond. All three of the locomotives are completely oblivious to the other two locomotives existence.

Programming Track.

In Fig 17, a programming track is shown. This piece of track is not provided with a Digital Train Set or any of the Extension Track Packs. It needs to be ordered separately. There is no special Hornby R part number. It is just a suitable length of basic track. It could be a R601 Double Straight track piece for example, with either a R8242 DCC Track Power Clip or R8241 DCC Power Track connected to it.

To perform decoder programming the Elite & eLink Digital DCC Controllers have a separate 'Programming Track' output on the back of the controller.

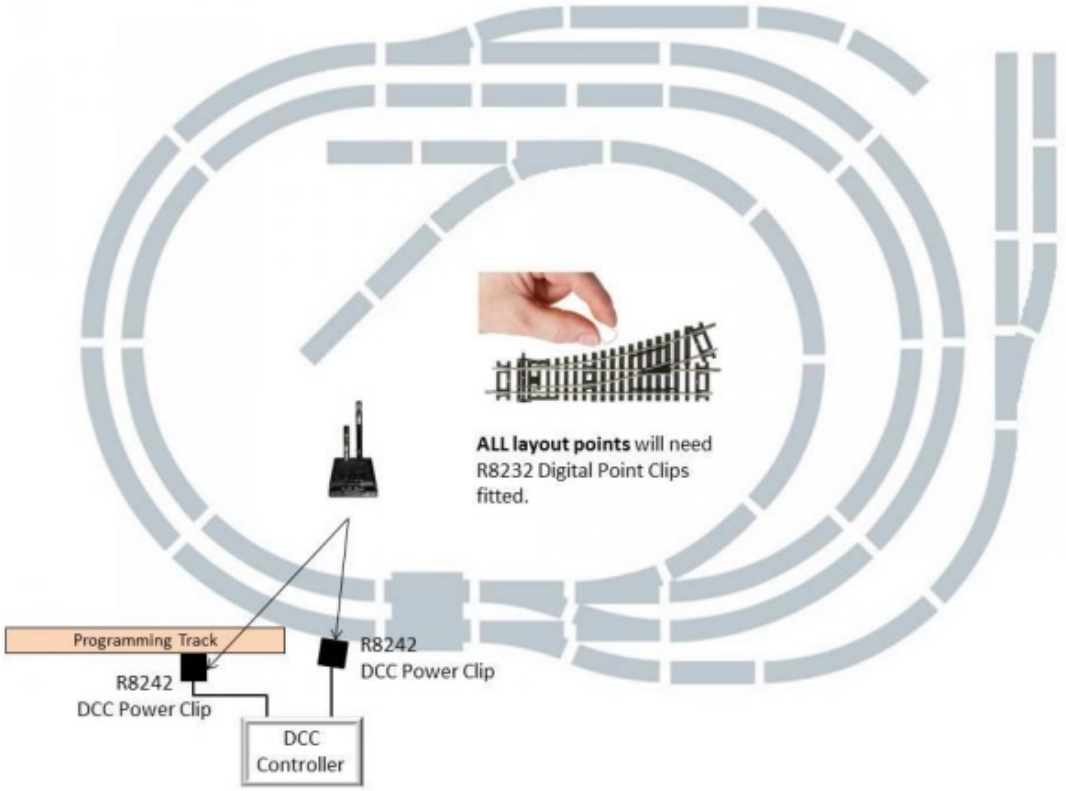
In the case of the Select, there is no separate 'programming track' output on the rear of the controller. The easiest way to perform a DCC decoder programming task is to disconnect the main track from the back of the Select and then connect the dedicated piece of 'programming track' directly to the back of the Select using the 'main track' output connections. This varies slightly from the suggestion made in the Select manual, but achieves the same end result.

Using Analogue Power track Components on a Digital DCC Layout.

The Analogue DC R602 & R8206 Track Power pieces are not suitable for use with DCC. They can however be modified to make them so. The modification involves opening the plastic cover of the power clip and cutting out the small electrical suppression capacitor that is soldered across the wires within it.

This is relevant to know if upgrading an existing Analogue DC layout to Digital DCC at a later date.

Fig 17 Connecting a Digital DCC Controller to your layout.



This Fig represents a Digital DCC controlled layout with all Track Extension Packs A to F fitted. In a Digital layout the connectivity requirements are consistent regardless of what Track Extension Packs are actually used. Thus, it only becomes necessary to show one single controller connection example in this document. It made sense therefore, to show the most extensive track layout in the TrakMat range.

The salient points to note are that there is only a single Digital DCC controller for the whole layout. The power connection can be, within reason, anywhere on the track, but preferably on an oval. All points must have Hornby R8232 digital point clips fitted.

Points that come packed in a Digital Train Set will have the digital point clips pre-fitted. Any points purchased as part of an Extension Track Pack will need to have the R8232 digital point clips purchased and fitted separately. The R8232 item is a pack of 20 clips, enough to fit out 10 Hornby points.

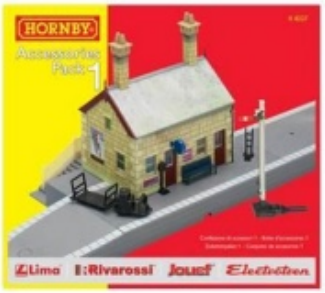
Fig 17 above shows the controller connected to a R8242 DCC Track Power Clip. This could alternatively be a R8241 DCC Power Track. Note: the R8241 being a track piece will require it to be fitted in place of a R600 Standard Straight.

Note: R602 & R8206 Power Clips & Tracks are NOT compatible with Digital DCC.

7) Hornby's Accessory Packs

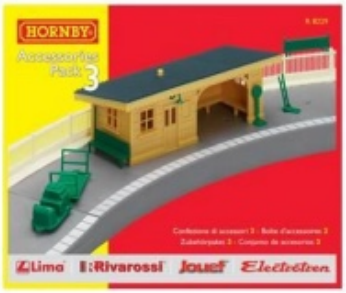
Fig 18 Hornby's Five Optional Accessory Packs

R8227

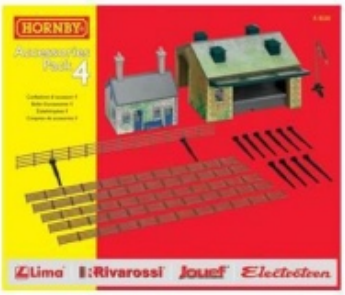


R8228

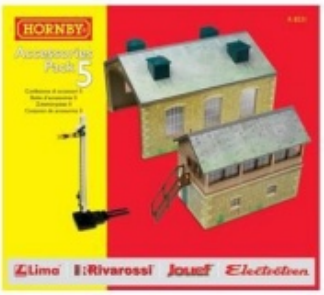
R8229



R8230



R8231



In order to bring to life and enhance the Midimat and TrakMat layouts. Hornby have produced a series of Accessory Packs that are a companion product range to the mats.

Accessories Pack compatibility matrix.

	Compatible with Extension Track Packs	
Accessories Pack	Midimat	TrakMat
1	D	F
2	A, B, C & D	E & F
3	C & D	C, D, E & F
4	TrakMat only	D, E & F
5	C & D	E & F

R8227 Accessory Pack 1

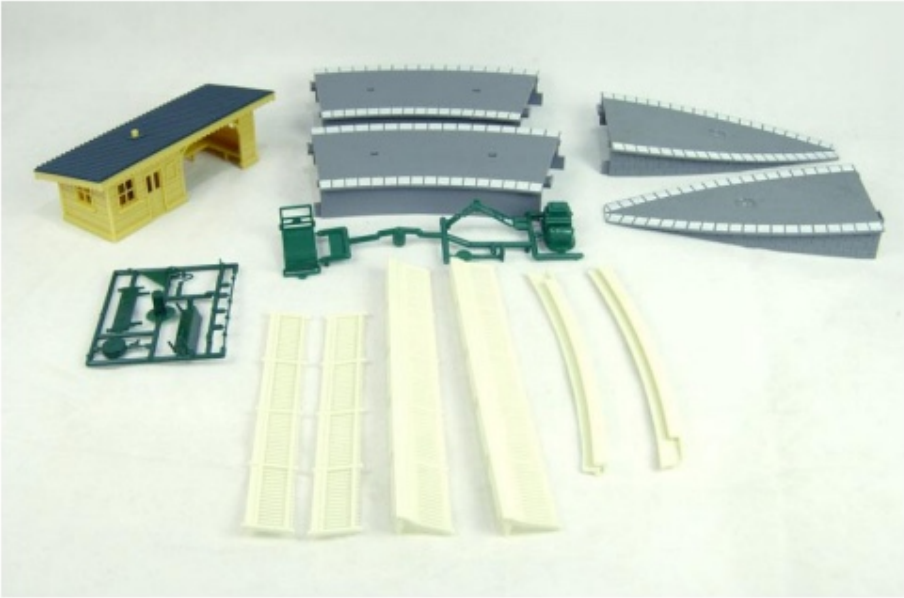
Contains:
1 x R8001 Waiting Room.
1 x R171 Single Home Signal.
2 x R464 Platform End Ramp Section.
1 x R460 Platform Straight Section.

R8228 Accessory Pack 2

Contains:
1 x R539 Railway Cottage.
1 x R8003 Water Tower.
1 x R574 Trackside Accessories (consisting of huts, telegraph poles, water crane, loading gauge, whistle sign and mile gradient posts).

R8229 Accessory Pack 3

Contains:
1 x R510 Platform Shelter.
2 x R464 Platform End Ramp Sections.
2 x R463 Platform Small Radius Curved Sections.
1 x R513 Platform Fencing.



R8230 Accessory Pack 4

Contains:
1 x R539 Railway Cottage
1 x R8002 Goods Shed.
1 x R537 Trackside Fencing Pack.

R8231 Accessory Pack 5

Contains:
1 x R8005 Signal Box.
1 x R8004 Engine Shed.
1 x R172 Single Distant Signal (Yellow Arm).

8) Troubleshooting your layout

Some of the questions listed below in this document section are based on real user questions previously raised in the Hornby user forum. It has been these previous forum questions that provided the incentive and inspiration to produce this 'Guide' document to address the problems regularly faced by users of Hornby Train Sets in the real world.

Issue:

I have two track ovals; each oval has its own DC controller. When switching my crossover points to drive a train from one oval to the other. My locomotives behave erratically. Sometimes they slow down, sometimes they speed up and sometimes they stop.

Suggestion / Solution:

You need to fit R920 Insulating Fishplate joiners between the two points where they face each other at the crossover location – see Fig 13 in this document.

Issue:

I have two track ovals; both ovals share the same DC controller. When switching my crossover points to drive a train from one oval to the other. My locomotives all suddenly stop.

Suggestion / Solution:

If you have fitted the R8201 Link Wire kit to link the two ovals together, then you need to reverse the two wires that connect to one of the R8201 track clips – see Fig 12 in this document.

Issue:

I have just upgraded my existing Analogue layout to Digital DCC, my locomotives behave erratically and I have problems trying to programme and configure them.

Suggestion / Solution:

Did you replace your original DC controller power tracks and/or power clips with DCC compatible ones R8241 or R8242 on your main and programming track. If not, your original power track clips need replacing with DCC ones or modifying for Digital DCC – see section 6) page 21 for details.

Issue:

My layout is Analogue DC. When I drive a locomotive into my siding it either stops suddenly or becomes erratic and jerky.

Suggestion / Solution:

Track points act as electrical switches to connect power into the siding when you want to drive a locomotive onto them. Where the moving blades of the point rest against the fixed rails, these contact pressure points can get dirty. These contact points need to be kept spotlessly clean, else the track power passing through them will become intermittent. The best way to clean them is with a cotton bud soaked in a cleaning fluid. A suitable cleaning fluid is IsoPropyl Alcohol (IPA).

Issue:

I have connected my Analogue DC controller to my track as instructed in my train set documentation, but my locomotive goes in the opposite direction to that shown on my controller direction switch.

Suggestion / Solution:

You need to reverse the wires that connect to your track power connection. In an Analogue DC layout the controller is using the polarity of its DC output to tell the locomotive which direction it should go. This also applies to layouts with two DC controllers.

Issue:

Up until now my locomotives have been operating without issue. I am now beginning to see erratic locomotive behaviour. Sometimes they are erratic, and sometimes they stop altogether. This can happen anywhere on the layout, not just on points.

Suggestion / Solution:

For electrical power to reach your locomotive motor, the entire electrical path needs to be spotlessly clean all the way from the controller to the locomotive. This includes locomotive wheels, electrical pickup wipers on the back of wheels as well as the track. The locomotive wheels can be cleaned with a cotton bud soaked in a cleaning fluid such as IsoPropyl Alcohol (IPA). There are proprietary track rubbers and cleaners on the market for cleaning the track. Do not use anything abrasive.

Track and wheel cleanliness is much more of an issue on Digital DCC layouts than Analogue DC ones, but DC ones can still be affected by excessive dirt and grime.

Issue:

I have just purchased a Hornby Extension Track Pack E, but there is nowhere on my Hornby Midimat for it to be placed.

Suggestion / Solution:

The basic Hornby Midimat supplied with Train Sets is only designed for Track Packs A to D. To accommodate Track Packs E & F, you need to purchase the R8217 Hornby TrakMat – see section 3) of this document.

Issue:

I have upgraded my Analogue DC layout to Digital DCC, but half my track layout is now dead track.

Suggestion / Solution:

If you previously used two Analogue DC controllers, did you remove the R920 Insulating Fishplates from your crossover points as part of your upgrade to DCC? If you didn't and it is now too difficult to do, because all your points and track are now fixed down securely on the baseboard. Then fit a R8201 Link Wire kit between the two ovals as per Fig 11 in this document that is shown for the single DC controller track design.

Issue:

I have just fitted a R8201 Link Wire Kit to bridge a point, now none of my locomotives will move.

Suggestion / Solution:

You need to reverse the wires that connect to one of your R8201 track clips – see Fig 12 in this document

Issue:

I have just added a new Digital DCC Decoder fitted locomotive to my Digital Train Set. My new locomotive moves as well, when I am driving my original train set provided locomotive.

Suggestion / Solution:

You need to change the DCC address of the new locomotive, so that it doesn't clash with your other locomotive(s) – see section 6) page 20 for additional information.

Issue:

I have added a number of Hornby Extension Track Packs to my Digital Train Set layout. When I park my diesel locomotives on a siding, the locomotive lights go out.

Suggestion / Solution:

Track points act as electrical switches. When they are thrown in the direction away from the siding they disconnect the power from the siding. You need to fit R8232 Digital Point Clips to your points so that your entire layout track is permanently live and powered all of the time.

Issue:

I have connected my controller to my track power clip as per the instructions but I do not appear to have any power getting onto the track.

Suggestion / Solution:

With the controller powered up and a locomotive sitting on the same section of track as the power track/clip location. Set the controller controls to move the locomotive. Now whilst the power is still on, jiggle the wire connections going into the clip, pull them out slightly and see if power is restored with the wires in a slightly different position. You will know that power is restored because the locomotive should start moving. This issue seems to be more prominent when using the R602 Track Power Clip with the two pronged connector of the R8250 DC Controller.

Appendix – Product Links

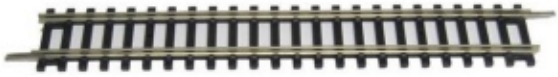
(Hyperlinks tested as working at time of document publication.)

P9000 Power Pack for R8250

P9300 Upgrade 4 Amp power pack for Select & eLink

R083 Buffer Stop

R600 Standard Straight 168mm



R601 Double Straight 335mm

R602 Analogue DC Track Power Clip

R605 Double Curve 1st Radius 371mm arc 45 deg.

R606 Single Curve 2nd Radius 438mm arc 22.5 deg.

R607	Double Curve 2nd Radius 438mm arc 45 deg.	
R608	Single Curve 3rd Radius 505mm arc 22.5 deg.	
R609	Double Curve 3rd Radius 505mm arc 45 deg.	
R636	Double Track Level Crossing Length 168mm	
R8012	HM2000 Analogue DC Power Controller @ 2 amp output.	
R8072	Left Hand Point Length 168mm Radius 438mm arc 22.5 deg.	
R8073	Right Hand Point Length 168mm Radius 438mm arc 22.5 deg.	
R8144	RailMaster Software. Not available for new supply. Check local retailer stock.	
R8201	Link Wire	

R8206 Analogue DC Power Track Length 168mm

R8213 DCC Select Controller

R8214 DCC Elite Controller

R8217 TrakMat 1800mm x 1200mm

R8221 Extension Track Pack A

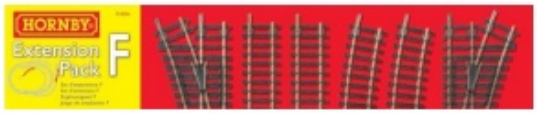
R8222 Extension Track Pack B

R8223 Extension Track Pack C

R8224 Extension Track Pack D

R8225 Extension Track Pack E

R8226 Extension Track Pack F



R8227 TrakMat Accessories Pack 1

R8228 TrakMat Accessories Pack 2

R8229 TrakMat Accessories Pack 3

R8230 TrakMat Accessories Pack 4

R8231 TrakMat Accessories Pack 5

R8232 Digital Point Clips (Pack of 20)

R8241 Digital Power Track 168mm

R8242 Digital Track Power Clip

R8250	Standard Analogue DC Controller. Supplied fitted with 760mm DC lead. Does not include P9000 Power Pack.	
R8312	eLink and RailMaster Combination Pack.	
R920	Insulating Fishplate Track Joiners (Pack of 12)	
X8011	Terminal Pins (Pack of 50)	

End of Document