GRAHAM FARISH MAGNUM LAYOUT PLAN No. 9702

September 1995

CUSTOMER HINTS

1. REMEMBER THAT THE LAYOUT PLAN IS BOUND TO SPREAD A LITTLE WHEN IT IS WETTED AND PASTED DOWN.
2. BECAUSE OF THIS, WAIT UNTIL THE LAYOUT PLAN HAS DRIED COMPLETELY, BEFORE YOU CHECK THE TRACK POSITIONS.
3. **IF YOU ARE USING PECO SETRACK,** WE SUGGEST THAT YOU FIT ALL THE TRACK SECTIONS LOOSELY TOGETHER FIRST, TO CHECK POSITIONING. IF NECESSARY, YOU CAN SLIGHTLY EASE THE TRACK SECTIONS APART TO TAKE UP ANY SPREADING THAT HAS OCCURRED DURING PASTING.
4. DO NOT DRIVE THE TACK PINS RIGHT HOME YET, BUT JUST TACK IT ALL ENOUGH TO GIVE YOU A CHANCE TO MAKE FINAL ADJUSTMENTS, IF NECESSARY.
5. **IF YOU HAVE DECIDED TO FIT THE PECO STREAMLINE FLEXIBLE TRACK,** ALL YOU NEED TO DO IS FOLLOW THE RED LINES PRINTED ON THE PLAN, SINCE IT WILL OBVIOUSLY BE POSSIBLE TO MAKE ADJUSTMENTS TO SUIT.

THIS IS THE DIAGRAM FOR CUSTOMERS USING PECO SETRACK, THE DIAGRAM IS NOT TO SCALE BUT IS DESIGNED TO SHOW WHICH PIECES CONNECT TO WHICH AND IN WHAT ORDER. *(SEE ATTACHED LIST FOR PURCHASES REQUIRED TO COMPLETE THIS PLAN).*

INDEX: X = POWER CONNECTION POINTS

■ = INSULATED FISH PLATES

NOTE: Cat. No. 9730 Magnum Layout Boards are delivered complete with all three 12 volt Power Wires connected into 1 pair of a 3 pair junction box ready for use with a POWERBOX 300 Transformer/Controller (not supplied). When purchased, just connect the two wires to your Controller into the opposite side of the Junction Box. For Multiple Controllers, refit the pairs of wires on both sides of the Junction Box similarly - i.e. one pair to one pair. Owners of Cat. No. 9702 Magnum Layout Plan only, should follow the Wiring Plan below, but will need to but the Junction Box from a Local Hardware Shop.

DON'T PANIC - ITS EASY!
NOTES ON CONNECTING UP THE POWER CONNECTION POINTS:- MARKED X X ON THE PLAN

1. Purchase 4 pairs of Graham Farish Wired Fishplates (GF Cat. No. 0039). (NOTE: FISHPLATES are just another name for track connectors!) (Each pair consists of 2 metres of double wire, with each wire soldered to a metal fishplate - all ready for use.)
2. Select the track sections indicated on the Plan on either side of the X X marks on the plan below. You will see that they are already fitted with a fishplate - one on each side of the two adjoining ends of the track sections for connecting them together.
3. Remove the fitted metal fishplates from each side of the adjoining ends of the two track sections - and refit the wired fishplates in their place - (at THIS stage, you don't need to worry about which side to fit the fishplates, either side will do.)

NOTE: The metal fishplates originally fitted to the track are not meant to come off easily, so you will need a pair of pliers to remove them - so do it carefully but firmly, and with determination!

THE FOLLOWING SPECIAL NOTES ONLY APPLY TO
LINKING THE TWO POWER CONNECTIONS WHERE MARKED ON THE DIAGRAM.

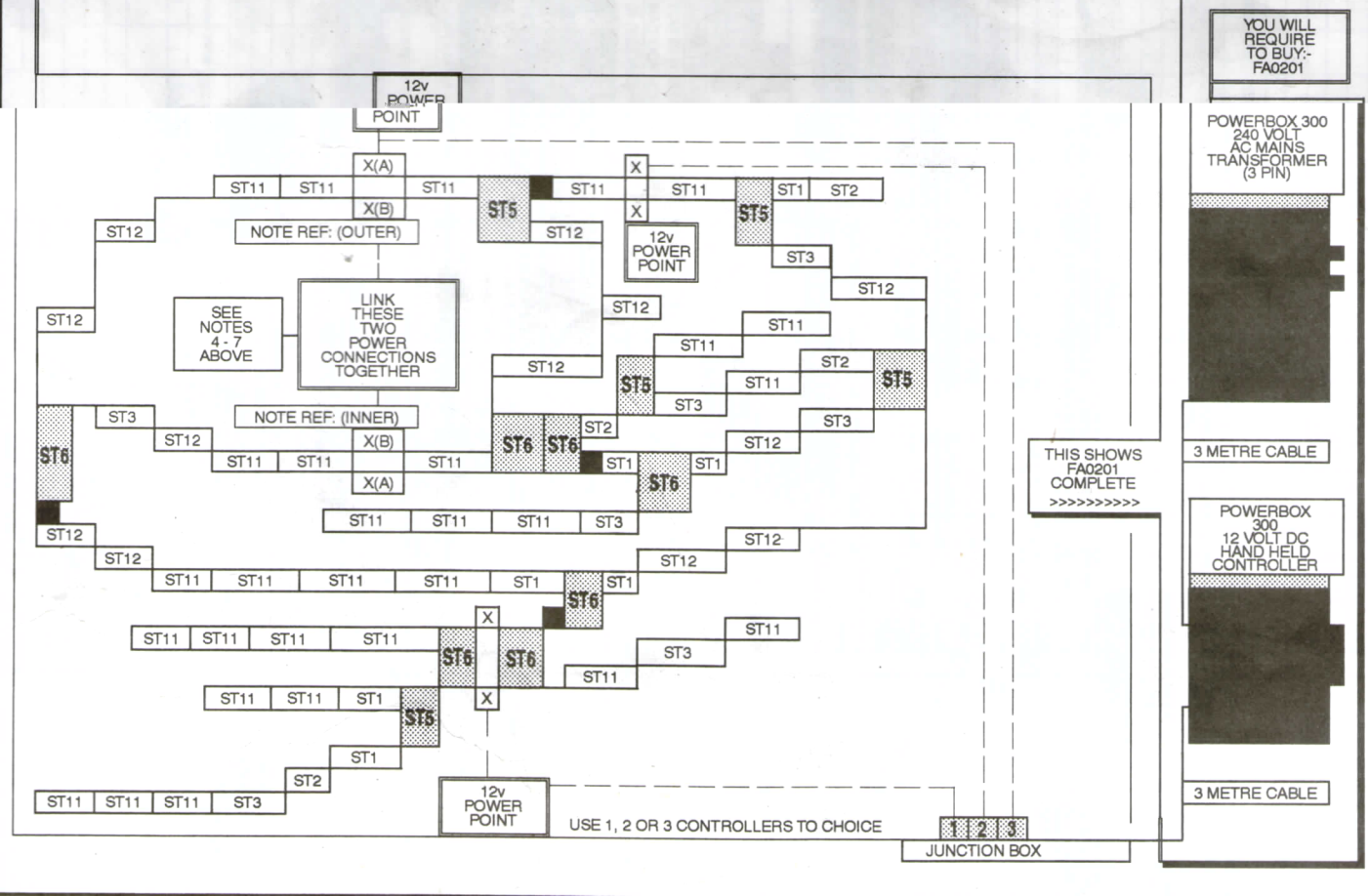
4. By this stage, you should have installed all 4 pairs of wired fishplates at the positions marked.
5. Looking at the diagram where it says "LINK THESE TWO POWER CONNECTIONS TOGETHER", you now pick up the pair of wires you have connected to the (INNER) side of the layout. (That is to say, below the Notice)
6. These two (INNER) wires, must be connected to the two (OUTER) wires, but NOW you MUST connect the two wires the right way round or you will get what is called a "dead short". This is not serious and will not cause damage - it just means that the layout will not work until you correct it, So don't panic! THE CORRECT CONNECTIONS ARE:- (INNER WIRE "A" to OUTER WIRE "A") and (INNER WIRE "B" to OUTER WIRE "B") as marked on the Plan.
7. There are basically two ways of doing this:- (Still following "A" to "A" and "B" to "B" of course.)

a) Solder one wire from the (INNER) power connection to the wired metal fishplate of the (OUTER) power connection. Repeat for the other wire to be connected to the (OUTER) power connection.
OR:-
b) Just carefully wind one wire from the (INNER) power connection around one wire of the (OUTER) power connection. Then do the same for the other pair.

NOTE: Although you do not require to use solder by this method, you may find it necessary to strip back the plastic coating of the wire connected to the (OUTER) power connection.

FITTING THE INSULATED FISHPLATES - MARKED ■ ON THE DIAGRAM BELOW.

(INSULATED FISHPLATES ARE MERELY ANOTHER NAME FOR THE METAL FISHPLATES BUT ARE MADE OF PLASTIC, NOT METAL)
1. Purchase a packet of PECO insulated fishplates (Cat. No. SL311). which contains enough for your requirements on this Plan.
2. Again, proceed as paragraph Notes 2 and 3 above, and then fit the plastic fishplates in their place.



SCENECRAFT BUILDINGS AND TREES REQUIRED TO COMPLETE THE MAGNUM LAYOUT PLAN No. 9702. SEPTEMBER 1994 FA9732

CAT. No.	INDIVIDUAL ITEMS AS SHOWN ON THE BUILDINGS LOCATION PLAN. . . . 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL ITEMS	TOTAL BOXES	CAT. No.
9001				(1)																				4			5					10	5	9001
9002				(1)																				(3)			2					6	3	9002
9003				1																												1	1	9003
9004																										1						1	1	9004
9501		6																				2	2									10	5	9501
9502	(1)		(1)								(1)			(1)	(1)						(1)											6	3	9502
9503																			1													1	1	9503
9504																															2	2	2	9504
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9506						1																										1	1	9506
9507													(1)							(1)												2	1	9507
9508																(1)	(1)															2	1	9508
9509	**NOTE:** THE ENGINE SHED IS PLACED TO BRIDGE OVER THE BLACK SECTION OF TRACK OPPOSITE LOCATION 25.																															1	1	9509
9510	**NOTE:** THE GOODS SHED IS PLACED TO BRIDGE OVER THE BLACK SECTION OF TRACK OPPOSITE LOCATION 27.																															1	1	9510
9511																												1				1	1	9511
9512																											2					2	1	9512
9513																								2			2					4	2	9513
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9524																														1		1	1	9524
9525					(1)																				(1)							2	1	9525
9601	**NOTE: RE: 9525** - ONLY THE WATER TOWERS ARE MARKED ON THE PLAN. PLACE ALL THE OTHER 9525 TRACKSIDE BUILDINGS ON THE UNMARKED BLOCKS ON THE PLAN.																															18	3	9601

NOTE: RE: 9601 - SMALL CIRCLES ON PLAN INDICATE SUGGESTED TREE CENTRE POSITIONS, IF YOU DO NOT WISH TO DRILL SMALL LOCATION HOLES IN THE BOARD, USE THE PLASTIC TREE BASES PROVIDED FOR EASY USE. *(THESE ALSO ALLOW YOU TO MOVE THE TREES ABOUT UNTIL YOU HAVE DECIDED WHAT ARRANGEMENT YOU LIKE BEST)*

NOTE FOR ADULT/PARENTS ONLY:
FOR BETTER AND MORE PERMANENT EFFECT, USE A SMALL 1/8" (3.15mm) DRILL AND CAREFULLY MAKE 1/4" (6.38mm) DEPTH HOLES SO THAT THE STUB ENDS OF THE TREE TRUNKS FIT SNUGLY INTO THE BOARD WITHOUT THE NEED FOR THE PLASTIC BASES PROVIDED.

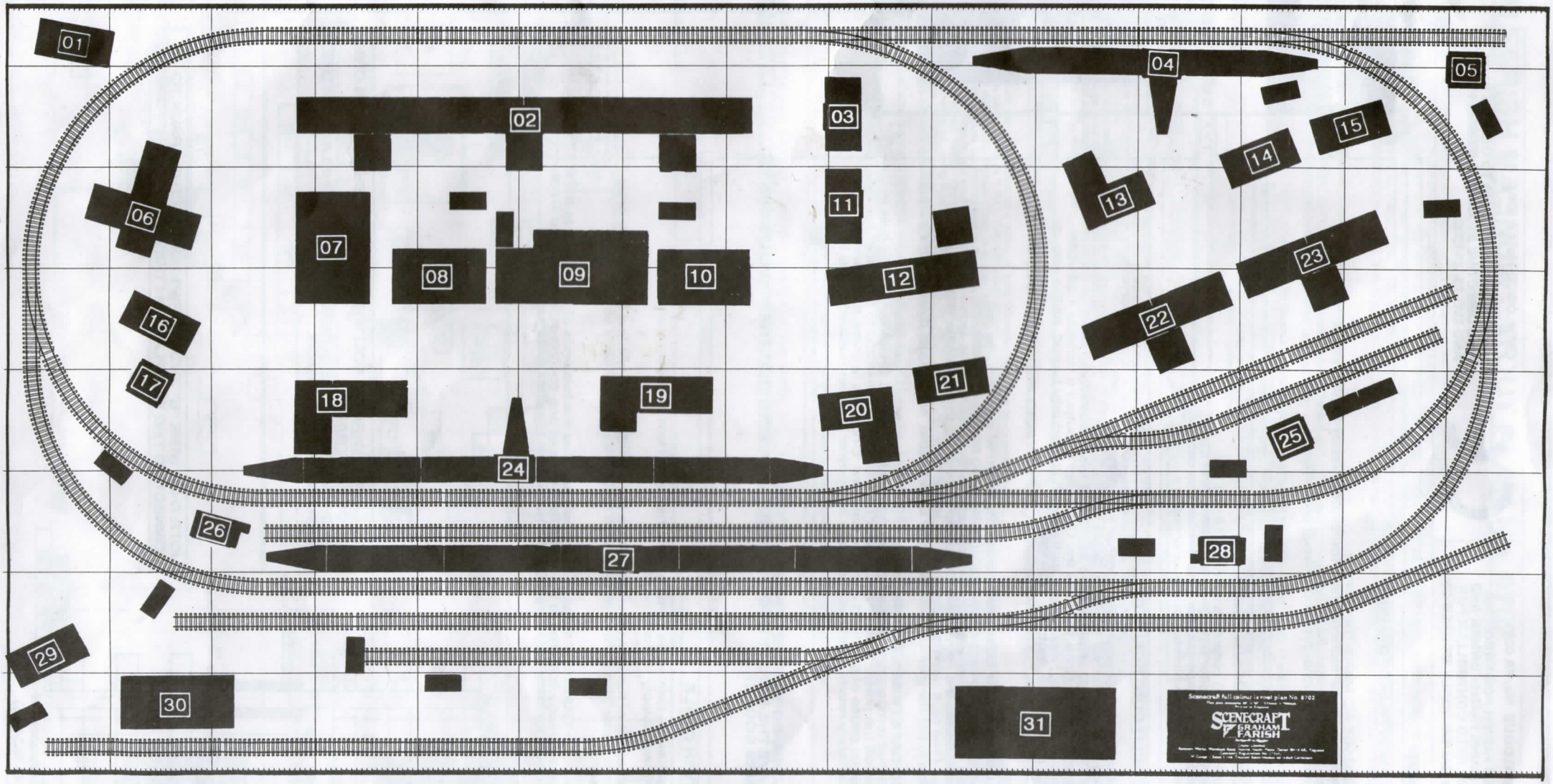
PURCHASING NOTE: FOR MODELLERS WISHING TO COMPLETE THE MAGNUM LAYOUT PLAN No. 9702

SIZE 1 SETS:	MAGNUM LAYOUT PLAN No. 9702 (AVAILABLE SEPARATELY) IS NOT INCLUDED IN THESE SETS AND NEEDS TO BE PURCHASED. YOU ALREADY HAVE 8 x (ST12) DOUBLE CURVES WHICH YOU CAN USE, PLUS THE POWERBOX 300 TRANSFORMER CONTROLLER.
SIZE 2 SETS:	THE MAGNUM LAYOUT PLAN No. 9702 (AVAILABLE SEPARATELY) IS NOT INCLUDED IN THESE SETS AND NEEDS TO BE PURCHASED. DEDUCT THOSE TRACKS AND BUILDINGS ETC. THAT YOU ALREADY HAVE IN YOUR SET, PLUS THE POWERBOX 300 TRANSFORMER CONTROLLER.
SIZE 3 SETS:	ALL SUPER SETS INCLUDE MAGNUM LAYOUT PLAN No. 9702, EXTRA BUILDINGS, TRACK, POINTS AND POWERBOX 300 TRANSFORMER CONTROLLER. REMEMBER TO DEDUCT THESE ITEMS FROM YOUR PURCHASING LIST WHEN YOU DECIDE YOU WOULD LIKE TO COMPLETE THE MAGNUM LAYOUT.
CONSTRUCTION NOTES:	1. USE POLYCELL OR SIMILAR TO PASTE THE LAYOUT PLAN ONTO A 5ft x 2ft 6in BOARD OF 3/4" CHIPBOARD. 2. THE BACKGROUND SCENERY STRIPS SHOULD BE PASTED ONTO A 3mm EXTERIOR GRADE PLY. 3. YOU WILL NEED FOR THESE 1 x 3mm EXTERIOR GRADE PLY BOARD MEASURING 5ft 1/4in LONG x 4 3/8in DEPTH. 4. PLUS TWO MORE 3mm EXTERIOR GRADE PLY BOARDS EACH MEASURING 2ft 6in x 4 3/8in DEPTH FOR THE SCENERY END BOARDS.

PECO SETRACK AND SETRACK POINTS REQUIRED TO COMPLETE THE GRAHAM FARISH MAGNUM LAYOUT PLAN No. 9702 ARE LISTED BELOW. . . .

NOTE: TO ALL GRAHAM FARISH CUSTOMERS:
WHILST ALL GRAHAM FARISH TRAINSETS INCLUDE RECOMMENDED PECO SETRACK, WE ARE NOT RETAIL STOCKISTS OF PECO SETRACK.
ALL PECO SETRACK AND FLEXITRACK AND POINTS MUST BE PURCHASED FROM YOU LOCAL MODEL SHOP OR FROM PECO LTD., BEER, SEATON, DEVON EX12 3NA

PECO SETRACK PURCHASING LIST: EITHER: SETRACK		FOR MAGNUM LAYOUT DESCRIPTION	OR: IF USING FLEXITRACK	OWNERS OF GRAHAM FARISH SIZE 1 TRAINSETS ALREADY HAVE:	OWNERS OF GRAHAM FARISH SIZE 2 TRAINSETS ALREADY HAVE:	OWNERS OF GRAHAM FARISH SIZE 3 TRAINSETS ALREADY HAVE:
ST1	7	PECO STANDARD STRAIGHT			2	
ST2	4	PECO SHORT STRAIGHT				
ST3	7	PECO STANDARD CURVE				
ST5	5	PECO RIGHT HAND POINT	5			1
ST6	7	PECO LEFT HAND POINT	7			1
ST11	30	PECO DOUBLE STRAIGHT				8
ST12	12	PECO DOUBLE CURVE		8	8	7
SL300		PECO FLEXIBLE TRACK (YARD LENGTHS)	10 YARDS			
SL311	8	PECO INSULATED FISHPLATE	(1 PKT)			
SL310		PECO METAL FISHPLATE	(2 PKTS)			
SL14	1	PECO TRACK PINS (PACKET)	(1 PKT)			
FA0039	4	GRAHAM FARISH PAIRS OF WIRED FISHPLATES	4			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Scenecraft full colour layout plan No. 8702
SCENECRAFT
GRAHAM FARISH

NOTES ON

CATALOGUE No. FA 0201

GRAHAM FARISH POWERBOX 300 240v AC MAINS TRANSFORMER AND 12v HAND HELD CONTROLLER FOR USE WITH N GAUGE SCALE MODELS ONLY

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CATALOGUE No. FA 0201

TESTED AND APPROVED TO COMPLY WITH EMC DIRECTIVE 89/336/EEC (EN55014:1993) AND LVD 73/ 23/EEC

DESCRIPTION

THE POWERBOX TRANSFORMER

This is the 240 volt AC Mains Transformer.
It is a modern (3 pin) wall mounted type transformer ready to plug into a conventional 13 amp socket. (U.K. Type)
It features overload, thermal and short circuit protection.

THE 3 METRE TWIN CABLE

The Transformer (above) outputs a nominal 14 volt DC.
to the Hand Held Controller through this 3 metre Twin Cable.
WARNING: Do not tamper, cut, damage or alter this cable in any way or you will invalidate your Guarantee.

THE HAND HELD CONTROLLER

The Hand Held Controller accepts a nominal 14 volt DC input from the Transformer via the Twin Cable above.
The CONTROL KNOB (1) regulates the SPEED of the Locomotive.
(Technically, the Control Knob instructs the Controller to output a variable 1.25 volts [i.e. DEAD SLOW SPEED] increasing, as the Knob is gradually turned, all the way up to 12 volt DC maximum output. [i.e. TOP SPEED]).
The SWITCH (2) controls the current polarity. (i.e. FORWARD AND REVERSE.)

SAFETY FEATURE
The Hand Held Controller should feel pleasantly warm when in normal use.
If there is a derailment, or any metal object is left lying across the track, this will cause a short circuit. Whilst this does no damage to the Locomotives or the Controller, it WILL gradually cause the Hand Held Controller to heat up to "Hot Water Bottle" temperature, if the fault remains unnoticed for some time.
This condition is not dangerous, but obviously undesirable, and should therefore be avoided.

AUTOMATIC SAFETY SHUTDOWN
When the higher temperature is reached, an Automatic Thermal Shutdown device cuts in and switches off the power to the track. Power cannot then be restored to the track until the original cause of the short circuit is removed. Once this is done, the thermal device immediately resets itself automatically, and power is again restored to the track.

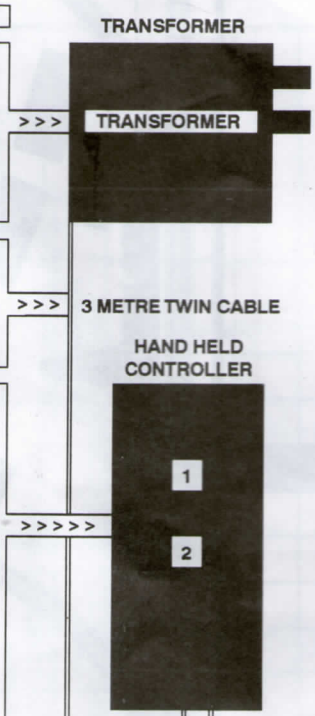
ENCOURAGE A GOOD SAFETY HABIT!
NEVER LEAVE THE LAYOUT ROOM WITHOUT CHECKING THAT THE POWER IS OFF AT THE MAINS SOCKET.

3 METRE TWIN CABLE

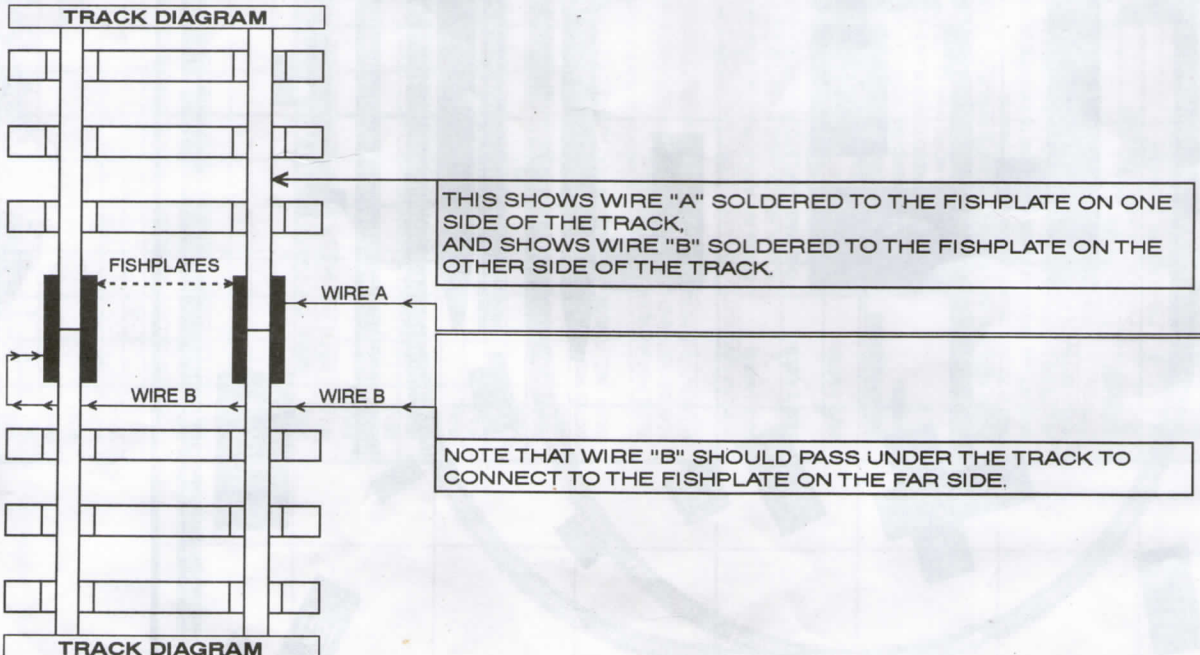
The second 3 metre twin cable coming from the Hand Held controller, carries the 12 volt DC Power Supply to the track itself.

NOTE: Purchasers of the individual Catalogue No. FA 0201 only, will find that the two ends of the power-to-track Twin Cable are fitted with metal fishplates already soldered on ready for use.

NOTE: Owners of TRAINSET Sizes 1, 2 or 3 will find that the two ends of the power-to-track Twin Cable are already soldered to the metal fishplates of one section of fixed Curved Track- so that it is ready for immediate use. Just fit the sections together and plug in!



TRACK DIAGRAM

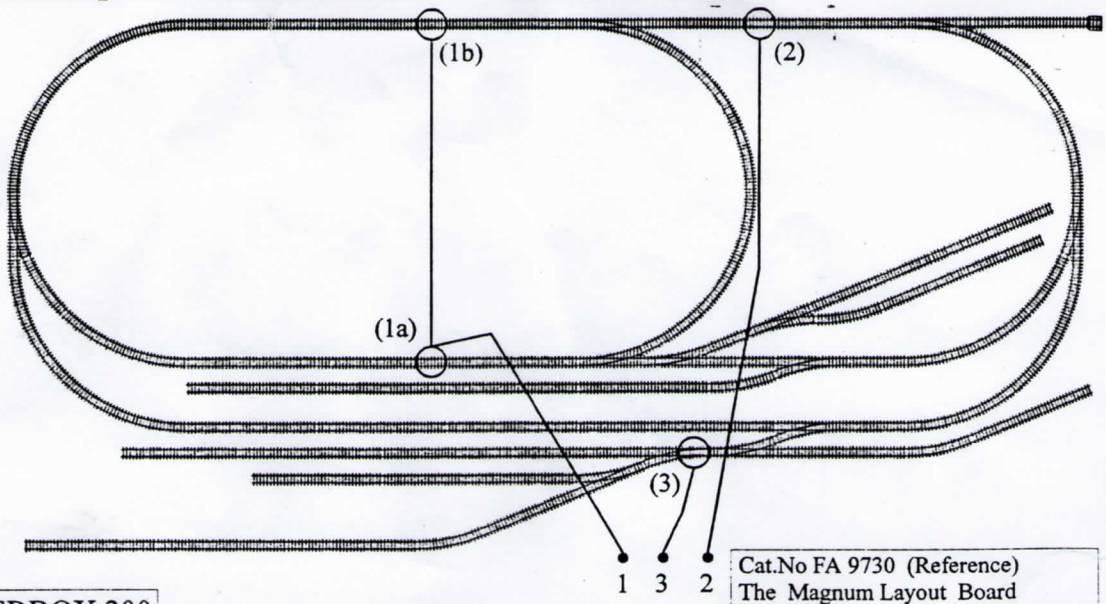


TRACK DIAGRAM
(NOT TO SCALE)

SEPTEMBER 1995

Magnum Layout Connection Examples

Cat.No FA 9702 (Reference)
Magnum Layout Plan ONLY
This just shows where power connection points should be positioned.



Cat.No FA 9730 (Reference)
The Magnum Layout Board
Note:Each pair of wires is numbered to correspond with the plan above.
A 2 way Junction Box is fitted as shown to each Cat. No 9730 Magnum Layout Board.

Other than this, Junction Boxes can be purchased at any good DIY Store.

Note: The Cat.No.0201 POWERBOX 300 Transformer/Controllers recommended are NOT included in any Example shown.

EXAMPLE 1
Using ONE POWERBOX 300 Controller allows the whole track layout to be operated by just one controller.

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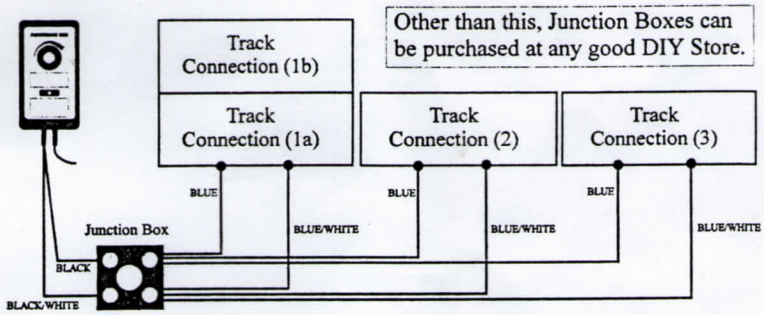

EXAMPLE 2
Using TWO POWERBOX 300 Controllers allows one Controller to control Sector 1 and the other to control Sectors 2 & 3.

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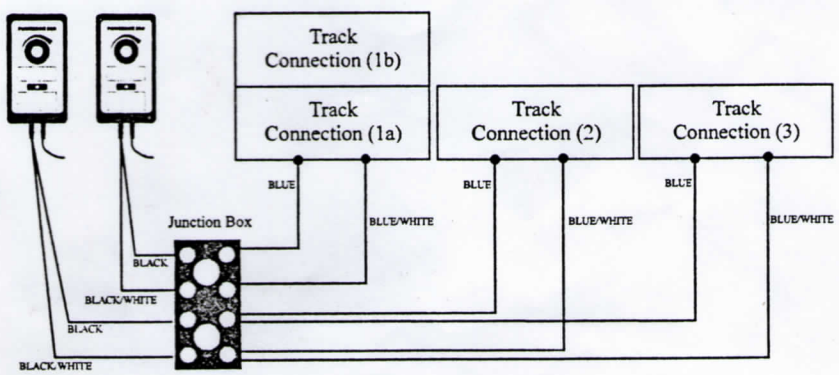

EXAMPLE 3
Using THREE POWERBOX 300 Controllers allows individual control of each of the three track sectors..

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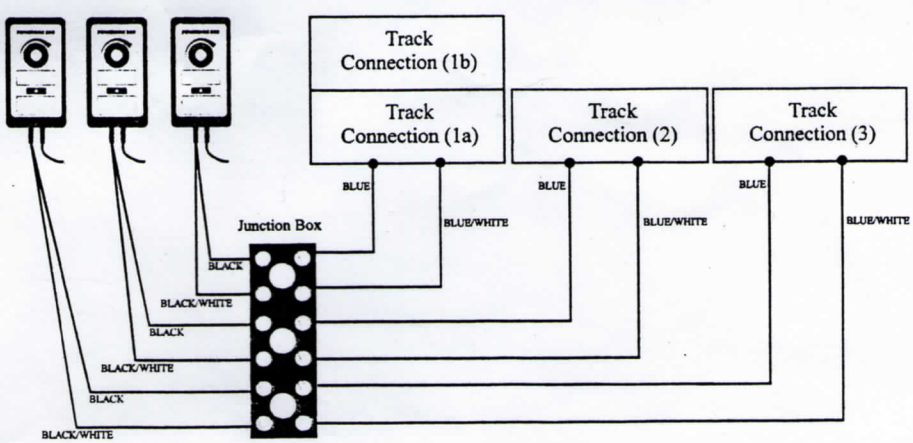
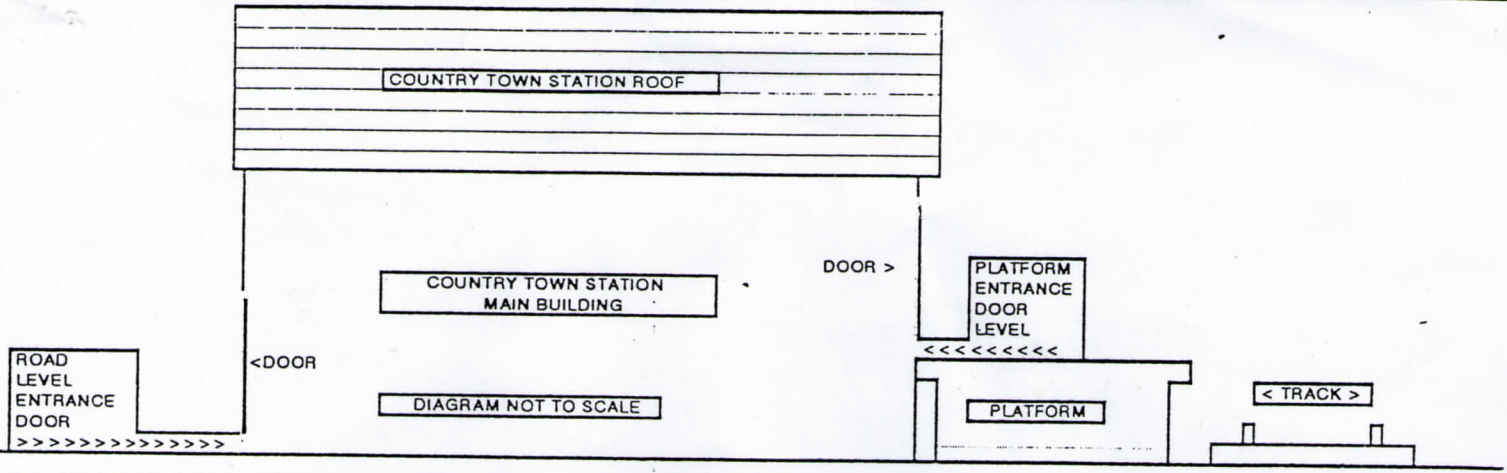


CAT.No9505. SCENECRAFT COUNTRY TOWN STATION – ASSEMBLY VARIATION WHEN IT IS TO BE BUILT IN CONJUNCTION WITH A PLATFORM.



COUNTRY TOWN STATION ASSEMBLY NOTE: The sticky backed printed cards for the Country Town Station are arranged so that the entrance doors at each end of the building are at road level in the standard format.
HOWEVER: If you wish to place a platform along one end of this building, (as is necessary for the Magnum Layout Plan No.9702), this will of course obstruct that entrance. The diagram above shows, that all you need to do is to cut down the height of the printed card of the Main Building (at the platform end of the building) so that the bottom of the entrance door is then level with the top of the platform. We recommend that you try this out for positioning before you cut the card or peel off the backing paper. This suggests that there is probably an imaginery set of steps inside the Booking Hall – thus making good sense of this interesting but simple and realistic modification.