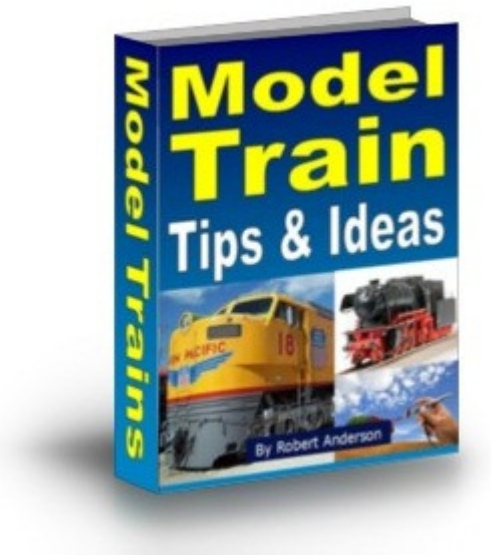
Model Train Tips & Ideas



By Robert Anderson

FREE TO GIVE AWAY AND SHARE

Unlike most "paid-for" ebooks, this one is free for you to give away and share. You can email it to a friend, or even include it on your web site (if you have one). The only restriction is that it cannot be altered in any way, or sold.

© Copyright 2013 Market Leaders Ebooks. All Rights Reserved

Creating a model railroad layout is an amazing and interesting hobby. It’s an activity that requires several carefully planned steps, and plenty of work along the way. Of course, for those of us who love model trains, it’s not work at all, it’s our passion. This is a hobby that appeals to the “engineer” in us.

The most important part of building a model railroad layout is the planning. Planning should include not only the layout of the track and the scenery, but your own personal needs as well.

Let's start with some questions. Firstly, how much time will you dedicate weekly to your hobby? Like any good engineering project, great layouts are not built in a weekend or two. If you want to really create an amazing little world, you’re going to have to dedicate some time to it. You’re also going to need to have patience, as it may take some time to have a functional track.

If you live with someone, or have a family, you should also consider trying to get them interested. A lot of husband/wife, father/son teams work on layouts together.

Be patient if you are working with children. They might be enthusiastic at first, but will want to see the train run as soon as possible. Their patience, objectives, quality standards etc may be different to what you want.

Another matter to consider is money. Building a layout doesn't necessarily need to be as expensive as some people think. It really depends on what you want as an end result. However, the hobby is not expensive if it becomes your passion and lifelong pastime. Compare it to some other hobbies or pastimes like: smoking, drinking, playing console video games (they can get expensive), golf, and skiing. And of course, it also depends on how far you want to go or how much you want (or can) spend.

Finally, another thing to consider is space and location. Is the layout going to be permanent or temporary? It is definitely worth investing more money, time, and trouble in a permant layout than a train set that might only last a season. House space and family needs have to be considered for this decision.

Whatever you decide, you’ll find that the work involved is fun and entertaining, and more than worth the result when your family finally sees the train make its first run.

Observation Is An Important Key To Creating Realistic Scenery

I have a friend who is a Police Detective and he notices everything. He has a natural (or learned) ability to observe and remember the smallest details. Many landscape artists and photographers have a similar ability to notice details.

So, what's this got to do with building a model train layout? The answer is simple. When you are creating the layout scenery you have to consider EVERY aspect of it. You need to think about colors, perspective, textures, and positioning of the buildings, structures, and vegetation relative to the surroundings.

My Gran always taught me to look up when walking and not to just stare at the ground. I guess she was not only teaching me about good posture, but also the powers of observation.

The difference between a realistic looking model train layout and fake looking one, is usually in the detail. Some model railway layouts have unrealistic color schemes or things out of proportion; and unfortunately the eye is drawn to anything that looks "out of place" or appears unnatural. The casual observer might not know exactly what the problem is, but just that something doesn't look right. Unfortunately, just one little thing out of character (or out of place) can ruin the whole look.

So, I would advise anyone building a layout to try to observe things around them, just as a landscape artist, photographer, or even a Police Detective might.

- When you are out and about have a good look at the color and patterns of the area you are in.
- Look carefully at the materials used for fencing and gates, the color and texture of trees and hedges, the height and condition of brick walls, the details and design of buildings, and the advertising posters or graffiti.
- Also observe the positioning of telegraph poles, street light, pillar boxes, mobile phone towers, masts and TV aerials.
- Study the road markings, signs of road works, pot holes, cracks, drains, location of car parks, vehicles, people, construction sites, and the types and conditions of roofing, doors, windows, guttering and cladding on houses.
- Have a look at the colors in gardens, and the color of lawns and crops in the fields.

I could go on forever. I think you get the point I'm making; be observant and spot the detail.

Sometimes it pays to make notes or take photos, but over time your brain will start to do that for you. You'll get better and better at it.

Before you model a piece of landscape think about what we've just discussed. Think about the time of day, or time of year being modeled, and how this might affect colors and textures. Consider what materials would be best to use; could you buy items from a manufacturer's range, or maybe create (or scratch build) your own?

If you are modeling a building for your model train layout, think about where it is and what the neighboring structures or landscape would look like. What condition would

the building be in, and has it undergone a change of use of the years? Should there be outbuildings in a back yard and what would they be used for? You see; it's not just a case of "plonking" a building on a layout in isolation. You need to think about it in relation to its surroundings, age, condition, and purpose.

I hope this will help you to see things in a different way and appreciate why things look the way they do. This is not a perfect world and model railroad scenery shouldn't look too perfect either. If the layout looks like it just came out of a package you bought, then it won't look natural to the casual observer. Not everything should look old and used, just as not everything should brand new. It is a case of striking the right balance if you are to create the perfect model train layout scenery.

I hope this will help you to see things in a different way and appreciate why things look the way they do. This is not a perfect world and model railroad scenery shouldn't look too perfect either. If the layout looks like it just came out of a package you bought, then it won't look natural to the casual observer. Not everything should look old and used, just as not everything should brand new. It is a case of striking the right balance if you are to create the perfect model train layout scenery.

Brian Miller has some great scenery tips on his website
http://www.modelrailwayscenery.org/scenery1.html

Here's a small sample of some of the many tips from the Model Train Club http://www.modeltrainclub.org/club.html to help with the planning stage of your layout.

Artist Gouache

Have a go using Gouache (a water mixable oil color available from art stores) for adding a pitting or streaking appearance to freight cars. Use a very fine artist brush to put a small dot of Gouache on the spot where you want to add a rust pit that has streaked down the side of the freight car. Let the Gouache start to dry. Then dip a wider brush in water (or Micro Sol Decal Set) and then pull the brush gently downwards from the dot. This will create a streak.

You can also use Gouache (also spelled Guache) to create much thin washes of rust or dirt. Try using white gouache to give a bleeding white effect on wagons.

Another idea is to prepare a thin Gouache wash. Apply the color to the car so it is is wet. Then sprinkle a little salt (kitchen table salt) on the surface. Wait for it to dry, then rub the salt away with your fingers. Then touch up the car with dabs of gouache to finish off the pitting. Always test new techniques on an old car first. You wouldn't want to make an mistakes with one of your best cars.

Airbrushing

Airbrushing can add amazing realism and special effects to any model railroad layout. An airbrush can be used for all sorts of projects from weathering buildings, adding subtle effects to landscapes and backdrops, through to adding realism to advertising signs and rolling stock.

Airbrushing is a skill that takes time and practice to master, but when done well, results in a very good finish. However, don’t expect to get a good finish first time... it takes practice.

Many airbrush artists create works that are so sharp in detail, so lifelike as to mimic the real thing. An airbrush can also be used to get the opposite effect of feather-edged, cloud-like softness... the type of subtlety that couldn't be achieved with a paintbrush. So, whether it is detail, from fine lines to wispy, or mere suggestions of color, an airbrush is a versatile tools to use on any model railroad layout.

I've done and still do some custom paint work and an airbrush can be a true gift if used properly. It can also be a curse if you think you can pick it up and use it like a spray can or brush. The angle you spray at before, during and after passing over the object being painted is important.

Also the paint thinning and proper air pressure are of high importance. This is because if you don't have an n-scale locomotive body secured properly it can be all kinds of fun chasing it around the paint booth to put the paint on, or having to completely start over, because it flipped over and messed up your paint job. Just some thoughts from learning trials.

Airbrushing is a lot of fun and can take some time to master, but the results can be

very impressive and rewarding. Airbrushing techniques can be effective on cars, structures, scenery and even backdrops.

Weathering Level Crossings

Weathering, is basically the art of taking something new and making it look like something old. It could be locomotive, caboose, a building, a bridge, a tunnel, a road, a fence, or any element of scenery for that matter. Almost anything ages and changes over time.

Model Railroad level crossings definitely look too clean when taken out of the packaging. However, sometimes level crossings on model railway layouts also give the appearance of being "over weathered". So what is the answer?

Try to apply a small amount of dark wash (a watered down black) only to the hinge and connecting rod areas of the gates. On a prototype railway level crossing they are the parts that are greased regularly and so it be right to assume that they would generally appear greasy.

Over weathering can make the gates look simply "grimy" and "uncared for". This also can be a pleasing effect in older freight yards etc.

Weathering Tip For Smokers

A weathering tip from a club member - “I use a gondola, or a open hopper, for an ashtray for a couple of weeks. It will age it and make it look used.”

Add Mud

Splattered mud is easily simulated with an old toothbrush. Dip the brush in dilute (preferably water based) paint and flick splattered "mud" (paint) on to the model. If you are weathering a freight car, work from the underside as mud splashes up from below. It can be messy so be sure to wear old clothes.

Painting Small Parts

Here is an idea from another club member. Working in a small scale (n scale) requires a steady hand, particularly when painting small plastic parts or details on structures or vehicles. I have found that using your typical rubber molding compound as a masking agent can make this work much easier. I have a number of the Woodland Scenics structures that, if painted in two or three tones (broad colors for the overall structure with detail painting for windows, doors, trim work, etc.) can be very difficult whether you have a steady hand or not.

I paint the detail work first (window sills, frames, doorways) and then come back and carefully apply a heavy coat (or two) of the molding compound directly on the painted surfaces after it has dried over night. Then, after the rubber molding compound has dried (a few hours), I can spray paint the larger areas for a nice, uniform surface.

After this second layer of paint has dried well (over night is best), I pick at the edge of the window sill areas or whatever with a toothpick worrk the rubber compound free of the model. Using my fingernails or a pair of tweezers, I find the hardened rubber pulls away very easily from the model.

You may find that some small areas require touch up repainting where the rubber molding compound was applied too generously but if you were careful, these areas are few. It takes a little practice but I have found this technique works best because I have found without it, the two (or three) different colors tend to smear into one another as one dissolves the adjacent color(s). This tip works for any scale (obviously) and only on plastic. It MIGHT work on other surfaces like cardboard or paper but I have never tried it.

Also note; the rubber molding compound can be used to mask off parts of you models that are clear plastic such as windows or canopies. If you have a model structure already built up with its windows installed but you wish to paint it another color overall, just coat the windows first with the rubber compound. Once the compound is dry, you can spray paint the whole thing without worrying about getting paint on the window. Just remember to cover the inside of the windows so they don't get accidentally coated. I usually just stuff paper towels inside before painting to prevent this from happening.

Drains and Manhole Covers

When you look observantly around streets you notice a an assortment of manhole covers and drain grates. There are probably more than you thought there would be - they seem to be everywhere. The surprising thing is that few in the hobby include them on their layouts.

You can buy them and they are relatively inexpensive. As an example; Langley Models sell various drain road manhole covers, grates and inspection chamber covers. They are brass (so are strong), and there are several on a sheet, and they are easy to paint. Durango Press also make some, and you can even buy cheaper self adhesive types.

The brass type is easy to fix in place. I paint the manhole covers first (neutral gray) and then glue them in place. For drain covers, I carve or drill out a small hollow a fraction smaller than the size of the drain cover. It only needs to be about 1mm deep. I paint the inside of the hollow black and then glue the drain cover in place. Avoid getting the glue stuck between the slots in the drain cover.

Using Real Ash In A Loco Shed

The more real (as opposed to artifically manufactured) materials you use in your scenery making the better. I like to use real coal lumps in my steam locomotive tender. It looks very authenic because it is.

For the same reason, I use real coal ash in my loco shed. If you have walked around a real railway loco shed will have noticed the black, gritty, often greasy, compacted surface underfoot. It is usually a mix of loco ash and coal dust.

Now, what I am about to suggest is a messy procedure, so be warned. Ash is messy, dirty stuff to work with.

I'll try and explain this step by step for you:

1. Get some coal ash from an old firebox. Make sure its thoroughly dry and then grind it to a powder using a mortar and pestle. Don't use the kitchen mixer as you'll be in trouble. Just do a little at a time (maybe a teaspoon full). This cannot be rushed and is a slow messy job. When finished, pass the powdered ash mixture through a "fine mesh" kitchen sieve to remove any remaining lumps.

2. Now you are ready to prepare your loco yard area. Start by building up any gaps (using a light-weight filler) between the sleepers and tracks. Aim for a smooth but slightly uneven undulating finish. You then paint everything using a dirty matt black color. Make sure you immediately clean off any wet paint you get on the rails. Leave the painted surfaces to dry.

3. Start applying the PVA glue at one end of your yard. Just cover a small area (maybe 5" - 6" square) between two of the tracks. You then carefully sprinkle the powdered ash (don't sneeze!) sparingly. Make sure you stopp before reaching the edge of the glue. The next thing is to extend the glue area and sprinkle more ash, and then do another area. After you have finished working on the areas between the tracks, you can repeat the process in the areas between the rails. Be careful not to get glue near the moving parts of points or on the inside faces of any rails. Once again, leave this to thoroughly dry before vacuuming away any unwanted ash.

4. I use an airbrush with a mixture of dishwashing detergent and water to damp down the entire area. Don't be too heavy handed, as you just want to apply enough to darken the coal ash. Also, take care not to blow loose ash around as an airbrush blows and a vaccum sucks. Then airbrush it again while its still dampish. This time spray on some matt finish adhesive (such as Woodland Scenic white adhesive). If you want a matt gritty finish then only apply a little glue. I prefer at smoother, slightly oily look, so I spray on a thick saturation of glue. I think this appears more realistic. Wait for it to dry and then you can check to see how secure the ash is holding. If it comes off you'll need to repeat the process until it stays in place.

5 Adding small piles of firebox ash will also add realism. The simple way to do this is to make the piles using a mix of ballast held together with PVA glue. After these are dry, you can then give them a coat of PVA, and then repeat the process to apply the ash as explained in steps 3 and 4.

Careful Planning Is Critical to Avoid Problems Later

Model railroading is a fun and exciting hobby, because it involves so many different skills. You will get to work with your hands, work solving problems with your mind, and apply your imagination creating something uniquely your own. The hobby is creative, practical and mentally stimulating.

The hobby has been described as "the worlds greatest hobby" (and I agree), because it involves everything from: carpentry to electronics, model building, painting, engineering and even historical research planning your layout.

Get started by collecting images of model railroads and real railroads and other scenes that you like. What type of scene involving trains interests you most: the wild west - maybe British trains from the 1930's, a WWII scene, a mining town, a modern container port, a scenic railroad through valleys and mountains, commuter trains? There are so many different possibilities.

The important thing is to make the concept decisions before you get started. Decide and era and location you want to model and focus on replicating it in everything you buy or build.

Think carefully when planning construction of your model train layout. Stop, and think before you rush in doing something you might later regret. Many model railroaders begin with the urge to see model trains running as soon as possible, and rush in to construct the first type of layout that occurs to them.

Trouble is; they find out too late that they have committed themselves to a design which is not going to be of long term interest. Worse still, they discover halfway through construction that they would have been better off to have adopted a different plan, even to have constructed a different railroad altogether.

The best and most satisfying layouts are almost always the result of a considerable amount of planning. This can appear frustrating at first, however most model railroaders soon discover that planning and research can be a lot of fun. It is usually well worth the time and effort involved in getting things right from day one.

It is almost impossible for even the largest model railroad setup to model an entire line. Most, if not all, interesting lines would 'go off' somewhere to connect with the rest of the system.

Even a very large model train layout must compromise, with the need to 'disappear' off the edge of the recreated world. That is why many layouts simply model a stretch of line with the 'rest of the world' at both ends. This type of layout can be made to look very realistic.

You may want to build a specialist layout with one major source of traffic, for example a steel mill, brewery or saw mill. In this case, you most definitely need to study the subject in order to model it correctly. If you love the subject, this is the sort of train layout you should consider building.

You may prefer to construct a more generalist layout where almost anything goes. A sea port for example could realistically be expected to send and receive almost all kinds of freight cars. A generalist model train layout allows for flexibility which for many railroaders is a good reason to choose this kind of layout.

Whatever you decide, think carefully before you get started. It is well worth the effort and a way to avid frustration later.

MORE TIPS:

Foam Brushes

Here is a tip from another club member.

http://www.modeltrainclub.org/club.html

I have just started using foam paint brushes as parts holders (specifically N gauge rolling stock & locomotive bodies) when spray painting. You can find these types of brushes in craft and hardware stores here in the States and they are very inexpensive. If you purchase the foam brushes that are about 3" wide (or wider), you can rest the car body shell over the brush. The foam is springy enough to hold the shell steady and the wooden handle acts as a nice grip, keeping the spray paint from your hands and fingers. Once I finish painting, I stick the wooden handle into a piece of Styrofoam or in a card board box to let the paint dry. This can also be used for just about any other hollow object that needs painting (regardless of the scale) but I use it primarily for N gauge.

How To Use A Craft Knife

Here's something I discovered the hard way.

A craft knife (with snap-off blades), a Stanley knife, or a scalpel is a very useful tool for anyone doing hobby work. These tools are great for giving a clean cut through cardboard, balsa wood, polystyrene etc. However be very careful, because they are also very efficient at cutting through flesh (as I found out). That's why surgeons use scalpels in operations!

I have found from experience it is best to make several cuts along the same line using light to medium pressure on the knife rather than pressing down hard on the knife to make one deep cut. The knife (or your grip) is more likely to slip under pressure and result in a serious cut to a finger (or damage to the object you are cutting). So, try using several light cuts - it may take a bit longer, but you'll be more likely to finish with the same number of fingers.

When cutting a straight line is also a good idea to use with a metal ruler rather than a less sturdy plastic ruler. Some metal rulers come with an integral finger guard.

Only ever use sharp blades. A dull blade is more likely to snag, you apply more pressure and it suddenly gives, ending up cutting something you didn't want to - like your hand.

Also, apart from keeping the craft knife in a safe/secure place, make sure the blade is safely retracted after use.

Many in the hobby prefer using a Stanley knife as they are more sturdy than the snap-off blade types. However, they are a little more bulky so it depends on the type of project you are working on, or what you prefer using. Whatever you choose be careful!

Making Trees

There are many different ways to make trees. A plant know as "Sea Foam" has great potential to make delicate, realistic looking trees. Depending on where you live it could be sold under a variety of different names. I've even heard it called ‘forest in a box’. Ask at model railroad shops and hobby suppliers.

Sea Foam on its own looks like small scale trees, but looks a little artificial and boring without some work. It tends to come slightly curved, so some manipulation will be required to get a proper tree shape. Try assembling a tree from various sprigs of Sea Foam rather than using just one piece. Use a larger piece as the main trunk and to which you will add sprigs for branches.

When joining pieces of Sea Foam together, you may need to strengthen the joints with fine brass wire. To add a greater girth to the bottom of the trunk wind a few pieces of irregularly torn masking tape around the trunk and seal it in with a mixture of wall filler and white glue.

When you've finished creating the basic tree skeleton, give it a quick spray with a dark greeny-grey/brown color aerosol paint. When the paint has completely dried, the foliage can be added by spraying the skeleton with spray adhesive or hairspray. The skeleton can then be dipped into fine ground scenic foam of the color of your choice. Alternatively you can apply foliage matting (like from Woodland Scenics) to the tree skeleton.

Scale Leaves

Another low cost idea is to use dried kitchen herbs for creating scale leaves. Different herbs and combinations of herbs create different effects. Dried herbs like Oregano, Thyme, and Parsley can be easily glued to the Sea Foam branches with spray adhesive. Put some old newspapers under the branches when you sprinkle the herbs over the tree foam. This way you can catch any herbs that don't stick and reuse them on other branches.

After giving the tree skeletons a thorough coating of the herbs give them a coat of matt Varnish. The matt varnish will help seal the herbs and remove the stickiness of the spray adhesive. The trees can then be left overnight to dry.

After the trees are fully dry, some modelers then like to apply a coating of a white PVA wood glue/water mix by using a spray bottle. This can be done by hanging the trees upside down on some string and again left to dry over night.

Planting Trees

If possible, plant the trees on the layout permanently. A couple of suggestions:

1.Use a small length of brass rod (1mm would do) which is glued into the base of the trunk and a small hole pre-drilled in the ground.

2. Or you could simply drill a small hole in the baseboard and then fill it with glue. The trees can then be inserted and the glue left to dry.

Note: Although Sea Foam is reasonably delicate, it is strengthened by the various coatings that are applied. The trees should be sufficiently flexible to withstand the odd brush with a careless hand or wrist. Also note, that some dried herbs can go brown over time, so you may want to add some green paint to the trees.

Using Lichen

Lichen is one of the easiest and most realistic materials to use in making small scale trees and shrubs on model railroads, or other hobby scenery. Lichen is ideal when mass foliage or quick and inexpensive greenery is needed.

Woodland Scenic is one brand with a range of Lichen products suitable for trees, foliage, small bushes and hedges on a model railroad layout.

As far as I know the Woodland Scenic Lichen products have been treated with preservative additives that make them nonflammable, nontoxic and hygroscopic. It does not dry out unless the relative humidity drops below 37%, and will soften again when the relative humidity rises above 37%.

Use Lichen to make trees, shrubs, bushes, vines, undergrowth and forests. This natural product blends in a limitless variety of colors and textures when combined with the turf and foliage line.

It comes in a range of colors including Fall (Autumn) tones. One popular shade is Spring Green -is a yellowish-green color with realistic-looking V-shaped pine needles.

Lichen makes it easy to produce realistic scenery whether you're a beginner or advanced modeler. This product is easy to use and virtually foolproof. With most brands, instructions and tips are printed on the back of the package.

Deciding a Track Plan Before Building Your Model Railroad Layout

When planning construction of a model railroad there are all sorts of possible track configurations and plans to consider. It really depends on the space you have at your disposal and what type of train operation you would most enjoy.

Real railroads (prototype) run from one destination to another rather than go around in a circle. In reality, real railroads usually have hundreds, if not thousands, of miles of track to work with. Even in a scaled down form, most model railroads lack the space to fully replicate this, so a degree of adaptation and compromise is usually required.

Full size trains often run for long stretches over monotonous landscape, which if reconstructed on a model layout, would be rather boring. To give you an example, the Ghan Train in Australia, runs 1,880 miles across mostly barren desert. Imagine replicating that on a scaled down model railroad - it would probably stretch from one end of town to the other!

The main line begins at one point, and travels to another point, and stops, hence the term - a point to point railroad.

Although a point-to-point layout is necessary on real railroads, the format is not generally practical for the average home (or club) model train layout. Replicating the scale mileage of a true point-to-point railroad does not generally work that well.

To make things a little more practical (and interesting), prototype railroads have branch lines, sidings and other subsidiary systems. Adding these to a model layout can be a good idea.

Before departure, the trains are turned around at terminals using yards, loops, wyes, and turntables. A single or double-track main line usually stretches from point to point.

When planning your point-to-point layout, you might want to include switches and yards at one end of the layout, and a turnaround at the other.

Most small layouts would not have enough space for two terminals, so use an "out-and-home" track configuration. An out-and-home layout accommodates only one terminal and is like a point-to-point layout double backing. The train journey would start at the terminal and it would pass through various landscapes, possibly a small town, and eventually arrive back at the same terminal.

Some might say it is cheating, but unless you have unlimited space (and money) for your layout, a little compromise is usually required.

Constructing an out-and-home layout usually enables a little more mileage between terminals. The train will still arrive back at the terminal in a reasonably short space of time.

You could add more realism and interest by combining an out-and-home, and point-

to-point, format with continuous pikes. You would need a fair amount of space though.

Many model railroaders prefer a continuous layout because it allows for varied train movements which make operation more interesting.

Whatever track plan you decide, the important thing is to have fun.

MORE TIPS:

Using Masking Tape

Masking tape is one of my best friends. I find its really good for putting small parts on so that they don't roll off the work bench. I also use it when cutting small pieces of wood when scratch building. I stick the wood to some masking tape before I cut it. I find the back of the wood doesn't splinter when I cut through. I then remove the masking tape.

Paint Finish

If you haven't got an airbrush you will probably use brushes to apply paint, but they can leave brush strokes. To get a really smooth surface you might need to apply several coats and use fine wet/dry sandpaper between coats. Also consider thinning the paint slightly between each coat and use a finer grade of sandpaper as you come to the end of the process. You might also use rubbing compounds on some jobs.

Thinners

I use white spirit instead for those expensive thinners from art shops. Each time when washing brushes I keep the dirty old used thinner and pour it in an old jar. After a while the paint sinks to the bottom of the jar and the thinner is relatively clear again. I reuse it.

Add Movement

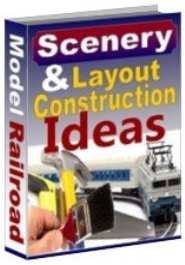
From my days in the retail trade we like to add movement to our window displays to attract interest. A local retired electrician use to wire up little electric motors to make things move. I have used the same idea on my railroad. I have a little figurine of a man with a chain saw cutting through a log and a boat in the water rocking gently. It only takes a little electric or battery motor mounted under the benchwork with the shaft of the motor attached to the the object that needs to move. You need to be a little ingenious, but the effect can be very interesting.

Disappearing Roads

A road disappearing into the distance can look impressive when done well. It can also look strange if it hits a wall and stops abruptly. To overcome this I bend the end of the roadway material up and twist it towards a point to the side. I then add some greenery on either side to hide it a little and give the appearance of the road weaving off into the distance.

The Model Train Club

The "Members Only" Model Train Club is a “work in progress” and includes sections on:



* scenery & layout construction ideas
* benchwork
* detailing and weathering
* locomotives
* maintenance and repairs
* train operation
* overcoming problems
* planning and design
* rolling stock
* scenery construction
* scratchbuilding and structures
* trackwork
* wiring and control
* DCC

http://www.modeltrainclub.org/club.html

After you join the Club you will be able to access a collection of step-by-step tutorials, how-to articles, photo galleries, plus lots of videos with clever ideas. You'll start off in month 1 at level #1, and get upgraded to higher levels (with access to more and more tutorials and resources) each month. You'll be amazed at what available instantly when you join. The club is a “work in progress” and new tutorials get added each month. The club already has members worldwide and will go from strength to strength.

There is even a member forum where you can chat, share ideas and ask the experts questions and ...

In month two, Model Train Club members can also access free historical railroad books, product reviews, and there are expert interviews, handy ideas and tips and answers to your model railroading questions and... much, much more!

When you join, the club will keep you up to date with every aspect of this fascinating hobby... and it's **ALL IN ONE PLACE!**

And, even better, exciting new content will be added each month.

The online Club will save you time and money in creating a model train layout you'll be supremely proud of... with all the help you'll need at your fingertips!

I know you are going to like it, so grab your train club access which at time of writing this included a free copy of the **Scenery & Layout Construction Ideas** e-book at

http://www.modeltrainclub.org/club.html

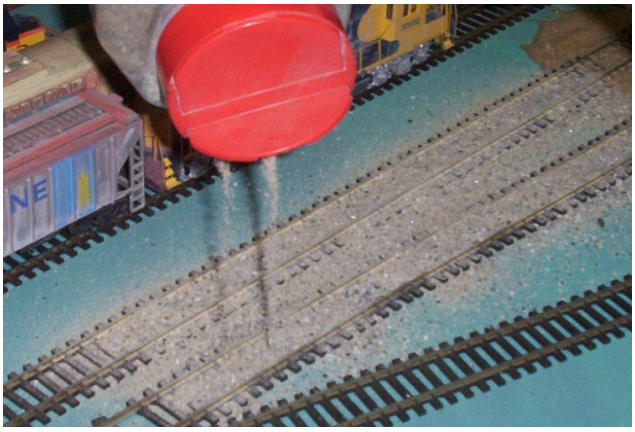
Back to some more tips from the club...

Masking Paint

Masking tape is great but paint can still bleed under it. To prevent this I paint the section I want to be masked off and leave it to thoroughly dry. I then mask the section I just painted and spray the rest of the model the original color again. The second spray of the original color should fill any holes where the second color overran. You then leave it to dry again before you respray your second color. There should be very little if any overrun this time. I know that sounds complicated but its not.

Ballasting

Train track is no doubt the most important feature of any model railroad layout, because without track, the trains would have nothing to run on. You could just attach the track to the baseboard, but to replicate a real railroad requires track ballasting.



Fortunately there are several good ballasting products available in hobby shops, specialist model train stores and online. However, if you have a large layout, buying these can be expensive. There are some cheaper options like masonry sand, but you need to use them with caution.

Masonry sand is generally sold to builders and is available from hardware stores in big twenty-five pound bags. You will be surprised how much you use when spreading it along the track of an average sized layout.

Be careful though, because some masonry sands do contain iron which could upset the electrical track current. Test the masonry sand for iron using a strong magnet. If any of the sand sticks to the magnet - do not buy it.

Masonry sand is generally available in fine through to course grading and comes in a range of pigments. You may want to mix colors for added effect. Another option is to use the masonry sand (which is inexpensive) as a base coat and apply the regular model railroading ballast (more expensive) on top.

Always ensure the electrics are in place and that the rail joiners are tight fitting before you begin to ballast any track. If you forget to do this, you could have problems on sections of track. And, take care not to do any damage when applying the ballast. It can be very frustrating when your trains do not work properly and you cannot locate the problem.

It is well worth taking your time and getting it right first time. To ensure a good clean finish, you may want to inspect the ballasting after the adhesive has dried. You may want to fill in some gaps and do some touch-up work.

After everything is dry you could add more realism to the ballasting - like oil marks, dirt and grime where trains have passed over the track. An airbrush is an ideal tool for doing this.

The important thing is to vary the airbrushing effect. Some locomotives will have stood for some time in one spot and dripped oil. Grease and grime would accumulate in different areas over time and in different amounts, so do not be too consistent with the effect.

You can use different colors in an airbrush and build up layers as you go. Use a

heavier application of color where the most grime would accumulate.

As I said earlier; use a blend of several ballast colors rather than just plain gray. It will add a more authentic look to the layout. If you are buying the proper model railroading ballast from a hobby store, select the coarse stuff for O scale, the medium for HO/OO and the fine grade for N scale. Remember you can mix the grades together if required.

After the paint from the airbrushed grease and grime effect has dried; you can then start to weather the rail faces with a rust colored paint. Wait for everything to thoroughly dry before running any trains or attempting to clean any track surfaces.

If you are interested in N scale then have a look at some of the excellent ideas on Tony Neilson's website http://www.ngaugelayouts.com/n-gauge-trains1.html

Sprinkling Ballasting

I use an old plastic salt shaker to sprinkle fine ballast. I have an old plastic parmesan cheese container that I use to sprinkle grass. I can adjust the pourer head from fine to course.

Ballast And Electrics Don't Mix

Ballasted track adds more scenic realism to a model train layout. However, you need to make sure that the electrics are all sorted out and that all the rail joiners are tight fitting before you start ballasting. Otherwise you may find that after you have ballasted your track, some sections of model train track won't work properly.

Make Culverts

To make realistic looking culvets try using drinking straws. Cut short pieces from the bendable sections of the plastic straws, paint them gray, to use as metal culvert drains.

Lights & Action

Put operating signals at crossings. Use either a set of crossing flashers or a flasher and drop-arm combo. Kids (and adults too) are mesmerized by these 'lights and action' items.

Other ideas like a working grain elevator, water tower, coal loaders, or a control towers help complete a scene. Be creative, but specific, with your scenery.

Buying A Locomotive

No one wants a locomotive that you have to push to get it going. You don't want one that suddenly speeds up and falls off he tracks. If you want your

train to run well, be prepared to pay good money for a good quality locomotive. Buy the best locomotive you can afford. Buy a high-performing

workhorse and it will pay for itself in no time with the pleasure it gives you over many years.

When buying a new or second hand model train locomotive always carefully check the wheels. When not connected to a gear, the locomotive wheels will move easily when prodded with a finger. The wheels on a locomotive may move just a little and then go stiff. If that happens it is usually an indication the wheels are connected to a gear. That’s a good sign.

Be careful to check the locomotives motor because it needs to be of good quality, to turn smoothly, using the least amount of electricity.

Point-to-Point Layout

Real railroads go from one place to another place rather than go around in a circle. Real railroads may have sidings, branch lines, and other subsidiary systems, but the main line starts at one point, travels to another point, and stops.

Although a point-to-point system works well on a real railroad, it's not generally very practical when applied to the average home or garage model railroad layout.

The problem is, that a limited space makes it difficult (if not impossible) to duplicate, in scale mileage, a point-to-point railroad.

On a point-to point layout the trains are turned around at terminals by means of extensive yards, wyes, loops, and turntables. It is usual for the single or double-track main line to go from point to point.

Point-to-point railroads have switches and yards at one end, and a turnaround of some sort at the other. However, most small model railroad layouts would lack the space to accomodate two terminals.

Out-and-Home Layout

Space limitations makes it difficult (if not impossible) for a small layout to duplicate, in scale mileage, a point-to-point railroad.

One solution is to have an out-and-home layout instead. An out-and-home layout has only one terminal which is basically a point-to-point system doubled back on itself.

The train leaves the terminal and travels through scenery, a town (or whatever) to arrive at a terminal. The terminal it arrives at, just happens to be the same terminal it started from.

When compared to a point-to-point layout, an out-and-home layout allows a little more mileage between terminals. The problem is that the train still arrives back home

in a relatively short time unless you have a reasonably large layout space.

In larger layouts, both point-to-point and out-and-home systems can be combined with continuous pikes, to offer variety and realism.

A continuous layout is usually the most practical option for most model railroads because it allows for interesting and varied train movements.

Removable Loads

Many of my wagons are removable. To make them I line the interior of each wagon with at least three layers of kitchen cling wrap. I then construct the load inside the cling wrap using a plaster mix, glue or whatever. I use painted matchsticks at different angles glued together with white wood glue as timber. I pour plaster when making coal and then paint it black. Before it dries I add some real crushed coal on the top. I also hide a little bit of wire or the end of a paper clip (painted black) in the mix. After everything is dry I can hook the load out by the paper clip as the cling wrap will allow some movement. I then remove the cling wrap and the load will easily fit back into the wagon. The little wire loop or paper-clip end is virtually impossible to spot.

Window From Lids

I have used the clear plastic lids on old yoghurt containers to make windows. I attach the windows in place using white glue and sometimes smear a little over the window to make them look dirty or less transparent. Cheap and easy.

Scrap Metal

I roll tin foil or old chocolate wrappers into small balls and then squeeze them into small cubes with some pliers. When grouped together they resemble scrap metal especially after I have painted them rusty colors.

Oil Tanks

I have used some old tins from the kitchen cupboard to make an oil tank depot. I found an old coffee tin and another one that contained drinking chocolate. They were the type that you press shut (not the ones you need a can opener for). I screwed the lids to the layout which meant I could easily remove the tanks at any time by just pulling them out from the lids (which stayed fixed to the layout base). I painted the tins and applied some graphics I printed out from the internet. However before I printed them out I used my computer graphics program to add a couple of ladders and some rivets to the design. They look very authentic.

Building Structures

Some people hate to waste money so one idea is to make those plastic kits go further. Sometimes you can assemble only the two sides of a building that can be seen from the front of the layout. Sometimes you might need need 3 sides. You then keep the other one or two sides to make another building. Sometimes you will need to add some reinforcing inside the building to give it some strength and you might need to scratch build an extra roof.

Wagon Weight

If you hate derailments you could add up to 50 grams of extra weight (to HO wagons). The flat wagons can be the biggest problem, so you could add weight to them by putting some liquid lead pellets under each one. I also got some small lead 5 g weights from my local car tyre shop. A club member commented: if weight is an issue and you need to get a bit more weight on the axles of your car... then, try wrapping a length of solder wire around the axles of the car as it helps to add weight to the bogies rather than the body of the car.

Old Sanding Belt

I cut up an old used sanding belt (coarse grade) and glued it on to a wooden bridge I had built out of thin MDF board. I then painted the sanding belt strips in the color I wanted. I looks like a solid and expensive bridge.

Making Hedges

If you want to save some money, try using green steel wool scourers to make hedge rows. You cut them into strips and glue them vertically. You then add some glue and sprinkle some Woodlands Scenics ground cover over them.

Window Cleaner

I mix window cleaner (Windex) to thin my acrylic paints when using an airbrush. It dries quickly, but be careful the window cleaner brand doesn't contain harmful chemicals like ammonia as they might damage some plastics.

FIXING PROBLEMS

Derailments and locomotive problems can be frustrating for any model railroader, regardless of whether they are new to the hobby or an "old hand."

Do not be tempted to buy the cheapest one you see in the hobby store. And do not buy one of those boxed train sets and expect the locomotive to be any good. The locomotives in those toy train sets are mass produced for a price. Spend some extra money and buy a good quality locomotive.

The problem with locomotives in those toy train sets, is you often have to push them to get them started and then they accelerate very fast and can fly of the track on to the floor. If you are prepared to pay for a good quality locomotive with lots of wheels (more than one set), you should have less problems. That is not to say it will run perfectly all the time, but the chances are it will be far more reliable and powerful. So, my advice is to purchase the best locomotive within your budget. A good locomotive will last for many, many years.

Another little tip is not to run your trains too fast. Fast running trains have more chance of coming off the track. Fast running trains do not look as real either. On a real railroad the locomotives slowly build up speed - because of their weight, they do not take off like a racing car. They also slow down gently to a smooth stop. A locomotive with flywheels at one or both ends of the motor will give you a smooth stop and start.

A flickering locomotive headlight can point to a dirty track. Be careful cleaning track with harsh abrasives because if you remove the smooth coating on the track it will be exposed to oxidation and will need cleaning more frequently. The track collect dirt and grime more easily.

Derailments happen from time to time even if you do keep your track reasonably clean and free from dirt and grime. Derailments can be caused by something as simple as lightweight flatcar being shoved behind a heavy boxcar. S-curves on model railroad layouts can cause derailments of longer passenger cars.

Another common model railroading problem is when a locomotive frequently stops on the same section of track. The first thing to do is clean the track. After that, check for a bad track connector. The problem could even be caused by a small blob of glue disrupting the power flow.

If you still have not located the cause, you might need a more powerful transformer as the track may be too large for the one you have.

Building and operating model train layouts needs to be viewed as a series of small challenges to test your level of persistence and dedication to the hobby. Thrive on problems and you will get a real buzz when you solve them. This is what makes model railroading so enjoyable for many.

MORE TIPS:

Here are some more tips from the Model Train Club
http://www.modeltrainclub.org/club.html

Painting Small Parts

If you are working in a smallish scale like N scale, then you will need a steady hand, particularly when painting small plastic parts or details on structures or vehicles. I have found that using your typical rubber molding compound as a masking agent can make this work much easier.

I have a number of the Woodland Scenics structures that, if painted in two or three tones (broad colors for the overall structure with detail painting for windows, doors, trim work, etc.) can be very difficult whether you have a steady hand or not. I paint the detail work first (window sills, frames, doorways) and then come back and carefully apply a heavy coat (or two) of the molding compound directly on the painted surfaces after it has dried over night.

Then, after the rubber molding compound has dried (a few hours), I can spray paint the larger areas for a nice, uniform surface. After this second layer of paint has dried well (over night is best), I pick at the edge of the window sill areas or whatever with a toothpick to work the rubber compound free of the model.

Using my fingernails or a pair of tweezers, I find the hardened rubber pulls away very easily from the model. You may find that some small areas require touch up repainting where the rubber molding compound was applied too generously but if you were careful, these areas are few.

It takes a little practice but I have found this technique works best because I have found without it, the two (or three) different colors tend to smear into one another as one dissolves the adjacent color(s). This tip works for any scale (obviously) and only on plastic. It MIGHT work on other surfaces like cardboard or paper too.

Making A Garden Hose

Firstly, take a bit of single wire green or black insulated coated wire and coil it up around a small dowel rod. Leave to the two ends sticking out. Then, attach one end to a house or a structure the other end to a HO figure and you have him or her holding a hose, washing a car of squirting a driveway.

Making A Fence

Take an old piece of window insect screen. Lay it on an angle the cut about 1" x 2" long, or what ever you think you will need for a section of fence. After its cut into sections you will have very nice sections of cyclone fence. Then, attach some posts (usually just toothpicks or small match sticks), and paint it silver or chrome and you have a pretty neat little fence.

Make Your Scenery Real

We've all walked down city streets and observed the less than perfect side to real city life. So, why make a cityscape on your model railroad layout look like a scene from Fantasy Island.

When modeling an urban scene, never forget the garbage that could be present. What about adding an old newspaper, some garbage cans, cracks in the pavement, graffiti, an old rundown shack, perhaps piles of junk, a broken-down old car and scrape outside of major industry or railyard.

Although you don't want to overdo it, a bit of imperfection will add to the reality of most city scenes. Look around you and come up with your own ideas.

Painting Model Trains

Painting two colors on a locomotive can be a difficult task especially if the colors butt up to each other and when a straight line is needed. Usually masking tape is a useful tool for painting straight lines, but sometimes the lines are a bit rough.

To achieve a better result allow at least 24 hours before applying the second color. This will give the first color adequate time to harden properly. Then apply the masking tape to make your line. The trick is to then spray the area to be painted the new color AT THE EDGE OF THE TAPE with dullcoat effectively sealing the tape.

Leave it to dry for at least 30 minutes. This is important because we rush applying the second coat when the first coat has not thoroughly dry and is still slightly soft. Then paint the second color and this should leave a sharp paint line with n signs of bleeding. A simple and easy model train tip.

Making Signage

If you want to make shop signs, road signs, railroad signs etc for placement around your layout, you might want to use your computer laser or ink-jet printer. Coat the ink-jet sign with Polly-Scale Flat Finish so that weathering will not cause the color to run.

Under no circumstances use the popular technique of dulling the sign with steel wool. The waterproof seal will be broken and the in-jet inks will run and ruin the sign. Instead use pastels for dulling the signs. This is less of a problem with laser printers or color copiers.

Scratch Building

Here is an inexpensive technique to use when scratch building structures out of balsa wood. Take a flat piece of thin balsa and then use a metal dog comb with a straight edge to create a board effect on the wood. This effect can look as good as any manufactured siding. The key is to use a comb that is the scale width.

Structure Walls

In case anyone wants this tip. I spray texture paint on paper. It makes great walls if you're into making your own buildings. Glue the textured paper on the cardboard or balsa wood you're building with.

Modeling Concrete

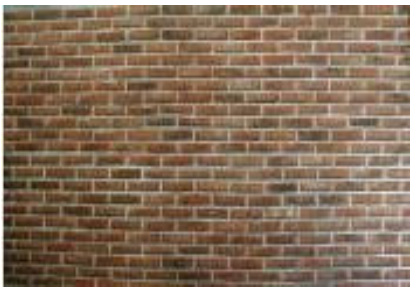
Here is a quick model railroading tip that you might want to try for creating realistic looking concrete.

As soon as you paint the base color of your concrete, lightly dust some baking soda onto the wet paint. This gives the surface some additional texture and the weathering will have more depth.

Use Floquil's Antique White with a drop or two of Box Car Red for the base followed by dry brushing rust streaks as needed from attached iron parts, earth colours at the ground level, grimy streaks following water down the wall, and a bit of white where calcium would leach from cracks.

Brick Walls

Most model railroads include at least one building with brick walls. Many in the hobby find that brick walls are not the easiest things to model realistically.



One option is to use card models for buildings with the brick walls already printed or to print out a brick pattern and glue the sheet of paper on the walls. Although this can work okay, this technique is without any surface texture and can require additional retouching to add a look of authenticity.

Plastic model kits of building often have brick walls moulded into surface and for scratch building there is embossed plastikard available.

These surfaces provide the contours for brick and mortar, but they are of a plain, a semi gloss color and need extra work to make them look realistic.

For anyone who has modeled brick walls they will know that to acheive a realistic brick wall appearance there needs to be variations in the brick color and mortar lines.

Here is one way of doing it. Start by mixing a suitable color such as "brick red" or "stone gray" and apply it with a brush or better still, an airbrush. Gloss or enamal paints may work best for this part of the process. The next step is to apply a variation of the color onto the bricks. Again, an airbrush can give a subtle effect.

Then paint individual bricks at random in a variety of colors using a fine brush. The colored bricks could vary in range from white through to black including various shades of brown. After you have finished the wall will look too artificial and the colors will look too bold, but don't worry.

The next step is to soften this effect to give a more realistic appearance. Do this by spraying on a thin translucent coat of brick red paint. An airbrush is best for acheiving the desired effect.

You are then ready to start applying the mortar. The wall will need to be laid horizontal for this task. A mixture of stone gray and white paint is often the right combination for the mortar color. The key is to thin the colors down and using a fine brush applying a drop of this into a corner of the mortar line (as accurately as possible into the recess). When thinned down enough, capillary action will carry the paint along the recess to follow and fill the mortar lines.

If some of the mortar paint sits on the brick faces simply wipe it off with a cloth before it dries. The wall will now be ready to be weathered according to the age and location you are modeling. You could use weathering powders or pastels for the desired weathering effect.

Finally, fix the weathering with an airbrushed coat of matt varnish.

Rolled Roofing Effect

Here is a clever, simple yet little known tip for constructing a roof for a building on your layout.

Single ply toilet paper (without a pattern) can be an ideal material for roofs on structures. Cut it into ½" wide strips and lay the first strip a little on the roof. Make sure that it is slightly longer than the length of the roof. Use some Floquil weathered black or roof brown to paint the lower edge paint in position.

Keep on adding the strips to the roof until one side of the roof is completely covered.

Do the same on the other side.

Cut a thin strip to represent the cap strip and apply it to where the two sections meet at the peak.

Wait for the paint to completely dry before trimming the edges with a sharp blade knife.

This simple model railroading trick provides you with a very realistic looking rolled roofing effect.

DCC

An Introduction to Digital Command Control and DCC Decoders

In month one, Model Train Club members get access an excellent DCC video... and in month two more excellent resources and tutorials on DCC, wiring and control, scenery construction, along with answers to difficult questions... and much more. The club is a "work in progress" and new tutorials and resources get added each month.

http://www.modeltrainclub.org/club.html

In the meantime here is some helpful information on DCC...

DCC or Digital command control is a type of train operation that involves a fully electrified railroad system. Essentially there is always electricity running through the rails, whether the train is moving or not.

A digital command control system allows model trains to operate independently. A layout can have multiple locomotives with multiple functions controlling the train speed, sound, lighting, direction, and movement. Decoders are small pieces of electronics that gets fitted within each locomotive. The decoder listens to information in the track.

DCC Decoders can be purchased from many different online retailers and in stores. Typically you will want to purchase a National Model Railroad Association (NMRA) certified DCC decoder to ensure you have a high quality device. There are several choices of DCC decoders worth considering.

One of the more notable features regarding DCC controlled tracks is that you can run the train in any direction. If you turn the train around on the track it will made the adjustments needed and continue to run in that particular direction. The only problems that you might run into are short circuits. To stop this from happening you can use insulated rail joiners.

You can use a standard track to create your DCC operations. There is however a difference in the way you design your actual layout. For instance if you choose to turn a regular layout into a DCC layout, you might have trouble installing the power feeds and wiring due to a lack of room, and you might have more than a few track switches. Designing it for the DCC in the first place will mean that there aren't quite as many switches in the track because more power would be required. Keep in mind that the size of the train will usually dictate the amount of power that needs to be employed.

When you buy your DCC system, remember that there are many different types. Different sizes of train will require different amounts of power. There are also several other options available in different DCC systems, and the more options the system comes with the more expensive it will be.

Ultimately it comes down to what you need and what your skill level is. DCC operations are by no means an easy feat, so make sure you start simple and work your way up, and of course make sure you actually like it first. While digital command control may look great at train shows, some people just prefer the old fashioned DC operation. As for what type of person you are, only time can tell.

A digital command control system allows model trains to operate independently. A layout can have multiple locomotives with multiple functions controlling the train speed, sound, lighting, direction, and movement. Decoders are small pieces of electronics that gets fitted within each locomotive. The decoder listens to information in the track.

DCC Decoders can be purchased from many different online retailers and in stores. Typically you will want to purchase a NMRA certified DCC decoder to ensure you have

a high quality device. There are several choices of DCC decoders worth considering.

One of the more notable features regarding DCC controlled tracks is that you can run the train in any direction. If you turn the train around on the track it will made the adjustments needed and continue to run in that particular direction. The only problems that you might run into are short circuits. To stop this from happening you can use insulated rail joiners.

You can use a standard track to create your DCC operations. There is however a difference in the way you design your actual layout. For instance if you choose to turn a regular layout into a DCC layout, you might have trouble installing the power feeds and wiring due to a lack of room, and you might have more than a few track switches. Designing it for the DCC in the first place will mean that there aren't quite as many switches in the track because more power would be required. Keep in mind that the size of the train will usually dictate the amount of power that needs to be employed.

When you buy your DCC system, remember that there are many different types. Different sizes of train will require different amounts of power. There are also several other options available in different DCC systems, and the more options the system comes with the more expensive it will be.

Ultimately it comes down to what you need and what your skill level is. DCC operations are by no means an easy feat, so make sure you start simple and work your way up, and of course make sure you actually like it first. While digital command control may look great at train shows, some people just prefer the old fashioned DC operation. As for what type of person you are, only time can tell.

Wiring Your Train Layout For DCC Operations

For those who are tired of the more traditional DC method of train operation, DCC Digital Command Control is always a viable option. DCC requires precise wiring, and it is a bit restrictive in some ways.

When building any train layout you will need to run wiring throughout your benchwork, and if you are not careful you will end up with your benchwork being immovable. For example, if you wire your table in such a way that the wires cannot be disconnected, or at least the circuit boards dismounted, you will have a bit of trouble taking your setup to a train show.

As far as your locomotives go, the first things you will need to take care of are the DCC decoder installations. Typically you will only be doing this on one train, but if you have more then you will need to make sure you have a DCC decoder for each of them. Most model trains will have the ability to be disassembled, and the decoder can be installed.

It is important to ensure that you get the right DCC decoder for your train scale. The problem with small trains is the lack of space within the locomotive shell to install the decoder. If you have steam locomotives, you could install the DCC decoder in the tender behind the locomotive. The idea here is to install it without making it entirely obvious that it is installed. All model trains are different, and there can be a different installation method for each one of them.

If you are unsure of how to install your DCC Decoder, you can have your local hobby shop do it. They will give you the information you need to do it yourself the next time. Of course they might charge a fee for this service, but it will at least keep you from making any mistakes and ruining the decoder before you even get a chance to use it.

Installing switches throughout your track will ensure the continued operation, and if you don't want to operate blindly, you can always install LCD monitors. There are actually software programs that you can use to control the movements of your train if

you so desire. Many say that doing this takes the fun out of the hobby, but this is a rapidly evolving hobby and you may prefer to keep up.

When you are wiring DCC layouts, you need to do it carefully and consistently. Remember that you are dealing with electricity, and there will also be power flowing through the tracks. In other words, don't put your tongue on the tracks. If you want to find more information on setting up your wiring layout, then you can ask around at hobby shops or even check out a book that has more detailed information. Wiring DCC layouts (or DC) can be a very difficult task, but if you can pull it off - your train set will create a very rewarding experience for you and everyone that comes to watch it in operation.

MORE TIPS:

Blobs Of Solder

It is usually a good idea to solder wires to the undersides of the rails at the time the track is being laid. I know it is tempting to lay the track and worry about the wiring later, but this can lead to unsightly wires and blobs of solder on the sides of track. It is also easy to damage a track tie (sleeper) with a hot soldering iron.

Pull the tie off the track and solder the wire to the underside of the rail. You then file down before replacing the sleepers. You can further conceal the wire by drilling a hole and poking the wire through the benchwork.

I also apply a little non corrosive Plumbers flux (used for copper) to the rail with a cotton bud prior to soldering. It helps the solder stick and leaves a smooth result instead of blobs. You need to wash the flux away when finished so as not to leave it on the rails.

Road Surfaces

A low-cost option is to use wet/dry fine grade sandpaper for sections of roadway. You could rub a couple of sheets together to remove the perfect glassy finish and make the road even smoother. Even the dust adds to the look, but you might need to spay a light coat of matt varnish to stop the dust getting where you don't want it.

Plowed Field

Corrugated cardboard is good for making plowed fields. Glue it down in the farm paddock with the corrugated side facing upwards. Then paint on some white glue and apply a sprinkling of soil-colored scatter. The final details can be a few indications of some weeds or dead growth. A little detailing is usually better than overdoing it.

Chalk Weathering

You'll need a make-up brush, or if you don't wear make-up then a shaving brush will do. Go to a hobby or art store and buy some powdered chalk or tempera. You'll want a selection of colors to get the best results.

Let's imagine you are going to weather the side of a brick building. You would start by spraying the wall to darken it. An airbrush is handy and you probably already have your own proven way of mixing the solution. Personally I spray a solution of leather dye with plenty of rubbing alcohol.

A small amount of the dye goes a long way in lots of alcohol. You'll find this sprayed

mixture fast drying. Then dab some light gray tempera on the make-up/shaving brush and wipe it across and up and down the wall. You then wipe off the excess with a moist cloth or even your finger to leave the color in the mortar lines of the brickwork.

I like to then add some patches of another color (maybe white) to indicate a little wear and tear on the brickwork in a few places. If you want to show up the lines a little more in two or three places, like maybe the wall was patched at some point, just dab on some white chalk with your finger. As soon as you are happy with the result you can spray it with a fixative, dull-coat or matt finish. That's how I do it.

Printed Circuit Board

Here is a tip sent in by a club member. Over the past 6 years I have done a lot of scratchbuilding of houses and buildings. I have tried using cardboard, balsa-wood and even styrene. Although I like working with balsa it is not always as strong as I would like it to be.

A friend gave me some double-sided printed-circuit board and it was perfect. I cut it using a guillotine as it was so strong. It was easy to solder pieces together. He gave me heaps of offcuts for free. I could still incorporate some balsa as it easily glued to the circuit board. I used my soldering iron to add some stonework effects. The buildings I now make with circuit board are almost indestructible.

Recommended Resources

- Brian Miller's Model Railroading Scenery Construction Techniques e-book available at http://www.modelrailwayscenery.org/model-railroad-scenery.html
- Tony Neilson's N scale ebook http://www.ngaugelayouts.com/trains.html and his N scale Track Plans at http://www.ngaugelayouts.com/n-scale-track-plans.html
- The online Model Train Club and Model Train Scenery & Layout Construction Ideas Ebook http://www.modeltrainclub.org/club.html
- The “best-selling” Model Train Help Ebook at http://www.model-train-help.com

I hope you enjoyed this free ebook and the sneak peek at a little of what's in the Model Train Club.

Happy Railroading.

Robert Anderson

FREE TO GIVE AWAY AND SHARE

Unlike most “paid-for” ebooks, this one is free for you to give away and share. You can email it to a friend, or even include it on your web site (if you have one). The only restriction is that it cannot be altered in any way, or sold.