
DCC CORNER

DCC BASICS - PART 2

Written By: Gary Zillyette

Now that we have talked a little bit about the basic terminology of DCC, we can move on now and explain about setting up a DCC system to a new layout and existing layout.

A lot of people ask, "How hard is DCC to set up to a new layout"? In my opinion, it is the same as setting up to an existing layout with a few exceptions.

Setting up to a new layout is a little more work, as you have to install feeder wires to the track. There are a lot of different opinions on how many feeder wires you need. It is all in how much you care to make sure your track is powered enough all over the layout. Now I would have to say, don't go overboard as you have to solder all those wires to the track and the more you have the more there is a chance that they will be seen. A good common ground on this subject is, if your using flex track, put one set of feeder wires to each section of flex track. If you are using sectional track or hand laying track, a good suggestion is to solder 3 feet of track together and then add feeder wires to that.

If you have already have a layout or one in progress, you can use the existing wiring. Most people who are switching from analog (DC) block control leave the switches in place as it allows them to shut the power of to a certain part of the track so that if you have a locomotive idling there, it will save on bulb life of the head lights or some don't like to have a sound locomotive just sitting there idling. So this allows you to shut the power off to that section. But the set up in this situation it as simple as run a decent size bus wires around the layout and attach your feeder wires to the bus wires.

Most DCC systems on the market use a separate programming track to allow you to program the locomotive decoder address and other CV's (control variables). If your system has this it would be wise to have a separate track to the side to do this on. Some will use a siding that is close to the edge of the layout and put in a DPDT (double pole, double throw) switch. If you would like to do this, you have to insulate this section of track from the rest of the layout. Then on the DPDT switch connect the siding track wires to the middle two tabs of the switch. Then you connect the track power to one of the other two sets and then the programming wires to the remaining set. This allows you to pull a locomotive on to this siding and then flip the switch and program the locomotive with out disturbing the rest of the locomotives on your layout.

Now with saying all that, a big to do, which is just as important as the feeder wires are the bus wires. These run from the command station and/or

booster and you connect the feeder wires to. It is imperative that you use a big enough bus wire for both sides of the power wires. A good rule of thumb and recommended by the manufacturers is using a 12 to 14 awg gauge wire. Some prefer stranded wire while other like solid wire. In my opinion I don't think there is a big difference other than if the solid wire happens to break, you could lose power to your track. If you use stranded wire, if one or a couple of the strands break, you still have the remaining strands that conduct the power. Your saying WOW, that is a lot to have to remember or do. Actually once you get started you will find that it is easier than it is to explain.

In my next installment I will explain and give descriptions of creating and using power districts and why they are useful. If you have any questions please [email](#) me and I will be glad to give you my information or thoughts.