

John Sipple

# Sipple on Trains

## The Aristo-Craft Train Engineer Revolution

*This may be a dealer's choice for railroad R/C*

The Aristo-Craft/Crest Revolution is a system for operating trains on radio/control (R/C). There's nothing new about R/C in the train world, but around three-quarters of garden railroad operators are still using straight DC power. Virtually all model railroad locomotives come prepared to operate on straight DC track control. Increase the voltage, and the train goes faster; reduce it, and it goes slower. Reverse the polarity, and the train goes the other direction. This is the electric train going back a century to the pioneering work of

Joshua Lionel Cowen. Most model railroaders buy a locomotive, some track, some cars and a DC power controller. This is the cheapest way into the hobby in any scale.

So the purpose of this product is not to replace what R/C equipment a model railroader might have, unless he's very unsatisfied with it. The Revolution is primarily pointed toward the operator who has straight DC out of the box, wants walk around control and doesn't care to get involved with



The receiver image on the left has been magnified to give you a better view of it. The transmitter shows the operating screen, with "C-44" being the locomotive and "600" being its cab number. This is Single Unit Cab-0, the speed is "0" and the direction is forward.

DCC or something else that is both expensive and complicated. For him, track control may be cheap, but it isn't easy.

Aristo-Craft has set up the Revolution so that it can operate a locomotive from track or battery power. The Revolution controls the locomotive directly through a receiver installed in the locomotive or a trail car. If it is set

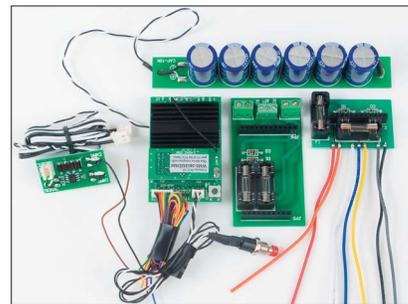


The transmitter stands proudly beside Aristo-Craft's Dash Nine with a receiver installed. Transmitter and receiver work together to move this fifteen pound beast around the layout with easy chair reliability.

up to pick up power from the tracks, it wants a steady DC power of no more than 22 volts and upwards of five amps constant, eight amps peak. A standard power pack is connected to the tracks and is set at full throttle to supply the needed DC juice. Other DC power sources will work if the power is pure DC and has the right amount of voltage and amperage capacity.

Some of my readers in Model Railroad News and from the forums jumped to the conclusion that this is

The receiver is surrounded by its best installation friends. Above it is the six capacitor board that provides a large amount of continuity on dirty tracks. To the receiver's left is the smoke control board, powered by the smoke circuitry of the loco but controlled through the smaller wires of the "rainbow" plug to the receiver. To the receiver's immediate right is a "No PNP" board for locos that don't have a built in "Super Plug" and to the right of that is another version of this complete with wiring for connection to the loco.



some sort of DCC, but let me make it clear: Revolution is not any form of DCC. It is a pure DC technology that is controlled by radio signals.

I tried R/C years ago that was based upon 75 MHz

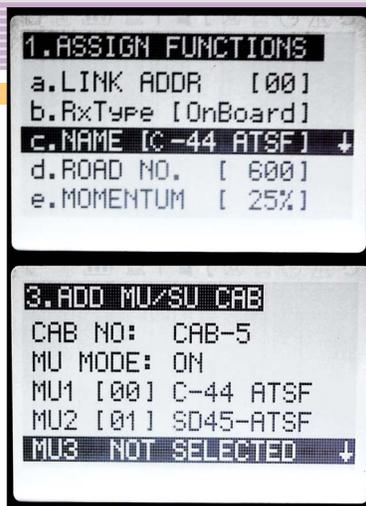
radio frequencies, and it worked fine on the workbench but not on the ground. Having to practically touch the locomotive with a foot-long antenna was not my idea of a good solution. The Revo is a super-reliable 2.4 GHz that offers excellent radio response and virtually no latency (the delay from button push to response).

The transmitter is the same across all scales for the Revo, so if you buy one, it'll be good for any other scales or layouts you may have. The Revo TX is about the size of a cordless phone with a large LCD display screen and a telephone-type keypad along with some other buttons on the top. All the information about all of your locomotives (up to 50 single or multiple locomotive set ups) can be set up "off-line" from the tracks.

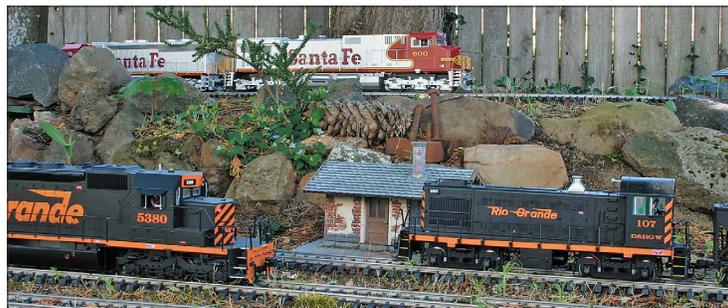
The operation screen seemed a little crowded with information at first, but I soon learned how to look for just what information I wanted, as I came to rely on all that was there. I can check the display for whatever locomotive I want to operate, and when I select it, the controller will quickly let me know if the loco is linked between transmitter and receiver.

Locomotive controls are easy and very intuitive. The up and down arrows control speed up or down, respectively. The left and right arrows control direction, with the right being forward for that particular locomotive, no matter what orientation it has relative to your position.

When you press the [Menu] button, you enter into a world of menus, named in English and easy to read and understand. A given menu selection may take you to yet another submenu and so on so you can make your choices in a logical fashion. This is a reasonable and simple way to manage all of the many options this system offers. Most of your work in these menus will be involved in set-



*This pair of screen shots illustrates the menu options for setting up locos. The top screen shows the "1. Assign Functions" area which runs from "A" down to "O" and lets you make that many different adjustments to you locos, if you wish. The "3. Add MU/SU Cab" area shows Cab-5, which is an Multi Unit (MU) Cab that combines cab 0 and cab 1 into a single operating set.*



*Let's run some trains! Four receivers in four locos lets us have some real fun. Up on the ridge, Santa Fe Super Fleet power is hotspotting a train, and both locos are MUed together so that controlling one is controlling both. Down in the yards, DRGW SD40-2 brings in the Ski Train while an S4 Switcher handles a cut of coal hoppers. The Santa Fe power is all made by Aristo-Craft while the DRGW pullers are from USA Trains.*

inexpensive smoke control board. If you want to add controllable sound, the installation process can feature button control by making the right connections—more possible work for your technician. Sound from Dallee and Phoenix can be adapted to the receiver's wiring harness.

There is so much more possible than I have room to discuss here. More will be discussed in future columns about trail cars, easy battery power and how to take advantage of low-cost aluminum track. Stop by [www.aristocraft.com](http://www.aristocraft.com) and download the manual for more information. **HM**

ting up locos with names and road numbers so that when you search for a given loco, you have the necessary information. Even when you change the batteries in the transmitter, all of this info is maintained for you.

The Revo receiver is very smart, even for a dummy! It's dumb because it remembers very little beyond its linking information, but it's smart because it uses the same expensive, state-of-the-art cell phone communications chip found in the transmitter. The result is smooth, reliable and seamless. While the entire system is easy to use, the receiver must be installed in either the locomotive or a trail car.

If a customer is reluctant to buy this system because he doesn't want to take a loco apart for the installation, this is an easy value-added service a technician could

accomplish while building sales. For Aristo-Craft locos of fairly modern vintage, the shell is removed, a dummy plug is removed from Aristo's Super Plug and the receiver is plugged right in. A capacitor-assist board is an option that can be added at installation that will dramatically improve service on dirty track.

Button control of the smoke unit is made possible by using an optional,