

Frequently asked questions

How can I learn more about ATCS Monitor? Go to the ATCS Monitor web site at www.atcsmon.com to learn more about ATCS Monitor, and also find out how to download the application.

Calera Area Railroad Frequencies

161.370	CSX Road
161.220	CSX Dispatcher
160.950	NS Road
160.830	NS Train to Dispatcher
160.245	NS Dispatcher to Train
160.920	Heart of Dixie Railroad Museum

A live railroad audio feed consisting of those frequencies is provided for your use by the Heart of Dixie Railroad Museum.

Listen to the railroad audio feed in the depot, or on the Internet at <http://www.radioreference.com/apps/audio/?feedId=8794>

Advanced Train Control System (ATCS) Monitor

Showing CSX railroad
operations in
the Calera Area

brought to you by

The Heart of Dixie
Railroad Museum

<http://www.hodrrm.org/>

Frequently asked questions

What is ATCS Monitor? ATCS Monitor is a free program developed to decode the signals sent to and from control points on railroads using the Advanced Train Control System (ATCS.) ATCS is a computerized command and control system that is used by train dispatchers to direct the flow of rail traffic on certain lines. By using the built in dispatcher display screen, you can follow trains as they move along rail lines using ATCS.

Technically speaking, how does this work? The control points (referred to as an "MCP") communicate with a base station (referred to as a "BCP") via two-way radios by sending and receiving short bursts of computer data. The data transmitted from an MCP to a BCP is called an indication, because it is indicating something happening in the field such block occupancy, switch alignment, etc. The data sent from a BCP to an MCP is called a control, because it is requesting (controlling) something in the field, such as a signal or switch alignment.

If it's possible to decode the information, is it also possible to affect movements? No. ATCS Monitor is a read-only application. It receives an audio signal from the output of a high-quality radio receiver. The program intentionally contains no code to create any control information, and no code for audio signal modulation. Since it contains NO encoding algorithms and cannot produce any audio output, it absolutely CANNOT be used to perform or assist in the performance of any kind of radio transmission.

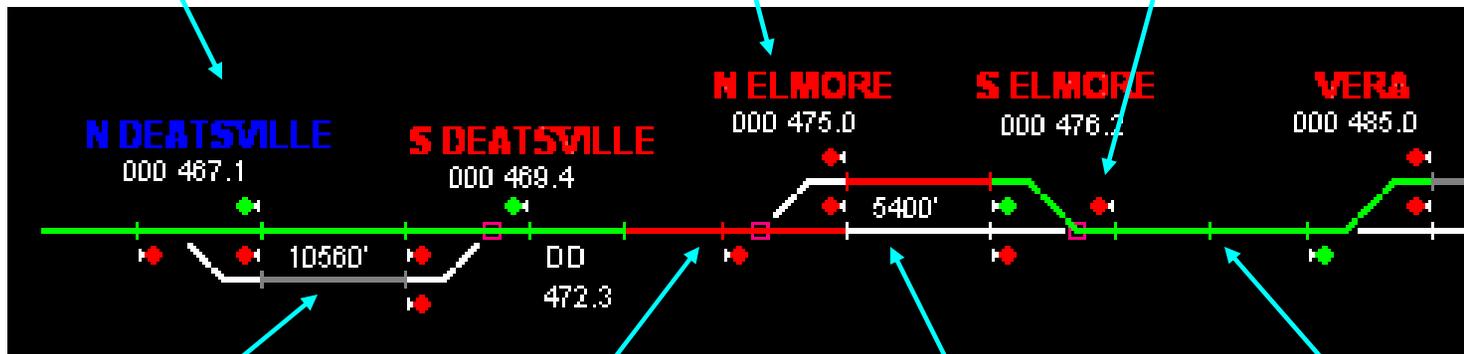
What do the railroads think of this? There's varying response. Not much of it has been terribly negative, and in fact, many signal system maintainers utilize the software to monitor and troubleshoot their own systems.

How to Read the ATCS Display

A Station Name in blue indicates that a command has been sent by the dispatcher

A Station Name in red indicates that information has been received from that station. A station name in white indicates no data received.

Signals show the direction the train will be traveling. Green means go, red means stop. On this layout, signals for northbound trains are on top. Signals for southbound trains are on the bottom.



Gray track segments indicate a track, usually a siding, that is not wired for ATCS

A red line indicates track occupancy (usually by a train or maintenance of way vehicle)

White track segments indicated that the track is unoccupied

A green line indicates that the track is clear for the train to proceed.

In this example, a northbound train has just passed another train that is in the siding at Elmore. The northbound train is at North Elmore and has clear (green) signals at S. Deatsville and N. Deatsville. The train in the siding at Elmore has been given a green signal to head south onto the main line and will go into the Montgomery, Alabama yard after they pass the control point at Vera.