

ATO markers, creating of timetable files, audio announcements definition

Author

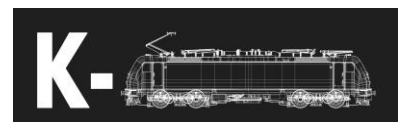
Model, scripts, textures:

Dominik Chaloupka

Other people who helped with facts and materials:

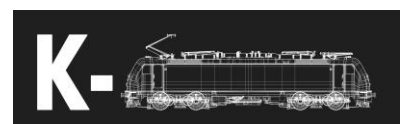
Jaroslav Kůfner, Vojtěch Raim, Tomáš Pospíšil, George VonShark, Pavel Hořínek and others...

However biggest Thank you belongs to my loving girlfriend.



Content

Concept of usage	3
Set of markers	3
Markers description	3
Procedure before first possible use of ATO	4
Timetable creation	4



Concept of usage

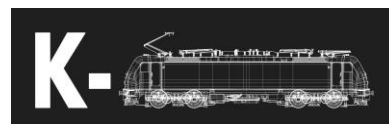
- This set of markers allows driving under ATO mode.
- Set of track markers a network of information point for train to use. Before using it on a newly equipped route, it is necessary to create route map/s by by ATOs generating mode and create timetables.

Set of markers

- AVV_JunctionPointInfo
- AVV_MarkerBlockSignal
- AVV_MarkerMainSignal
- AVV_MarkerPlatform
- AVV_MarkerPresignal
- AVV_SynchronizationPoint

Markers description

- AVV_JunctionPointInfo
 - Značka se umísťuje za poslednú výhybku smerom do stanice. Jedná sa o upresnenie informácií pro vlak při jízdě na koleji neobsažené v mapě trati.
 - Marker needs to be put after the last junction in the direction towards the platform. This marker is used for tracks not contained in the route map.
 - Markers allows You to put up to 3 informations to its ID
 - PL=xyz -> distance to the end of platform
 - SIG=xyz -> distance to nearest signal
 - PRE=xyz -> distance to nearest presignal
 - xyz means distance in meters
- AVV_MarkerBlockSignal
 - This marker is placed to same place as links of block signals
- AVV_MarkerMainSignal
 - This marker is placed to same place as links of main signals
- AVV_MarkerPlatform
 - This marker is placed at both ends of the platform in direction out of the platform. Put the same name of station as used in timetables to its ID.
- AVV_MarkerPresignal
 - This marker is placed to same place as links of presignals



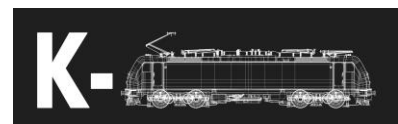
- AVV_Synchronization point
 - This marker should be placed at the last junction in a direction from the station. However it is possible to place it in any desired place.
 - Unique numeric positive number is set to its ID.
 - At this point the train will recognize its position relatively to the loaded map in its memory and can now continue under fully active ATO system.

Procedure before first possible use of ATO

- It is necessary to generate map loadable by train after all markers are placed. To do this (in case of 471 unit) enable the ATO generating mode by Ctrl + Shift + A. Now just ride through the whole map in any drive mode. If the route has two tracks it is necessary to drive through both of them. First just drive through one of them, save the file and in next scenario drive through the another one. After every passage of marker it is written to file Assets\Kal000px\AVV\Routes pod jménem (in case of 471 unit) 471_AVV_RENAME.txt. To save the file simply rename this file to something with .csv at the end.
- Created map should have name with three numbers. In case of double tracked route use „a“ and „b“ names e.g. 123a.csv and 123b.csv. In that case, the train loads both of those maps and switches them accordingly to passed synchronization markers.
- It is possible to define how to stop at the platforms
 - Stopping in the middle of the platform
 - *PLATF-STRANCICE;0*
 - *203*
 - *PLATFX-STRANCICE;0*
 - Stopping at the end of the platform
 - *PLATF-STRANCICE;0*
 - *203*
 - *PLATFX-STRANCICE;1*
 - Stopping at the start of the platform
 - *PLATF-STRANCICE;1*
 - *203*
 - *PLATFX-STRANCICE;0*
- ;1 marks the important point, train will be navigated to this point.
- ;0 is not necessary to write, however it is recommender for better readability

Timetable creation

- Timetables are located in a folder corresponding to the models (in case of 471 unit it is folder Assets\Kal000px\471 pack01\Timetables). Naming convention is trainNumber.csv, e.g. 2534.csv.
- The first line contains ATO route number and possibly the line name. Other lines contain station names (if ATO is used, they need to be the same as in the ATO map) and corresponding times.



- If one time is written, both time of arrival and departure are the same.
- If arrival and departure are not same, they are written in this order and separated by ",".
- If any time contains half minute use *.
- Stations names have to not use diacritics.
- Example:
 - *221b,S9*
 - *Benesov,11:52*
 - *Mrac,11:57*
 - *Cercany,12:00*
 - *Pysely,12:02*
 - *Ctyrkoly,12:05**
 - *Senohraby,12:08,12:09*
- Timetable contains also link for defining file of audio announcements. This is the first three numbers of route number (e.g. for 221b it is 221).
 - In case of the 471 unit those files are located in
Assets\Kal000px\471 pack01\Announcements
 - The defining file is named with the first three numbers of the route number, so in the previous example that is
Assets\Kal000px\471 pack01\Announcements\221.csv.
 - Single announcements are defined by three parts. First one is the station name (same as for ATO and timetable names), second part is announcement used when arriving to the platform, the third one is announcement used for the next station announcement. Parts are without any spaces separated by ",".
 - Example:
 - *Benesov,Benesov.wav,ExpectBenesov.wav*
 - Station name is Benesov, file Benesov.wav contains arriving announcement, file ExpectBenesov.wav contains announcement played during departure from the previous station.

