WRITING and READING TAGS

This document gives instructions on how to write tags, and how to read them.

IMPORTANT
When you have a new tag, that has not had the StockID written to it, you MUST make sure that in the Reader Set Up frame, that the "Present Read Type" is set to UID. If this is not done, then in the "Reader for Tag Write and Read" frame, the tag will not appear to be over the selected reader, even though it is. Once the StockID has been written to the tag, then the "Present Read Type" is immaterial.

PLACING THE TAG
Place the tag, which can already be on a piece of rolling stock, over any reader - and you will see the colour on the "Readers" frame turn to green.
On the "Reader for Tag Write and Read" frame, select the reader number, press "Choose", and the legend should then read "TAG PRESENT OVER SELECTED READER".

WRITING THE STOCKID
On the "Tag Write" frame, enter a number between 1 and 16383, and press "Write". Note that it is up to you to make sure that no tag numbers are duplicated, and also that they are in a range that your control program can handle. For instance, generalised LocoNet protocol can only handle numbers in the range 1-10239, whilst TrainController should be limited to 1-9999. JMRI and OpenLCB/LCC can handle numbers 1-16383.

WRITING THE HEADER CODE
The header code is a Train Identification that can be used for identifying a train, and would usually just be written into the loco, before the train is despatched. Writing a blank field into this erases the header code. The header code is persistent in the "Readers" window, so although the StockID will change as a train passes over a reader, the Header Code will not change, if the header codes on all rolling stock in the train have not been set. This makes it possible to see what train is passing over a reader.
To write the header code, enter up to 4 ASCII characters in the header code box, and press write. To erase a header code, just press write without entering any ASCII characters.

USER FIELDS
There are six user fields stored in the tag, each of 16 characters long. These can be used in any way you want - you may want to put an "owner" field, so if your stock is visiting another layout, you can easily find out whose stock is whose. You may want an inventory number, or date purchased, or a description, or anything else you desire.
On the "Tag Read" frame, the 6 user fields are numbered, but you can write a description of up to 16 characters into each line, so you know what the fields refer to.
Select the field number on the Up/Down arrows, and then enter a description (say, Owner) of up to 16 characters in the User Label box, and then press "Write". The label will then change from "User Field x" to "Owner".
To write data into the tag, with the tag static over a particular reader, select the field you wish to write using the drop down menu in the "Tag Write" frame, and then enter up to 16 characters in the Data field, then press "Write".
To read all the data on the tag, simply press "Read" in the "tag Read" frame, and all data will be read from the tag, and displayed.