

SSI Data Preparation Consecutive Double Yellow Aspect Sequences

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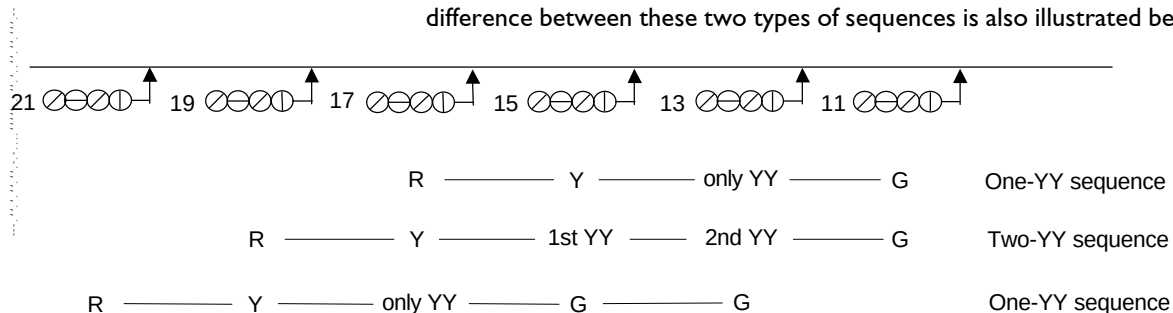
Consecutive Double Yellow Aspect Sequences

I. Introduction

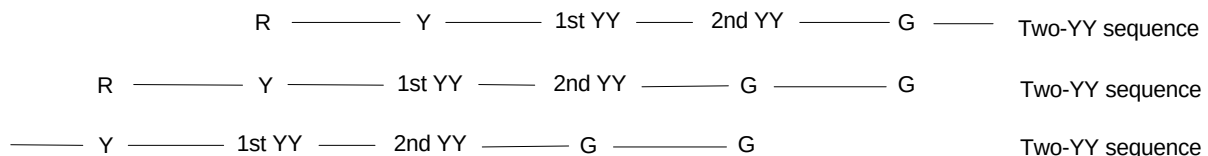
I.1 General

This document covers sequences of two or more consecutive double yellow aspects. Both isolated sequences and overlapping sequences are covered, in Sections 3 and 4 respectively.

An overlapping sequence occurs wherever a signal's double yellow aspect is the final double yellow in one sequence but not in another. This can be recognised from the aspect sequencing section of the signal's control tables if signals other than the one immediately ahead are referred to. The difference between these two types of sequences is also illustrated below.



ISOLATED TWO-YY SEQUENCE



OVERLAPPING TWO-YY SEQUENCES

I.2 Terminology & Abbreviations

Throughout this document, the signal whose double yellow aspect is under consideration is referred to as **<sig>**. The signal one ahead is referred to as **<sig+1>**, the signal two ahead as **<sig+2>**, the signal three ahead as **<sig+3>**. Where more than one double yellow appears in a sequence, these are labelled 1st, 2nd, 3rd, etc. working back from the red aspect. This represents the order in which the aspects are calculated.

Aspects are abbreviated as follows:

R	Red aspect
Y	Single yellow aspect
YY	Double yellow aspect
G	Green aspect

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2. General Principles

2.1 Use of Aspect Sequence Command

For each signal that can display a YY whilst the signal ahead is also displaying a YY, the aspect sequence command has to be used to initially calculate the aspect (and set the output bits accordingly) i.e. as if the signal were in a standard sequence. This ensures that the signal is held at Y for one major cycle where necessary for the reason explained in SSI8003-I0D Section 1.2.

A conditional statement then follows which, if the initially calculated aspect is G, then changes the aspect code and output telegram bits from G to the more restrictive YY, unless the conditions are present for the signal to display G.

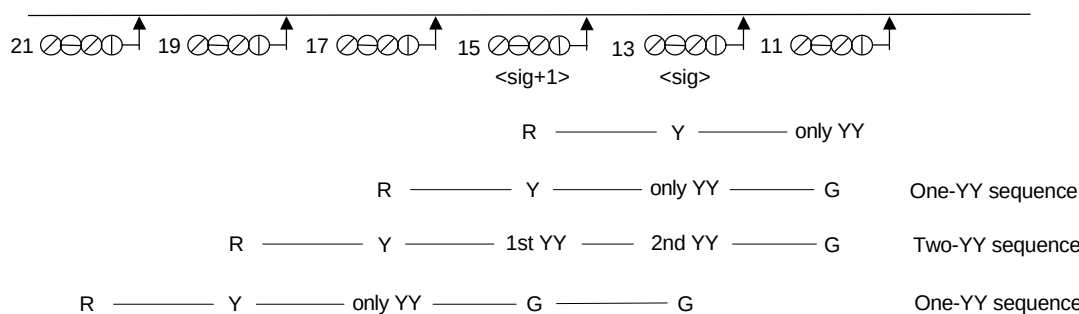
2.2 Signal Module Failure

The mechanism identified in SSI8003-I0G Section 1.2.7 whereby the aspect code is set to the identified most restrictive aspect if the not red retained bit is clear (indicating that either the Signal Module driving the signal is in the red retaining state or no replies are being received from the Module), is applied after all the data in the ASD section has been processed. Thus this mechanism is unaffected by the data changes in this document.

3. Isolated Consecutive YY Sequences

3.1 Isolated Two-YY Sequence

3.1.1 Principles



For an isolated two-YY sequence, the controls for the YY & G aspect sequencing of <sig>, i.e. the signal that has the second YY, can be determined from the above aspect sequence chart:

<sig> YY requires	[<sig+1> at Y (<sig> is <u>only</u> YY in a one-YY sequence) or <sig+1> at YY] (<sig> is <u>second</u> YY in a two-YY sequence)
<sig> G requires	<sig+1> at G

Thus it can be seen that, for isolated consecutive YY sequences, the control tables will only require the aspect of the four aspect signal