Color Coding Schemes for Decoders

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The decoders use colors to convey the symbolic meaning associated to a signal segment. These colors have remained stable over the years and have become a de-facto standard. This stability helps the entire community gravitating around the serial decoders, such as users, developers, support, sales and technical writers. The true colors are embedded in the source code in form of red/green/blue triplets, and this document attempts to summarize colors with English names and symbols.

Graphic Example

An imaginary signal is used to show the main colors used by the decoders. This signal is fairly typical for modern protocols with 3 levels of grammar. Older or simpler protocols might only have 1 or 2 levels.
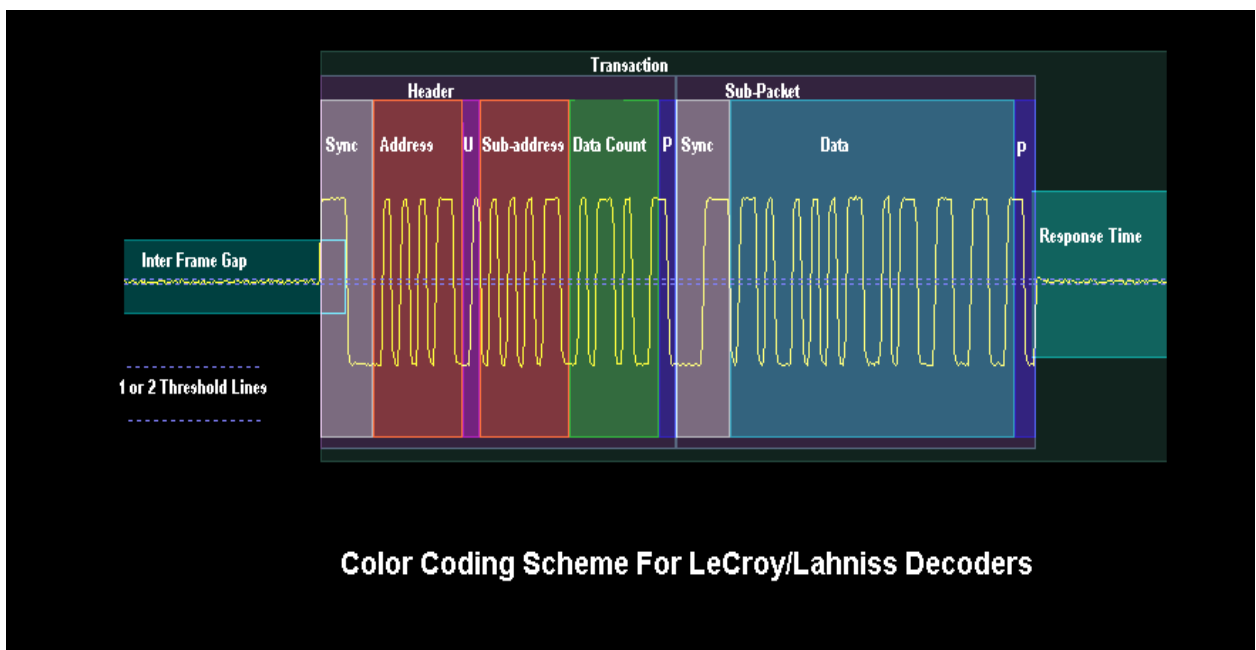

Figure 1: This image shows the main colors used by most decoders. Elements of lower levels are represented by shorter rectangles. Elements of higher level are rendered by taller rectangles.

Conventions

By convention, a color represents syntaxic elements. However, different protocols use different names (synonyms) for the same concepts. A short overview of the variations is given below.

Dark Green:	Transactions, Transfers, Frames
Dark Violet:	Headers, Data Packets, Sub-Frames
Ocean Green:	Inter Frame Gaps, Idle, Response Time
Grey:	Sync, Break
Cherry:	Address, Sub-Address, ID, Destination, Source,
Light Violet:	Utility Bits, Flags
Grass Green:	Data Count (DC), Data Length Count (DLC), Length, Payload Length (PLL), Word Count (WC)
Royal Blue:	Parity, Cyclic RC, Check Sum, Header CRC, Payload CRC
Mountain Lake Blue:	Data, Words, Bytes
Bright Red:	Errors (not in example)
Light Blue:	Utility bits (not in example).