

# Gigaclear Documentation

## Cable Colour Code Guidance

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## 2. Background and Scope

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Fibre cables, due to the size of individual cable elements, cannot use written labels to identify cable elements. Therefore, colours are used. There are a wide range of standard and non-standard colour schemes. These schemes cover:

- Buffer tubes in cables
- Buffer tube aggregation elements in >144F cables (wraps and binders)
- Individual fibre strands

Gigaclear has never previously issued guidance to specifiers about colour schemes, and consequentially we currently have several in use and have issued documentation to multiple different schemes.

This guidance standardises on a single, internationally recognised standard.

### 3. Guidance

Gigaclear will standardise on ANSI/EIA/TIA 598-D. This standard was originally standardised in North America but is widespread internationally. While Gigaclear generally prefers ISO, ITU or IEC standards, no fibre-specific standards exist within these bodies.

All cables should be ordered with the ANSI/EIA/TIA 598-D colour scheme.

For the avoidance of doubt, the high-level scheme described in the standard is replicated below:

Element (1-12)	Colour	Element (13-24)	Colour
1	Blue	13	Blue with black tracer
2	Orange	14	Orange with black tracer
3	Green	15	Green with black tracer
4	Brown	16	Brown with black tracer
5	Slate	17	Slate with black tracer
6	White	18	White with black tracer
7	Red	19	Red with black tracer
8	Black	20	Black with white tracer[1]
9	Yellow	21	Yellow with black tracer
10	Violet	22	Violet with black tracer
11	Rose	23	Rose with black tracer
12	Aqua	24	Aqua with black tracer

[1] Yellow tracers are also acceptable for element 20; a clear coating MAY be used but is discouraged

Where a colour is specified as having a “black tracer” this shall be a ring marking at regular intervals spaced no more than 1 metre apart down the full length of the element. Alternatively, the tracer may be a continuous strip having a width of at least 45% of the circumference of the element or 1.5mm, whichever is less. Other methods are suggested in TIA-598-D section 3.6.1.4.

All colours must fall within the permissible ranges of colour specified in the standard. Pantone/Munsell can supply a set of colour reference cards should there be concern over the accuracy of colour in an element.

#### 3.1. Ordering/Procurement Advice

In selection and procurement exercises, supply of products compliant with this guidance MUST be regarded as a MUST requirement.

Where existing products exist that must comply with the standard, purchasers MUST require that future orders are placed for product variants compliant with this guidance, and confirm with suppliers that their products meet the requirements of TIA-598-D.

Where existing products cannot be made compliant or are unavailable, this MUST be raised as an issue with Technology to allow alternative products to be selected or mitigations to be put in place. Purchases of non-compliant components MUST NOT continue without discussion and acceptance from Technology.

## 4. Version History

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Version	Date	Notes
<b>1.0</b>	2019-04-25	First issue