



*Excellence  
Through  
Innovation*

## Product Guide

### TVG Blueline Cables

Document ID: G0033 v1.2

**Read guide fully before commencing installation.  
This guide must be present during time of install.  
This guide is to be used in conjunction with training.**

Distribution:

This document contains information which is proprietary to The Vehicle Group Limited (inclusive of its subsidiaries). It may not be reproduced, retransmitted, or otherwise distributed without prior written consent from The Vehicle Group Limited.

CONFIDENTIAL: TVG and Customer.

## Document Change Control

Date	Version	Author	Approval	Changes
06/06/24	V1.0	A. Barker	M. Blackburn	Initial Release.
29/08/24	V1.1	A. Barker	M. Blackburn	Updated to include CVAS Blueline.
02/09/24	V1.2	A. Barker	M. Blackburn	Updated Introduction

## Table of Contents

Legal Notice .....	Page 3
General Notice .....	Page 4
Introduction to Blueline Cables .....	Page 5
Blueline CCTV Cable.....	Page 6
Blueline Susie Cable .....	Page 8
Blueline CVAS Cable .....	Page 10
About Us & Contact Information .....	Page 12

## **Legal Notice**

Due care has been taken in creating the information contained within this guide, The Vehicle Group Limited does not and cannot guarantee the accuracy thereof. Anyone using the information contained in this document does so at their own risk, The Vehicle Group Limited will not indemnify for any injury or damage arising from such use.

This document is for use by the intended recipient, and contains confidential information under applicable law. You are hereby formally notified that any unauthorised use, copying or distribution of the document, in whole or in part, is strictly prohibited.

This publication supersedes and replaces all information previously supplied.

## **Trademarks**

The Vehicle Group Limited logo and product names are trademarks of The Vehicle Group Limited and are protected by copyright law.

All rights reserved.

## **Copyright Notice**

© Copyright 2024, The Vehicle Group Limited.

## General Notices

- Before starting installation, please read the documentation fully as the performance of the device is dependent on correct installation.
- This device is designed for automotive use only. It must not be used in situations where human life is dependent on its performance.
- Installation of this device may conflict with some countries regulations, or the vehicle manufacturers instructions. Compliance with these regulations shall solely be the customers responsibility. Improper installation may invalidate the vehicle warranty.
- Prior to the commencement of any work, the correct PPE should be worn and a risk assessment should be conducted in accordance with your company policies.
- Ensure manufacturers guidance is followed during the installation.
- The device must be installed by a suitably qualified and experienced professional skilled in automotive electronics.
- Misuse, physical damage and incorrect installation will invalidate the warranty of this device or systems using this device.
- Vehicle batteries should be isolated before working on any electrical systems.
- If using the OEM body builders module to gain CANbus information, ensure the module is correctly configured by the manufacturer.
- Do not secure the device in a way where it will interfere with the vehicles control systems. E.g. steering column, brake pedals etc.
- Other people may install equipment after you, so your work must be firmly secured in place, this includes devices and cabling.
- Connecting the power supply and ground should be done as per OEM specifications. Once any jointing or crimping has been completed, testing should be conducted to ensure the joint is compliant with the crimp specifications and all other relevant standards.
- We do not recommend drilling through vinyl (vehicle decals etc) as this will lead to blistering from the heat generated. Hole should be fitted with a grommet and sealed with appropriate sealant.
- Any alteration to metal must be de-burred and all sharp edges removed. Exposed bare metal must be treated with appropriate anti-corrosion solution in accordance with manufacturers recommendations. Any swarf produced must be collected by placing a magnet or catchment device under the area of modification. No swarf is to be left on or in a vehicle.
- We recommend using flexible polyurethane sealants. Any sealed areas must be sealed to a minimum of IP65 and must comply with the vehicle manufacturers recommendations.
- Any serial / key numbers from the equipment being installed must be logged against the vehicle identity for future reference.

# Introduction to TVG Blueline Cables

All TVG Blueline cables are engineered for superior quality and performance and feature a durable TPU jacket specifically crafted to endure harsh conditions. This makes them ideal for specialized environments such as:

## Outdoor Installations

Outdoor environments typically expose cables to weather elements like rain UV light and temperature changes. Our Blueline cables are resistant to water, they are UV stable, and have been tested in extreme temperatures to ensure they are tough enough to be used in all weather conditions.

## Hazardous Environments

Our Blueline cables are highly resistant to oils, chemicals and solvents making them a perfect choice for any ADR vehicles or hazardous environments.

## Industrial / Machinery Applications

Blueline cables are perfect for use in conditions where cables are frequently moved, or coiled and are exposed to physical wear, machinery, oils and chemicals. Our cables have excellent abrasion resistance, flexibility and durability.

## Military and Emergency Response Vehicles

In military or emergency situations, cables often face rugged terrains, rough handling, and exposure to unpredictable environmental conditions. Our Blueline cable design ensures they perform reliably in critical scenarios.

TVG Blueline cables are suitable for environments where cables will be exposed to physical stress, chemical exposure, outdoor elements, or frequent movement. They offer excellent performance, reliability and superior durability. This makes them the ideal solution for both heavy-duty and long-term applications, all whilst ensuring maximum performance.

## Blueline CCTV Extension Cables



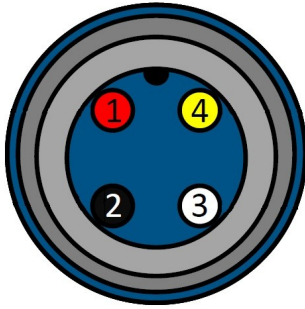
Blueline CCTV Extension Cables are a 4 core shielded extension cable for video applications. They have a tough TPU jacket to provide protection against harsh environments.

All Blueline CCTV Extension cables come with a male 4-pin aviation connector on one end, and a female 4-pin aviation connector on the other end.

Blueline CCTV Extension cables are made with a specifically engineered characteristic impedance to ensure maximum video quality over longer distances.

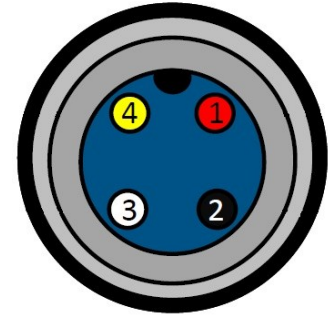
The cable outside diameter is 6mm.

## Blueline CCTV Extension Cables



Female Aviation Connector

Wire Colour	Function
	Red
	Black
	Yellow
	White



Male Aviation Connector

### TVG Part Numbers

TVG Part Number	Description	Length	Connectors
304447	Cable, 3.5m Blueline Extension, Aviation 4-Pin Female to Male	3.5m	1 x 4-pin aviation male 1 x 4-pin aviation female
304448	Cable, 5m Blueline Extension, Aviation 4-Pin Female to Male	5m	1 x 4-pin aviation male 1 x 4-pin aviation female
304449	Cable, 6.5m Blueline Extension, Aviation 4-Pin Female to Male	6.5m	1 x 4-pin aviation male 1 x 4-pin aviation female
304450	Cable, 10m Blueline Extension, Aviation 4-Pin Female to Male	10m	1 x 4-pin aviation male 1 x 4-pin aviation female
304451	Cable, 15m Blueline Extension, Aviation 4-Pin Female to Male	15m	1 x 4-pin aviation male 1 x 4-pin aviation female

## Blueline Susie Cables



TVG Blueline Susie Cables are a 7-Core Susie Cable designed for HGV CCTV systems. They allow signals from 2 cameras on the trailer to be fed through to the cab monitor and DVR.

The Blueline Susie Cable and associated sockets all have a tough TPU jacket to provide protection against harsh environments.

They come with ISO 7638-2 compliant 7-pin connectors on each end to connect to the Blueline Susie Sockets and have an opposing interlock to prevent incorrect connecting with other electrical cables.

The cable is made with a specifically engineered characteristic impedance to ensure maximum video quality over longer distances.

When coiled the cables are 680mm (+/- 22mm) long, and they have a maximum stretched length of 4500mm. The cable outside diameter is 11mm (+/- 1mm).

## Blueline Susie Cables



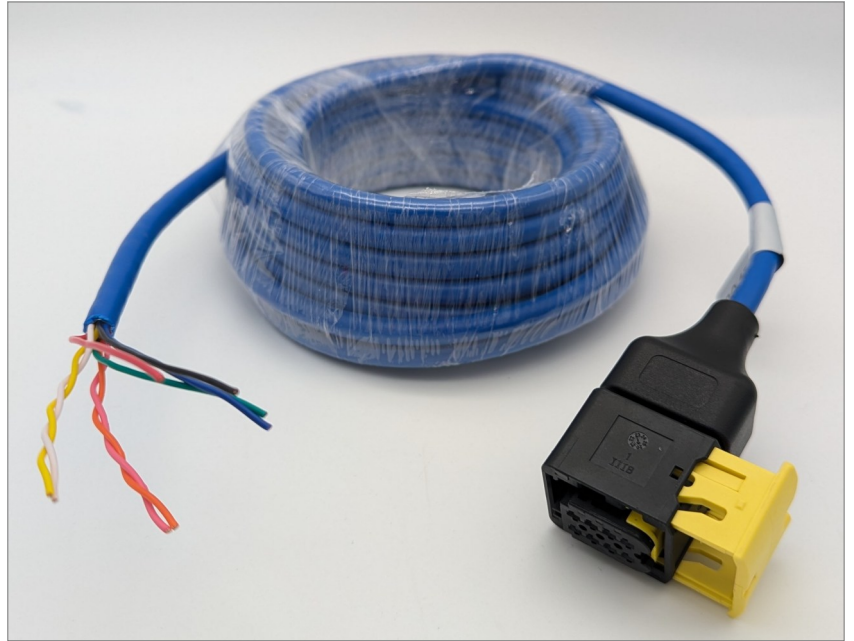
Pin Layout

Wire Colour	Pin Number	Function	
	Brown	1	CAM 2 V+
	Red	2	CAM 1 V+
	Green	3	CAM 1 Audio
	Yellow	4	CAM 1 Video
	Black	5	Ground
	Orange	6	CAM 2 Video
	White	7	CAM 2 Audio

### TVG Part Numbers

TVG Part Number	Description
304541	Blueline Susie Lead 7-Pin, 4.5m.
304752	Blueline Susie 7-Pin Socket with 2 x 4-Pin Female Aviation Connectors
304753	Blueline Susie 7-Pin Socket with 2 x 4-Pin Male Aviation Connectors
304754	Blueline Susie 7-Pin Tractor Kit
304755	Blueline Susie 7-Pin Trailer Kit

## Blueline CVAS Cables



Blueline CVAS Cables are an 8 core shielded extension cable for use with our Commercial Vehicle Announcement System (CVAS) speaker. They the same tough TPU jacket as the rest of the Blueline range, designed to provide protection against harsh environments.

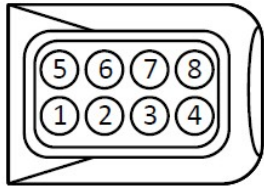
The cables are made from copper and insulated with PVC, then the protective TPU jacket.

The cable outside diameter is 7mm.

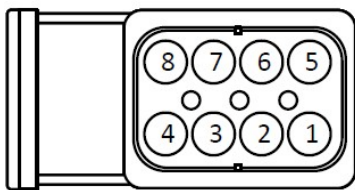
## Blueline CVAS Cables

### TVG Part Numbers

Below is the pin layout for the Blueline CVAS cables.



8-Way Connector  
Housing Male



TE Connectivity, MPC  
2 Row 8-Way In-Line  
Mount Socket

Pin	Colour	Function
1	Red	Positive 12 / 24V
2	Black	Ground
3	Blue	Negative Input
4	Green	Positive input. 10V or above On, 3.4V or below Off
5	White	Negative Input / CAN H
6	Yellow	Positive input. 10V or above On, 3.4V or below Off / CAN L
7	Orange	Positive or Negative Input / CAN L
8	Pink	Positive or Negative Input / CAN H

TVG Part Number	Description	Length	Connectors
304899	CVAS Blueline extension lead	3m	1 x MCP 2 Row 8-way in-line Mount socket. 1 x 8-Way connector housing male.
304901	CVAS Blueline extension lead	6m	1 x MCP 2 Row 8-way in-line Mount socket. 1 x 8-Way connector housing male.
304776	CVAS Blueline lead	6m	1 x MCP 2 Row 8-way in-line Mount socket. 8 Wire flying leads.
304846	CVAS Blueline lead	650mm	1 x 8-Way connector housing male. 8 Wire flying leads.

## About Us

The Vehicle Group Limited (TVG) is a leading manufacturer of high quality safety and security systems for commercial vehicles. Our facility in North Yorkshire, where we have circa 100 employees, is home to our design, manufacturing, engineering, and service centre. We are especially proud of our market leading, British engineered and manufactured CCTV solution Oculux®, which is used Worldwide.

Our technology's include:

- Oculux® Cameras.
- Automotive CCTV.
- CANbus Readers.
- Commercial Vehicle Announcement System (CVAS).
- Vehicle Solar Systems.
- Cable Harness Design & Manufacture.
- Electronic Design & Manufacture.
- Systems Development.

## Useful Contacts

Sales and Account Management Team

Telephone: 03450 60 50 40

Email: [sales@tvg.uk](mailto:sales@tvg.uk)

Technical Support

Telephone: 03450 60 50 40

Web: <https://support.tvg.uk/>

Email: [support@tvg.uk](mailto:support@tvg.uk)

Service and Installation Centre

Telephone: 03450 60 50 40

Email: [service@tvg.uk](mailto:service@tvg.uk)

1 Target  
Chartermark Way  
Colburn  
North Yorkshire  
DL9 4QJ

Tel: +44 (0) 3450 60 50 40

Email: [info@tvg.uk](mailto:info@tvg.uk)

Web: [www.thevehiclegroup.com](http://www.thevehiclegroup.com)