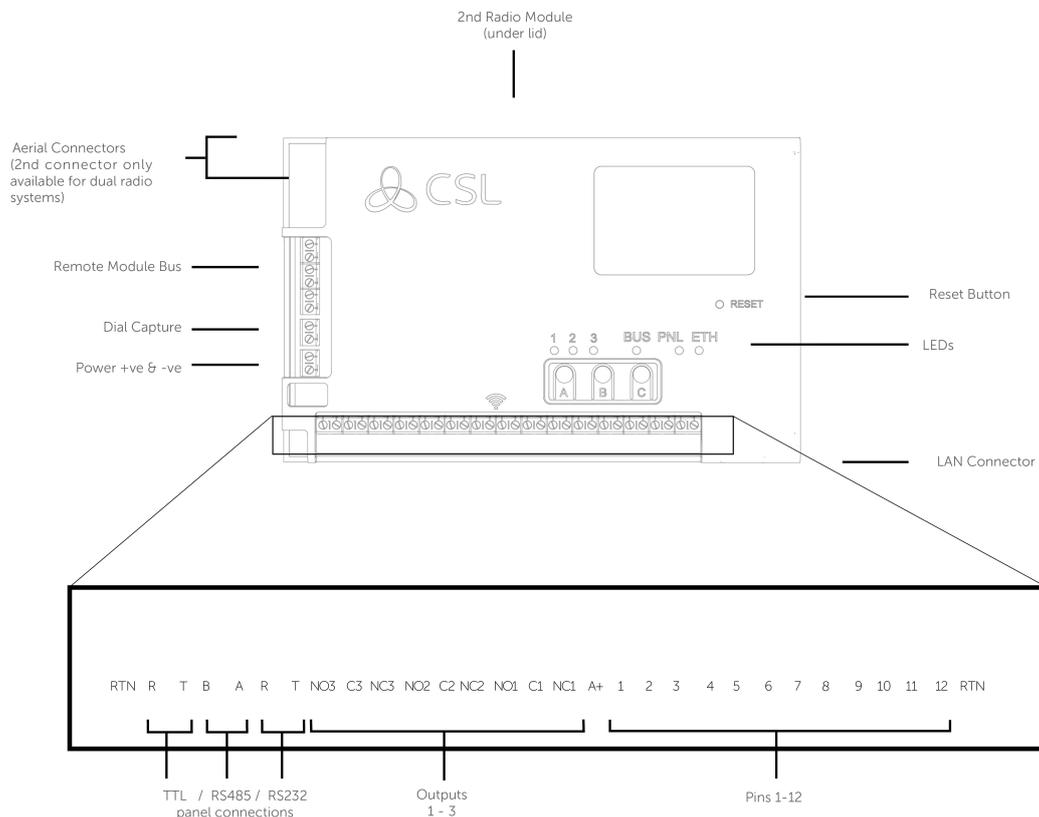# DUALCOM PRO 2 RANGE

DualCom Pro 2 Range

Introduction

The DualCom Pro 2 Range offers Installers easier, faster installation of a professional signalling system with even greater resilience, plus access to CSL Live, our ordering and management portal.

Using the onboard serial connections, pins triggering or dial capture, DualCom Pro 2 is compatible with a wide range of control equipment including systems installed to EN50136 & PD6662. The range consists of DigiAir Pro 2 - our single-path solution that utilises a Radio path or LAN to signal an alarm; and GradeShift Pro 2 - our dual-path solution that utilises a combination of two Radio paths or one Radio and one LAN path to signal an alarm.

Figure 1 - DualCom Pro 2

It's as Easy as 1, 2, 3!

Most DualCom Pro 2 units are ready to go after these few simple steps

1) Wire and connect power - Refer to step 3 in the main quick guide for information on pins and serial connections

2) Wait 5 Minutes for LEDs 1-3 to go Green - Whilst your DualCom Pro 2 downloads its configuration

3) You're good to go! - For customisation use the CSL My Base App/Web Portal. For panel configuration instructions see our online guides

Need a My Base Account?

[CLICK HERE TO REGISTER](#)

Need One Time My Base Access?

[CLICK HERE](#)

Need Panel Configuration Instructions?

[CLICK HERE TO FIND YOUR PANEL](#)

Need UDL Configuration & Install Instructions?

[CLICK HERE TO FIND YOUR UDL GUIDE](#)

DualCom Pro 2 Range

Step 1 - Site Survey

VARIANTS WITH RADIO

Use a CSL Signal Analyser to determine if enough base stations (2 or more) are available at the site and that they can supply sufficient signal strength (30% and above). This will determine the optimum location for the DualCom's aerial to be mounted.

If you do not have a Signal Analyser we recommend powering up the DualCom Pro 2, connecting the aerial/s, going through the commissioning process and checking the signal strength before permanently fitting the aerial. Whilst in the connectivity menu, LED 1 (for single radio systems) or 1 & 2 (for dual radio systems) should be green to show an acceptable level of Radio signal/quality. See Connectivity LED section for more information see **Section 4 - Testing (Figure 11)**.

VARIANTS WITH LAN

DualCom Pro 2 uses DHCP as default, fixed IP settings can be added/amended in the My Base App. Fit the Ethernet Cable to the device and connect to the customer's router. Ensure the customer's LAN socket is live and their network allows access to the CSL servers -
see https://www.csl-group.com/uk/installer-zone/survey-form/customer-it-survey-form/ for more information on what is required.

The ETH LED will flash green to indicate connection.

DualCom Pro 2 Range

Step 2 - Installation

DualCom Pro 2 must be installed within an enclosure suitable for the installation certification. The unit should be fixed securely using the adhesive pads supplied or via the screw fixings accessible by removing the lid.

Once fitted, ensure:

a - As required, the aerial/s are connected and/or the ethernet cable is installed

b - The alarm panel or PSU is powered down, then wire the DualCom Pro 2 in this order.

1. Neg (-) power , 2. Pos (+) power , 3. serial cable or inputs

c - If required, connect the serial cable - RS485, RS232 or TTL (panel dependent) – see **Section 3 - Commissioning (Figure 6)** for more information

d - Connect any hardwired alarms into the device – see **Section Technical Specifications (Figure 1)** for more information

e - Connect the fault output

f - Ensure that all inputs are electrically isolated

g - Restore power to the alarm panel or PSU

IN ORDER TO MAINTAIN COMPLIANCE WITH THE REQUIREMENTS FOR ELECTRICAL SAFETY THE DUALCOM PRO SHOULD BE POWERED FROM A FUSED CONNECTION WITH FOLLOWING RATING:

- **FOR A 12V DC SYSTEM (SUPPLY VOLTAGE IN THE RANGE 10VDC TO 14VDC) A FUSE RATED AT 1.25**
- **FOR A 24V DC SYSTEM (SUPPLY VOLTAGE IN THE RANGE 20VDC TO 36VDC) A FUSE RATED AT 600 MA**

IF THE POWER SOURCE IS NOT LIMITED TO THESE VALUES, THEN A FUSE WITH THE CORRECT RATING MUST BE FITTED IN LINE WITH THE POSITIVE CONNECTION FROM THE POWER SOURCE

SITING AERIAL

DO	• INSTALL VERTICALLY IN AN OPEN SPACE. • COMPLETE A SIGNAL TEST BEFORE INSTALLING IN THE FINAL POSITION.
DON'T	• INSTALL CLOSE TO METAL OR SOURCES OF INTERFERENCE, I.E. WIRING, LIGHTING, ELECTRICAL INSTALLATIONS, COMPUTERS, MONITORS, ROUTERS & OTHER EQUIPMENT.

DualCom Pro 2 Range

Step 4 - Testing

Before leaving site you must test the DualCom Pro 2 device as per these steps.

a - Place device on test at the ARC and send a range of signals from the panel

b - Perform a path test by tapping button C whilst in quiescent/normal state

c - LED 3 will flash to show signals are being sent

d - Check signals are received at the ARC

You should also simulate path failures at part of the testing process.

a - Place device on test at the ARC

b - Whilst in the quiescent/normal state section, press button A to get to the connectivity menu. The LEDs (LED 1 = single-path, LED 1 & 2 = dual-path) will be lit

c - Hold button B for 5 seconds. Once let go, LED 1 will go red to show path 1 is in simulated fail

d - For dual-path devices, hold button C for 5 seconds. Once let go, LED 2 will go red to show path 2 is in simulated fail. Check signals are received at the ARC

e - Tap button B & C to restore each path. LEDs 1 and/or 2 will go green. Check path failure signals are received at the ARC

> **IF YOU HAVE PURCHASED A DUAL-PATH DEVICE, YOU MUST ENSURE BOTH PATHS ARE CONNECTED BEFORE LEAVING SITE.**

> **IF YOU DISCONNECT BOTH PATHS AT THE SAME TIME, MY BASE WILL ONLY SHOW THE FIRST PATH IN FAILURE. THIS IS EXPECTED BEHAVIOUR.**

LEDS & TROUBLESHOOTING

Figure 9 - Commissioning LEDs

As the DualCom Pro 2 powers up for the very first time it will run through a

commissioning process. You will need to wait for LEDs 1, 2 & 3 to go green before the unit reboots.

LED 1	LED 2	LED 3
No light = No power	Red flashing = No comms	Red flashing = No comms
Red flashing = Power Start Up	Amber solid = 1 path comms (dual-path systems)	Amber flashing = Comms path found
Green solid = Power On	Green solid = All paths comms (dual-path systems)	Amber solid = Commissioning server found. Contacting alarm server
		Green solid = Fully Commissioned

Figure 10 - Quiescent/Normal State LEDs

Once commissioned, the unit will return to its quiescent/normal state. Only LED 3 should be visible and will show you whether the unit has any errors or is transmitting data.

LED 3
Red solid = Error found on the device (no commissioning performed)
Amber flashing = Only one path is working on the dual-path system and the device is currently transmitting or receiving data (pdp context active)
Amber solid = Only one path is working on the dual-path system, however it is able to transmit & receive data
Green flashing = No errors found and the device is currently transmitting or receiving data (pdp context active)
Green solid = No major errors found

Figure 11 – Connectivity Section

To toggle between the connectivity section and quiescent/normal state press button A. Single-path systems will only show LED 1. Dual-path systems will show both LEDs 1 & 2. LAN data transmission is covered by the ETH LED.

LED 1	LED 2
Red flashing = No signal / SIM not ready or LAN not connected	Red flashing = No signal / SIM not ready or LAN not connected
Amber flashing = Registering / Signal is unacceptable / LAN connected but cannot transmit data	Amber flashing = Registering / Signal is unacceptable / LAN connected but cannot transmit data
Green flashing = Signal is acceptable (3/10) but could be improved	Green flashing = Signal is acceptable (3/10) but could be improved
Green solid = Signal 4/10 (or above) or LAN connected	Green solid = Signal 4/10 (or above) or LAN connected

Figure 12 – Simulate Path Fails (testing the system)

It is possible to simulate a path fail for the primary and secondary path. Once in the connectivity section, press and hold B to fail the primary path and/or C to fail the secondary path. The path will stay in fail for 15 mins unless you tap B or C again.

LED 1	LED 2
Red flashing = Interface in fail mode	Red flashing = Interface in fail mode
Green flashing = Interface tx/rx data	Green flashing = Interface tx/rx data
Green solid = Interface out of fail mode	Green solid = Interface out of fail mode

Figure 13 – Additional LEDs

There are 3 additional LEDs shown as BUS, PNL and ETH.

LED 1	LED 2	LED 3
BUS	RS422 connection to additional accessories (i.e remote radio module)	Green/Amber flashing = Data is being transferred
PNL	Serial connection to panel	Green/Amber flashing = Data is being transferred
ETH	LAN connection to customer's router	Green/Amber flashing = Data is being transferred

RADIO TROUBLESHOOTING

How can I fail my signalling paths without having to disconnect them?

To fail each path enter the connectivity menu (see simulate path fail section - Figure 12 above). Press and hold B to fail the primary path or C to fail the secondary path. The path will stay in fail for 15 mins unless you tap B or C again to restore the applicable path.

How can I check the signal strength of each radio module?

You can check the signal strength of each radio module on a commissioned device via the My Base App. Alternatively, when in the quiescent/normal state, you can press button A to toggle to the connectivity menu. Once there, LED 1 (first path) & LED 2 (second path) will show you the signal strength. We recommend a solid green LED (40% or 4/10).

Does my unit have a roaming SIM?

Yes, all DualCom Pro 2 devices come with at least 2 Roaming 4G SIMs

My signal strength is less than 30% (3/10) or my LED is orange/red. What can I do to improve it?

For all radio variants:
• Avoid coiling the aerial cable
• Move the aerial away from electrical equipment/wiring
• Move the aerial to a higher point in the property or closer to a window/door

DualCom Pro 2 Range

Step 3 - Commissioning

On power-up, the DualCom Pro 2 will automatically contact the Gemini Global Platform to perform its commissioning process, which will take up to 5-8 minutes. Once commissioning is complete, LED 3 will go green to indicate that the device is fully commissioned - see **Below Figure 2**.

Figure 2 - Commissioning

LED 1 - Power	LED 2 - Comms Path	LED 3 - Commissioned
⬤	⬤	⬤

MENUS & BUTTON CONFIGURATION

All device programming can be performed using the My Base App. We strongly recommend you use this App instead of the buttons and LED menu as it provides access to various hardware and site information. You can also use the one-time access page to install a device using your mobile phone or web browser even without login details. If you cannot get online during the install you can use the LED menu system and buttons.

LED MENU SYSTEM

Once commissioned, DualCom Pro 2's menu system is divided in to 2 sections: Quiescent/Normal State and Connectivity.

BASIC BUTTON CONFIGURATION

To move between sections during installation press the A button. Whilst in quiescent/normal state, tap the C button to send a Test Call or Press and hold for 5 seconds to allow the device to perform a self-learn of the current input state.

Figure 3 - Quiescent/Normal state

LED 3 will show the device status.

- **Green** = paths and system are OK
- **Amber** = 1 path is not working
- **Red** = error

LED 1 - N/A	LED 2 - N/A	LED 3 - Device Status
◯	◯	⬤

Press button A once in quiescent/normal state to enter this menu. LEDs 1 & 2 will show the signal/connectivity status of your paths.

> **LEDS BELOW SHOW FOR RADIO PATHS. ONCE PLUGGED IN, LAN CONNECTED DEVICES WILL SHOW**
>
> **GREEN = GOOD CONNECTION / AMBER = POWERED BUT NO DATA CONNECTION**

- **Solid green** = good signal

- **Flashing green** = acceptable signal

- **Flashing amber** = emergency, only/low signal available (move aerial)

- **Flashing red** = SIM not ready/no signal available (move aerial).

- **Red** = error

Figure 4 - Connectivity

| LED 1 - Primary Path	LED 2 - Secondary Path (if Applicable)	LED 3 - N/A
🟢	🟢	⚪

PIN TRIGGERING

For this operation the device is triggered by removing or applying zero volts to input terminals 1-12. No external pull-up resistors will be required. This is generally achieved via the digital communicator outputs of a control panel. On receiving an input to the pins terminals the unit will signal alarm conditions and will generate the relevant messages and forward them via the Gemini Global Platform to the ARC. Installers are advised that the intended use should avoid situations where the rate of trigger exceeds the rate at which messages are received at the ARC receiver.

Figure 5 - Example of pin triggering wiring

Control Panel   DualCom Pro 2

1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9		9
10		10
11		11
12		12

Neg (-) PWR

Pos (+) PWR

Neg (-)   Pos (+)
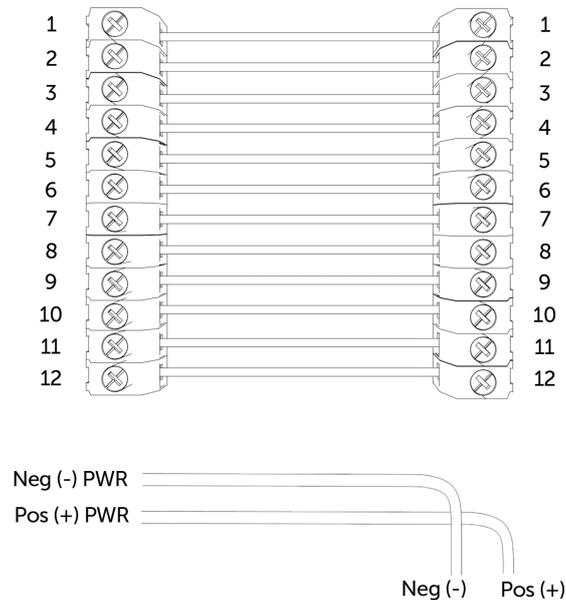
PIN INPUT CONFIGURATION

• To self-learn the current panel input status, press button C whilst in quiescent/normal state for 5
seconds. LED 3 will flash red twice once completed.

• To change the input from negative removed or applied to positive removed or applied, change the pin bias via My Base under the Hardware menu button and use the A+ terminal instead
of RTN.

IF YOU CANNOT CHANGE THE PANEL'S POLARITY AND YOU DO NOT HAVE ACCESS TO MY BASE OR THE WEBSITE, PLEASE SPEAK TO OUR TECHNICAL SUPPORT TEAM

DualCom Pro device general inputs are defined as SIA untyped alarms for pins 1-12 (excluding pin 4).

UA/UR8001 to 8012 on standard product configuration.
Example: [#123456|NUA8001|AChannel 1 Alarm]
[#123456|NUR8001|AChannel 1 Restore]
DualCom Pro device pin 4 Open / Close inputs defined as SIA alarm OP and CL

OP/CL8004 on standard product configuration.
Example: [#123456|NOP8004|ASystem Set]
[#123456|NCLR8004|ASystem Unset]

OUTPUTS

All 3 outputs can be configured as either N.O or N.C as required. Output 1 is defaulted to indicate a total path fail condition to the control panel. Output 1 can be reconfigured to indicate another path failure type, Output 2 can be configured to indicate a path fail condition or be used as a manual trigger and Output 3 can be used as a manual trigger. To make any amendments please use the My Base App.

> **IF THE DEVICE IS POWERED BY A 24V (FIRE PANEL), THE + TERMINAL SHOWN WILL STILL DELIVER 12V**

Figure 6 - Example of Fault Output Wiring
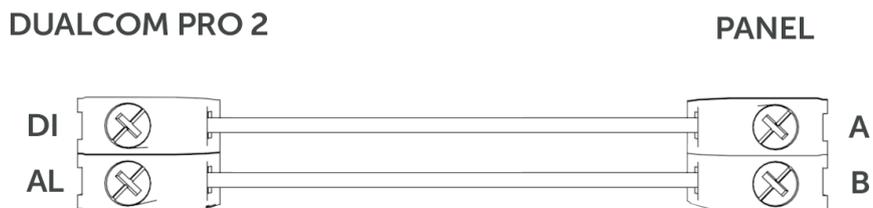
Control Panel
Line Fault Input

RTN
NO1
C1
NC1
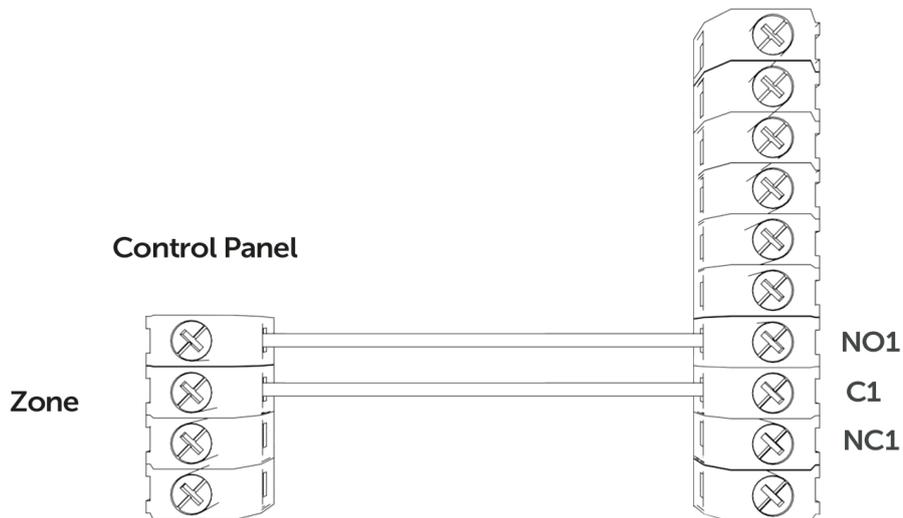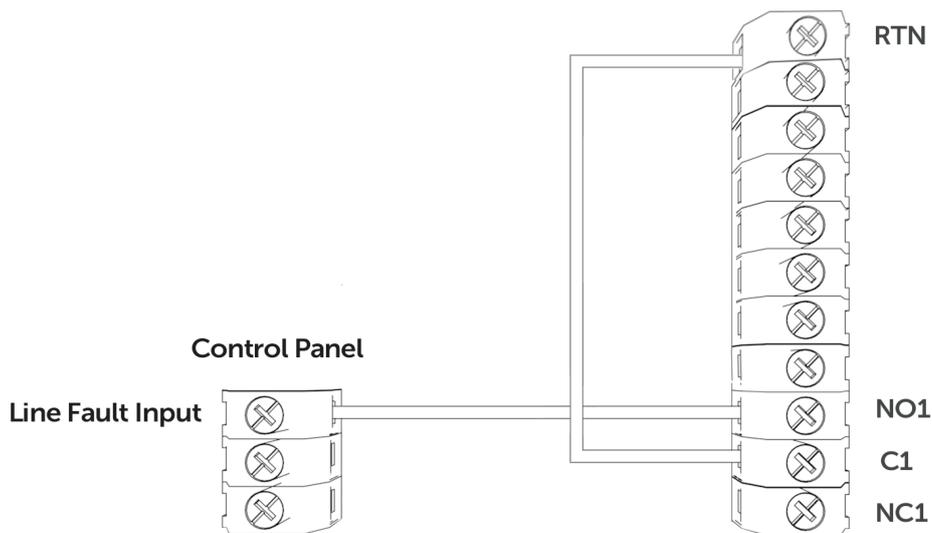
DIAL CAPTURE

DualCom Pro 2 simulates and replaces the phone line connection to the control panel's Digi-Modem. The control panel's Digi-Modem must use one of the following alarm formats: Fast Format*, Contact ID or SIA. In the event the control panel needs to send a signal to the ARC, DualCom Pro 2 will capture the message and forward it, via Gemini, to the ARC. The Digi-Modem must have an ARC telephone number (ie 01) and account number (ie 1234) programmed for Dial Capture to work. If you want to monitor the Dial Capture connection, you will need to connect an output configured as PSTN line fault on your control panel, to one of the DualCom's inputs. That input then needs to be designated as Dial Capture Fail at your ARC.

*Please confirm compatibility of Fast Format with DualCom Pro 2 via your ARC.

Figure 7 – Dial Capture Wiring

DUALCOM PRO 2
DI
AL

PANEL
A
B

PANEL CONNECTION

Your device will come pre-configured without a panel connection (pins only). To enable serial connection to a control panel, go to the My Base App and select the panel type.

Panel guides can be found by clicking the panel type (after selection) via the My Base App; scanning the QR code below or by visiting the Installer Zone on our website.

CLICK HERE TO FIND YOUR PANEL

SERIAL / RS232 / 485 / TTL PANEL CONNECTIONS

As standard, DualCom Pro 2 is supplied with a serial cable compatible with Honeywell (RS485), Orisec (TTL), Pyronix (RS232), Texecom (TTL) and HKC (TTL) panels. Other types may require an additional cable/plug-in that can be purchased on our Installer Shop. It is possible to use pins and serial cable together, if required.

MANUFACTURER	PANEL	CONNECTION	CABLE/PLUG ON	SUPPLIED CABLES
Honeywell	Galaxy	RS485	4 Pin (cable provided)	Green - RTN Blue - RS485-B Red - RS485-A
Orisec	All	TTL	4 Pin (cable provided)	Green - RTN Blue - TTL-T Red - TTL-R
Pyronix	Euro/Enforcer	RS232	6 Pin (cable provided)	Green - RTN Blue - RS232-R Red - RS232-T
Texecom	Premier/Elite	TTL	5 Pin (cable provided)	Green - RTN Blue - TTL-R Red - TTL-T
HKC	1070/10270	TTL	4 Pin (cable provided)	Green - TTL-R Blue - RTN Red - TTL-T

For RISCO, Eaton, UTC and other panels, please purchase the relevant cable from CSL Live. For other connections or further instructions on Control Panel programming, panel guides can be found by clicking the panel type (after selection) via the My Base App, by scanning the QR code below or visiting the Installer Zone of our website.

Figure 8 - Serial Cable (RS232/485/TTL)

6 Pin - Pyronix

5 Pin - Texecom

4 Pin - Honeywell /
Orisec / HKC

YOU MUST POWER DOWN THE CONTROL PANEL AND DUALCOM PRO 2 BEFORE CONNECTING THE SERIAL LEAD TO AVOID DAMAGE

CLICK HERE TO FIND YOUR PANEL

DualCom Pro 2 Range

Technical Specifications

Dimensions	90mm (h) x 142mm (w) x 22mm (d)
Weight	189g excluding aerial
Temperature	-10 °C to + 55 °C
Humidity	0 - 90% non-condensing
Mounting	Via fixing points under main cover
Warranty	5 years
Power Requirement	10 - 36 Volts DC In order to maintain compliance with requirements for electrical safety the Dualcom Pro should always be powered from a fused supply with following rating: • For a 12V DC system (supply voltage in the range 10 Volts DC to 14 Volts DC) a fuse rated at 1.25 • For a 24V DC system (supply voltage in the range 20 Volts DC to 36 Volts DC) a fuse rated at 600 mA If the power source is not limited to these values, then a fuse with the correct rating must be fitted in line with the positive connection from the power source. The SPT will shut down on detecting a low supply of 7.6 Volts DC +/- 0.5 Volts DC
Current Consumption	DigiAir Pro 2 Radio 12V Power Supply: 103 mA (average value) DigiAir Pro 2 Radio 24V Power Supply: 59 mA (average value) DigiAir Pro 2 LAN 12V Power Supply: 96 mA (average value) DigiAir Pro 2 LAN 24V Power Supply: 55 mA (average value) GradeShift Pro 2 LAN Radio 12V Power Supply: 100 mA (average value) GradeShift Pro 2 LAN Radio 24V Power Supply: 63 mA (average value) GradeShift Pro 2 Dual Radio 12V Power Supply: 120 mA (average value) GradeShift Pro 2 Dual Radio 24V Power Supply: 72 mA (average value)
Radio Path	2G, 3G, 4G
Output Ratings	Maximum applied voltage = 60VMaximum current = 150mA
Aerial	50 ohms (nominal) on MMCX socket
Operation Method	Store and forward
CIE Interconnections	Input triggering (standardised parallel), RS232, RS485, TTL
RCT Protocols	SIA
Input Terminals	Max +30 Volts, Min 0 Volts DC (reference supply 0V) with a + or – 40% change for > 200ms.
Low Battery	7.6V DC +/- 0.5 VDC
User Serviceable Parts	There are no serviceable parts within the DualCom Pro Range
Applicable Standards	Suitable for use in alarm systems complying to: • EN50131-1:2006+A2:2017 • EN50136-1:2012+A1:2018 • EN 54-21 LAN (Type 1): D4, M4, T5, A4, S0, I0 • EN 54-21 GSM (Type 1): D4, M4, T3, A4, S0, I0 • PD6662:2017 • PD6669:2017 Emissions Standard – Radio Equipment Directive 2014/53/EU (RED) EN 50130-5 Environmental Class II ATS Classification EN 50136-2:2013 SP2, SP3, SP4, DP1, DP2, DP3, DP4 ATS Configuration EN 50131-10:2014 Type Y ATS Classification EN 50136-1-1:1998 • Radio D3, M3, T4, S2, I3, A4 (ATS5) • LAN D3, M3, T5, S2, I3, A4 (ATS5)

DIGIAIR PRO 2

PATH	AVAILABLE GRADES	WHAT'S IN THE BOX	PART NUMBER
Radio	SP2	DigiAir Pro 2, serial cable & small aerial	CS.51.R2
LAN	SP2	DigiAir Pro 2, serial cable, ethernet cable	CS.51.L2

GRADESHIFT PRO 2

PATH	AVAILABLE GRADES	WHAT'S IN THE BOX	PART NUMBER
LAN + Radio	DP2 DP2+ DP3 DP4	GradeShift Pro 2, serial cable, single T-bar aerial, ethernet cable	CS.53.LR2 CS.53.LR2P CS.53.LR3 CS.53.LR4
Radio + Radio	DP2 DP2+ DP3	GradeShift Pro 2, secondary radio module, serial cable, dual T-bar aerial	CS.53.RR2 CS.53.RR2P CS.53.RR3

UK CA	CE
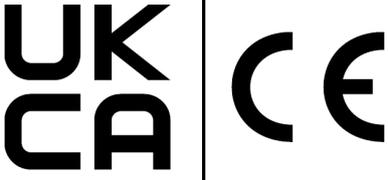
24
CS.51.HWR.02 / CS.51.HWL.02 / CS.53.HW.02 / CS.55.HW.02 / CS.40.104.02
CSL DualCom ltd. Building 4, Croxley Park, Hatters Lane, Watford, WD18 8YF
KIWA 0063-CPR-242190024 / 00
EN 54-21:2006 Fire detection and fire alarm systems / Alarm transmission and fault warning routing equipment EN 50131-10:2014 EN 50136-1:2012/A1:2018 EN 50136-2:2013 PD6662:2017 / PD6669:2017

Type of transmission system: Fire Safety - Type 1 Security - SP2, SP3, SP4, SP5, DP1, DP2, DP3, DP4 Security Grade: 1- 4 depending on the I&HAS housing in which it is installed. Environmental Class: II Certification Body:Kiwa Nederland B.V
www.csl-group.com

DualCom Pro 2 Range

Fire Guide

DualCom Pro Fire Guide

This document covers the requirements of a Fire installation and is a supplement for the GradeShift Pro 2 and DigiAir Pro 3. The guide uses DualCom Pro Fire to refer to both product variants.

Mounting

The enclosure requirements for the DualCom Pro Fire are the same as for the Fire Alarm Panel itself which must meet the requirements of the EN54-21 standard.

The DualCom Pro Fire should be mounted inside the Fire Alarm Panel or inside a separately powered housing that meets the requirements of section 7.3 of the EN54-21 standard.

Input Pins

The default pin profile configured at installation is "PinLearn Fire". With this, pins 1 and 2 are configured for use with fire alarm panels (EOL mode) and will generate a SIA Tamper Alarm/Restore in response to additional conditions along with Alarm and Restore with the other pins:

- Open circuit and open circuit restore
- Short circuit and short circuit restore
- Fault

If additional pins are required in EOL mode, use My Base to configure the DualCom Pro Fire to use pin profile "PinLearn EOL Pins 1-12". In this configuration all pins on the DualCom Pro Fire will respond to the additional conditions and generate the corresponding events to the Gemini Global Platform.

Pin 1: intended for receiving the Fire Alarm/Restore signal from the Fire Alarm Panel.

Pin 2: intended for receiving Fault/Restore signal from the Fire Alarm Panel.

Remaining Pins: used for receiving notifications from any other device (e.g. an Intruder Panel). These pins take a lower priority than pins 1 & 2 when signalling to the Gemini Global Platform.

Input Pin Wiring

Input pins, which are configured in EOL mode, require 10k and 4k7 Ohm resistors to be wired in line as shown below.

The DualCom Pro Fire uses a normally closed configuration so that a power fail on

the Fire Alarm Panel will signal an alarm to the Gemini Global Platform.

- If the circuit is broken, then an open circuit tamper alarm will be generated
- If it detects 0v, then a short circuit tamper alarm will be generated
- If the wrong resistor values have been used, then a fault tamper alarm will be generated

Example Of Wiring Using Normally Closed
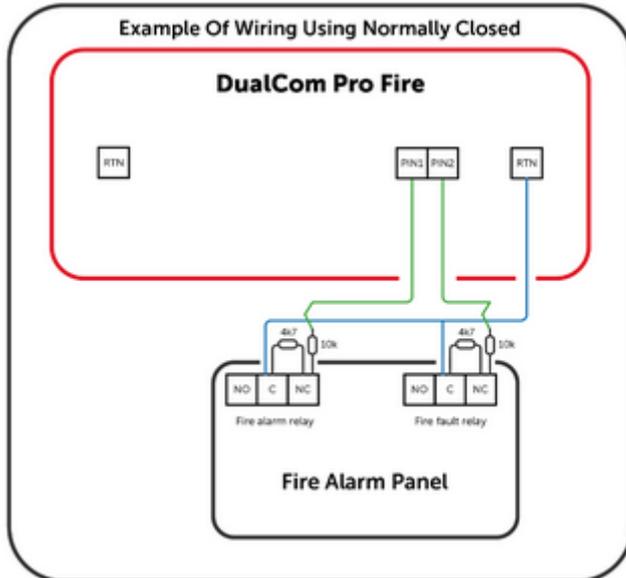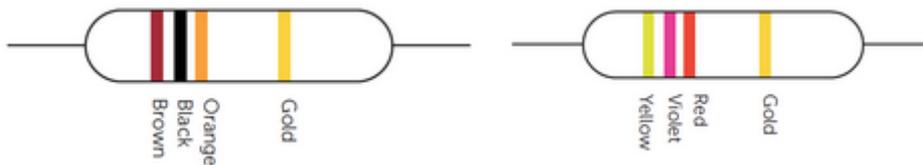
Resistors

These are the colour code markings for the 10k Ohm and 4k7 Ohm resistors respectively.

Self-Learn

If the self-learn functionality (Press Button C for 5 seconds) is invoked when an EOL pin is Alarm State then the DualCom Pro Fire will switch to generating a Restore event when a high voltage is detected for that pin going forward and an Alarm event when a low voltage is detected.

Relays

The relays are intended to notify the Fire Alarm Panel of events on the DualCom Pro, Gemini Global Platform or from the ARC. Their configuration is fixed in Fire Mode and cannot be changed via My Base.

When the DualCom Pro is unpowered, NC is connected to C and NO is not connected to C.

When the DualCom Pro is powered and in a quiescent state, Relay 1 has the NO1 connected to C1 and the NC1 is not connected to C1.

If a fault occurs then, Relay 1 changes such that NO1 is not connected to C1 and NC1 is connected to C1. When the fault is cleared it will revert.

Fault conditions include:

- If any of the input pins being monitored enter a fault state
- If there are communication path issues (Line Fault)
- If there is an alarm/restore that is sent to the ARC for one of the monitored pins and a response is not received within the configured timeout
- If there is a power failure

Relay 2 will connect NO2 to C2 and disconnect NC2 from C2 relay for 5 seconds to indicate that the ARC has acknowledged successful receipt of an event.

Relay Wiring
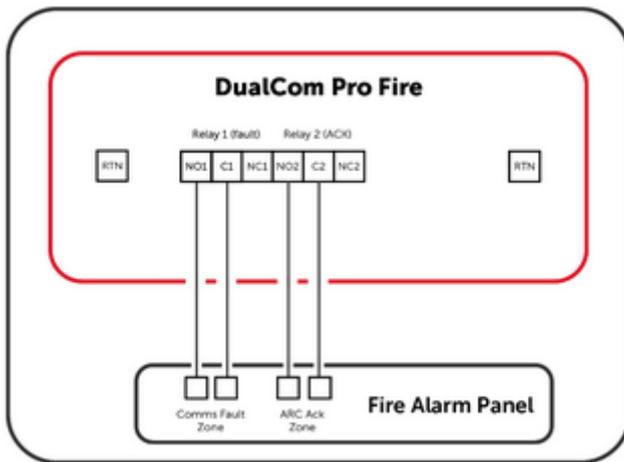
Fault Reporting

To meet the EN54-21 requirements for monitoring on Type 1 Fire systems, this device sends regular polling calls to the Gemini Global Platform on all connected and active transmission paths. The Installer shall ensure that appropriate reporting actions have been agreed with the ARC for all alarm codes, transmission path failure notifications and polling failure reports from the Gemini Global Platform.