

CAPABILITY STATEMENT

ULTIMA CONTROL

Control panels, wiring harnesses and generator-control systems



We engineer, build and commission practical electrical and control packages for diesel generators, industrial engines and critical-power systems.

CONTROL PANELS

Custom panels and retrofit assemblies engineered around the machine and operating duty.

WIRING HARNESSES

Rugged engine and machinery looms for heat, vibration, oil, dust and field serviceability.

SYSTEM INTEGRATION

Controllers, PLC, HMI, SCADA, switchgear interfaces, testing and commissioning.

DESIGN | BUILD | TEST | COMMISSION | SUPPORT

ULTIMA SERVICE GROUP PTY LTD | ABN 90 676 533 252 | EC 17267 | WESTERN AUSTRALIA

FABRICATION AND INTEGRATION CAPABILITY

What we build

Ultima Control turns operating requirements into complete, tested control packages. We can deliver a new assembly, reproduce an obsolete system, or modernise an existing generator or machine without losing the practical details required for installation and maintenance.



Custom control panels

- Generator, engine and machinery control panels
- Controller, PLC, HMI and protection integration
- Switchgear, ATS and auxiliary-system interfaces
- Schematics, terminal plans and labelled field connections



Harsh-environment wiring harnesses

- Engine, generator and machinery wiring looms
- Connector selection, branch protection and strain relief
- Serviceable labelling and documented pin-outs
- One-off, prototype and repeat-build assemblies



Retrofit and upgrade packages

- Obsolete controller and relay replacement
- Pre-engineered mounting, wiring and interface assemblies
- Protection, metering and operator-interface upgrades
- Staged changeover, testing and site commissioning

Integrated control systems

- Synchronising, paralleling and load sharing
- PLC, HMI, SCADA and remote telemetry
- Power-management and plant sequencing
- Alarm, event, trend and operational visibility

ENGINEERING THROUGH TO COMMISSIONING

A complete delivery capability

One technical team can carry the work from concept and electrical design through fabrication, software, testing, field installation and lifecycle support. This reduces interface risk and gives the client one accountable point for the finished control package.

TECHNICAL CAPABILITY

- Diesel generator and industrial engine control systems
- Synchronising, paralleling, kW/kVAr sharing and power management
- Generator controllers, PLC, HMI and SCADA engineering
- ATS, switchboard, protection, metering and auxiliary interfaces
- Electrical schematics, I/O lists, cable schedules and termination details
- Controller programming, alarm logic and operator interfaces
- Workshop testing, fault simulation and functional acceptance testing
- Site installation support, commissioning, tuning and troubleshooting

DELIVERY PROCESS

01 DEFINE

Confirm the machine, operating philosophy, interfaces and acceptance criteria.

02 ENGINEER

Develop the architecture, drawings, component selection and software design.

03 BUILD

Fabricate the panel, harnesses and interface assemblies with clear identification.

04 TEST

Verify wiring, I/O, protection, sequences, alarms and operator functions before site.

05 COMMISSION

Integrate with the equipment, prove performance and provide practical support.

Where we add value

POWER GENERATION

Multi-generator plants, standby systems, remote power and critical loads.

OEM & MACHINERY

Control packages, repeat-build harnesses, prototypes and machine upgrades.

INDUSTRIAL SITES

Mining, utilities, infrastructure, processing and harsh operating environments.

Documentation and handover

ENGINEERING DELIVERABLES

Electrical schematics, I/O schedules, termination details, cable schedules, component schedules and operating descriptions.

TESTING & HANDOVER

Functional test records, alarm and sequence verification, controller or PLC software backups, commissioning records and practical handover information.



BUILT FOR REAL EQUIPMENT AND OPERATING CONDITIONS

Why Ultima Control

ENGINEERING-LED DELIVERY

- Controls engineering and electrical delivery coordinated under one point of accountability.
- Practical designs shaped by installation, commissioning, fault-finding and maintenance needs.
- A specialist focus on diesel generators, industrial engines and critical-power controls.
- Capability to combine fabricated hardware, wiring, software and field integration in one package.



ENGINEERING LEADERSHIP: DEGREE IN INDUSTRIAL AUTOMATION ENGINEERING | DIPLOMA IN ELECTRICAL ENGINEERING | LICENSED WA ELECTRICAL CONTRACTOR

Ideal projects

We are particularly interested in projects where a client needs a control system physically engineered and built, not simply specified. Typical opportunities include:

NEW BUILDS A complete generator, engine or machinery panel with drawings, wiring and tested control logic.	REPEAT ASSEMBLIES Documented harnesses or control packages for OEMs, fleet owners and equipment builders.
OBSOLESCENCE UPGRADES A replacement controller, panel or wiring package for unsupported or unreliable equipment.	PLANT INTEGRATION A multi-generator, SCADA, switchgear or telemetry package requiring coordinated site commissioning.

DISCUSS A CONTROL PANEL, HARNESS OR SYSTEM BUILD

Send us the equipment details, existing drawings or the operating requirement. We can help define a practical scope for engineering, fabrication, testing and commissioning.

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