

dynamic logic



D4110 Programmable Outstation

The D4110 is an intelligent, programmable outstation providing a flexible data monitoring, local processing and logging package.

Benefits

- ❑ Combining telemetry, logging and processing facilities in one unit, the D4110 is suitable for a wide range of applications.
- ❑ Powerful outstation offering extensive local processing, calculation and intelligent control.
- ❑ Provides customer peace of mind and reduced administration by using automatic monitoring, storage, reporting, processing and control of remote data/alarms.
- ❑ Offers derived signals and values which eliminates the need for additional, external equipment.
- ❑ Ease of operation through a choice of flexible configuration, programming and access procedures.
- ❑ Provision for dual communications (with PSTN fallback.)
- ❑ Modular hardware allows system to be configured to customer needs.

Product Description

The D4110 is one of a range of intelligent, programmable outstations produced by Dynamic Logic and compatible with existing Dynamic Logic masterstations.

These outstations have been developed to meet the requirements of collecting and reporting data over the Public Switched Telephone Network (PSTN), SecureStream 300 Network (SS300), Private Wire (PW) and Radio communications media. Data security is ensured through the use of a high integrity protocol.

The D4110 offers a high level of independent intelligence in the form of local processing, calculation and control facilities generated by flexible user compiled/defined sequences. By combining telemetry, processing and logging facilities in one unit the need for additional external equipment is reduced.

The D4110 is easily programmed through a remote or local Outstation Programming Terminal (OPT) and/or a masterstation. The configuration and sequencing data is stored in a non-volatile memory.

Features and Facilities

- Local data processing, calculation and control facilities generated by flexible, user-written/defined sequence language programs.
- User friendly, flexible configurations and programming procedures, performed either locally or remotely.
- Reliable, soundly engineered product based on modern proven technology and utilising modular hardware.
- Programmable, automatic alarm dial outs with automatic retries to host systems.
- Up to five telephone numbers, dial-out rota and "special index" telephone number per sensor; all are user programmable.
- Site configuration and calibration parameters securely stored in battery backed non-volatile memory, (additional to outstation's integral standby battery).
- Local connection facility for an IBM-compatible laptop PC, running DL's OPT software package.
- Facility for remote connection of OPT without the need for additional hardware within the D4110.

- Modular I/O hardware for adjustable configuration and expansion.
- Integral data logging facility (min.66K, expandable), for storage of timed and event data, including variable rate logging.

Applications

The modular design, ease of operation and maintenance of the D4110 makes it ideally suited to a wide range of applications in industry and the utilities markets. These applications include the monitoring and control of:-

- Water and Sewage Plants
- Flood Defence Systems
- Distribution Networks
- Environmental Pollution
- Process/plant control
- Building Services
- Landfill Sites
- Transport Systems
- Industry Energy Consumption

Specification

- Logging
 - Time Logs (& 15 min averaging)
 - Event Logs
 - Sequence Logs (& variable rate logging)
- Sensor Inputs and Outputs
 - **Digital inputs** - 500V optical isolation from outstation, inputs protected to 100V d. c.
 - **8-decade Count inputs** - as per digital inputs with detection of pulse up to 25Hz; 2 customer set rate alarm points per I/P.
 - **Analogue inputs** - 500V isolation from outstation; 500V isolation between inputs; 12 bit ADC resolution; current, voltage and potentiometer inputs; 4 Customer-set level alarm trip points per I/P; 24 hour profile shadowing/alarm facility.
 - **Pseudo inputs** – providing internal level monitoring and alarm dial-out facility for mains and standby battery supply.
 - **Digital Outputs** - volt-free relay outputs set for either inching or latching operation.
- All input/output connections provided by up to 4 plug-in cards. Facility to accommodate a wide range of input types
 - Cards –

16DIN + 4AI + 2CI	(932)
16DIN + 8DO	(933)
2 S/E/Input Card	(937)
 - Alternatively, up to four of the following cards

32* DIN + 4AI	(938)
16AI + 2 S.E.	(939)
16DIN + 12DO	(940)

* 4 Digital inputs can be configured as count inputs.

- Sequences
 - user written/defined flexible programmes. facilities for a wide range of applications.
 - can be accessed either locally or remotely via OPT capacity to run 16 independent sequences in an outstation.
 - access to 50 derived digital points and 25 derived analogue points each fully configurable for logging and alarm dial-outs.
- Local Communications - OPT
 - * serial connection at 4800 baud (nom)
 - * IBM compatible PC/Laptop with OPT software
- User friendly, Windows based menu driven, MMI
- Remote Communications
 - * PSTN
 - * to all relevant BS and BAPT standards approved, separate modem
 - * BAPT approval no - BAPT/97/5048
 - * 300/1200 baud for host and remote OPT
 - * Radio - MPT1329 and MPT1411 - analogue and serial interfaces (PSTN fallback option available)
- Power Supply
 - 85 to 264V ac at 47 to 63Hz mains input.
 - Automatically recharged, integral 8 hour (nominal) standby battery. External 12Vdc supply option. Internal automatic power supply monitoring for mains failure and low battery conditions.
- Environment
 - 10° C to +55° C.
 - IP65 Enclosure.
 - 0.95% relative humidity, at 45deg C (non-condensing).
- Installation
 - Steel enclosure - Suitable for wall or panel mounting. Cable glands access to sensor terminals.
 - Pluggable connectors enable card removal without disturbing plant wiring.

Warranty: 12 months from delivery.

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The Company's policy is one of continued improvement and it reserves the right to change specifications at any time without notice.