ST501
Kiln Temperature Controller

FEATURES

- **Simple to use with large alphanumeric display**
- **Suitable for ceramics or glass**
- **20 fully adjustable programs**
- **Up to 30 segments per program**
- **1 ramp + dwell (soak) per segment**
- **Controlled ramps for heating & cooling**
- **Program pause feature**
- **Segment advance feature**
- **Temperatures from 0 to 1310°C**
- **Dwell times up to nearly 100 hours**
- **Ramp rates from 1 to 998°C/hour + full**
- **Delayed start facility - up to 4 days**
- **Program check facility**
- **Power failure recovery**
- **Energy used display**
- **Optional internal over-temperature trip**
- **Optional multi-function control relay (ST501A)**
- **Separate events for ramps & soaks (ST501A)**

DESCRIPTION

GENERAL The ST501 is a program controller designed for pottery, ceramics & glass firing. Its large illuminated 32 character display makes it easy to set up & use. Setting up is performed using an on-screen menu system and during firing full status information is displayed.

PROGRAMS 20 programs are provided. The programs are fully adjustable and each can contain from 1 to 30 ramp/dwell (soak) segments. Controlled heating & cooling ramps are possible.

For convenience the controller is provided with 10 pre-loaded programs. These programs cover the majority of common firing requirements and have been chosen to give safe repeatable results over a wide range of sizes, sections & material types. These programs can be altered or deleted as required.

TYPICAL DISPLAYS

selecting program...   firing...   status...   paused...

| PROG: 20 880° Cur | HEATING RAMP..r KILN TEMP 750°C | COOLING RAMP..r KILN TEMP 600°C | PROG: 20 SEG: 10 KILN TEMP 550°C | HEATING PAUSED r KILN TEMP 750°C |

OPTIONS

INTERNAL TRIP

This is an adjustable safety device which cuts off heating power in the event of over-firing. A normally hidden FAULT legend illuminates.

AUXILIARY RELAY

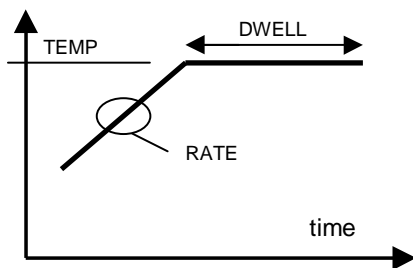The auxiliary relay can be user configured as either a damper control, safety alarm or event relay.

CABLE & CONNECTOR

This is a 2m or 3m cord fitted with a standard Harting style HAN 7D connector.
Mating pre-wired kiln connectors can also be supplied.

PRE-LOADED PROGRAMS

No	Name	Seg 1	Seg 2	Seg 3
1	Low Biscuit	30°C/hr to 200°C dwell 00:00	70°C/hr to 600°C dwell 00:00	999°C/hr to 960°C dwell 00:15
2	Normal Biscuit	30°C/hr to 200°C dwell 00:00	70°C/hr to 600°C dwell 00:00	999°C/hr to 1000°C dwell 00:15
3	High Biscuit	30°C/hr to 200°C dwell 00:00	70°C/hr to 600°C dwell 00:00	999°C/hr to 1160°C dwell 00:15
4	Earthenware Low Temperature Glaze	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 960°C dwell 00:30
5	Earthenware Mid Temperature Glaze	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 1040°C dwell 00:30
6	Earthenware High Temperature Glaze	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 1140°C dwell 00:30
7	Stoneware Glaze	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 1250°C dwell 00:30
8	On Glaze Enamel	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 780°C dwell 00:30
9	Heavy Sculpture	20°C/hr to 150°C dwell 00:30	50°C/hr to 300°C dwell 00:30	70°C/hr to 1000°C dwell 00:30
10	Lustre	30°C/hr to 150°C dwell 00:00	90°C/hr to 600°C dwell 00:00	999°C/hr to 750°C dwell 00:00

SEGMENT

TYPICAL PROGRAM