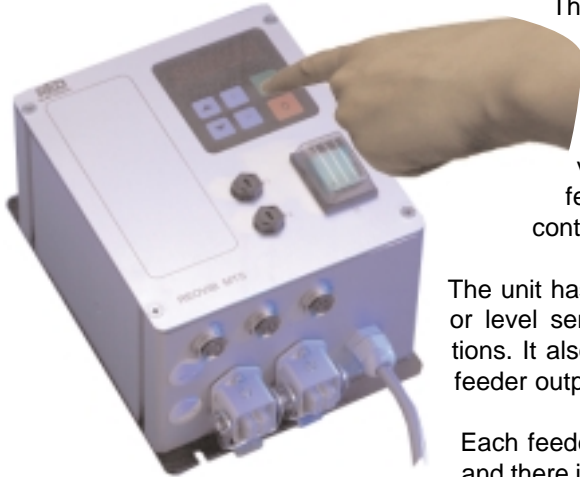


# REOVIB MTS 442

## Versatile digital control unit, for dual feeder/sensor control



The MTS 442 brings unrivalled levels of reliability, versatility and performance to the Electromagnetic Feeder world.

The unit combines ease of use with the very latest technology - enabling two feeders to be easily set up and controlled.

The unit has 2 PNP sensor inputs, for either track or level sensors, each with its own timing functions. It also has separate enable inputs for each feeder output.

Each feeder has a normal running status output, and there is also a 24 V output which can be used to operate a solenoid valve or actuator.

### Technical Specification - MTS442

Supply voltage	110/230 V, 50/60 Hz auto setting
Output frequency	50 or 100 Hz (Half or Full Wave)
Output current	max 10 A total current
Soft start	2 x 0...4 secs
Soft stop	2 x 0...4 secs
Sensor supply	2 x 24 V, 25 mA
Switch ON time delay	2 x 0...10 secs
Switch OFF time delay	2 x 0...10 secs
Empty time	30...240 secs
Enable	12-24 VDC / Volt-free contacts
Status Output	2 x 24 V DC
Solenoid Output	24 V, 100 mA
Operating temp	0...45 degrees C
Dimensions	150 x 205 x 105 mm
Enclosure	IP54

## Important Features

The MTS442 has the following as standard

- Mains switch with visible ON/OFF indicator
- Digital Display
- Touchpanel for easy adjustment of parameters
- 2 Separate feeder outputs
- **Definable Configurations - see below**
- **Versatile output eg 2 x 5 A OR 1 x 10 A - see below**
- Pulsed feed option - no need for a paddle switch
- 24V DC output for solenoid or actuator
- Feeder ON/OFF pushbuttons - no need to power down
- **Configurable sensor logic - see below**

### Special Function - Definable Configurations

Unit can be configured to control almost every conventional feeder arrangement i.e.

- Bowl/Hopper
- Bowl/Linear
- 2 Track Feed and Monitoring
- 230V Elevator (Ensure output is set to 100%, Full Wave)

The MTS442 is our most versatile, fixed frequency controller ever.





### Special Function - Versatile Output

The MTS 442 has a total power capacity of 10 Amps. The two outputs can be used at any current, providing the total current drawn is not more than 10 A. It is possible to run a 2 A Hopper and 8 A Bowl or a 6 A Linear and a 4 A Bowl - or alternatively just use channel 1 to drive a 10 A feeder!

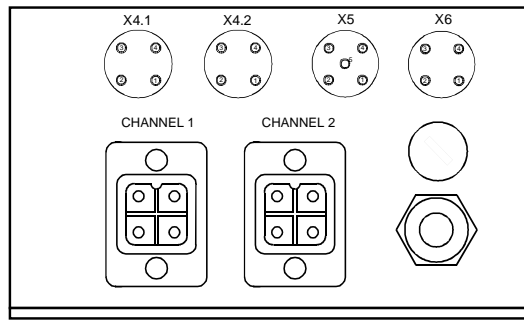
### Special Function - Sensor Logic

The unit has 2 PNP sensors, which can be used in tandem to provide MIN/MAX sensor configuration or DUAL track out feed. They can also be used to control each output totally independantly.

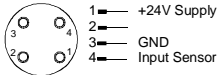
**Standard Rating 110/230V - 10 Amps. Refer to accompanying drawing when following this guide**

Drawing Reference	Check Point	Setting	Notes
1	<b>Supply Voltage</b> 	The controller is designed to accept a mains input of 110 or 230 V, 50/60 Hz. Use of any other voltage will cause damage	Unsure of your mains supply? *** CHECK ***
2	<b>Connections</b> 	Connection to the feeder must be made using the connectors provided see connection diagram	Mains connection to the 442 must be made using the <b>INPUT</b> cable <b>BROWN = LIVE, BLUE = NEUTRAL, Green/Yellow = EARTH</b> 
3	<b>Load 10 A max</b> 	The MTS442 has a total current capacity of 10 A, Ensure that the total current drawn from the controller is no more than 10 Amps Use an analogue, moving iron meter to measure the current	Unsure of feeder current? *** CHECK ***

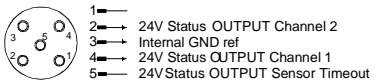
**Connections**



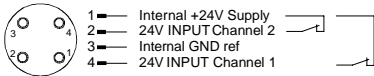
PNP Sensor Socket ( X4.1 and X4.2)



Status Socket ( X5 ) - OUTPUTS ONLY!

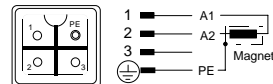


Enable Inputs (X6) - INPUTS ONLY!

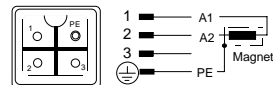


Pin 5 not connected Enable Connections Link 1-2 for Channel 2 Link 1-4 for Channel 1

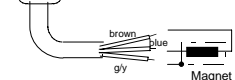
Output Socket Channel 1



Output Socket Channel 2

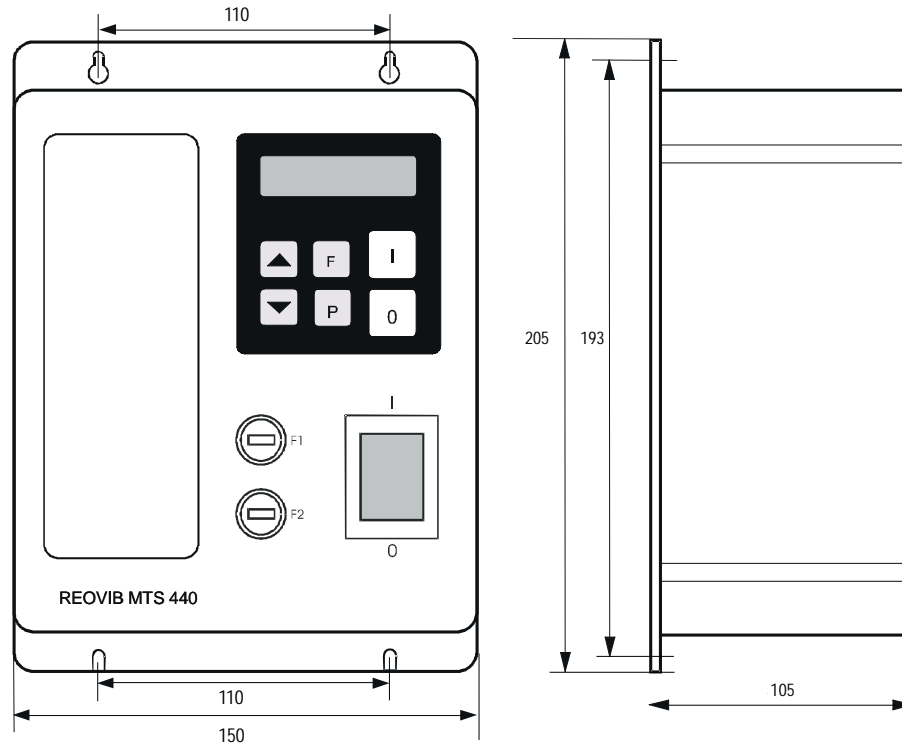


Output Cable Option



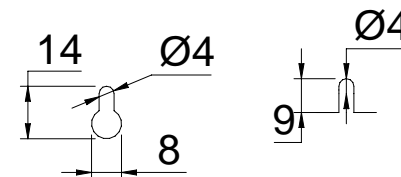
24 V Solenoid connection via internal terminals 21 (+) and 22 (-)

**Dimensions**

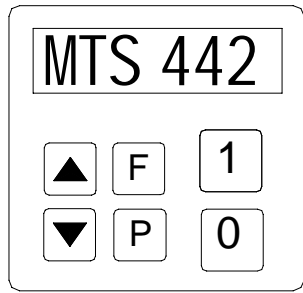


**Installation Notes**

The unit is designed to be mounted vertically, in free air and in an environment free from vibration. The unit is NOT waterproof - DO NOT expose to moisture.



### Input Controls



The six buttons and a LED display found in the front panel, are used for operating and setting up the unit. All operating methods and adjustable parameters can be set up through this panel.

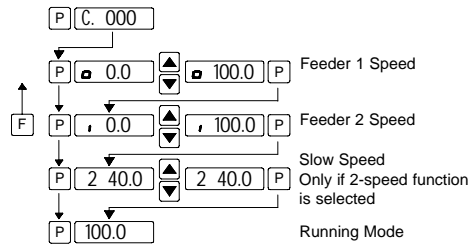
The "1" and "0" buttons are used for switching the unit ON and OFF, however, these do not provide mains isolation, they simply inhibit the power semiconductors

The "P", "F" are used to enter passcodes and navigate within the setup menus

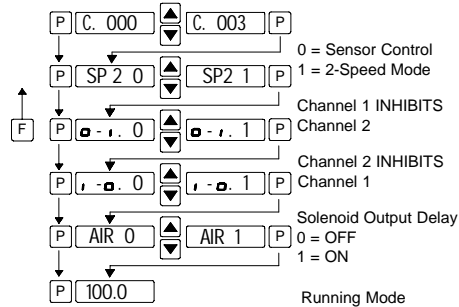
"Cursor Buttons" are used for parameter adjustment. Parameters are set by using menu controls which are called up by entering operator codes. A capital letter is used to indicate the selected function.

Setting adjustments are automatically saved upon leaving the programming mode or if no button is pressed for a period of 100 secs

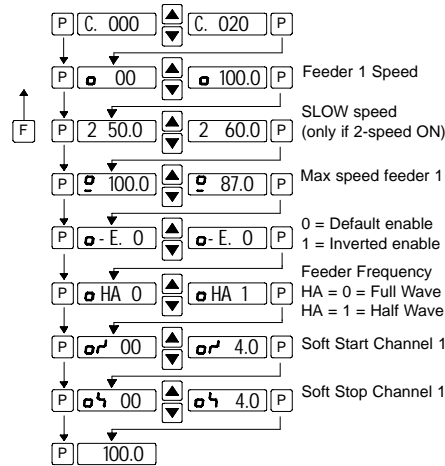
### Code 000 - Feeder Speed



### Code 003 - Function Selection



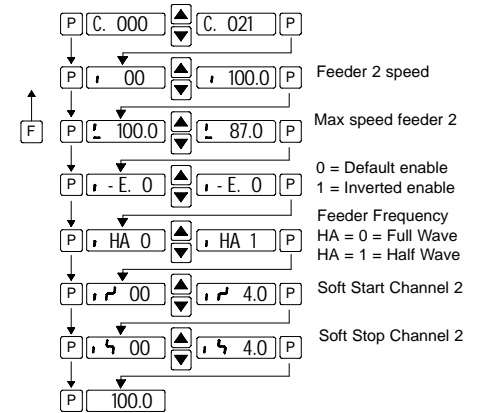
### Code 020 - Feeder Channel 1



#### Note

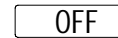
The MTS 442 has a total output capacity of 10 Amps. This is able to be split between the 2 channels in any combination. For example Channel 1 = 7 A and Channel 2 = 3 A or Channel 1 = 9 A or Channel 2 = 1 A. The unit can even be used to control one 10 A feeder.

### Code 021 - Feeder Channel 2

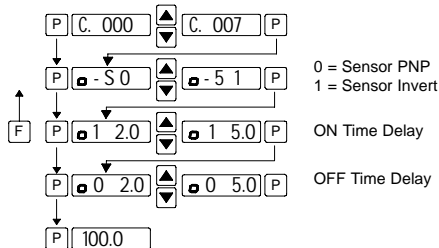


#### Note

Display reads OFF when there is no enable signal. If signal is present ensure function is not inverted



### Code 007 - Sensor Channel 1

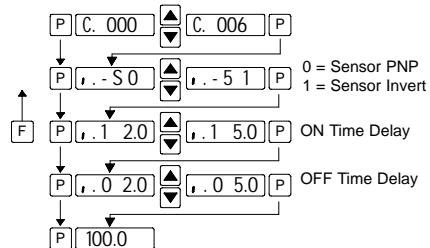


#### Note



Feeder Stopped under sensor control

### Code 006 - Sensor Channel 2

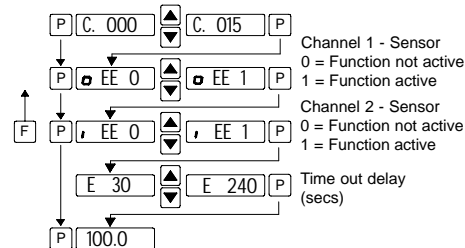


#### Note



Flashing Full-Stop indicates sensor time delays are active

### Code 015 - Sensor Time Out

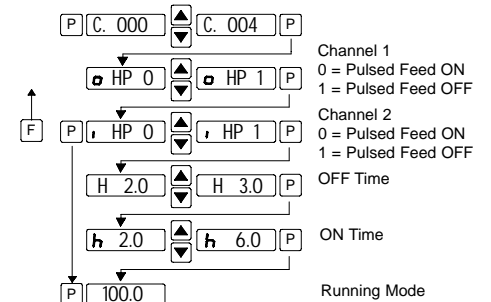


#### Note

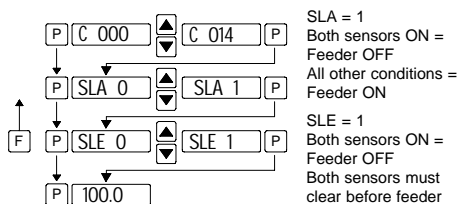


Display flashes when time-out has expired. Reset with P key

### Code 004 - Pulsed Feed Function



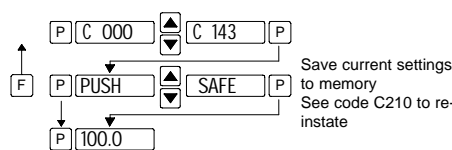
### Code 014 - Sensor Logic



If SLA and SLE = 0, sensors act totally independently

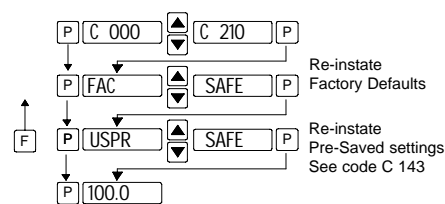
SLA = 1  
Both sensors ON = Feeder OFF  
All other conditions = Feeder ON  
  
SLE = 1  
Both sensors ON = Feeder OFF  
Both sensors must clear before feeder restart

### Code 143 - Save Current Settings



Save current settings to memory. See code C210 to re-instate

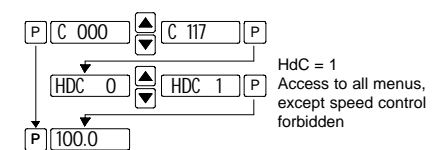
### Code 210 - Re-instate saved settings



Re-instate Factory Defaults

Re-instate Pre-Saved settings. See code C 143

### Code 117 - Hide Settings



HdC = 1  
Access to all menus, except speed control forbidden