

INTRODUCTION:

The Poushali Electronics make Off Line Bag Filter Timer has been designed to operate the equipments used for dust collection purpose in modern Industries, especially in the POWER, CEMENT, METAL & STEEL, MATERIAL HANDLING sectors.

Model No.: OBFT-08

The controller is wall mounting type and hazard free in operation. It is designed in two no. of basic cards, namely 'Power and CPU Card' and 'Relay Card'. Components are used, which are reliable and readily available to facilitate easy operation and cost effective maintenance.

The micro controller based instrument is having a two line back lit LCD Display and four touch keys for programming and control indication along with LEDs as describe bellow.

KEYs:

- 1) MODE / EDIT KEY
- 2) SAVE KEY
- 3) UP KEY
- 4) DOWN KEY

The controller is having LEDs which provide visual indication for energized relay for the selective solenoids. Once switched ON the controller operates the dampers and solenoid valves with a certain time duration (ON time) measured in milli seconds and with a preset time interval measured in seconds (Off time)

The controller is designed with a facility of 'RUN' and 'TEST' mode, which can select from program menu.

The controller has provided with two digital inputs and two Relay output along with LED indication. Input one for 'Remote Start' and another for 'High Pressure'. Relay output one for 'Timer OK' and another for 'Timer Running'.

It has fuse F1, which is 250mA and F2 as per load

OPERATION:

There are three modes of operation, one is "Program Mode" (Supervisory Mode), "Test Mode" and another is "Run Mode".

Program Mode – different parameter can be set from program menu shows bellow.

Test Mode- relays for dampers and solenoids can be test from this menu. After one test cycle the timer will go to "Run Mode" automatically.

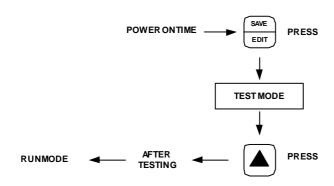
Run Mode- timer will run in this mode with the power ON.

Program Mode:

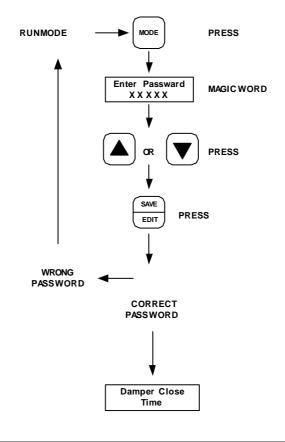
Note: after entering the edit mode, "UP" key and "DOWN" key are both active to go to forward menu or previous menu.

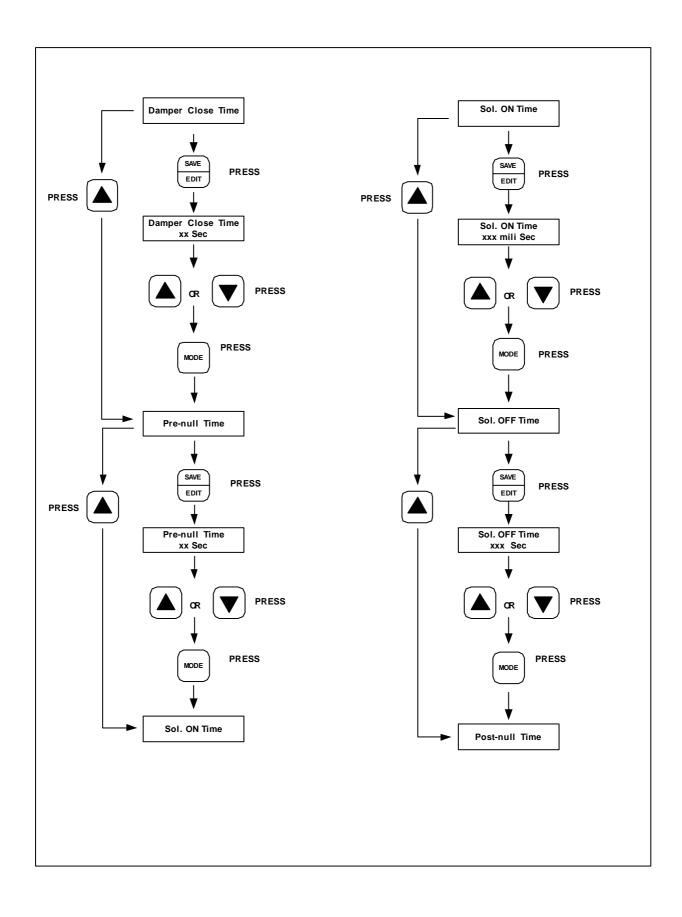
Edit menu is given bellow

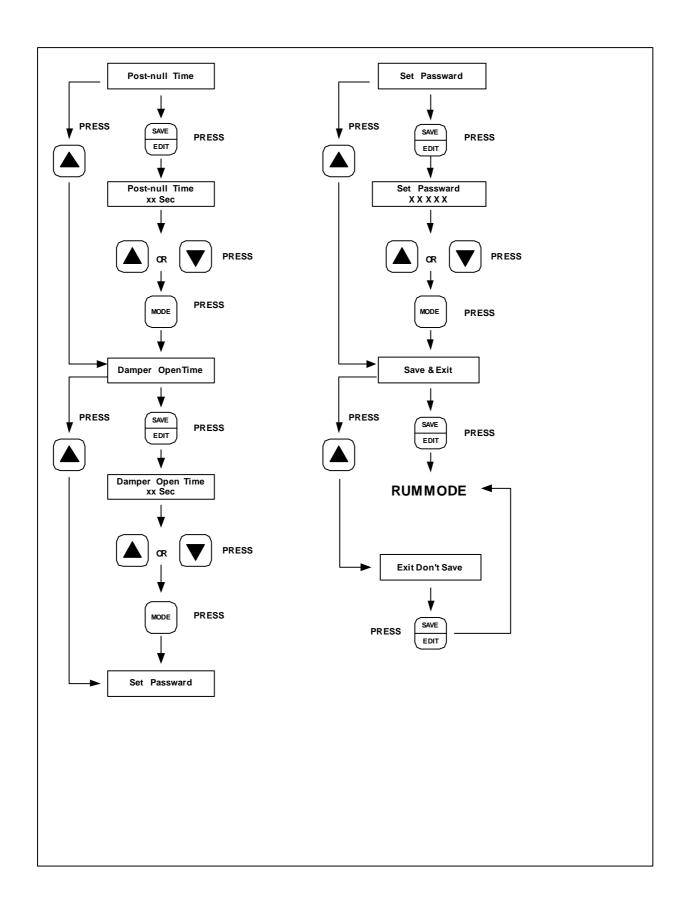
TEST MODE



PROGRAM MODE







IMPORTANT NOTE:

If any parameter has been changed always exit through "SAVE & EXIT" mode.

RUN Mode:

With the 'Power ON' Timer will go to "Run Mode' and it starts the system automatically if the 'Remote Start' input is ok.

At first the Damper of first chamber will be closed. Then the system takes time, called 'Pre-null Time', to stabilize the chamber. Then solenoids of that chamber start purging as per pre-seted 'ON' and 'OFF' time. After completion of purging again the system takes time, called 'Post-null Time', to stabilize the chamber. Then the Damper of first chamber will be open and the Damper of next chamber will be closed immediately and follows the same sequence.

FAULT Finding:

1) No Power : Check the 230V AC supply and fuse F1

2) For other Faults : Consult Factory

SAFETY MEASURES:

Enclosure IP55.

Power Supply Card is fuse protected.

All Solenoid Outputs are fuse protected.

All Relay Contacts are surge protected by MOV.

SPECIFICATIONS:

No. of chamber : Up-to 12 Nos. (selectable)

No. of Solenoid : Up-to 16Nos for each chamber (selectable)

Damper Close Time : 0sec to 20sec

Pre-null Time : 0sec to 20 sec

On Time duration : 50 milli seconds to 250 milli seconds

Off Time duration : 5seconds to 255 seconds

Post-null Time : 0sec to 20 sec

Damper Open Time : 0sec to 20sec

Potential Free Relay output

for damper and solenoid

3Amps for 220VAC / 5Amps for 24V DC

Solenoid Power Supply : 220V AC (110V AC / 24V DC optional)

Controller input Power Supply : 220V AC +/- 10%, 50 Hz (110V AC +/- 10%, optional)

Enclosure : Wall mounting type IP55 enclosure.

Operating Temperature : 0 to 55 Deg.C