DAFFUE ELECTRONIC SOLUTIONS

MONOLOG

Single Door Stand-alone Door and Alarm Controller Module

USER MANUAL

Version: 1B

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1. INTRODUCTION

The MONOLOG Module was designed as a Single Door Access and Alarm Controller to be used as a Stand-Alone Controller. The High Level of Access Control makes it suitable for use at any location.

The flexibility of the MONOLOG makes it suitable for use in the following applications and a lot more:
- Home Access Control
- Office Access Control
- Etc. ...

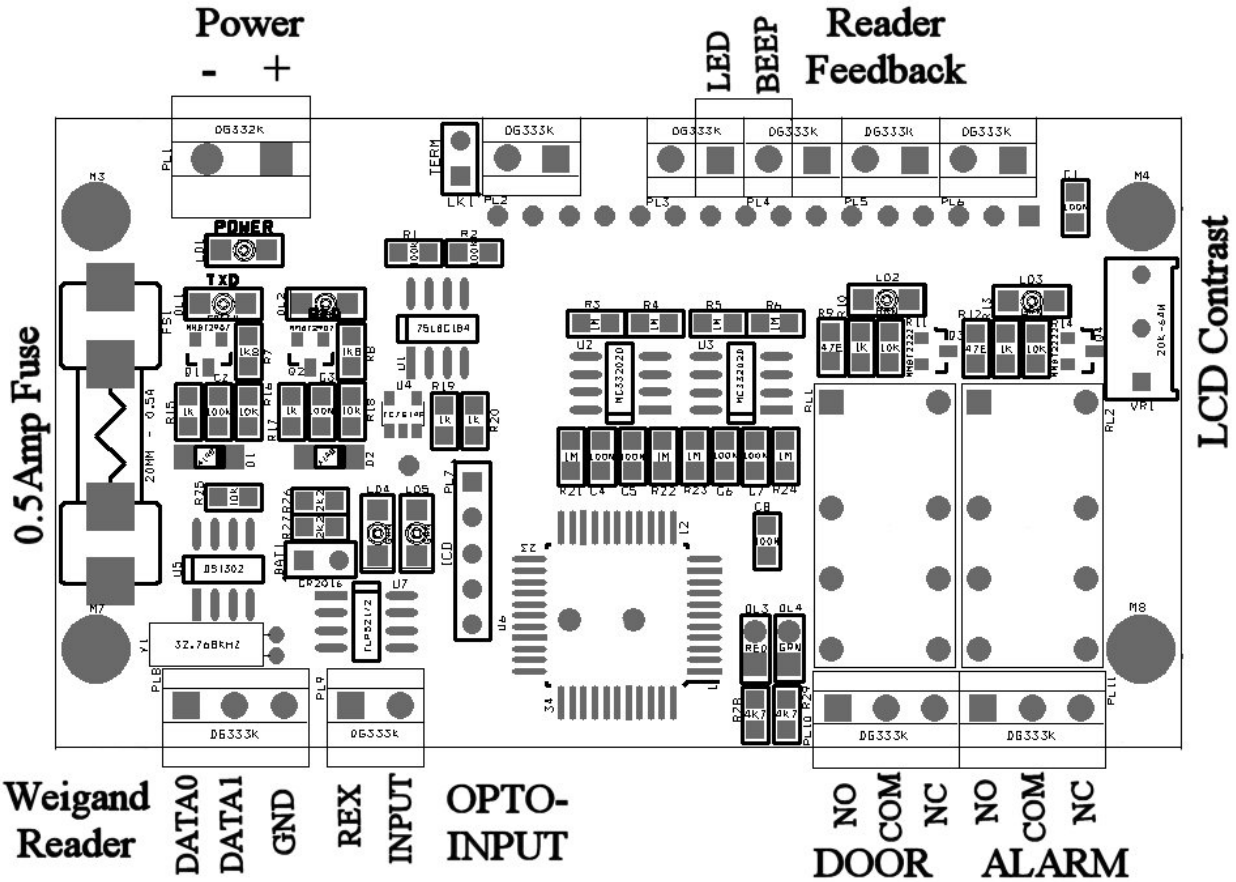
1.1 Build-in Features

The MONOLOG was designed to be used at a wide variety of locations and the following features were added with this in mind:

- 9 to 18Volt DC Input Voltage
- 2Line 16Character LCD Module with Backlighting (Optional)
- Status Indication
- 26Bit Weigand Reader with Keypad Reader Interface
- Door Contact Monitor with Programmable Reader Buzzer and Alarm Output Contact
- Contact for Door Control.
- Real Time Clock with Battery Backup.
- Keypad Programming Routines for Configuration of All Functions

These features could be build up modularly to cut on product cost and prevent the wastage of unused features.

2. CONNECTING THE MODULE



2.1 Installation Precautions.

The supplier or Manufacturer does not cover damage due to static, lightning or mishandling of the module.

2.2 Power Connection

The power requirement for this module on the 2way Screw Terminal is ±12V DC @ 500mA.
The power connector is of a different pitch and would prevent connecting it to a wrong location, this might damage the equipment. Wrong Polarity connection would not damage the unit but the unit would not switch on.

2.3 Weigand 26Bit Reader Connection

Connect the 26Bit Weigand Readers using the above illustration and the documentation supplied by the Reader supplier.
Firstly connect the Readers power by using the reader's instructions.
Then connect the Data lines. Make sure of the polarity of the Data0 and Data1 connections on the reader. The polarity would affect the data read by the unit.
Then connect the Feedback lines using the Data provided by the reader and using the drawing above.

NOTE: The unit must be set-up using a keypad reader.

2.4 Relay Outputs

The unit are fitted with 2 Relay Outputs with NO and NC contacts available. The Door Relay is used to control the Door, and the Alarm Relay is used to control the external alarm in the event of it being activated.
Make sure not to exceed the current rating of the relay installed.

2.5 OPTO-Input Connection

These inputs are opto-isolated for protection of the internal circuitry.
To activate any of these inputs the line must be pulled to ground.
There are two inputs provided. The "REX" input is provided for remote opening of the door controlled by this module.
The other "INPUT" is provided for the monitoring of a magnetic or other contact at the door, for the "Door Ajar" features.

2.6 LCD Contrast Adjustment

When the unit is installed at its location it is wise to adjust the contras of the LCD to its optimum level, to make sure the display is clear and readable.

2.7 Programming the MONOLOG

Use the following table and the Master Tag provided for the Programming of this unit.

2.7.1 Enter Main Menu - Program Mode

STEP 1 – Present MASTER TAG to the properly connected Weigand Reader while the system is powered.
RESPONSE – Sound 1 Long and 1 Long Flash – Indicating Master Tag Recognised, awaiting PIN.
STEP 2 – Enter the PIN Code (6 Digit) for the MASTER TAG using the keypad on the Reader.
POSETIVE RESPONSE – Sound 2 Long and 2 Long Flashes – Indicating PIN accepted, entered Main Menu.
NEGATIVE RESPONSE – Stop All Flashes – Indicating Incorrect PIN.

If the response from the unit was Sound 2 Long and 2 Long Flashes the unit entered the Main Menu and would continue with 2 Long Flashes until a Menu Item are Selected or Escape (ESC) are pressed on the keypad to return to normal operation.

2.7.2 Menu Items in Main Menu

2.7.2.1 Master Tag Programming (01)

NOTE: The Monolog is limited to 5 Master Tag Program Cycles and after that would not accept Master Tag Programming Permanently.

STEP 1 – Unit must be in Main Menu – 2 Long Flashes
STEP 2 – Enter 01 on the Keypad.
RESPONSE – Sound 1 Long and continue with 1 Short Flashes – Indicating in "Master Tag Programming Mode.
STEP 3 – Present new additional MASTER TAG.
STEP 4 – Enter New 6Digit Pin Code for Presented new Master Tag.
RESPONSE – Sound 2 Short and then Change to 2 Long Flashes – Indicating that the new Master Tag and PIN Code has been Programmed and back into Main Menu

2.7.2.2 Erase All and Reset All to Default (02)

STEP 1 – Unit must be in Main Menu – As in "Enter Main Menu" – 2 Long Flashes
STEP 2 – Enter 02 on the Keypad.
RESPONSE – Sound 2 Long and continue with 2 Short Flashes – Indicating in "Erase and Default" and waiting for Enter key to proceed.
STEP 3 – Enter Enter (ENT) on the Keyboard if you agree with Erase and Default Continue.
RESPONSE – Approximately 12 Seconds Later, Sound 2 Short and continue with 2 Long Flashes – Indicating Erase and Default Complete and back in Main Menu.

2.7.2.3 Erase All Tags Data Only (03)

STEP 1 – Unit must be in Main Menu – As in "Enter Main Menu" – 2 Long Flashes
STEP 2 – Enter 03 on the Keypad.
RESPONSE – Sound 3 Long and continue with 3 Short Flashes – Indicating in "Erase All Tags" and waiting for Enter key to proceed.
STEP 3 – Enter Enter (ENT) on the Keyboard if you agree with Erase All Tags Continue.
RESPONSE – Approximately 6 Seconds Later, Sound 2 Short and continue with 2 Long Flashes – Indicating Erase Complete and back in Main Menu.

2.7.2.4 New Tag Programming with PIN (04)

STEP 1 – Unit must be in Main Menu – as in "Enter Main Menu" – 2 Long Flashes
STEP2 – Enter 04 on the Keypad.
RESPONSE – Sound 4 Long and continue with 4 Short Flashes – Indicating in "New Tag Programming" and waiting for next Tag.
STEP 3 – Present new Tag to Reader
STEP 4 – Enter this Tags PIN Code (4 Digits)
STEP 5 – Enter Enter (ENT) on the Keypad.
RESPONSE – Sound 2 Short and continue with 4 Short Flashes – Indicating Tag and PIN accepted and Programmed and waiting for next Tag.
Repeat STEP 3 to 5 for all Tags to be programmed
STEP 6 – Enter Escape (ESC) on the Keypad to return to Main Menu
RESPONSE – No Sound but Change to 2 Long Flashes – Indicating back into Main Menu.

2.7.2.5 New Tag Programming without PIN (05)

STEP 1 – Unit must be in Main Menu – as in "Enter Main Menu" – 2 Long Flashes

STEP2 – Enter 05 on the Keypad.

RESPONSE – Sound 5 Long and continue with 5 Short Flashes – Indicating in "New Tag Programming" and waiting for next Tag.

STEP 3 – Present new Tag to Reader

RESPONSE - Sound 2 Short and continue with 5 Short Flashes – Indicating Tag accepted and Programmed and waiting for next Tag.

Repeat STEP 3 for all Tags to be programmed

STEP 6 – Enter Escape (ESC) on the Keypad to return to Main Menu

RESPONSE – No Sound but Change to 2 Long Flashes – Indicating back into Main Menu.

2.7.2.6 Existing Tag Delete (06)

STEP 1 – Unit must be in Main Menu – as in "Enter Main Menu" – 2 Long Flashes

STEP 2 – Enter 06 on the Keypad.

RESPONSE – Sound 6 Long and continue with 6 Short Flashes – Indicating in "Tag Delete" and waiting for Tag Serial Number to be entered.

STEP 3 – Enter 4 Digit Serial Number of Tag to be deleted.

STEP 4 – Enter Enter (ENT) on the Keypad.

RESPONSE – Sound 2 Short and continue with 6 Short Flashes – Indicating that Entered Tag has been deleted and waiting for next 4 Digit Serial Number.

Repeat STEP 3 to 4 for all Tags to be deleted.

STEP 5 – Enter Escape (ESC) on the Keypad to return to Main Menu

RESPONSE – No Sound but Change to 2 Long Flashes – Indicating back into Main Menu

2.7.2.7 Access Criteria Programming (07)

STEP 1 - Unit must be in Main Menu – as in "Enter Main Menu" – 2 Long Flashes

STEP 2 – Enter 07 on the Keypad.

RESPONSE – Sound 7 Long and continue to 7 Short Flashes – Indicating in "Access Criteria" and waiting for new Access Criteria Data.

STEP 3 – Enter one of the following on the Keypad:

0 – Card or Keypad or
1 – Card Only or
2 - Keypad Only or
3 – Card and Keypad

RESPONSE – Sound 2 Short then Change to 2 Long Flashes – Indicating new Criteria is set and back in Main Menu.

2.7.2.8 Set Lock Release Time (08)

STEP 1 - Unit must be in Main Menu – as in "Enter Main Menu" – 2 Long Flashes

STEP 2 – Enter 08 on the Keypad.

RESPONSE – Sound 8 Long and continue with 8 Short Flashes – Indicating in "Lock Release Time" and waiting for new Time Data.

STEP 3 – Enter a 2 Digit value for the Lock Release Time (00 to 99)

RESPONSE – Sound 2 Short and then Change to 2 Long Flashes – Indicating new Lock Release Time Applied and back in Main Menu.

2.7.2.9 Door Alarm Functions (09)

STEP 1 - Unit must be in Main Menu – as in "Enter Main Menu" – 2 Long Flashes

STEP 2 – Enter 09 on the Keypad.

RESPONSE – Sound 9 Long and continue with 9 Short Flashes – Indicating in "Door Alarm Functions" and waiting for new Function Data.

STEP 3 – Enter one of the following:

0 – Nothing happens if a door stays open or
1 – Only Reader Alarm Sounds when a door stays open
2 – Reader Alarm and then External Alarm Sounds when door stays open

STEP 4 – Enter 2 Digit Ajar Delay (00 to 99) before Reader Alarm Sounds.

STEP 5 – Enter one of the following:

0 – Nothing happens when the door is forced open
1 – External Alarm Sounds when door is forced open

STEP 6 – Enter 2 Digit Siren On Time (00 to 99)

RESPONSE – Sound 2 Short and then Change to 2 Long Flashes – Indicating new Door Alarm Functions programmed and back in Main Menu.

2.7.2.10 RTC Set-up (Real Time Clock) (10) -Optional

STEP 1 - Unit must be in Main Menu – as in "Enter Main Menu" – 2 Long Flashes

STEP 2 – Enter 10 on the Keypad.

RESPONSE – Sound 10 Long and continue with 10 Short Flashes – Indicating in "RTC Set-up" and waiting for new RTC data.

STEP 3 – Enter new RTC data in the following sequence: "YYMMDDhhmmd" where YY=Year (09), MM=Month (08), DD=Date (18), hh=Hour (19), mm=Minute (21) and d=Day of the week (3).

RESPONSE – Sound 2 Short and Change to 2Long Flashes – Indicating Time Programmed and back in Main Menu.

2.7.3 Exit Menu and Return to Normal Operation

To resume normal operation after using the Main Menu to set-up the unit follow and observe the following steps.

STEP 1 – Enter Escape (ESC) on the Keyboard.

RESPONSE – No Sound but Change to No Flashes of Reader LED and Seconds on the RTC display start to flash again – Indicating unit entering normal operation.

The unit should now function normally again but if not reset the unit to make sure.

3. Use the Unit

After connecting and installing the unit, do the Programming as indicated in 2.7 and then start to use.

Present your Access Card and/or your Keypad Code, depending on the Access Criteria set on the unit.
The unit would display the Date and Time and then if Access Granted would display "0001 Granted" on the bottom line or if Denied it would display "Access Denied" in the same line.
If access were granted the unit would activate the Relay to deactivate the door lock to grant access.

If after the door was opened the door were kept open to long the Reader Buzzer would sound prompting you to close the door.
If the buzzer is ignored the External Alarm Relay would be activated for the set time.
This would continue until the door is closed.

If this door were forced open the External Alarm would be activated again for the set time.

If the REX is activated the door could be opened by remote and this is also indicated on the display.

In the event of the power going off, all the features, Real Time Clock and other data would be reloaded automatically on switch on of the power and would provide an seamless reactivation of functions.

4. Contact Information.

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