

# KINETIC SIGN

## OPERATING MANUAL

Automated Control | 16.03.2020

## Kinetic signage display User Manual

This user manual is for operation of the Deloitte Kinetic signage display should be given to the people whom have the responsibility to power up, starting, resetting, customizing routines and power off this signage display.

This Kinetic signage display has been designed so that it can perform predefined routines known as Preset 1 - 8. These can be run individually or in a cycle format.

It also allows the user to program Custom routines by adjusting the operating parameters of each symbol referred to as an AXIS. There is capacity to store up to eight Custom routines and they can be viewed individually or in a cycle format.

Throughout this manual you'll find reference to Buttons which are on the HMI Human to Machine Interface display screen on the front of the control cabinet. Buttons are indicated as having [####]

## Powering Up

Before powering on the display make sure that all the symbols are aligned and facing in the correct direction.

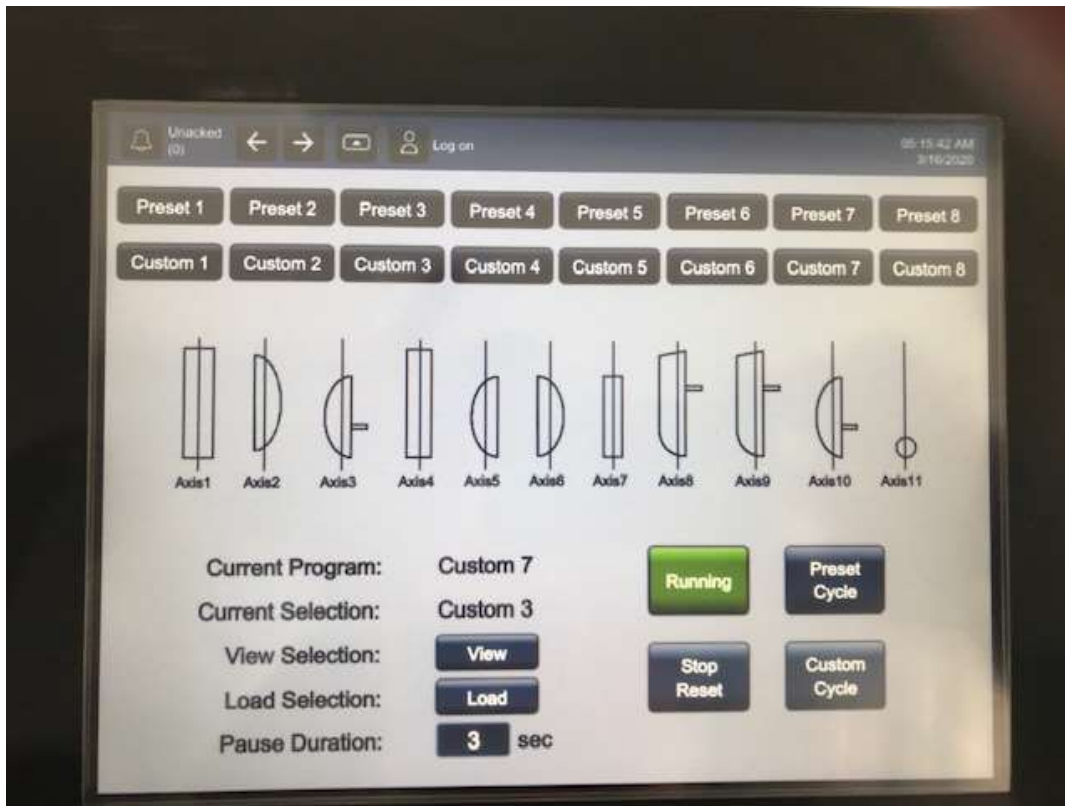
Check that the Emergency Stop button is in the released (High) position.

Ensure the sign is clear of any loose material (Clothing, bags etc) before powering on the sign.

**The controller** is to be powered on or isolated by the operator using the GPO general purposed outlet plug provided. This GPO outlet maybe powered remotely by a console operated switch at reception desk.

## Powering Up

The HMI screen should illuminate, and the Control Screen will be visible within [two minutes](#). On powering Up the PLC will establish communication with the eleven stepper motors noted as AXIS on the HMI screen. Once powered up the screen should have a picture of the Kinetic Sign with each symbol noted with an AXIS number.



## Preset Displays

Note at the top of the HMI control screen you have a row of **[PRESET]** buttons.

PRESET'S are preconfigured routines which move the eleven AXIS in a format that will make the sign rotate in a predefined way. There are eight PRESET 1 - 8 options for routine display and for program routine reference.

**Note:** PRESET's are stored and cannot be changed.

When you want the sign to perform a particular Preset display you need to select it by pressing the Preset # 1 -8 button try **[Preset 4]**. Press the **[LOAD]** button and it will be loaded to run and then press **[START]** button and Preset 4 display will run its routine.

Note: You can load another Preset display whilst one is in motion and it will then be ready to go as the next routine.

By selecting **[View]** you can see how each individual AXIS has been programed to operate:

Preset 1      Axis 1 --11

< > Will change the Axis you are viewing

Rotations:    3      Number of rotations this Axis will complete in a Preset routine

Duration:     1.00 (sec) Time in seconds the routine will last

Direction:    CW or CCW    Axis rotation Clock Wise or Counter Clock Wiise

Start Delay:   The time which the Axis will start moving from the start of routine

### Other Buttons with functions

**[Jog CCW]** or **[Jog CW]** can be used to align the symbols when the routine has stopped

**[Preset Cycle]** button which will run through the eight routines one after another.

**[Pause Duration]** Is the time delay between Current program routine completing and the next starting.

**[Custom-Cycle]** button which will run through the eight routines one after another.

## Custom Displays

Note at one row from the top of the HMI control screen you have a row of **[Custom]** buttons.

There are eight Custom display options which have been programmed and can be altered within predetermined functional parameters.

When you want the sign to perform a particular Custom display you need to select it by pressing the Custom # 1-8 button **[Custom 2]**. Press the **[Load]** button and it will be loaded to run and then press **[Start]** button and Custom 2 display will run its routine.

Note: You can load another Custom display whilst one is in motion and it will then be ready to go as the next routine.

By selecting **[View]** you can see how each individual AXIS has been programed to operate:

**Preset 1**      Axis 1 --11

< > Will change the Axis you view

[Edit] will let you change the Custom routine parameters to create your own display

**Rotations:**    3          Number of rotations this Axis will complete in a Preset routine

**Duration:**    1.00 (sec) Time in seconds the routine will last

**Direction:**    CW or CCW    Axis rotation Clock Wise or Counter Clock Wiise alternate using the **[DIR]** button

**Start Delay:** The time delay in seconds which the Axis will start moving from the start of routine

**[Jog CCW]** or **[Jog CW]** can be used to align the symbols

## FAULTS

- Should an error occur a red **FAULT** will indicate on HMI display above the AXIS on HMI
- Should someone press the Emergency Stop Button the routine will be stopped and then the power to the motors will be completely remove after 5 seconds. This will also cause all the **FAULT** to appear for every AXIS on the HMI display

Carefully check that the sign symbols are all in position with no obstructions present.

Check that the emergency stop is in the raised reset position.

Press [Stop/Reset] button on HMI and the FAULT should reset. If the FAULT remains on. Turn the power off at GPO and wait ten seconds and turn power on again.

- IF the FAULT still remains please call electrical service provider