

<b>APPLICATION NOTE</b>	<b>FECA-AN-144</b>
<b>HAND – OFF – AUTO Switch Wiring Setup and Parameters</b>	

<b>Inverter type</b>	FRENIC-MEGA series
<b>Software version</b>	All versions
<b>Required options</b>	None
<b>Related documentation</b>	-
<b>Author</b>	Shane Spencer
<b>Date</b>	3/30/2012
<b>Revision</b>	

### Introduction:

This application note will address the wiring and parameter settings for using a HAND – OFF - AUTO (HOA) switch to control a **FRENIC-MEGA** drive.

### Terminology

HAND – Frequency and Run commands controlled from keypad (Local mode)

OFF – Drive is stopped, still has power

AUTO – Frequency and Run commands controlled from terminals (Remote mode)

### Switch Wiring

HAND – Closes a dry contact creating an electrical short between the drive's **X1** and **CM** terminals.

OFF – Opens all HAND/AUTO contacts.

AUTO – Closes a dry contact between the drive's **FWD** and **CM** terminals. This is to be wired in series with customer supplied dry contact (labelled CSC1 in wiring diagram on page 2) from PLC or RUN relay.

### Common Examples

Typical uses of this application include operating under following conditions:

HAND – Drive is controlled from keypad.

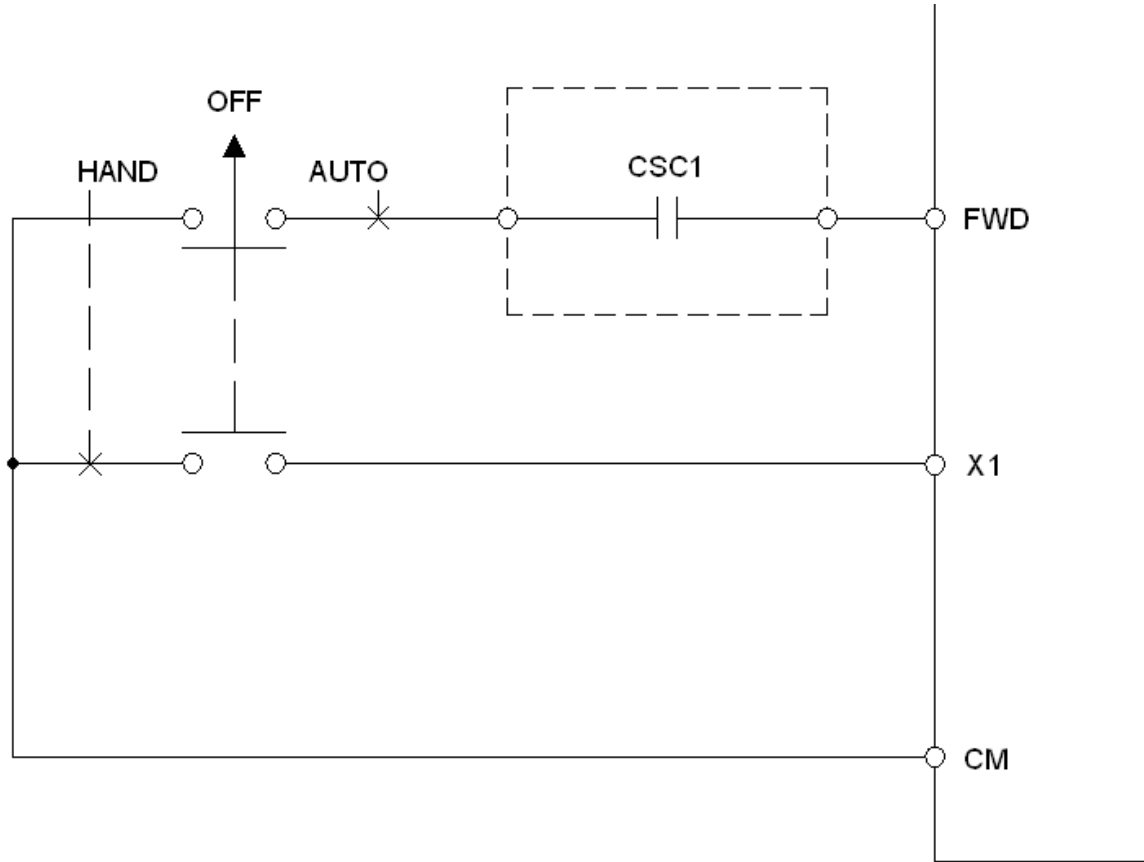
OFF – Drive stops.

AUTO – Drive controlled by PLC. Forward Run command given by dry contact closure (CSC1, wired in series with AUTO dry contact) creating an electrical short between the drive's **FWD** and **CM** terminals. The speed controlled by 0-10VDC signal from PLC going to drive terminals **11** and **12** (or 4-20mA signal to terminals **11** and **C1**).

### Parameters:

Code	Setting	Name
F01	1 (0-10VDC to terminal <b>12</b> ) 2 (4-20mA to terminal <b>C1</b> ) 3 (Sum of V and mA to <b>12</b> and <b>C1</b> ) 5 (1-10VDC to terminal <b>V2</b> ) 7 (Enable terminal UP/DOWN control)	Frequency Command 1 (AUTO)
F02	1 (Terminal FWD/REV)	Run Command (AUTO)
E01	35 (Select Local (Keypad) Operation)	X1 Terminal Function (HAND)

**Wiring Diagram:**



Note: All contacts are to be supplied by customer. For more information refer to **FRENIC-MEGA Instruction Manual (INR-SI47-1457-E)**.