Need to get to where can set

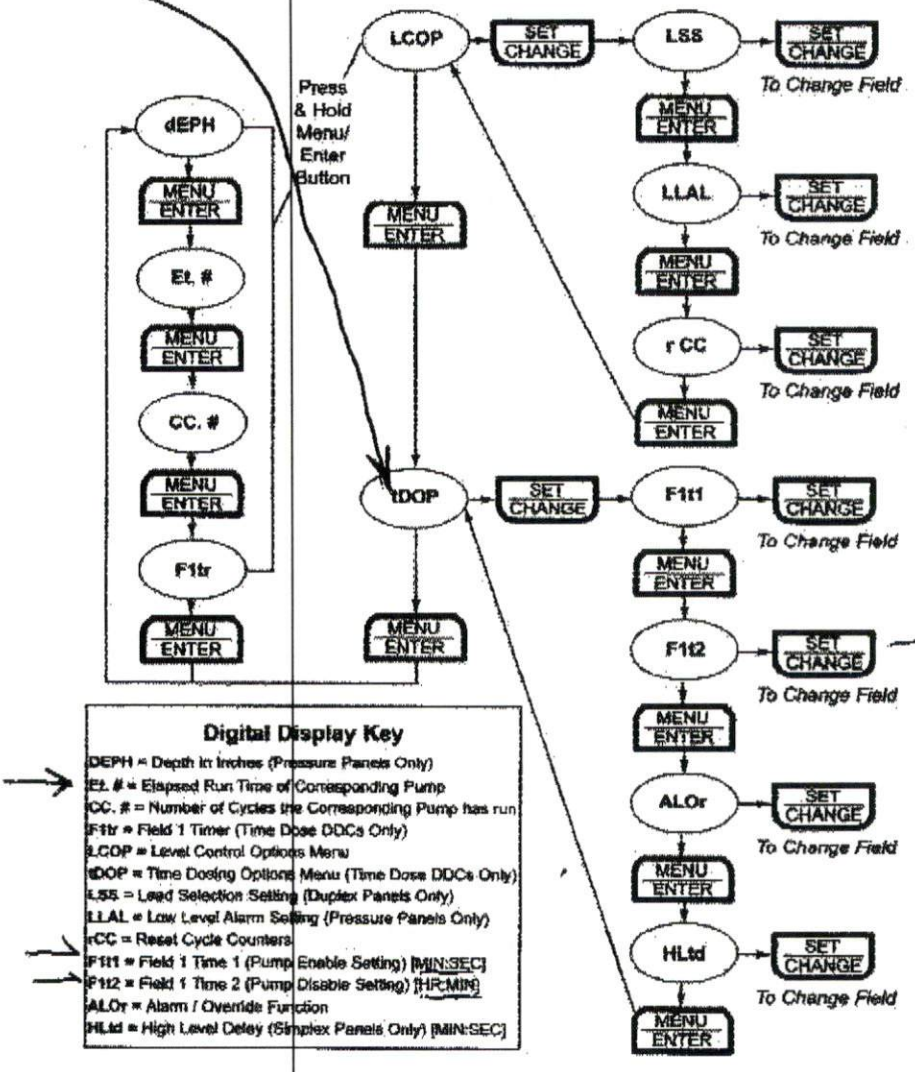
00-363-5842
Aaron

Jeff Thompson
919-427-1218

# RK Series

## Digital Display Center Flow Chart

Harnett Co. Envi
Oliver
910-893-754
910-893-9371
FAX




**Digital Display Key**

dEPH = Depth in Inches (Pressure Panels Only)
Et. # = Elapsed Run Time of Corresponding Pump
CC. # = Number of Cycles the Corresponding Pump has run
F1tr = Field 1 Timer (Time Dose DDCs Only)
LCOP = Level Control Options Menu
tDOP = Time Dosing Options Menu (Time Dose DDCs Only)
LSS = Lead Selection Setting (Duplex Panels Only)
LLAL = Low Level Alarm Setting (Pressure Panels Only)
rCC = Reset Cycle Counters
F1t1 = Field 1 Time 1 (Pump Enable Setting) [MIN:SEC]
F1t2 = Field 1 Time 2 (Pump Disable Setting) [HR:MIN]
ALOr = Alarm / Override Function
HLtd = High Level Delay (Simplex Panels Only) [MIN:SEC]

Start at ET1

Defaut 5 min run time

Default 1h 0mi

Once the run time is set then it asks how long before ne run time



Ea. circle is a display; ex ET1 flash betw ET1 & actual lapse time # of cycles

See page 21 for a flow chart view of the below.

# RK Series

## Digital Display Center (DDC)

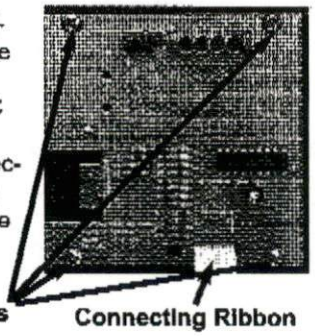
**Make Sure Power is OFF before Installing DDC!**

### Installation

With Future Expansion in Mind, Every RK Panel has a Removable Expansion Board Face Plate to Add a DDC if it is not factory installed or to Upgrade a DDC to a model with more features. To install just remove the faceplate from above the control center on the sub-door (or remove the old DDC if you are upgrading) and insert the DDC module from the back of the sub-door. Next, screw in the four corner screws. **With the power off** attach the ribbon from the DDC module to the control board. After everything is installed turn the power on. It may take up to 10 seconds for the circuit boards to complete the program update. Once the circuit boards have completed the program update normal operation will begin.
**Note:** RKE boards cannot update through the DDC.

**Removable Face Plate**

**Back of DDC Module**



**Installation Screws** **Connecting Ribbon**

### Main Menu


### Display Menu Fields

**Press Menu/Enter Button to change between menu fields**

**dEPH** - (Depth, Pressure type panels only):
Reads out liquid level in inches. (Max value: 49.99")

**Et. # -** (Elapsed Time, # is Pump number (1 or 2)):
Reads out the total elapsed run time of the corresponding pump.
**Press Set/Change button to alternate between hours and minutes & seconds**

**CC.#** - (Cycle Counter, # is Pump number (1 or 2)):
Reads out the number of cycles the corresponding pump has run. (Max Value: 9999)

**F1tr -** (Field 1 Timer, Time Dose DDCs only):
Reads out the remaining time in the current time cycle. If the pump(s) are running then it indicates the time remaining until the pump(s) shut off. If the pump(s) are off then it indicates time remaining until the pump(s) are enabled tol run again.

Common Features

## User Settings Main Menu

**Press and hold Menu/Enter Button for 3 seconds while in the Display Menu to enter into this menu. Press the Menu/Enter Button to change between menu fields.**

**LCOP** - (Level Control Options Menu):

**Press Set/Change button to enter into this sub-menu.**

**tDOP** - (Time Dosing Options Menu, Time Dose DDCs only):

**Press Set/Change button to enter into this sub-menu.**

## Level Control Options Menu

**LSS** - (Lead Selection Setting, Duplex Panels Only):
Diplay will alternate showing "LSS" and the current Value.

**Press Set/Change button to change this field.**

**Possible Settings:**
0 = Alternate Between Pumps
1 = Pump #1 Always is Lead Pump
2 = Pump #2 Always is Lead Pump

**LLAL** - (Low Level Alarm Setting, Pressure Panels Only):
Display will alternate showing "LLAL" and the current value.

**Press Set/Change button to change this field.**

**Possible Settings:**
0 = Low Level Alarm Off
1 = Flash Alarm Light only for Low Level Alarm
2 = Flash Alarm Light and sound audible for Low Level Alarm

**r CC** - (Reset Cycle Counter(s))
Display will alternate showing "r CC" and the value "0."
**Press Set/Change button to change this field.**

**Possible Settings:**
0 = Do Not Reset Cycle Counter(s)
1 = Reset Cycle Counter(s) to 0

## Time Dosing Options Menu

**F1t1** - (Field 1 Time 1 (Pump Enable Time Setting))
Display will alternate showing "F1t1" and the current value. Time shown is in [Minutes : Seconds] (Maximum time setting is 99:59)

**Press Set/Change button to change this field.**

**F1t2** - (Field 1 Time 2 (Pump Disable Time Setting))
Display will alternate showing "F1t2" and the current value. Time shown is in [Hours : Minutes] (Maximum time setting is 99:59)

**Press Set/Change button to change this field.**

**ALOr** - (Alarm / Override Function):
Diplay will alternate showing "ALOr" and the current value.

**Press Set/Change button to change this field.**

**Possible Settings, Simplex:**
(What the High Level set point will do)
0 = Override the Pump Disable Timer and Alarm with selected Time Delay (see HLtd setting). A warning will sound and flash the alarm light to indicate the panel is in Override mode. This can be silenced. It will be cleared after the Disable timer times out.
1 = Only Override the Pump Disable Timer without any alarms.
2 = Only Sound High Level Alarm without any delays.

**Possible Settings, Duplex:**
(What the Lag (override) set point will do)
0 = Override Pump Disable Timer. A warning will sound and flash the alarm light to indicate the panel is in Override mode. This can be silenced. It will be cleared after the Disable timer times out.
1 = Override the Pump Disable Timer. No warning will sound.
2 = Override function is disabled. Lag float input or setpoint is ignored.

**HLtd** - (High Level Time Delay, Simplex Panels Only):
Diplay will alternate showing "HLtd" and the current value. The High Level Alarm will delay according to the set time. If the the fluid level is above the High Level set point for this length of time without interruption the alarm will begin to sound. Time shown is in [Minutes : Seconds] (Maximum time setting is 99:59)

**Press Set/Change button to change this field.**

910-893-9371 fax

## VIII. Responsibilities and Permitting Procedures:

a. An application for a Flow Equalization system shall include everything as required in Rule .1937 and at least the following information:

i. A floor plan of the facility with a plumbing fixture schedule,
ii. Days of operation, Sunday & Wednesday evening
iii. Frequency of regular and special events, Sunday morning & Wed. evening every week
iv. Number of employees, 3
v. Number of people in attendance at events, ~~36~~ 190
vi. Trips per day,
vii. Parking capacity, ~~36~~ 190
viii. Building code occupancy limits for the structures, and 190
ix. Any other information required to calculate an accurate design flow.

b. All systems shall be designed by a North Carolina registered professional engineer; local health department authorized agent or by an individual with advanced pump system training. The system shall be designed by a professional engineer when:

i. pretreatment components have not received prior state approval, or
ii. daily event flow (or Q) is 3,000 gallons per day or greater, or
iii. duplex pumps are otherwise required per Rule .1952 (duplex pumps are required if linear footage of nitrification trenches exceeds 2000 feet) or this approval (equalized daily flow is 1500 gallons per day, or greater),
iv. when either the septic tank or equalization tank volume exceeds 6000 gallons, or
v. at any site proposed for flow equalization if so specified by the local health department.

When required, plans and specifications shall be prepared, reviewed and approved in accordance with Rules .1938 (e) and (f).

c. Prior to the issuance of an Authorization to Construct for a Flow Equalization system with time dosing, site specific plans and specifications shall include:

i. Septic tank, effluent filter, grease tank (if applicable), and dosing tank specifications including the specification that all tanks shall be state approved.
ii. Preparation of a Flow Balance spreadsheet.
iii. Level sensing devices (float) elevation (feet above sea level or in relation to the interior bottom of the tank) detail showing redundant "off", timer enable, high-level "on" and timer over-ride settings.
iv. Specific plans and specifications for the control panel, with preliminary pump run time and pump off time specified.
v. Effluent Pump specifications: (gpm @ TDH).