

# HEATEC TEC-NOTE

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## Setting Honeywell UDC2500 controllers used with Heatec vertical asphalt tanks

This document provides information for setting Honeywell controller **DC2500-EE-1000-200-00000-00-0** (Figure 1) when used to indicate levels in Heatec asphalt tanks. It applies to six sizes of Heatec vertical tanks equipped with VEGA PULS 65 radar sensors (Figure 2).

The controller indicates levels of asphalt in the tank. Levels are shown in feet and tenths of a foot, measured from the bottom of the tank. The controller automatically shuts off pumps used to fill the tank when the tank reaches a preset “full” level. It also activates an alarm circuit when the tank is “full.”

When the asphalt level reaches its low-level setting, the controller shuts off the valve that allows hot oil to heat the tank. The low-level setting prevents heating the asphalt when its level is below the heating coils and avoids coking the coils.

Honeywell controllers purchased from Heatec are normally set at our factory and require no further setup. However, the controller can be set in the field using the information shown in **Figure 3**.



Figure 1. Honeywell Controller DC2500-EE-1000-200-00000-00-0.

A Honeywell UDC Controller Manual is on a CD furnished with each controller. If you need instructions on how to use buttons on the controller to make settings, you will find them in this manual.

### COORDINATION OF SETTINGS

Settings of the Honeywell controller should be coordinated with the settings on the radar sensor shown in Heatec Tec-Note 5-04-116, Revised 10-11-04, entitled *Setting up Vega radar sensors for Heatec vertical asphalt tanks*.

***Failure to coordinate settings may result in erroneous level indications and improper shutoff control!***

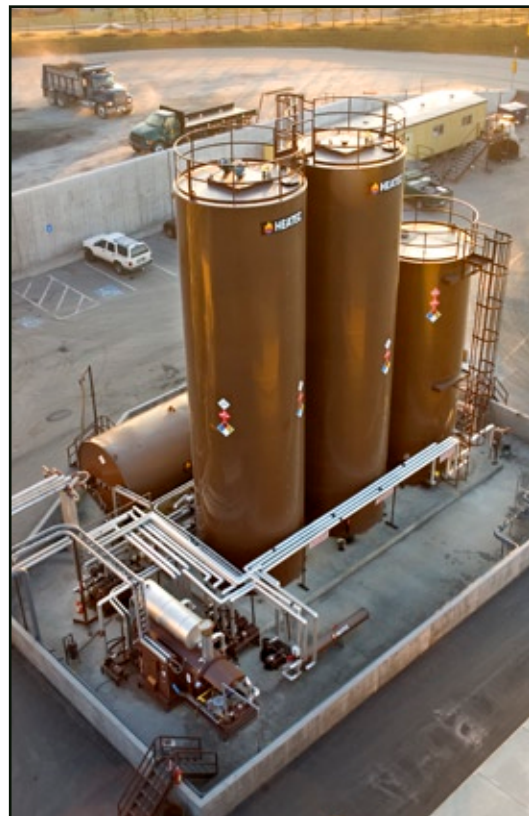


Figure 2. Heatec vertical asphalt tanks.

**Figure 3. Honeywell Controller DC2500-EE-1000-200-00000-00-0  
used with Heatec vertical asphalt tanks**

Setup button	Function button	Make these settings (Use up/down buttons)					
		10,000 gal tank	15,000 gal tank	20,000 gal tank	25,000 gal tank	30,000 gal tank	35,000 gal tank
TUNING	CYC T1	1	1	1	1	1	1
	SECUR	0	0	0	0	0	0
	LOCK	CAL	CAL	CAL	CAL	CAL	CAL
SPRAMP	SPRAMP	DIS	DIS	DIS	DIS	DIS	DIS
ALGOR	CTRALG	ONOF	ONOF	ONOF	ONOF	ONOF	ONOF
	TIMER	DIS	DIS	DIS	DIS	DIS	DIS
OUTALG	OUTALG	RLY	RLY	RLY	RLY	RLY	RLY
INPUT1	IN1TYP	4-20	4-20	4-20	4-20	4-20	4-20
	XMITR1	LIN	LIN	LIN	LIN	LIN	LIN
	IN1 HI	14.50	22.50	28.50	36.50	42.50	48.50
	IN1 LO	0.00	0.00	0.00	0.00	0.00	0.00
	RATIO1	1.00	1.00	1.00	1.00	1.00	1.00
	BIAS 1	0.0	0.0	0.0	0.0	0.0	0.0
	FILTR1	1	1	1	1	1	1
	BRNOUT	NONE	NONE	NONE	NONE	NONE	NONE
CONTRL	LSP'S	ONE	ONE	ONE	ONE	ONE	ONE
	SP TRK	NONE	NONE	NONE	NONE	NONE	NONE
	PWR UP	ALSP	ALSP	ALSP	ALSP	ALSP	ALSP
	SP Hi	0.00	0.00	0.00	0.00	0.00	0.00
	SP Lo	0.00	0.00	0.00	0.00	0.00	0.00
	ACTION	REV	REV	REV	REV	REV	REV
	HYST	100.0	100.0	100.0	100.0	100.0	100.0
	FAILSF	0.0	0.0	0.0	0.0	0.0	0.0
OPTION	AUXOUT	IN 1	IN 1	IN 1	IN 1	IN 1	IN 1
	0 PCT	0.0	0.0	0.0	0.0	0.0	0.0
	100PCT	14.5	22.5	28.5	36.5	42.5	48.5
	CRANGE	4-20	4-20	4-20	4-20	4-20	4-20
	DIGIN1	NONE	NONE	NONE	NONE	NONE	NONE
COM	ComADR	3	3	3	3	3	3
	ComSTA	DIS	DIS	DIS	DIS	DIS	DIS
	IRENAB	ENAB	ENAB	ENAB	ENAB	ENAB	ENAB
	BAUD	19.2K	19.2K	19.2K	19.2K	19.2K	19.2K
	TX DLY	1	1	1	1	1	1
ALARMS	A1S1TY	IN 1	IN 1	IN 1	IN 1	IN 1	IN 1
	A1S1VA	1.00	1.00	1.50	1.50	1.50	1.50
	A1S1HL	LOW	LOW	LOW	LOW	LOW	LOW
	A1S2TY	NONE	NONE	NONE	NONE	NONE	NONE
	A2S1TY	IN 1	IN 1	IN 1	IN 1	IN 1	IN 1
	A2S1VA	13.70	21.70	27.70	35.70	41.70	47.70
	A2S1HL	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
	A2S2TY	NONE	NONE	NONE	NONE	NONE	NONE
	ALHYST	0.1	0.1	0.1	0.1	0.1	0.1
	ALARM1	NO L	NO L	NO L	NO L	NO L	NO L
BLOCK	DIS	DIS	DIS	DIS	DIS	DIS	
DIA AL	DIS	DIS	DIS	DIS	DIS	DIS	
DISPLY	DECMAL	ONE	ONE	ONE	ONE	ONE	ONE
	TUNITS	NONE	NONE	NONE	NONE	NONE	NONE
	FREQ	60	60	60	60	60	60
	DISPLY	PR N	PR N	PR N	PR N	PR N	PR N
	LNGUAG	ENGL	ENGL	ENGL	ENGL	ENGL	ENGL

**Setting sequence: ALGOR, INPUT1, CONTRL, OPTION, COM, ALARMS, DISPLY, TUNING, SPRAMP, OUTALG.**