

HEATEC TEC-NOTE

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Setting Honeywell UDC2500 controllers used on Heatec portable asphalt tanks

This document provides information for setting Honeywell controller **DC2500-EE-1000-200-00000-00-0** (Figure 1) used to indicate levels in Heatec asphalt tanks. It applies to Heatec *portable* asphalt tanks with capacities of 10,000, 15,000, 20,000, 25,000, 30,000, and 35,000 gallons (Figure 2) equipped with Siemens Sitrans P, Series DSIII pressure transmitters. It also applies to stationary horizontal tanks of those capacities.

The controller indicates levels of liquid above the bottom of the tank and displays the levels in *inches*. However, the transmitter cannot read levels below 3 inches, which is the height of the transmitter above the bottom of the tank. Thus, the display will show 3.0 inches when levels are lower than 3 inches and when the tank is empty. NOTE: In the past Heatec set the transmitters setup to display levels in feet above transmitter height.

ALARMS

When optional alarms are used, the controller can be set to automatically activate the alarm for both high and low levels of fuel.

The low-level alarm in the controller is **A1S1VA** (see Figure 3) and is normally set for 24 inches. The high level alarm in the controller is **A2S1VA** (see Figure 3) and is normally set at 114 inches.

These settings take into account that the tanks have an inside diameter of 126 inches. Accordingly, the high level settings should activate the alarm at a level 12 inches below the top. And the low level should activate the alarm at 24 inches above the bottom.

SETTINGS AT HEATEC FACTORY

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

HONEYWELL MANUALS

This document along with a Honeywell manual applicable to Honeywell UDC2500 controllers are included with



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



Figure 2. Heatec portable asphalt tank.

portable fuel tanks that incorporate pressure transmitters. The Honeywell manual is a PDF file on a computer CD.

If you need help on how to use the buttons on the controller, please refer to the Honeywell manual. You can call Honeywell for technical assistance at 1-800-423-9883. Their web site for assistance is www.honeywell.com/imc.

Refer to **Heatec Tec-Note No. 5-09-215** for information on the Siemens pressure transmitter. Refer to **Heatec Tec-Note No. 11-04-149** for converting levels to gallons.

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

Setup button	Function button	Make these settings (Use up/down buttons)
TUNING	CYC T1	1
	SECUR	0
	LOCK	CAL
SPRAMP	SPRAMP	DIS
ALGOR	CTRALG	ONOF
	TIMER	DIS
OUTALG	OUTALG	RLY
INPUT1	IN1TYP	4-20
	XMITR1	LIN
	IN1 HI	126.0 IN
	IN1 LO	3.00 IN
	RATIO1	1.00
	BIAS 1	0.0
	FILTR1	1
	BRNOUT	NONE
CONTRL	LSP'S	ONE
	SP TRK	NONE
	PWR UP	ALSP
	SP Hi	3.00
	SP Lo	3.00
	ACTION	REV
	HYST	100.0
FAILSF	0.0	
OPTION	AUXOUT	IN 1
	0 PCT	3.0
	100PCT	126.0
	CRANGE	4-20
DIGIN1	NONE	
COM	ComADR	3
	ComSTA	DIS
	IRENAB	ENAB
	BAUD	19.2K
	TX DLY	1
ALARMS	A1S1TY	IN 1
	A1S1VA	24.00 IN
	A1S1HL	LOW
	A1S2TY	NONE
	A2S1TY	IN 1
	A2S1VA	114.0 IN
	A2S1HL	HIGH
	A2S2TY	NONE
	ALHYST	0.1
	ALARM1	NO L
BLOCK	DIS	
DIA AL	DIS	
DISPLY	DECMAL	ONE
	TUNITS	NONE
	FREQ	60
	DISPLY	PR N
	LNGUAG	ENGL

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

NOTE: Data changed in the revision of 5-29-09 are shaded in green.