

HEATEC TEC-NOTE

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Setting Honeywell UDC2500 controllers used on Heatec portable fuel tanks

This document provides information for setting Honeywell controller **DC2500-EE-1000-200-00000-00-0** (Figure 1) used to indicate levels in Heatec fuel tanks. It applies to Heatec *portable* fuel tanks (Figure 2) equipped with Siemens Sitrans P, Series DSIII pressure transmitters.

The controller indicates levels of fuel in the tank. Levels are shown in feet and tenths of a foot, *measured above the level where the transmitter is installed*. The transmitter is usually installed 0.5 feet (6 inches) above the bottom of the tank. Thus, when the level of fuel in the tank is 6 inches or less, the controller indicates 0.0 or zero feet.

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 2.0 feet. The high level alarm in the controller is **A2S1VA** (see Figure 3) and is normally set at 9.0 feet on double-wall tanks and at 9.5 feet on single wall tanks.

These settings take into account that zero is actually 6 inches above the bottom of the tank, that double-wall fuel tanks have an inside diameter of 10 feet, and that single-wall fuel tanks have an inside diameter of 10.5 feet. Accordingly, on both types of tanks the high level settings should activate the alarm at a level 6 inches below the top. And the low level should activate the alarm at 2.5 feet 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 portable fuel tanks that incorporate pressure transmitters. The Honeywell manual is a PDF file on a computer CD.



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



Figure 2. Heatec portable fuel tank.

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.

Please refer to **Heatec Tec-Note No. 6-05-164** for information on the Siemens pressure transmitter. Please refer to **Heatec Tec-Note No. 6-06-166** for converting levels to gallons.

**Figure 3. Honeywell Controller DC2500-EE-1000-200-00000-00-0
used with Heatec portable fuel 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	10.00
	IN1 LO	0.00
	RATIO1	1.00
	BIAS 1	0.0
	FILTR1	1
	BRNOUT	NONE
CONTRL	LSP'S	ONE
	SP TRK	NONE
	PWR UP	ALSP
	SP Hi	0.00
	SP Lo	0.00
	ACTION	REV
	HYST	100.0
	FAILSF	0.0
OPTION	AUXOUT	IN 1
	0 PCT	0.0
	100PCT	10.0
	CRANGE	4-20
	DIGIN1	NONE
COM	ComADR	3
	ComSTA	DIS
	IRENAB	ENAB
	BAUD	19.2K
	TX DLY	1
ALARMS	A1S1TY	IN 1
	A1S1VA	2.00
	A1S1HL	LOW
	A1S2TY	NONE
	A2S1TY	IN 1
	A2S1VA	9.00 for DW tanks or 9.5 for SW tanks
	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.