

Honeywell DR4200 EV Recorder

Optional Control Output Setup

Introduction

If you ordered a recorder with control output, a separately packaged control printed circuit board is supplied with your recorder. You must mount the control printed circuit board on the Main printed circuit board. Refer to Figure 2-5 and follow the procedure in Table 2-4 to mount the control output board.

Depending on the model number you've ordered, you configure the hardware and software for your control output function.

Printed Circuit board number 30756087-001, Model Table 1 = 1X or X1

- configure the control output software as current or relay,
- set the jumpers on the control output PCB for current output control or set the relay action jumpers as N.O. (normally open) or N.C. (normally closed).

Printed Circuit board number 30756087-002, Model Table 1 = 2X or X2

- set the relay action jumpers on the control printed circuit board as N.O. (normally open) or N.C. (normally closed).

Printed Circuit board number 30756087-003, Model Table 1 = 3X or X3

- no settings required.

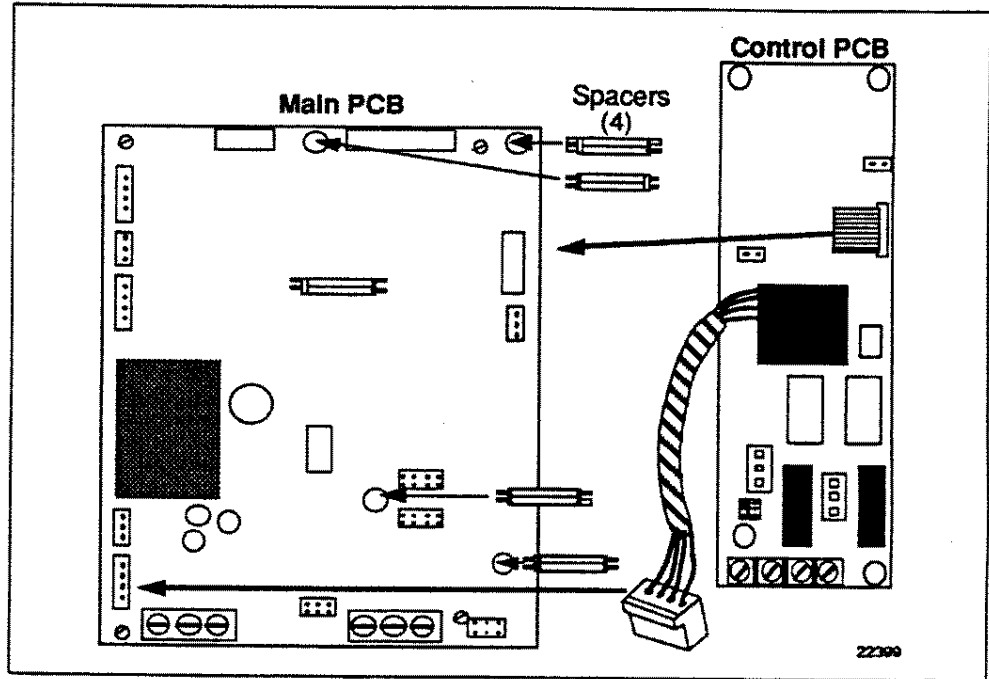
CAUTION Make sure you have set all the jumper positions on the main printed circuit board before proceeding. See Figure 2-5.

Optional Control Output Setup, Continued

Introduction

If you ordered a recorder with control output, you must mount the control Output printed circuit board on the Main printed circuit board. Refer to Figure 2-5 and follow the procedure in Table 2-4 to mount the board.

Figure 2-5 Mounting the Control Output Printed Circuit Board on the Main Printed Circuit Board



Mounting control output board procedure

Follow the procedure in Table 2-4 to mount the Control Output printed circuit board.

ATTENTION If Table 1 in the model number is X1, X2 or X3, repeat this procedure for the Main printed circuit board for Pen #2.

Table 2-4 Procedure for Mounting Control Output Printed Circuit Board

Step	Action
1	Push the four plastic spacers (supplied with Control printed circuit board) into the holes on the right side of the Main printed circuit board for Pen #1 or Pen #2.
2	Hold the Control printed circuit board so that its mounting holes align with the spacers and plug the multi-pin connector from the Control printed circuit board into J5 connector on the Main printed circuit board. Be sure that the plug positions are aligned and matched with the pins on J5.
3	Push down on each corner of the Control printed circuit board in turn to seat the board on the spacers.
4	Plug the 4-pin connector from the transformer on the Control printed circuit board into the TB2 connector on the Main printed circuit board.

Optional Control Output Setup, Continued

DIP switch and jumper locations

Figure 2-6 is a graphic view of the DIP switch and jumper locations on the Optional Control Output printed circuit board.

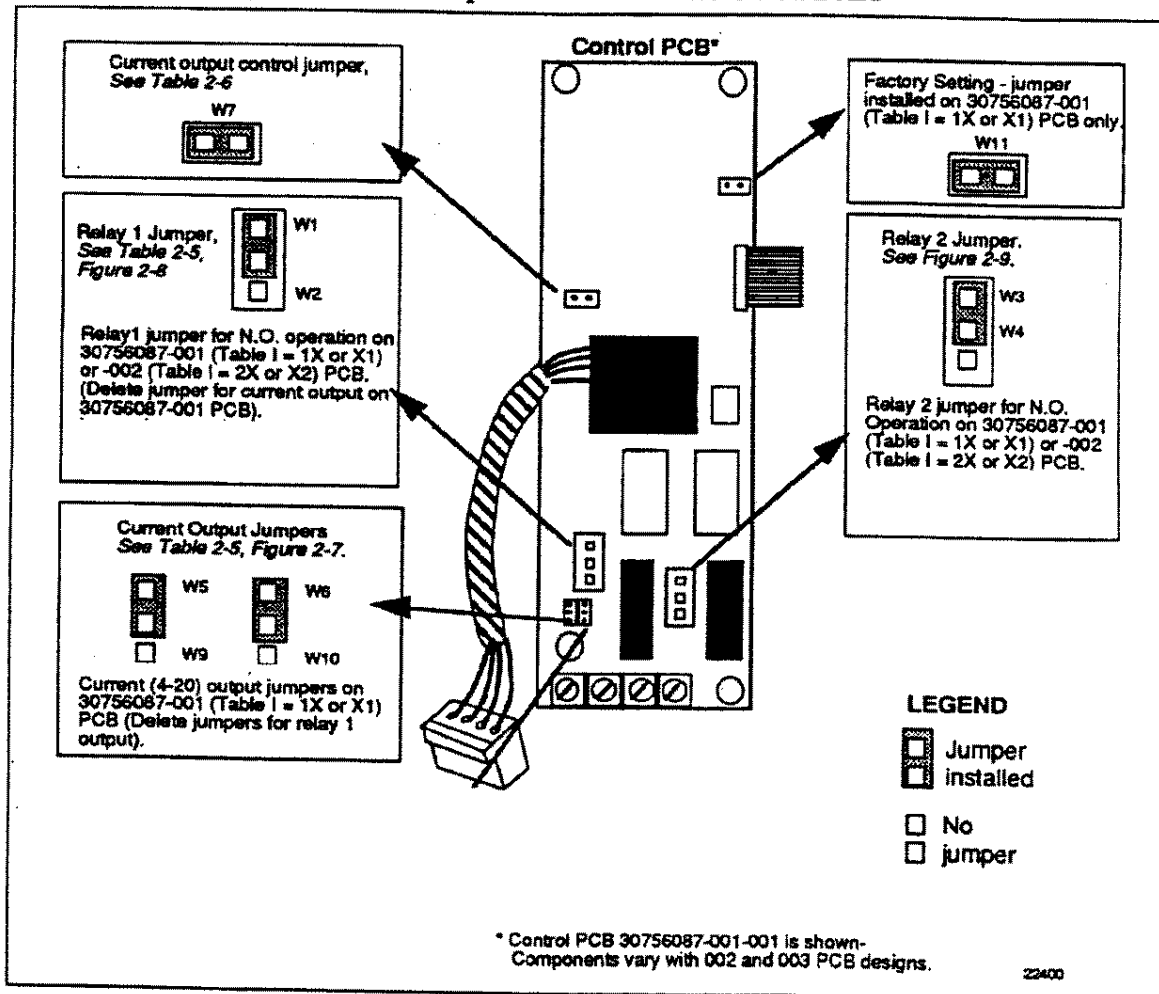
DR4200 EV Optional Control Output Circuit Boards

Part#

30756087-XXX

- 001- Current/Relay output Circuit board is completely populated with components
Install jumpers per figure 2-6. Remove jumper W1/2 if using current output control. Remove W5/W6 if using relay output control.
- 002- Relay only output Upper left edge of board is unpopulated-includes only jumpers W1/2 and W 3/4 for selection of N.O./N.C. relay operation. Refer to Fig. 2-8 and 2-9 for additional configuration information.
- 003- 24Vdc Transmitter power supply output Minimal component population includes only W9/10 , factory installed

Figure 2-6 Jumper Locations on Optional Control Printed Circuit Board



Optional Control Output Setup, Continued

Control output function summary On recorders with model number DR4200 EV1-10 or EV2-X1 (Table 1= 1X or X1) you can set the control output to be:

- a 4-20 mA signal, or
- a relay contact from relay 1

by adding and deleting jumpers on control printed circuit board 30756087-001.

Depending on the hardware and software configuration selections you can set the control and/or alarm output functions to be one of the functions shown in Table 2-5.

Table 2-5 lists the control/alarm functions available plus the software and hardware configuration that is required to setup these functions.

Table 2-5 Control /Alarm Function Summary

Control/Alarm Function	Software Configuration			Hardware Configuration	
	Set Up Group Prompt	Function Prompt	Function Parameter Selection	Add W5 & W6 Delete W1/W2	Delete W5 & W6 Add W1/W2
Relay 1 is for ON-OFF control and relay 2 is for alarm #2	OUTPUT CONTRL CONTRL	OUTTYP OUTALG CTRALG	CTRL* RLY ONOF	NO	YES
Relay 1 is for time proportioning control and relay 2 is for alarm #2	OUTPUT CONTRL CONTRL	OUTTYP OUTALG CTRALG	CTRL RLY PIDA or PDMR	NO	YES
Relay 1 is for HEAT and relay 2 is for COOL in duplex time proportioning control	OUTPUT CONTRL CONTRL	OUTTYP OUTALG CTRALG	CTRL RLYD PIDA	NO	YES
Both relay 1 and relay 2 are for ON-OFF control	OUTPUT CONTRL CONTRL	OUTTYP OUTALG CTRALG	CTRL RLYD ONOF	NO	YES
On-OFF current control with relay 2 for alarm #2	OUTPUT CONTRL CONTRL	OUTTYP OUTALG CTRALG	CTRL CUR ONOF	YES	NO
Current proportioning control with relay 2 for alarm #2	OUTPUT CONTRL CONTRL	OUTTYP OUTALG CTRALG	CTRL CUR PIDA or PDMR	YES	NO
Relay 1 is for alarm #1 and relay 2 is for alarm #2	OUTPUT	OUTTYP	ALRM*	NO	YES

* Note that relay 1 output for Control PCB 30756087-002 (2X or X2) can be configured as ON-OFF control or alarm #1 by setting OUTTYP as CTRL or ALRM, respectively - jumpers W5 & W6 are not applicable.

Optional Control Output Setup, Continued

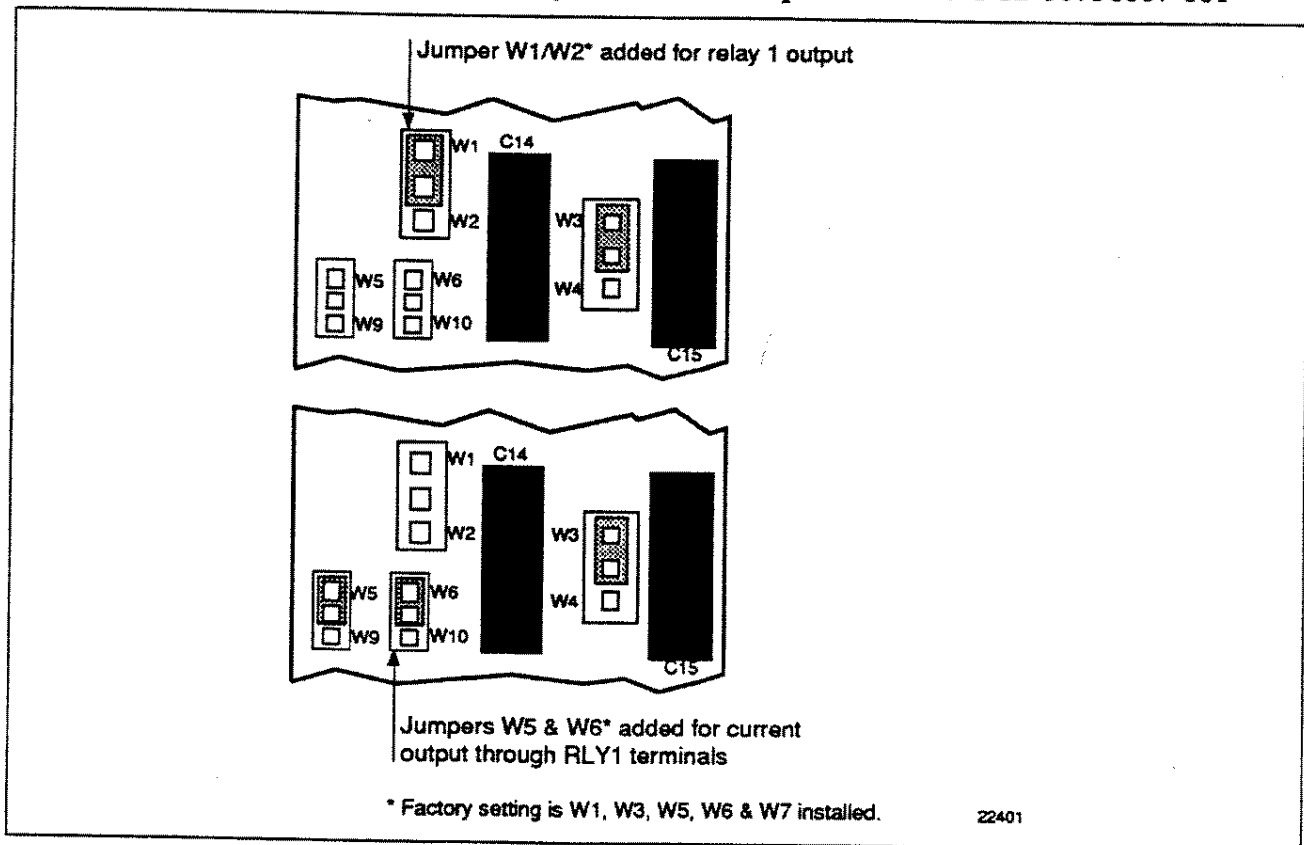
Control output setup procedure

Refer to Figure 2-7 and follow the procedure in Table 2-6 to select the desired control output action.

Table 2-6 Control Output Setup Procedure

Step	Action
1	Refer to Table 2-5 to identify jumpers for addition and deletion to get the desired control output action (Control PCB 30756087-001, Model Table I = X1 or 1X.)
2	Refer to Figure 2-6 or jumper location and add or delete jumpers as required for the desired control/alarm output. ATTENTION For current output control add W7 to tie common to ground or delete it for floating output.
3	Follow this procedure for the control output printed circuit board for pen #2, if applicable.
4	Note the configured control/alarm output function for each pen on the wiring label on the back of the chart plate for future reference.

Figure 2-7 Jumper Positions for Relay and Current Output on Control PCB 30756087-001



Optional Control Output Setup, Continued

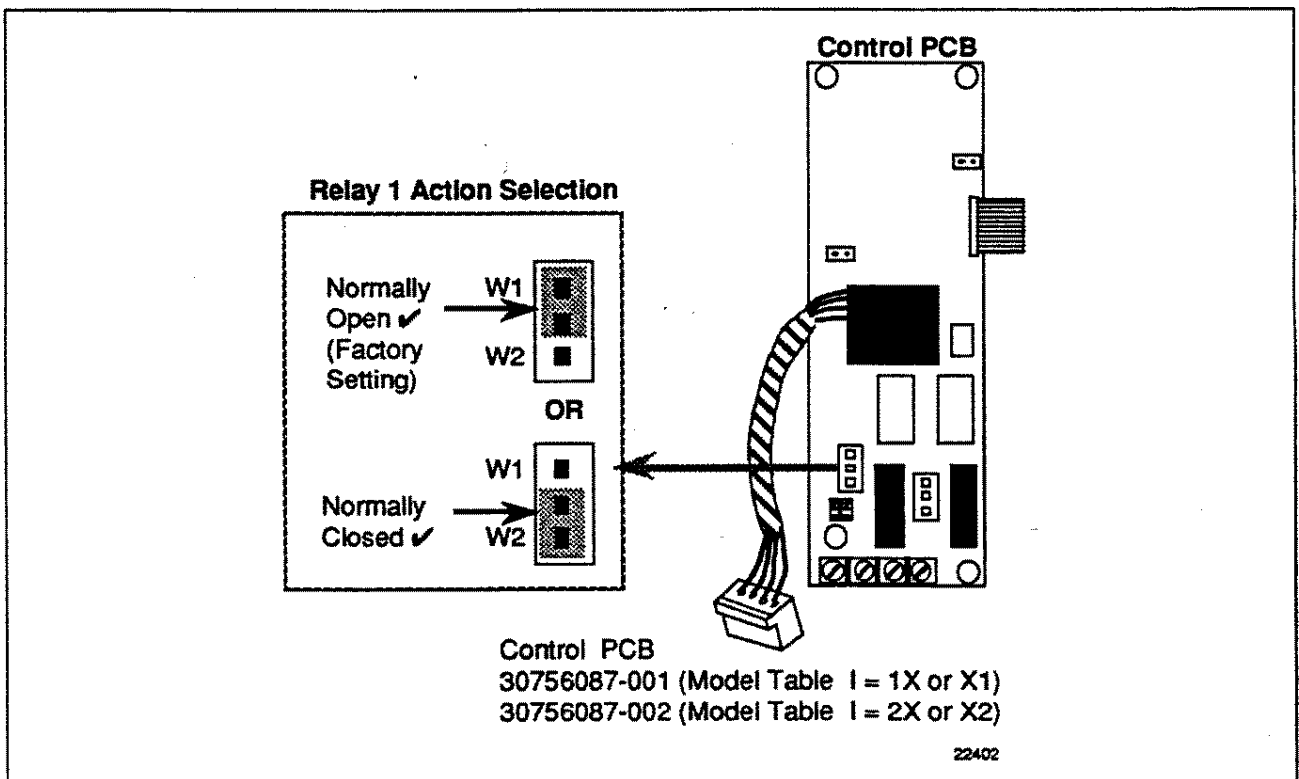
Selecting relay #1 action

Figure 2-8 is a graphic view of the jumper locations for setting relay #1 Action. Select the Output relay as N.O. or N.C. as shown in this figure. Note the selected action on the wiring label on the back of the chart plate for future reference.

Attention Insure W5/W6 have been removed for relay operation if installing a 30756087-001, Current/Relay output control board

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Figure 2-8 Jumper Locations for Relay #1 Action



Optional Control Output Setup, Continued

Selecting relay #2 action

Figure 2-9 is a graphic view of the jumper locations for setting Relay #2 Action. Select the Output relay action as N.O. or N.C as shown in this figure. Note the selected action on the wiring label on the back of the chart plate for future reference.

Figure 2-9 Jumper Locations for Relay #2 Action

