

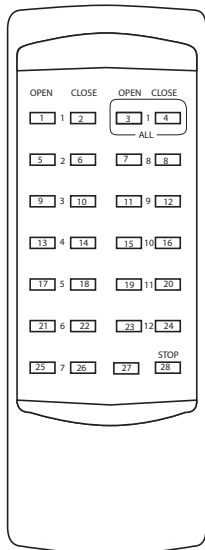
Installation Instructions

IntelliFlex® 24 Channel IR and RF Remote Control by Draper

Each 24 channel IR and RF transmitter works with every channel you can have within the IntelliFlex family of motor controls. By "Selecting" a layout, you will be configuring a transmitter to output a selected range of channels.

To begin the process of "Selecting" which Transmitter layout, you first need to understand the button numbering system.

This numbering system simply assigns a number to specific buttons, allowing us to press specific buttons in the necessary order to "Select" a layout.



To select a layout for 24-channel transmitter layout, follow these steps:

	Button	Press	LED NOTE
①	Press and HOLD both buttons 6 & 7	ON Solid	
②	Continue holding buttons 6 & 7 until LED goes OFF	OFF	LED will not flash until BOTH buttons are released in step 3
③	Release both buttons 6 & 7	Flashing rapidly	You have 4 seconds to complete step 4
④	Press and release the "Layout" button you wish the Keypad to become (see charts for selectable layouts)	Flashes the layout you have just selected	Complete

To change the "Radio" address of a 24-channel transmitter, follow these steps:

	Button Press	LED	NOTE
①	Press and HOLD both buttons 6 & 7	ON Solid	
②	Continue holding buttons 6 & 7 until LED goes OFF	OFF	LED will not flash until BOTH buttons are released in step 3
③	Release both buttons 6 & 7	Flashing rapidly	You have 4 seconds to complete step 4
④	Press and release button 6	LED does one quick flash and goes off	Complete

Pre-configured layouts (blank cells in the following tables mean button is not used).

Layout 1 (T24 with shift: 1 thru 24)

O1	C1	OAll	CAI1	O13	C13	OAll	CAI1
O2	C2	O8	C8	O14	C14	O20	C20
O3	C3	O9	C9	O15	C15	O21	C21
O4	C4	O10	C10	O16	C16	O22	C22
O5	C5	O11	C11	O17	C17	O23	C23
O6	C6	O12	C12	O18	C18	O24	C24
O7	C7	Shft>	Stop	O19	C19	<Shft	Stop

Layout 2 (T24 with shift: 13 thru 36)

O13	C13	OAll	CAI1	O25	C25	OAll	CAI1
O14	C14	O20	C20	O26	C26	O32	C32
O15	C15	O21	C21	O27	C27	O33	C33
O16	C16	O22	C22	O28	C28	O34	C34
O17	C17	O23	C23	O29	C29	O35	C35
O18	C18	O24	C24	O30	C30	O36	C36
O19	C19	Shft>	Stop	O31	C31	<Shft	Stop

Layout 3 (T24 with shift: 25 thru 48)

O25	C25	OAll	CAI1	O37	C37	OAll	CAI1
O26	C26	O32	C32	O38	C38	O44	C44
O27	C27	O33	C33	O39	C39	O45	C45
O28	C28	O34	C34	O40	C40	O46	C46
O29	C29	O35	C35	O41	C41	O47	C47
O30	C30	O36	C36	O42	C42	O48	C48
O31	C31	Shft>	Stop	O43	C43	<Shft	Stop

Layout 4 (T24 with shift: 37 thru 60)

O37	C37	OAll	CAI1	O49	C49	OAll	CAI1
O38	C38	O44	C44	O50	C50	O56	C56
O39	C39	O45	C45	O51	C51	O57	C57
O40	C40	O46	C46	O52	C52	O58	C58
O41	C41	O47	C47	O53	C53	O59	C59
O42	C42	O48	C48	O54	C54	O60	C60
O43	C43	<Shft	Stop	O55	C55	<Shft	Stop

DRAPER®

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If you encounter any difficulties programming your IntelliFlex IR or RF control, call your dealer or Draper, Inc., Spiceland, Ind., (765) 987-7999 or fax (765) 987-7142.

** If you select any undefined layouts, the result is a standard T12 without shift.

Front LED Blinks Indicate Selected Layout:

The Red LED on the front of the transmitter, in the upper left corner, will blink to tell you which layout is selected when either of the following occurs:

- Batteries are removed and reinserted at the completion of the button 6+7 sequence to select a layout, or
- The blinks are long and short. Each long blink indicates 5's and each short blink indicates 1's, with the sum indicating the currently selected layout.

If the LED does not blink when batteries are inserted, press and hold any button, then remove the batteries. Then release all the buttons and reinsert the batteries watching for the blinks.

IR Codes

IR wavelength is 950 nm. Light is modulated at 38 KHz with 1/3 duty cycle.

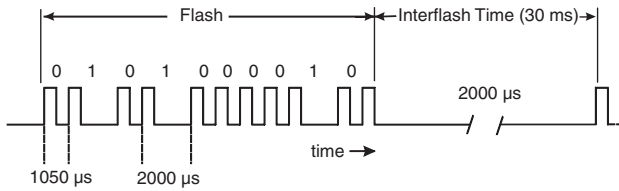
An on pulse must be at least 158 μseconds (μs) long (6 cycles) and should not be longer than 448 μs (17 cycles).

From the start of a pulse till the start of the next pulse is 1050 μs for a "0 bit", and 2000 μs for a "1 bit".

A Flash is 11 pulses (10 bits), minimum time between flashes (interflash time) is 11 mseconds (ms). When using the small eye the minimum interflash time is 25 ms, 30 ms is recommended. There is NO preamble.

Channel 1 OPEN sequence is 0101000010. The sequence always starts with 01, so for simplicity strip that off, and we get 0100 0010 = hex 42 (see figure below).

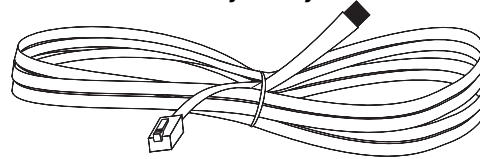
Please Note: low = off, high =38 KHz signal on.



The complete table of codes (in hex) is:

OPEN1	42	OPEN13	40
CLOSE1	22	CLOSE13	20
OPEN2	62	OPEN14	60
CLOSE2	12	CLOSE14	10
OPEN3	32	OPEN15	30
CLOSE3	0a	CLOSE15	08
OPEN4	4a	OPEN16	48
CLOSE4	2a	CLOSE16	28
OPEN5	1a	OPEN17	18
CLOSE5	06	CLOSE17	04
OPEN6	46	OPEN18	44
CLOSE6	26	CLOSE18	24
OPEN7	16	OPEN19	14
CLOSE7	0e	CLOSE19	0c
OPEN8	56	OPEN20	54
CLOSE8	36	CLOSE20	34
OPEN9	4e	OPEN21	4c
CLOSE9	2e	CLOSE21	2c
OPEN10	5a	OPEN22	58
CLOSE10	3a	CLOSE22	38
OPEN11	02	OPEN23	1c
CLOSE11	72	CLOSE23	70
OPEN12	6a	OPEN24	68
CLOSE12	66	CLOSE24	64
OPEN ALL (1-12)	76	OPEN ALL (13-24)	74
CLOSE ALL (1-12)	6e	CLOSE ALL (13-24)	6c
STOP	52		

IR Eye Only



A Note on Wiring

The IR Receiver Eye must be plugged in to an open "Eye" jack (see diagram on page 1). All input devices connect using **electrically straight** 4-conductor modular cable.

Please note: If you use standard telephone cable, you must first remove one connector, turn it over and re-attach, to ensure that the cable is electrically straight (see diagram below).

