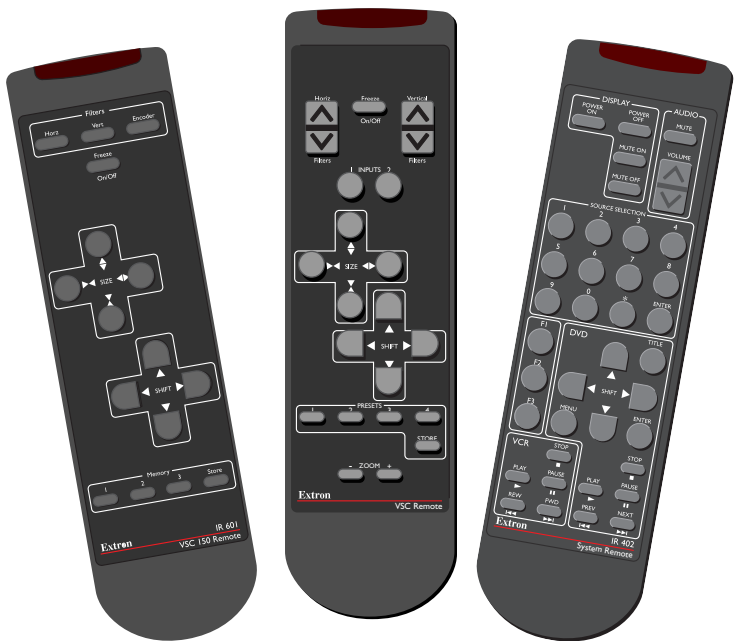


User's Guide



IR Remote Control Hex Codes and Signal Timing

Guide to Hex Codes and Signal Timing for Extron IR Remote Controls

68-1323-01
Rev. A
10 06

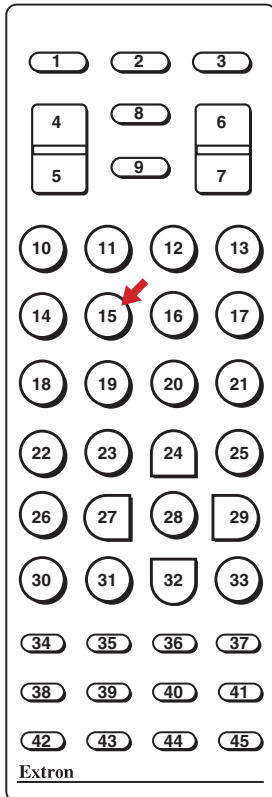
Hex codes

Looking up the Hex Code

To find the hex codes for your individual Extron IR remote control, match your button positions with those in figure 1, then look up the corresponding button number in the hex code table (e.g., button #15 [arrowed] has the hex code 0E).

NOTE

Your remote control will not have all the buttons shown. Figure 1 below covers the button combinations of all available Extron IR remote models.



Hex Code Table
(See left for button position)

Button #	Hex Code	Button #	Hex Code
1	00	25	18
2	01	26	19
3	02	27	1A
4	03	28	1B
5	04	29	1C
6	05	30	1D
7	06	31	1E
8	07	32	1F
9	08	33	40
10	09	34	41
11	0A	35	42
12	0B	36	43
13	0C	37	44
14	0D	38	45
15	0E	39	46
16	0F	40	47
17	10	41	48
18	11	42	49
19	12	43	4A
20	13	44	4B
21	14	45	4C
22	15		
23	16		
24	17		

Figure 1 — IR Remote buttons and corresponding transmitted hex codes

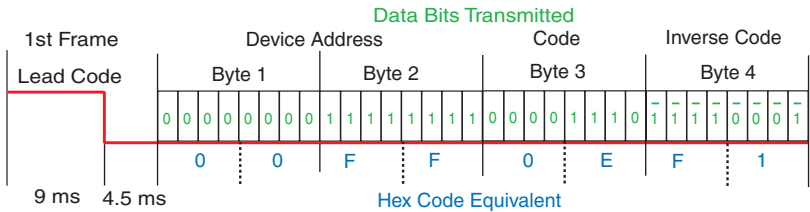
Explanation of Signal Timing

A complete command signal is made of a lead pulse, followed by 32 bits (4 bytes) of data, and a repeat pulse as long for as the button is held. The first two bytes contain the Extron device address (which is 00H FFH), the third byte contains the hex coded data (see the table above), and the fourth byte is the inverse of the third byte. The repeat pulse is sent to allow the receiver to know that the button is still being held.

Signal Timing

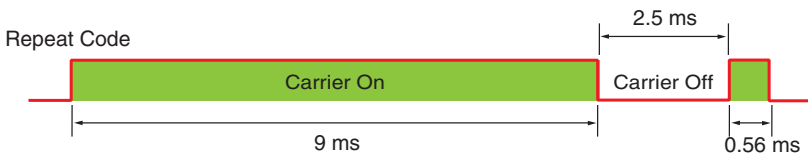
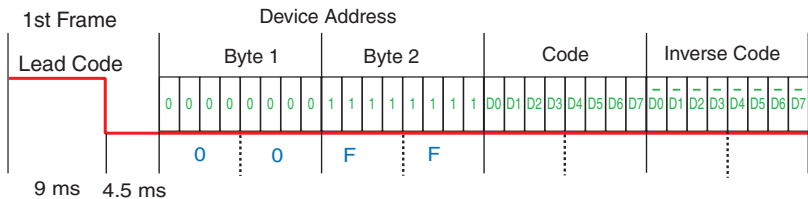
Example

The figure below shows the transmitted signal to represent a single press of button #15.



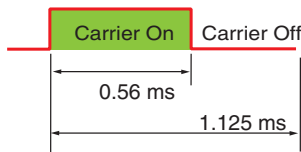
General Signal Timing with Code Positions

Carrier Frequency = 38 KHz
(50% duty cycle)

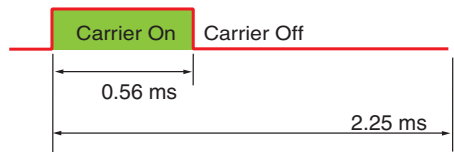


Bit Description

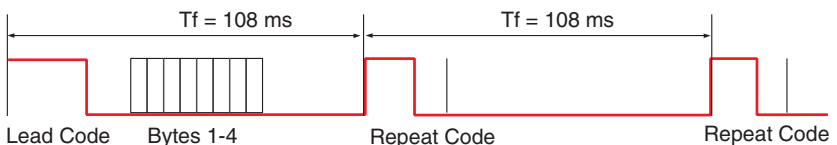
Bit "0"



Bit "1"



Frame Interval: T_f = The transmitted waveform as long as a key is depressed.



**Extron Electronics, USA**

1230 South Lewis Street
Anaheim, CA 92805
USA
714.491.1500
Fax 714.491.1517

Extron Electronics, Europe

Beeldschermweg 6C
3821 AH Amerfoort
The Netherlands
+31.33.453.4040
Fax +31.33.453.4050

Extron Electronics, Asia

135 Joo Seng Road, #04-01
PM Industrial Building
Singapore 368363
+65.6383.4400
Fax +65.6383.4664

Extron Electronics, Japan

Kyodo Building
16 Ichibancho
Chiyoda-ku, Tokyo 102-0082 Japan
+81.3.3511.7655
Fax +81.3.3511.7656

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>