

13. I/R Remote Control

13.1 Specifications

13.1.1	Keys	33
13.1.2	Dimensions	165x45x20
13.1.3	Keypad Type	Silicone rubber
13.1.9	Case Material	ABS plastic
13.1.4	LED	Yes, Red
13.1.5	IR Emitter	1
13.1.6	Range	20-30ft, (6-9m)
13.1.7	Power Supply	2 x AAA Batteries
13.1.8	Power Consumption	Approx. 50mA at IR transmit
13.1.10	Operation Temp.	+5°C to +40°C
13.1.11	Storage Temp.	-40°C to +70°C
13.1.12	Humidity Range condensing	10% to 90% non-
13.1.14	Infrared Frequency	38 KHz

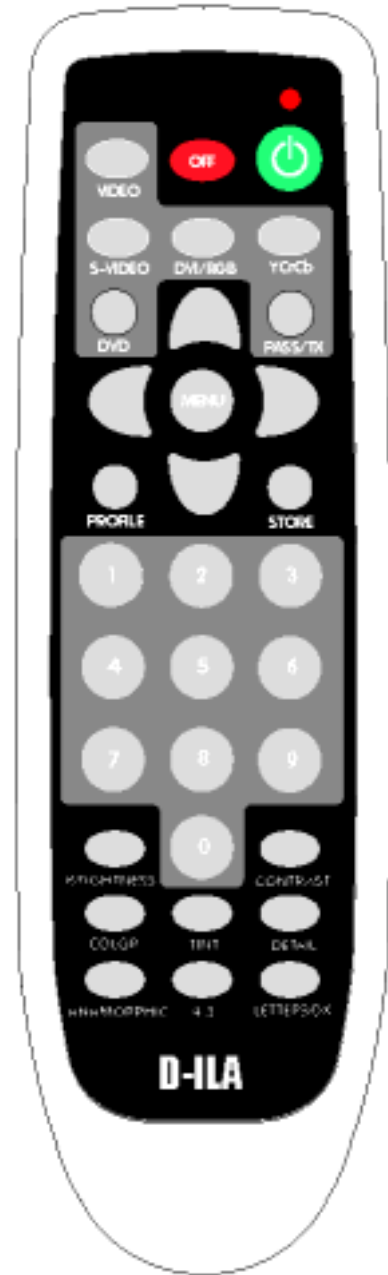


Figure 3

13.2 Remote Control Key Definitions

- 13.2.1 Red LED
Provides visual feedback when command is being transmitted.
- 13.2.2 Red Button
Direct access for power on. Also will toggle between on and standby.
- 13.2.3 Off Button
Direct Access for standby mode.
- 13.2.4 Video Button
Direct access to select the Video input.
- 13.2.5 S-Video Button
Direct access to select the S-Video input.
- 13.2.6 DVI/RGB Button
Selects the DVI input. If pressed twice the input will switch to the RGB input. Direct access to DVI input is also granted by pressing the DVI/RGB key followed by the 0 (zero) key. Direct access to the RGB input is also granted by pressing the DVI/RGB key followed by the 1 (one) key.
- 13.2.7 YPrPb Button direct access to select the YPrPb input.
- 13.2.8 DVD
Direct access to select the DVD input mode when used with the DVP1510 or other Faroudja processor with an internal DVD transport.
- 13.2.9 Pass/TX
Selects the pass-through input. If pressed twice the input will switch to the pass-through transcoding input. Direct access to pass-through input is also granted by pressing the PASS/TX key followed by the 0 (zero) key. Direct access to the pass-through transcode input is also granted by pressing the PASS/TX key followed by the 1 (one) key. The DVI input will be passed to the DVI output without any transcoding process.
- 13.2.10 Function Up Button
Used as a navigation key with the On Screen Display
- 13.2.11 Value Left Button
Used to change the values in the menus when the On Screen Display is used. Used to change the settings when in the setup mode when referring to the LCD display

- 13.2.12 **Menu Button**
Used to raise or lower the On Screen Menu. If the button is held for 5 seconds the unit will enter setup mode. Pressing menu again will return the unit back to user mode.
- 13.2.13 **Value Right button**
Used to change the values in the menus when the On Screen Display is used. Used to change the settings when in the setup mode when referring to the LCD display
- 13.2.14 **Preset Button**
Used to recall user store profile
- 13.2.15 **Function Down Button**
Used as a navigation key with the On Screen Display
- 13.2.16 **Store Button**
Used to store the current settings to a user profile. When in setup mode the store key is used to verify and store the newly selected scan rate.
- 13.2.17 **0 – 9 Buttons**
Used to enter values when using the direct access levels for the picture controls.
- 13.2.18 **Brightness Button**
Used to raise and lower the picture brightness level
- 13.2.19 **Contrast Button**
Used to raise and lower the picture contrast level
- 13.2.20 **Color Button**
Used to raise and lower the picture color level
- 13.2.21 **Tint Button**
Used to raise and lower the picture tint level
(Composite NTSC only)
- 13.2.22 **Detail Button**
Used to raise and lower the picture detail level
- 13.2.23 **Anamorphic Button**
Direct access to select the picture in anamorphic aspect ratio
- 13.2.24 **4:3 Button**
Direct access to select the picture in 4:3 aspect ratio

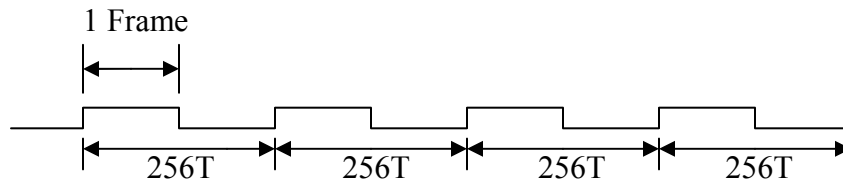
13.2.25 Letterbox Button
 Direct access to select the picture in letterbox aspect ratio

13.3 Remote Control Timing Definitions:

13.3.1 The modulated carrier is derived from a 432KHz clock and is 1/12 of the frequency with a 1/3 duty cycle.

13.3.2 When data is transmitted repeatedly, the frame cycle is 113.7mS or 256T periods.

13.3.3 A frame consists of a two-bit sync code, a one-bit toggling control code, a five-bit system code (address) and a six-bit data code.



1 Frame:

S0	S1	TG	C0	C1	C2	C3	C4	D0	D1	D2	D3	D4
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S0, S1 = Sync (2 bit)

TG = Toggle (1 bit)

C0-C4 = Custom address code (1 bit, see below)

D0-D4 = Data code (5 bit, see table below)

Data item	Time (sec.)	Time (no. of period)
Data off time	0.888mS	2T
Data on time	0.888mS	2T
Data period (0)	3.552mS	4T
Data period (1)	3.552mS	4T
Frame output cycle	113.7mS	256T

13.4 I/R Custom address code

Address	Decimal Code	Hex Code	Bin Code				
			C4	C3	C2	C1	C0
Default	27	1b	1	1	0	1	1

13.5 I/R data codes

Function	Decimal Code	Hex Code	BIN Code					
			D5	D4	D3	D2	D1	D0
Power On	1	01	0	0	0	0	0	1
Power Off	2	02	0	0	0	0	1	0
Video	3	03	0	0	0	0	1	1
S-Video	4	04	0	0	0	1	0	0
RGB	5	05	0	0	0	1	0	1
YPrPb	6	06	0	0	0	1	1	0
Pass thru	7	07	0	0	0	1	1	1
Pass thru Xcode	8	08	0	0	1	0	0	0
4:3	9	09	0	0	1	0	0	1
Letterbox	10	0a	0	0	1	0	1	0
Anamorphic	11	0b	0	0	1	0	1	1
Brightness	12	0c	0	0	1	1	0	0
Contrast	13	0d	0	0	1	1	0	1
Color	14	0e	0	0	1	1	1	0
Tint	15	0f	0	0	1	1	1	1
Detail	16	10	0	1	0	0	0	0
Menu	17	11	0	1	0	0	0	1
Preset	18	12	0	1	0	0	1	0
Store	19	13	0	1	0	0	1	1
Function Up	20	14	0	1	0	1	0	0
Function Down	21	15	0	1	0	1	0	1
Value Up	22	16	0	1	0	1	1	0
Value Down	23	17	0	1	0	1	1	1
0	24	18	0	1	1	0	0	0
1	25	19	0	1	1	0	0	1
2	26	1a	0	1	1	0	1	0
3	27	1b	0	1	1	0	1	1
4	28	1c	0	1	1	1	0	0
5	29	1d	0	1	1	1	0	1
6	30	1e	0	1	1	1	1	0
7	31	1f	0	1	1	1	1	1
8	32	20	1	0	0	0	0	0
9	33	21	1	0	0	0	0	1