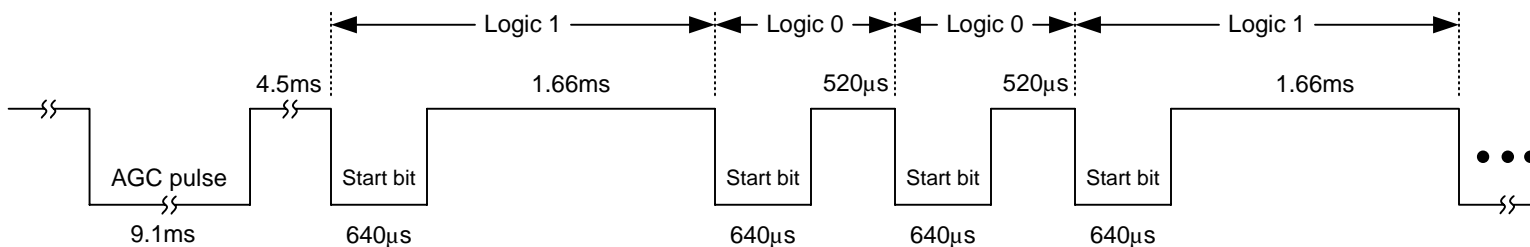


Apple remote notes

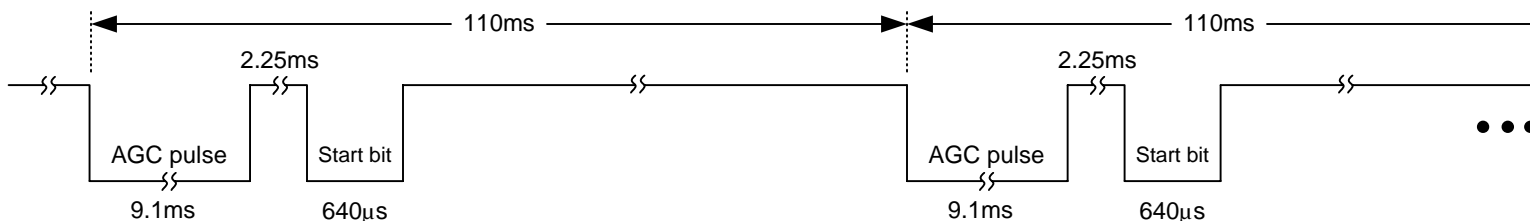
Derek Matsunaga
26-May-2011

Apple remote transmits 32 bits per single button press, least significant bit first.

Waveform out of IR detector for one button press:



Waveform out of IR detector for auto repeat (press and hold to repeat last key):



The data (in hex):

Button	White remote		Aluminum remote		
Menu	4A03	87EE	6203	87EE	
Play/pause	4A05	87EE	625F	87EE	6205 87EE (double transmission)
Forward	4A06	87EE	6206	87EE	
Backward	4A09	87EE	6209	87EE	
Up	4A0A	87EE	620A	87EE	
Down	4A0C	87EE	620C	87EE	
Center	N/A	N/A	625C	87EE	6205 87EE (double transmission)
		Apple ID		Apple ID	Apple ID

Remote ID Button code + parity (odd)

	Remote ID	Button code + parity (odd)
Increment remote ID	4A 0100 1010	0C 0 0 0 0 1 1 0 0
White: Menu + Play (6 sec)	4B 0100 1011	0D 0 0 0 0 1 1 0 1
Aluminum: Menu + Center (6 sec)	4C 0100 1100	0C 0 0 0 0 1 1 0 0

↑
Parity bit

Button codes

Button	Code (binary)	Code (hex)
Menu	001	1
Play/pause	010	2
Forward	011	3
Backward	100	4
Up	101	5
Down	110	6
Center	(Aluminum only, double xmit)	