



Pin	Signal	Description	Apple pin numberin g*
1	GND	Ground (-), internally connected with Pin 2 on iPod motherboard	30
2	GND	Audio & Video ground (-), internally connected with Pin 1 on iPod motherboard	29
3	Right	Line Out - R (+) (Audio output, right channel)	28
4	Left	Line Out - L(+) (Audio output, left channel)	27
5	Right In	Line In - R (+)	26
6	Left In	Line In - L (+)	25
7	?		24
8	Video Out	Composite video output (only when slideshow active on iPod Photo) or Component Video Pb	23
9	S-Video Chrominance output	for iPod Color, Photo only or Component Video Y	22
10	S-Video Luminance output	for iPod Color, Photo only or Component Video Pr	21
11	AUDIO_SW	If connected to GND the iPhone sends audio signals through pin 3-4, otherwise it uses onboard speaker.	20
12	Tx	ipod sending line, Serial TxD	19
13	Rx	ipod receiving line, Serial RxD	18
14	RSVD	Reserved	17
15	GND	Ground (-), internally connected with pin 16 on iPod motherboard	16
16	GND	USB GND (-), internally connected with pin 15 on iPod motherboard	15
17	RSVD	Reserved	14
18	3.3V	3.3V Power (+) Stepped up to provide +5 VDC to USB on iPod Camera Connector. If iPod is put to sleep while Camera Connector is present, +5 VDC at this pin slowly drains back to 0 VDC.	13
19,20	+12V	Firewire Power 12 VDC (+)	11,12

21	Accessory Indicator/ Serial enable	Different resistances indicate accessory type: 1kOhm - iPod docking station, beeps when connected 10kOhm - Takes some iPods into photo import mode 6.8 kΩ - Serial port mode. Pin 11-13 are TTL level. Requires MAX232 chip to convert to RS232 levels. 68kOhm - makes iPhone 3g send audio through line-out without any messages 500kOhm - related to serial communication / used to enable serial communications Used in Dension Ice Link Plus car interface	10
21	Indicator/	any messages 500kOhm - related to serial communication / used to enable serial communications Used in Dension Ice Link Plus car	10
22	TPA (-)	FireWire Data TPA (-)	9
23	5 VDC (+)	USB Power 5 VDC (+)	8
24	TPA (+)	FireWire Data TPA (+)	7
25	Data (-)	USB Data (-)	6
26	TPB (-)	FireWire Data TPB (-)	5

27 Data (+) 27 Data (+) To and this litts use US (25) was ma 2x Ac 2.0	ith iPod 5G 20GB). This provides 500mA of current for harging. For quicker charing, up to 1A, see below. To charge an iPhone, 3G, 3GS, 4 / iPod Touch, 2nd gen, 3rd, 2th or Ipod Classic (6th Gen), usb data- (25) should be at 2.8v, 3th data+ (27) should be at 2.0v. This can be done with a few mple resistors: 33k to +5v (23) and 22k to gnd(16) to obtain and 33k to +5v and 47k to gnd to obtain 2.8v. This is a obtification to the iphone that it is connected to the external harger and may drain amps from the usb. To charge iPod Nano pins 25 and 27 should be tied together and then connected to a 10K ohm resistor, and the other side of the is resistors then needs to be connected to 5v power. The salso possible to charge the iPod's or iPhone's battery to make the of internal +3.3v output (18) terminal to connect the SB Data + (27) thru a 47k ohms resistor and the USB Data- 25) thru a 47k resistor to the USB Power source +5v (23). This ay the USB function is still useable for normal operations and takes it easier the fit in a plug. The resistors are not to critical at 150k's still work. Indeed correction: iPod 2.1A charger advertises 2.8V on D+ and OV on D Tying either wire to 5V could damage the target - the resistors tied to 5.1V and ground to be safe.	4
28 TPB (+) Fin	reWire Data TPB (+)	3
29,30 GND Fin	ireWire Ground (-)	1,2

