

## Pinout Changes to Range Rover Black 54 Pin Telephone Plug to match BMW Bluetooth ULF

Remove Cable 1	Isolate in separate plug
Remove Cable 54	Put into Socket 1
Remove Cable 13	Put into Socket 15
Remove Cable 38	Put into Socket 11
Remove Cable 17	Put into Socket 38
Remove Cable 25	Put into Socket 17
Remove Cable 19	Isolate in separate plug
Remove Cable 52	Put into Socket 19
Remove Cable 53	Put into Socket 21
Remove Cable 32	Isolate in separate plug
Remove Cable 2	Put into Socket 32
Remove Cable 33	Isolate in separate plug
Remove Cable 47	Put into Socket 33
Remove Cable 34	Put into Socket 36
Remove Cable 12	Put into Socket 35
Remove Cable 37	Isolate in separate plug
Remove Cable 18	Put into Socket 37
Remove Cable 29	Put into Socket 51
Remove Cable 9	Isolate in separate plug
Remove Cable 10	Isolate in separate plug
Remove Cable 20	Isolate in separate plug
Remove Cable 24	Isolate in separate plug
Remove Cable 28	Isolate in separate plug
Remove Cable 31	Isolate in separate plug
Remove Cable 42	Isolate in separate plug
Remove Cable 43	Isolate in separate plug
Remove Cable 46	Isolate in separate plug
Remove Cable 48	Isolate in separate plug

**I01154 Universal electronic charging and hands-free module (ULF)****Plug connector overview**

Number	X-pin, colour	Description
X18500	54-pin, black	Plug connector Universal electronic charging and hands-free module (ULF)
X9987	1-pin, black	Plug connector Universal electronic charging and hands-free module (ULF)

**Pin assignments at plug connector X18500**

Pin	Type	Description / Signal type	Connection / Measuring notes
1	A	Positive input signal. microphone ✓	Voice input Microphone
2		Not used	
3		Not used	
4		Not used	
5		Not used	
6		Not used	
7		Not used	
8		Not used	
9		Not used	
10		Not used	
11	E	Telephone ON signal	Eject box ✓
12		Not used	
13		Not used	

Yellow CAB 54

white/green ✓ CAB 35  
CAB 35

14		Not used	
15	E/A	I-bus signal line	I-bus connector Telephone connector ✓
16		Not used	
17	E	Voltage supply terminal 30	Fuse F74 ✓
18		Not used	
19	A	Negative input signal, microphone ✓	Voice input Microphone
20		Not used	
21	M	Shield ✓	Shield Microphone
22	E/A	Telephone, internal	Eject box
23		Not used	
24		Not used	
25		Not used	
26		Not used	
27		Not used	
28		Not used	
29		Not used	
30		Not used	
31		Not used	
32	E/A	Telephone, internal	Eject box ✓

White/grey/yellow CAB 13

Red/yellow CAB 25

Black CAB 52

CAB 53

Red/yellow  
(POTENTIAL GROUND) CAB 2  
white

33	A	Telephone ON signal	Voice input Amplifier Radio ✓
34	A	Telephone ON signal	Compensator
35	E	Voltage supply terminal R	K3 Unloader relay terminal R ✓
36	M	Ground	Ground connector ✓
37	A	Positive activation, front loudspeaker	Voice input Amplifier Front loudspeaker ✓
38	A	Negative activation, front loudspeaker	Voice input Amplifier Front loudspeaker ✓
39	M	Shield	Eject box
40		Not used	
41		Not used	
42		Not used	
43		Not used	
44		Not used	
45		Not used	
46		Not used	
47		Not used	
48		Not used	
49		Not used	
50		Not used	

white/green

CAB 47  
Yellow / Blue

violet/white

CAB 12  
violet

Brown/black

CAB 34  
Brown / Black

Black / Brown

CAB 18  
Black / Brown

Black / white

CAB 17  
Blue / Brown

51	A	Telephone mute signal	Voice input Radio	✓
52	E	Night light signal	Connector, terminal 58g	
53		Not used		
54		Not used		

Yellow

CATB 29  
WHITE / BROWN

## Pin assignments at plug connector X9987

Pin	Type	Description / Signal type	Connection / Measuring notes
1	E/A	Antenna signal	Bluetooth aerial