2014 Mercedes Benz CLA Class (C117)



Wiring Information

Wire Color	Polarity	Wire Location
red/green (40A)	+	SAM Control Unit under driver dash, 4 pin plug, pin 1
N/A		
purple/white (for starter kill only)	+	underhood fuse box, plug (MR1), pin 13
N/A		
black/blue (for ignition sense only)	+	SAM Control Unit under driver dash, 24 pin plug (UH2), pin 5
N/A		
brown/red (CAN-B)	data	SAM Control Unit under driver dash, 48 pin plug (B2), pin 47
brown (CAN-B)	data	SAM Control Unit under driver dash, 48 pin plug (B2), pin 46
N/A		
gray/blue	- resistor	Left Front Door Control Unit, plug (C5), pin 4
(same as power lock)	-	
pink/yellow	5 wire	SAM Control Unit under driver dash, 48 pin plug (B2), pin 41
green	5 wire	Left Front Door Control Unit, plug (C7), pin 6
pink/blue	5 wire	SAM Control Unit under driver dash, 48 pin plug (B2), pin 39
blue/black (LF); blue/red (RF)	+	SAM Cntrl Unit, 24 pin plug (UH1), pin 21; 24 pin plug (UH2), pin 10
(CAN bus)		
(LIN bus)		
black/white (F); yellow/white (R)	+	SAM Cntrl Unit, 24 pin plug (UH1), pin 4; 47 pin plug (B1), pin 39
black/green (F); gray/red (R)	+	SAM Cntrl Unit, 24 pin plug (UH2), pin 24; 48 pin plug (B2), pin 3
	red/green (40A) N/A purple/white (for starter kill only) N/A black/blue (for ignition sense only) N/A N/A N/A N/A N/A N/A N/A N/	red/green (40A) + N/A purple/white (for starter kill only) + N/A black/blue (for ignition sense only) + N/A N/A N/A N/A N/A N/A N/A N/

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Headlight	yellow (L); yellow (R)		SAM Cntrl Unit, 24 pin plug (UH2), pin 15; 24 pin plug (UH1), pin 3
AutoLights	(CAN bus)		
Reverse Light	everse Light gray/yellow		SAM Control Unit under driver dash, 47 pin plug (B1), pin 25
Left Front Door Trigger	brown/pink	-	Left Front Door Control Unit, plug (C7), pin 9
Right Front Door Trigger	brown/pink	-	Right Front Door Control Unit, plug (C7), pin 9
Left Rear Door Trigger	pink/white	-	SAM Control Unit, 47 pin plug (B1), pin 23
Right Rear Door Trigger	white	-	SAM Control Unit, 47 pin plug (B1), pin 19
Dome Supervision	(LIN bus)		
Trunk/Hatch Pin	yellow/green	-	SAM Control Unit under driver dash, 47 pin plug (B1), pin 21
Rear Glass Pin	N/A		
Hood Pin	N/A		
Trunk Hatch/Release	gray/black (rear handle switch)	-	SAM Control Unit under driver dash, 47 pin plug (B1), pin 9
Trunk Release Motor	purple	5 wire	SAM Control Unit under driver dash, 48 pin plug (B2), pin 1
Fuel Door Release	yellow/blue or yellow/green(fuel door lock/unlock)	5 wire	SAM Control Unit under driv dash, 48 pin plug (B2), pin 28 or 40
Power Sliding Door (Left)	N/A		
Power Sliding Door (Right)	N/A		
Factory Alarm Arm	(factory remote only)		
Factory Alarm Disarm	(factory remote only)		
Disarm No Unlock	N/A		
Trunk Alarm Shunt	N/A		
Tachometer	Fachometer brown/black, black/red, brown/blue, or blue/green		any fuel injector, 2 pin plug, pin 2
Wait to Start	N/A		
Neutral Safety	N/A		
Clutch Pedal	N/A		
Fuel Pump	black/purple	+	passenger kick fuse box, plug (P2), pin 8
Rear Defroster	yellow/red	+ latched	passenger kick fuse box, plug (P3), pin 12
Mirror Defroster	(CAN bus)		
Left Front Heated Seat	(LIN bus)		
Right Front Heated Seat	(LIN bus)		

Wiring Information (Continued)

Speed Sense	
Brake Wire	
Parking Brake (electric parking brake) Horn Trigger yellow/black yellow/burple yellow/burple + SAM Control Unit under driver dash, 24 pin plug (UI Wipers yellow/purple + SAM Control Unit under driver dash, 24 pin plug (UI Left Front Window (Up/Down) (not recommended because of factory auto up/down) Right Front Window (Up/Down) (not recommended because of factory auto up/down) Left Rear Window (Up/Down) (not recommended because of factory auto up/down) Right Rear Window (Up/Down) (not recommended because of factory auto up/down) Sun Roof (Open/Close) (LIN bus) Sun Roof (Limit/Close) N/A Memory Seat 1 (LIN bus) Memory Seat 2 (LIN bus) Memory Seat 2 (LIN bus) Radio 12V red/green + radio, 16 pin plug, pin 15 Radio Ground brown - radio, 16 pin plug, pin 12 Radio Illumination (CAN bus) Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) brown/green - green +, radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) white - brown/white +, radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) gray - brown/gray or blue/gray +, amplifier in trunk right side, 32 pin plug, pins 2 - 6 Left Rear Speaker (+/-) brown/gray or blue/gray +, amplifier in trunk right side, 32 pin plug, pins 3 - 1 Brown/red (2)	
Horn Trigger yellow/black yellow/purple horn Trigger yellow/purple yellow/purple yellow/purple horn Trigger yellow/purple yellow/purple horn Trigger yellow/purple yellow/purple horn Trigger horn Trigger yell	∃2), pin 3
Wipers yellow/purple + SAM Control Unit under driver dash, 24 pin plug (UI Left Front Window (Up/Down) Right Front Window (Inot recommended because of factory auto up/down) Left Rear Window (Up/Down) Right Rear Window (Up/Down) Right Rear Window (Inot recommended because of factory auto up/down) Right Rear Window (Inot recommended because of factory auto up/down) Right Rear Window (Inot recommended because of factory auto up/down) Sun Roof (Open/Close) Sun Roof (Linit/Close) N/A Memory Seat 1 (LIN bus) Memory Seat 2 (LIN bus) Memory Seat 3 (LIN bus) Radio 12V red/green + radio, 16 pin plug, pin 15 Radio Ground brown - radio, 16 pin plug, pin 12 Radio Illumination (CAN bus) Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) brown/green - green +, radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) white - brown/pink +, radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray blue - brown/blue (1); red - brown/red (2) brown/red (2)	
Left Front Window (Up/Down) Right Front Window (Up/Down) Left Rear Window (Up/Down) Right Rear Window (Up/Down) Sun Roof (Open/Close) (LIN bus) Sun Roof (Limit/Close) N/A Memory Seat 1 (LIN bus) Memory Seat 2 (LIN bus) Memory Seat 3 (LIN bus) Radio 12V red/green + radio, 16 pin plug, pin 15 Radio Ground brown - radio, 16 pin plug, pin 12 Radio Illumination Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) brown/green - green +,- radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) brown/orange - orange +,- radio, 8 pin plug, pins 2 - 6 Left Rear Speaker (+/-) pink - brown/white +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray blue - brown/blue (1); red - brown/red (2) brown/red (2) motor recommended because of factory auto up/down) (not recommended because of factory auto up/down) (LIN bus) Memory Seat 1 (LIN bus) Memory Seat 2 (LIN bus) Memory Seat 1 (LIN bus) Memory Seat 2 (LIN bus) Memory Seat	l2), pin 17
factory auto up/down	l2), pin 18
Cup/Down	
Right Rear Window (Up/Down) Sun Roof (Open/Close) Sun Roof (Limit/Close) Memory Seat 1 Memory Seat 2 (LIN bus) Memory Seat 3 (LIN bus) Memory Seat 3 (LIN bus) Radio 12V red/green + radio, 16 pin plug, pin 15 Radio Ground Brown - radio, 16 pin plug, pin 12 Radio Illumination Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna Left Front Speaker (+/-) Right Front Speaker (+/-) Left Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) gray - brown/gray or blue/gray brown/red (2) Left Front Kright side, 32 pin plug, pins 3 - 1 subwoofer (+/-) brown/greed (2) Subwoofer (+/-) blue - brown/blue (1); red - brown/red (2) Left Front Kright side, 32 pin plug, pins 3 - 1	
(Up/Down) factory auto up/down) Sun Roof (Open/Close) (LIN bus) Memory Seat 1 (LIN bus) Memory Seat 2 (LIN bus) Memory Seat 3 (LIN bus) Radio 12V red/green + radio, 16 pin plug, pin 15 Radio Ground brown - radio, 16 pin plug, pin 12 Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) brown/green - green +,- radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 2 - 6 Left Rear Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) pink - brown/pink +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- amplifier in trunk right side, 32 pin plug, pins 2 - 1 Subwoofer (+/-) blue - brown/blue (1); red - brown/red (2) +,- amplifier in trunk right side, 32 pin plug, pins 3 - 1	
Sun Roof (Limit/Close) N/A Memory Seat 1 (LIN bus) Memory Seat 2 (LIN bus) Radio 12V Radio Ground Radio Ignition Radio Illumination Factory Amp Turn-on N/A Left Front Speaker (+/-) Left Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Gray - brown/gray or blue/gray Subwoofer (+/-) Subwoofer (+/-) Subwoofer (+/-) Memory Seat 1 (LIN bus) (LIN bus) (LIN bus) + radio, 16 pin plug, pin 15 radio, 16 pin plug, pin 12 radio, 16 pin plug, pin 12 radio, 16 pin plug, pin 12 radio, 18 pin plug, pin 12 radio, 8 pin plug, pins 3 - 7 radio, 8 pin plug, pins 2 - 6 + radio, 8 pin plug, pins 4 - 8 radio, 8 pin plug, pins 4 - 8 radio, 8 pin plug, pins 4 - 8 radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray + amplifier in trunk right side, 32 pin plug, pins 3 - 1 brown/red (2)	
Memory Seat 2 (LIN bus) Memory Seat 3 (LIN bus) Radio 12V red/green + radio, 16 pin plug, pin 15 Radio Ground brown - radio, 16 pin plug, pin 12 Radio Ignition (CAN bus) Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna Left Front Speaker (+/-) brown/green - green +,- radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) Left Rear Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) gray - brown/gray or blue/gray Subwoofer (+/-) blue - brown/blue (1); red - brown/red (2) Left Rear Speaker in trunk right side, 32 pin plug, pins 3 - 1 brown/red (2)	
Memory Seat 2 (LIN bus) Radio 12V red/green + radio, 16 pin plug, pin 15 Radio Ground brown - radio, 16 pin plug, pin 12 Radio Ignition (CAN bus) Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) brown/green - green +,- radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) pink - brown/pink +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- amplifier in trunk right side, 32 pin plug, pins 2 - 1 brown/red (2)	
Memory Seat 3(LIN bus)Radio 12Vred/green+radio, 16 pin plug, pin 15Radio Groundbrown-radio, 16 pin plug, pin 12Radio Ignition(CAN bus)-radio, 16 pin plug, pin 12Radio IlluminationN/AFactory Amp Turn-on(MOST bus)Power AntennaN/Aradio, 8 pin plug, pins 3 - 7Left Front Speaker (+/-)brown/green - green+,-radio, 8 pin plug, pins 2 - 6Left Rear Speaker (+/-)white - brown/white+,-radio, 8 pin plug, pins 4 - 8Right Rear Speaker (+/-)pink - brown/pink+,-radio, 8 pin plug, pins 1 - 5Center Channel (+/-)gray - brown/gray or blue/gray+,-amplifier in trunk right side, 32 pin plug, pins 2:Subwoofer (+/-)blue - brown/blue (1); red - brown/red (2)+,-amplifier in trunk right side, 32 pin plug, pins 3 - 1	
Radio 12V red/green + radio, 16 pin plug, pin 15 Radio Ground brown - radio, 16 pin plug, pin 12 Radio Ignition (CAN bus) Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) brown/green - green +,- radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 2 - 6 Left Rear Speaker (+/-) white - brown/pink +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- amplifier in trunk right side, 32 pin plug, pins 3 - 1 brown/red (2)	
Radio Ground brown - radio, 16 pin plug, pin 12 Radio Ignition (CAN bus) Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) brown/green - green +,- radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) brown/orange - orange +,- radio, 8 pin plug, pins 2 - 6 Left Rear Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) pink - brown/pink +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- amplifier in trunk right side, 32 pin plug, pins 2 - 1 Bubwoofer (+/-) blue - brown/blue (1); red - h amplifier in trunk right side, 32 pin plug, pins 3 - 1	
Radio Ignition Radio Illumination N/A Factory Amp Turn-on (MOST bus) Power Antenna Left Front Speaker (+/-) Right Front Speaker (+/-) Left Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Dirown/orange - orange +,- Right Rear Speaker (+/-) Right Rear Speaker (+/-) Dirown/orange - orange +,- Right Rear Speaker (+/-) Right Rear Speaker (+/-) Dirown/orange - orange +,- Right Rear Spea	
Radio Illumination Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) Right Front Speaker (+/-) Left Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Subwoofer (+/-) Subwoofer (+/-) Diver Antenna N/A Fradio, 8 pin plug, pins 3 - 7 Fradio, 8 pin plug, pins 2 - 6 Fradio, 8 pin plug, pins 4 - 8 Fradio, 8 pin plug, pins 4 - 8 Fradio, 8 pin plug, pins 1 - 5 Fradio, 8 pin plug, pins 2 - 1 Fradio, 8 pin plug, pins 3 - 1	
Factory Amp Turn-on (MOST bus) Power Antenna N/A Left Front Speaker (+/-) Right Front Speaker (+/-) Left Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Subwoofer (+/-) Diver Antenna N/A +- radio, 8 pin plug, pins 3 - 7 radio, 8 pin plug, pins 2 - 6 +- radio, 8 pin plug, pins 4 - 8 radio, 8 pin plug, pins 4 - 8 radio, 8 pin plug, pins 4 - 8 radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +- subwoofer (+/-) Subwoofer (+/-) Diver Antenna N/A +- radio, 8 pin plug, pins 2 - 6 Right Rear Speaker (+/-) pink - brown/pink +- radio, 8 pin plug, pins 4 - 8 radio, 8 pin plug, pins 3 - 1 subwoofer (+/-) amplifier in trunk right side, 32 pin plug, pins 3 - 1 brown/red (2)	
Power Antenna N/A Left Front Speaker (+/-) Right Front Speaker (+/-) brown/green - green +,- radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) brown/orange - orange +,- radio, 8 pin plug, pins 2 - 6 Left Rear Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) pink - brown/pink +,- radio, 8 pin plug, pins 4 - 8 radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- subwoofer (+/-) blue - brown/blue (1); red - brown/red (2) phown/red (2) subwoofer (+/-) phown/red (2)	
Left Front Speaker (+/-) brown/green - green +,- radio, 8 pin plug, pins 3 - 7 Right Front Speaker (+/-) brown/orange - orange +,- radio, 8 pin plug, pins 2 - 6 Left Rear Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) pink - brown/pink +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- amplifier in trunk right side, 32 pin plug, pins 2: Subwoofer (+/-) blue - brown/blue (1); red - brown/red (2) +,- amplifier in trunk right side, 32 pin plug, pins 3 - 1	
Right Front Speaker (+/-) brown/orange - orange +,- radio, 8 pin plug, pins 2 - 6 Left Rear Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) pink - brown/pink +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- amplifier in trunk right side, 32 pin plug, pins 2 - 1 Subwoofer (+/-) blue - brown/blue (1); red - brown/red (2) +,- amplifier in trunk right side, 32 pin plug, pins 3 - 1	
Left Rear Speaker (+/-) white - brown/white +,- radio, 8 pin plug, pins 4 - 8 Right Rear Speaker (+/-) pink - brown/pink +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- amplifier in trunk right side, 32 pin plug, pins 2: Subwoofer (+/-) blue - brown/blue (1); red - brown/red (2) +,- amplifier in trunk right side, 32 pin plug, pins 3 - 1	
Right Rear Speaker (+/-) pink - brown/pink +,- radio, 8 pin plug, pins 1 - 5 Center Channel (+/-) gray - brown/gray or blue/gray +,- subwoofer (+/-) blue - brown/blue (1); red - brown/red (2) pink - brown/pink +,- amplifier in trunk right side, 32 pin plug, pins 2 - 1 amplifier in trunk right side, 32 pin plug, pins 3 - 1	
Center Channel (+/-) gray - brown/gray or blue/gray +,- amplifier in trunk right side, 32 pin plug, pins 2: Subwoofer (+/-) blue - brown/blue (1); red - +,- amplifier in trunk right side, 32 pin plug, pins 3 - 1 brown/red (2)	
Subwoofer (+/-) blue - brown/blue (1); red - +,- amplifier in trunk right side, 32 pin plug, pins 3 - 1 brown/red (2)	
brown/red (2)	- 28
	5; 4 - 16
Aux. Audio Input Left (+/-) black - brown +,- radio, 12 pin plug, pins 4 - 11	
Aux. Audio Input Right (+/-) yellow - brown +,- radio, 12 pin plug, pins 10 - 11	
RSE Video (+/-) (digital video)	
RSE Audio Left (+/-) (MOST bus)	
RSE Audio Right (+/-) (MOST bus)	
Satellite Radio 12 Volts brown + satellite radio, 4 pin plug, pin 2	
Satellite Radio Ground brown - satellite radio, 4 pin plug, pin 1	
Satellite Radio Ignition (MOST bus)	
Satellite Radio Antenna (coaxial cable)	
Satellite Audio Left (+/-) (MOST bus)	
Satellite Audio Right (+/-) (MOST bus)	

What Fits

Item	Size	Depth	Location
Headunit	irregular		center of dash
Left Front Speaker			left front door
Left Front Tweeter			left front door
Right Front Speaker			right front door
Right Front Tweeter			right front door
Left Rear Speaker			left rear door
Left Rear Tweeter			left rear door (tweeter); rear deck (surround)
Right Rear Speaker			right rear door
Right Rear Tweeter			right rear door (tweeter); rear deck (surround)
Center Channel			top center of dash
Subwoofer			rear deck
Left Front Headrest			
Right Front Headrest			
Left Right Headrest			
Right Rear Headrest			
Satellite Radio Tuner			

Additional Wiring Notes

Item	Note
	On models with amplifier, the speaker wires are brown/green - green at the amplifier in trunk right side, 32 pin plug, pins 6 - 18.
	On models with amplifier, the speaker wires are brown/orange - orange at the amplifier in trunk right side, 32 pin plug, pins 5 - 17.
Left Rear Speaker (+/-)	On models with amplifier, the speaker wires are purple - brown/purple (door); yellow - brown/yellow (surround) at the amplifier in trunk right side, 32 pin plug, pins 8 - 20; 10 - 22.
	On models with amplifier, the speaker wires are white - brown/white (door); pink - brown/pink (surround) at the amplifier in trunk right side, 32 pin plug, pins 7 - 19; 9 - 21.
	The LR - RR are black/orange - gray/pink (+) at the SAM Control Unit under driver dash, 48 pin plug (B2), pin 19; 47 pin plug (B1), pin 30.