

## 2012 Mercedes Benz ML Class (W166)



## Wiring Information

Item	Wire Color	Polarity	Wire Location
<b>12 Volts</b>	red/white (40A)	+	SAM Control Unit in passenger kick, 4 pin plug, pin 1
<b>Second 12 Volts</b>	N/A		
<b>Starter</b>	purple/white (for starter kill only)	+	underhood fuse/relay box, plug (MR1), pin 13
<b>Second Starter</b>	N/A		
<b>Ignition</b>	yellow/black (for ignition sense only)	+	SAM Control Unit in passenger kick, 52 pin plug (B2), pin 48
<b>Second Ignition</b>	N/A		
<b>Third Ignition</b>	N/A		
<b>Accessory</b>	N/A		
<b>Second Accessory</b>	N/A		
<b>Third Accessory</b>	N/A		
<b>Key Sense</b>	N/A		
<b>Data Bus</b>	N/A		
<b>Can Bus High</b>	brown/red	data	driver kick or SAM Control Unit in pass kick, 52 pin plug (B2), pin 47
<b>Can Bus Low</b>	brown	data	driver kick or SAM Control Unit in pass kick, 52 pin plug (B2), pin 46
<b>Can Bus Sw</b>	N/A		
<b>Power Lock</b>	brown	-	Left Front Door Module, plug (C5), pin 4
<b>Power Unlock</b>	(same as power lock)	- resistor	
<b>Lock Motor</b>	yellow/black	5 wire	Left Front Door Module, plug (C7), pin 7
<b>Unlock Motor</b>	gray/black	5 wire	Left Front Door Module, plug (C7), pin 6
<b>Disarm Defeat</b>	gray/black	5 wire	Right Front Door Module, plug (C7), pin 6
<b>Parking Lights (+)</b>	green/white (LF); purple/white (RF)	+	SAM Cntrl Unit, 23 pin plug (UH1), pin 5; 24 pin plug (UH2), pin 12
<b>Parking Lights (-)</b>	(LIN bus)		
<b>Hazards</b>	(LIN bus)		
<b>Turn Signal (Left)</b>	black/white (LF); black (LR)	+	SAM Cntrl Unit, 23 pin plug (UH1), pin 4; 52 pin plug (B2), pin 4
<b>Turn Signal (Right)</b>	black/green (RF); purple/black (RR)	+	SAM Cntrl Unit, 24 pin plug (UH2), pin 24; 48 pin plug (B1), pin 40

## Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Headlight	yellow/black (L); gray/white (R)	+	SAM Cntrl Unit, 24 pin plug (UH2), pin 15; 23 pin plug (UH1), pin 3
AutoLights	(LIN bus)		
Reverse Light	white/blue	+	SAM Control Unit in passenger kick, 48 pin plug (B1), pin 25
Left Front Door Trigger	brown/gray	-	Left Front Door Module, plug (C7), pin 9
Right Front Door Trigger	brown/gray	-	Right Front Door Module, plug (C7), pin 9
Left Rear Door Trigger	brown/black or brown/gray	-	Left Rear Dor Module, plug (C7), pin 9
Right Rear Door Trigger	brown/black or brown/gray	-	Right Rear Door Module, plug (C7), pin 9
Dome Supervision	(LIN bus)		
Trunk/Hatch Pin	green/white	-	Rear Control Unit under center of rear seat, 52 pin plug, pin 31
Rear Glass Pin	N/A		
Hood Pin	N/A		
Trunk Hatch/Release	yellow (rear handle switch)	-	Rear Control Unit under center of rear seat, 52 pin plug, pin 45
Trunk Release Motor	green/black	5 wire	Rear Control Unit under center of rear seat, 52 pin plug, pin 26
Fuel Door Release	(locks/unlocks along with doors)		
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	yellow/blue (V6); yellow/gray (V8 and diesel)	ac	cam position sensor, engine driv or pass side front, 3 pin plug, pin 2
Wait to Start	N/A		
Neutral Safety	N/A		
Clutch Pedal	N/A		
Fuel Pump	black/white	+	rear fuse box in RR footwell, plug (S2), pin 5
Rear Defroster	blue/black	+ latched	rear fuse box in RR footwell, plug (P1), pin 3
Mirror Defroster	(CAN bus)		
Left Front Heated Seat	(LIN bus)		
Right Front Heated Seat	(LIN bus)		

## Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Speed Sense	(wheel speed sensor)		
Brake Wire	blue/black (functions with ignition on only)	+	SAM Control Unit in passenger kick, 48 pin plug (B1), pin 26
Parking Brake	(electric parking brake)		
Horn Trigger	blue/white	+	underhood fuse/relay box, plug (S1), pin 2
Wipers	white	+	SAM Control Unit in passenger kick, 24 pin plug (UH2), pin 18
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 3	(LIN bus)		
Radio 12V	red/white	+	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	gray/black (MOST wake up)		radio, 16 pin plug, pin 16
Power Antenna	N/A		
Left Front Speaker (+/-)	white/black - white	+,-	radio, 16 pin plug, pins 3 - 7
Right Front Speaker (+/-)	purple/black - purple	+,-	radio, 16 pin plug, pins 2 - 6
Left Rear Speaker (+/-)	yellow/black - yellow	+,-	radio, 16 pin plug, pins 4 - 8
Right Rear Speaker (+/-)	green/black - green	+,-	radio, 16 pin plug, pins 1 - 5
Center Channel (+/-)	gray/black - gray	+,-	amplifier behind right rear seat, 32 pin plug, pins 24 - 29
Subwoofer (+/-)	black - black/white (1); white - white/blue (2)	+,-	amplifier behind right rear seat, 32 pin plug, pins 3 - 15; 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 (+/-)	(coaxial cable)		
RSE Audio Left (+/-)	yellow - brown	+,-	radio, 8 pin plug, pins 5 - 2
RSE Audio Right (+/-)	black - brown	+,-	radio, 8 pin plug, pins 1 - 2
Satellite Radio 12 Volts	red/black	+	Satellite Radio under driv seat, 4 pin plug, pin 2
Satellite Radio Ground	brown	-	Satellite Radio under driv seat, 4 pin plug, pin 1
Satellite Radio Ignition	gray/black (MOST wake up)		Satellite Radio under driv seat, 4 pin plug, pin 3
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 (twtr); left rear roof (surr)
Right Rear Speaker			right rear door
Right Rear Tweeter			right rear door (twtr); right rear roof (surr)
Center Channel			top center of dash
Subwoofer			left rear quarter panel
Left Front Headrest			
Right Front Headrest			
Left Right Headrest			
Right Rear Headrest			
Satellite Radio Tuner			under driver seat

Additional Wiring Notes

Item	Note
<b>Left Front Speaker (+/-)</b>	On models with amplifier, the speaker wires are white/black - white (high/mid); blue/black - blue (low) at the amplifier behind right rear seat, 32 pin plug, pins 25 - 30; 6 - 18.
<b>Right Front Speaker (+/-)</b>	On models with amplifier, the speaker wires are purple/black - purple (high/mid); brown/black - brown (low) at the amplifier behind right rear seat, 32 pin plug, pins 23 - 28; 5 - 17.
<b>Left Rear Speaker (+/-)</b>	On models with amplifier, the speaker wires are yellow/black - yellow (door); pink/black - pink (surround) at the amplifier behind right rear seat, 32 pin plug, pins 9 - 21; 10 - 22.
<b>Right Rear Speaker (+/-)</b>	On models with amplifier, the speaker wires are green/black - green (door); white/black - white (surround) at the amplifier behind right rear seat, 32 pin plug, pins 7 - 19; 8 - 20.
<b>Parking Lights (+)</b>	The (LR) - (RR) are gray/black - green/blue at the SAM Control Unit in passenger kick, 52 pin plug (B2), pin 16; 48 pin plug (B1), pin 27.