MBQUART®

GMR7V1

7" Waterproof Touchscreen Source Unit



Operator's Guide and Installation Instructions Congratulations on choosing the GMR7V1 7" Waterproof Touchscreen Source Unit by MB Quart. For more detailed information about the product, please visit MBQuart.com.

CAUTION

Always consider consulting a professional audio installation technician before installing any mobile audio components. Be careful and take your time. Disconnect the power source (battery) before installing. Do not let wires make contact with metal edges, sources of moisture, or hot engine components.

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7" Waterproof Touchscreen Source Unit

Phonelink, AM/FM, Weather Band Radio, USB, Bluetooth[®], and AUX sources. Marine Certified to IPX67 for water and dust intrusion.

Auxiliary A/V Sources

Quick Connect Bluetooth Audio	USB Audio Input w/Charging
Auxiliary RCA Stereo Preamp Input	Weather Band Radio
Composite Video Camera Input	Composite Video Output

AM / FM / Weather Band Section

USA Frequency: FM87.5 – 107.9MHz / AM530 – 1710kHz NOAA NWR Weather Band Frequency: Preset (162.400MHz, 162.425MHz, 162.450MHz, 162.475MHz, 162.500MHz, 162.525MHz, 162.550MHz)

USB / AUX / Bluetooth Audio Section

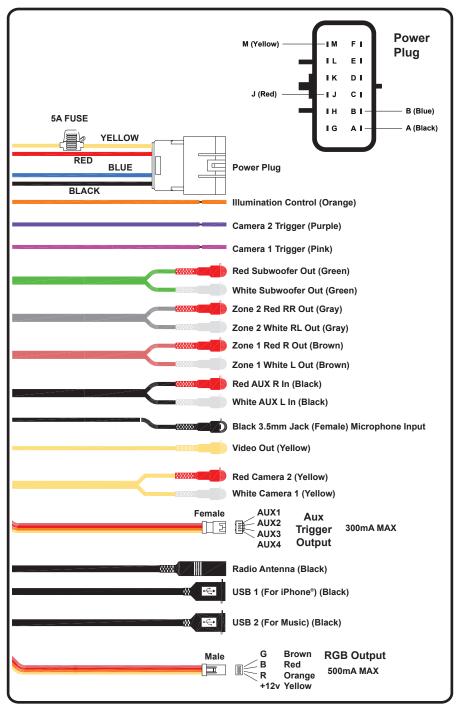
RCA S/N: >81.8dB	BT S/N: >88.1dB
USB S/N: >84.6dB	Frequency Response: 20Hz – 20KHz

Audio Section & Other Features

Preamp Output Voltage: 4 volts

Dual Zone Capability between Preamp Outputs and Built-in Power Independent Subwoofer Level Control with Selectable Low Pass Filter 10-Band Graphic EQ (64, 150, 250, 500, 1K, 2K, 4K, 6K, 10K, and 16K)

Installation



Wiring and Connections

- We recommend wire-to-wire connections such as power, ground, and speaker wiring are soldered and protected with either heat shrink tubing or high quality electrical tape.
- The main (yellow) power wire should be connected to a source with at least 10 amps of additional current capability to support the unit. This has an in-line 5 amp fuse for protection.

Wire Color/Tag	Location	Function
Black	Power Plug Pin A	Negative Chassis Ground (-)
Blue	Power Plug Pin B	Amp Turn-On (+12v Output)
Red	Power Plug Pin J	+12 volt Accessory
Yellow	Power Plug Pin M	+12 volt Constant
Orange / ILL	Harness	Illumination Control
Purple / Cam 2	Harness	Camera 2 Trigger
Pink / Cam 1	Harness	Camera 1 Trigger
Green / Subwoofer	Harness	Subwoofer Output Female-RCA
Gray / Zone 2	Harness	Zone 2 Lineout Female-RCA
Brown / Zone 1	Harness	Zone 1 Lineout Female-RCA
Black / Aux	Harness	Auxillary Input Female-RCA
Black / Mic	Harness	3.5mm Phone Female Jack
Yellow / Video Out	Harness	Video Output
Yellow / Cam 2 / Red	Harness	Camera 2 Input Female-RCA
Yellow / Cam 1 / Wht	Harness	Camera 1 Input Female-RCA
* White/Orange Aux Trigger	Harness	Aux 1 – Aux 4 Trigger Output
Black / Antenna	Harness	Radio Antenna Input
Black / USB 1	Harness	USB Input for iPhone
Black / USB 2	Harness	USB Input for Music
** White/Orange RGB	Harness	RGB Output

* Refer to Page 25 for aux trigger functionality.

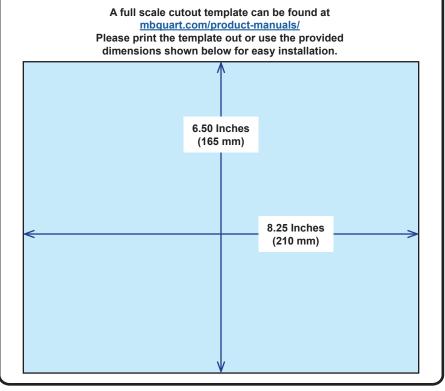
** Refer to Page 26 for RGB output functionality.

Preamp Level Audio Connections

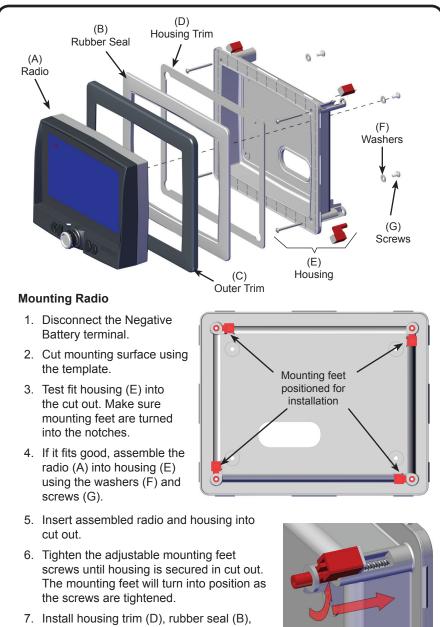
• Zone 1, Zone 2, and Subwoofer RCA preamp outputs are labeled as such. These are intended to be connected to external amplifiers (not included).

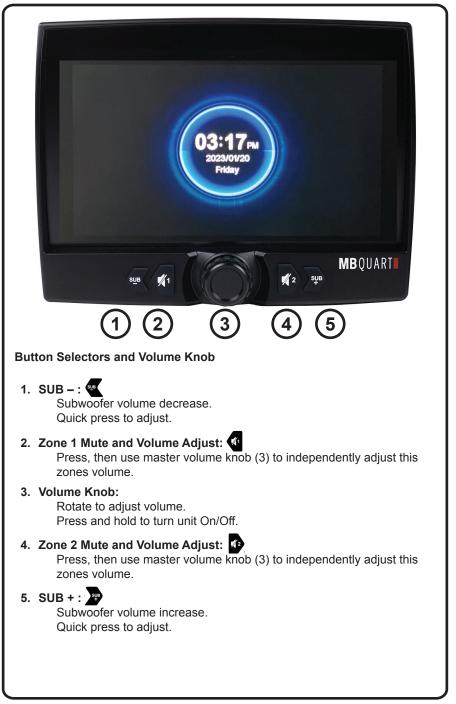
Installation

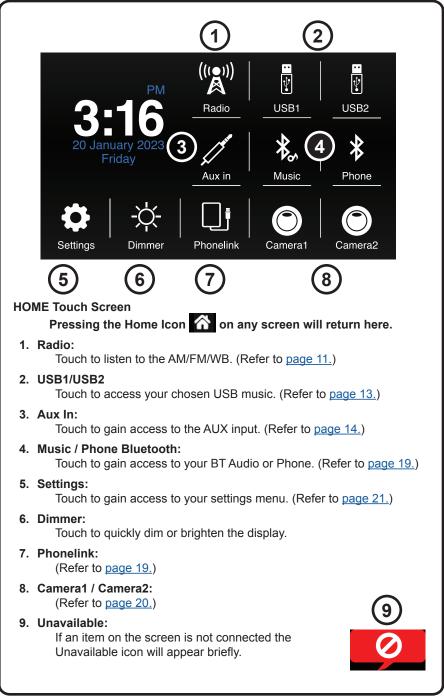
- Subwoofer RCA outputs (green RCAs) are mono and paralleled. They are identical subwoofer audio signals. Their frequency range is controlled by the low pass crossover and the subwoofer level control. Both are found in SETTINGS (refer to <u>Page 21</u>). We recommend starting with 100Hz for the low pass crossover point.
- This unit offers zone control to balance the sound level between different zones. The zones are designated by the zone 1 & zone 2 RCA outputs (using external amplifiers). For example, if using in a boat, a passenger area can be designated as zone 1 and a wakeboard tower speaker could be designated as zone 2, allowing lower or muted volume in the passenger area zone 1 and more volume at the wakeboard speakers zone 2. Each zone can also be independently tuned to achieve the best sound output for different size or style speakers. Example, if the boat has 6.5in speakers connected to zone 1, the HPF may be set to 120Hz high pass to reduce distortion from low frequency reproduction and if zone 2 has 8in wakeboard tower speakers it can be adjusted to play a full range audio signal. (See page 21 for more information.) The volume knob will control both zones and the individual zone 1 & zone 2 buttons allow adjustment of each zone independently.(see page 8)

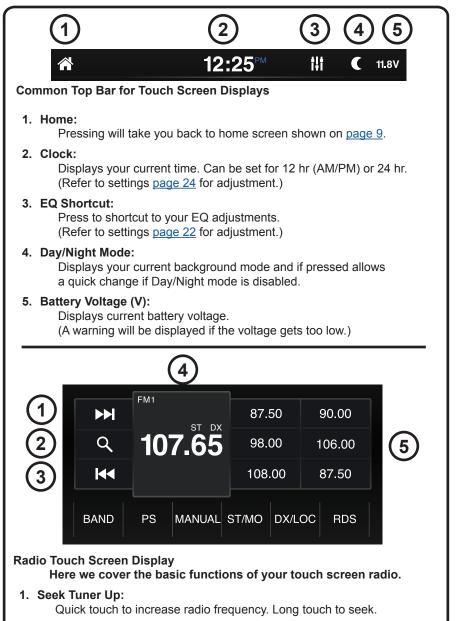


Installation



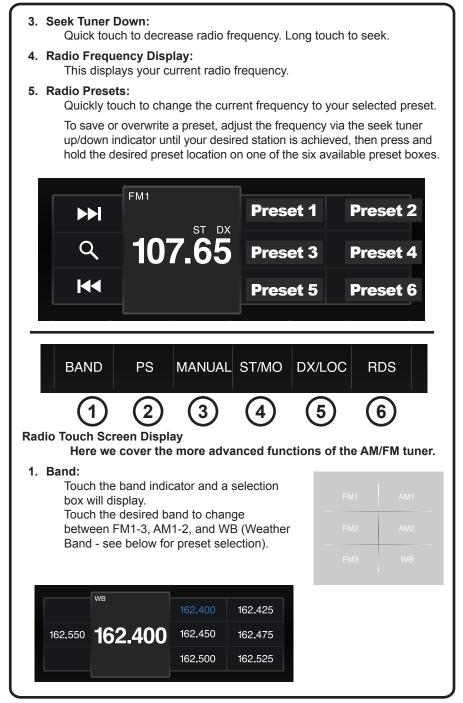






2. Tuner Search:

Touch to enable auto seek, the tuner will search for a frequency with good signal strength. When done, station will play and frequency will be stored in Preset 1.



2. PS (Program Scan):

Touch PS to listen the preset stations [1] to [6] FM1~FM3 (or AM1/AM2) for few seconds. **PS** will be displayed in the station area during the scan.

3. Manual:

Touch to choose a manual frequency entry (use the key input to enter the station frequency).

4. ST/MO (Stereo/Mono):

Touch to choose STEREO or MONO output. Recommended to set to MONO for AM as AM radio signal is broadcast in mono. Recommended to set to STEREO for FM as FM radio signal is broadcast in stereo. 1 2 3 4 5 6 7 8 9 X 0 OK

ST will be displayed only if in Stereo mode.

5. DX/LOC (Distant/Local):

DX (distant) or LOC (local) frequency handling. This function filters out weaker signals when ON to limit only strong stations in seek feature.

6. RDS (Radio Data System):

This enables FM radio stations to send additional information along with the regular program signal (touch to open selection pad).



AF (Alternative Frequencies list): This provides the receiver with a list of frequencies that allows a receiver to

re-tune to a different frequency providing the same station when the first signal becomes too weak (e.g., when moving out of range).

TA (Traffic Announcement):

Refers to the broadcasting of a specific type of traffic report on the Radio Data System. It is generally used by motorists, to assist with route planning, and for the avoidance of traffic congestion.

PTY (Program Type):

Some stations put a digital encoding on the program type and you can scan for pre-defined program types like rock, news, jazz, etc. (When > is selected, you can scroll through a list of variety options.)

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USB2

The multimedia controller supports MP3, WMA, and WAV audio files with a USB thumb drive connected. Additionally, M4A or Apple Lossless file types are supported if the user connects an iPhone® using iTunes as the music player. Most smartphone the charging mb drives of timedia con ny smartph through the ne USB thu include alb trmation. Music Files:

Touch to access your chosen USB music.

Most smartphones with a USB-

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USB1

ed charging connector and USB mb drives easily connect to the timedia controller.

hy smartphones include album through the phone's music player. ne USB thumb drive files may include album art, only song rmation.

1. Folder Selector:

Touch to enter your USBs folder and search for a specific track (See **7** on following page).

2. Play/Pause:

USB1 / USB2

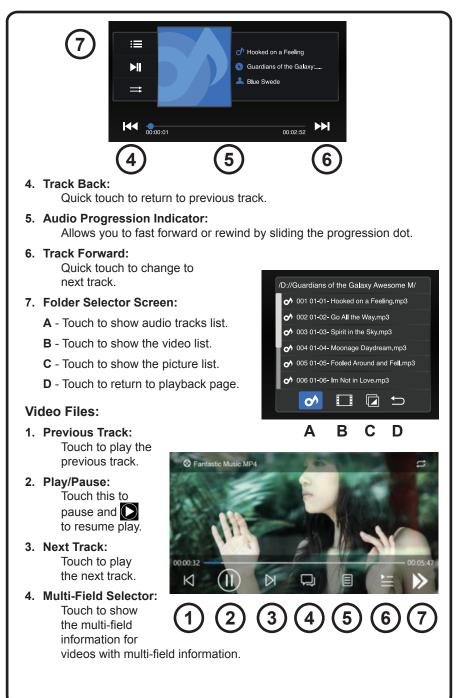
Touch this to pause your music and touch again to resume play.

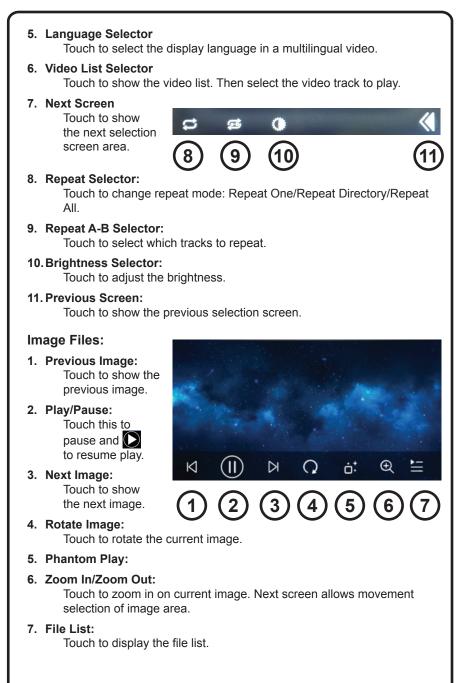
3. Play Mode Selector

Touch to change play mode from normal, to track repeat, album repeat or randomized.

- A Normal
- B Track repeat
- C Album/Folder repeat
- D Random







Aux In

The multimedia controller has right and left preamp level RCA connections for the Auxiliary Input. If a portable device with a headphone jack is used, a 3.5mm (male) to RCA (male) adapter cable is required and not included.

(For connector location refer to page 4.)

Bluetooth® (BT) Mode

The Bluetooth[®] function allows pairing cell phones and BT equipped media playback devices with the car audio system.

Once you pair a cell phone with the audio system, you can make phone calls with

the built-in hands-free function. An external 3.5mm microphone mic is required and not included. You can access the list of dialed numbers and the phone book of the registered cell phone after selecting "Sync" option.

Music

Phone

If the connected Bluetooth® device supports the functions like A2DP and AVRCP, you can play music via the car audio system and control playback. During a call, music playback is interrupted and resumes again after the call.

If a cell phone is paired via Bluetooth[®] and a call is received during playback, the source playback is interrupted and the call menu is displayed.

- Scan for "GMR7V1" in the Bluetooth list on the mobile device.
- Select "GMR7V1" and confirm that this code is shown on "GMR7V1". Do not enter this code on any accessory.

A "BLUETOOTH Loading" screen will appear briefly as the mobile device's song info and album art are transfered to the multimedia source unit.

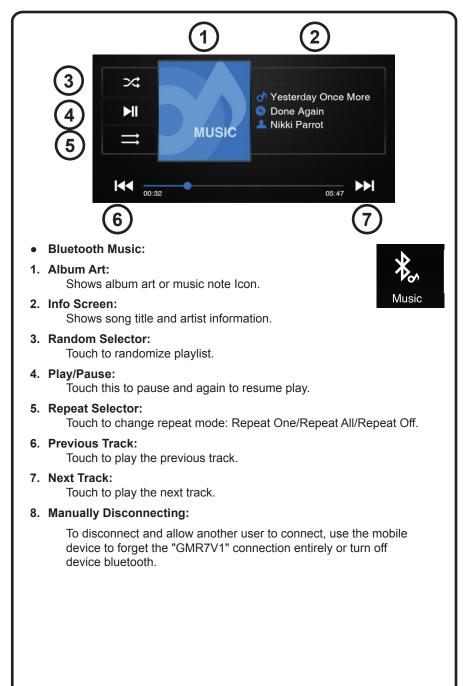
The BT icon 🔊 will be displayed when successful paired.

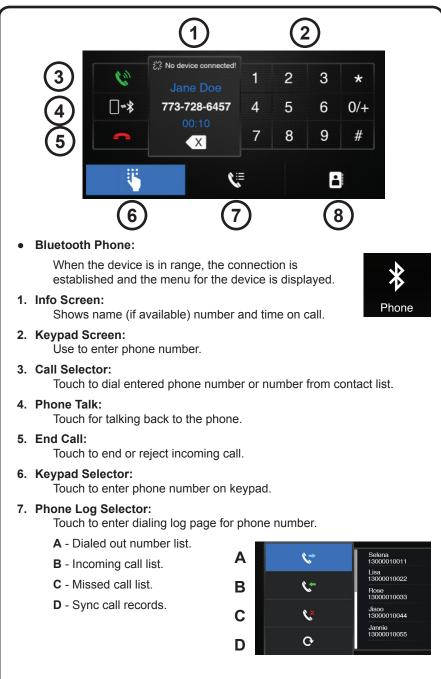
• If a PIN Code is Required:

Some Bluetooth devices require inputting a pass code for connection. Please input code "0000" and the connection will be made automatically.

Automatically Connecting:

Once the multimedia controller has made a connection with the Bluetooth mobile device for the first time, the unit can then connect to the Bluetooth mobile device automatically within a valid range.





Continued on following page

Phonelink

Continued from previous page



8. Phone Book:

Touch to enter contact list for phone numbers.

Phone Book Sync: To be able to access the Phone Log/Phone Book of a connected mobile phone / device, you must allow sync phone book on your mobile phone. Car audio system support up to 1024 numbers.

Phone Log/Phone Book Download: Once device is paired with the car radio and sync option is selected the car radio begins downloading the phone log and phone book. Should this be interrupted - the download will begin the next time the device is within range and connected to the car radio.

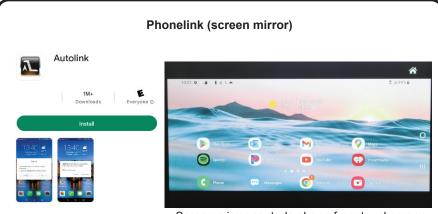
Phonelink

1. Display Selector:

Phonelink, Carplay, or apps.

- 2. Home Screen: Return to GMR7 home screen.
- **3.** App Display: Shows the current installed apps.





Screen mirror controls phone from touchscreen

Camera1/Camera2

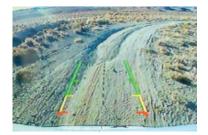
Dual camera inputs, for front, or rear view cameras.

This device features a video input for connecting view cameras that are available as an option (sold



separately). If connected - the image is displayed on the screen, when the camera is selected.

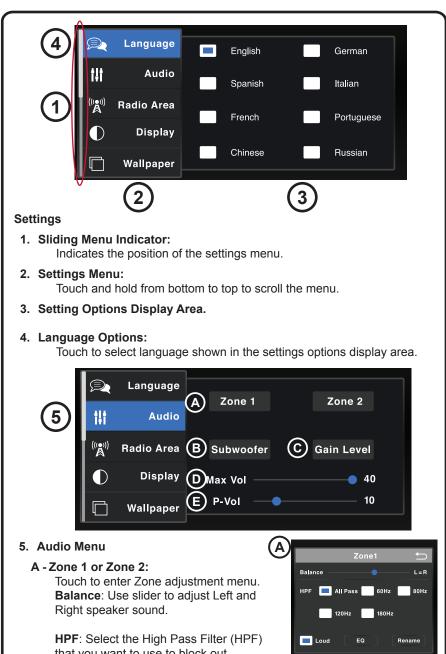




Examples

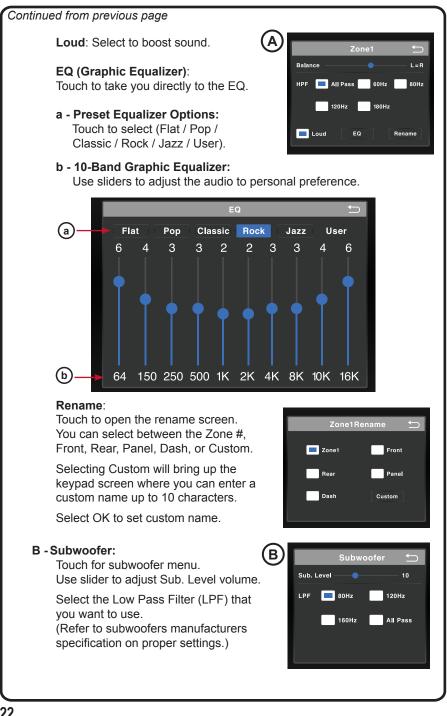
External Monitor

This device features a video out for connecting an external monitor (sold separately). If connected - select the desired source via the main menu and start movie playback, e.g. from a USB, to view on the external monitor.



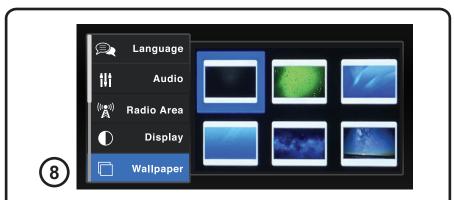
that you want to use to block out unwanted frequencies to the speakers.

* Zone 2 has same exact adjustments. Continued on following page



C - Gain Level: \mathbf{C} Touch for gain level menu. Use slider to adjust the gain for USB Gain 0dB different inputs (USB / Radio / Bluetooth / Radio Gain 0dB Aux). BT Gain 0dB Aux Gain 0dB D - Max Vol: (refer to image on page 21) Slide to adjust the maximum volume for the unit. E - P-Vol: (refer to image on page 21) Slide to adjust start up volume for the unit. Language USA Brazil ili Audio 6 (((•))) **Radio Area** Europe Australia Display Wallpaper 6. Radio Area: Selectable radio region control, touch to select your local region. Language Brightness 03 ili Audio Contrast 07 Saturation 05 ((((()))) Radio Area Hue 02 7 Display Reset Wallpaper 7. Display:

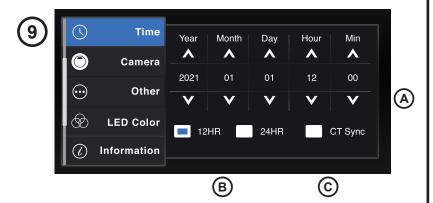
Adjust brightness, contrast, saturation, and hue. Touch and slide to make personal adjustment. Touch **Reset** to revert to default settings.



8. Wallpaper:

Touch to make a background selection.

The background will be shown when the Day/Night Mode is turned off or when the radio is in Night Mode.



9. Time:

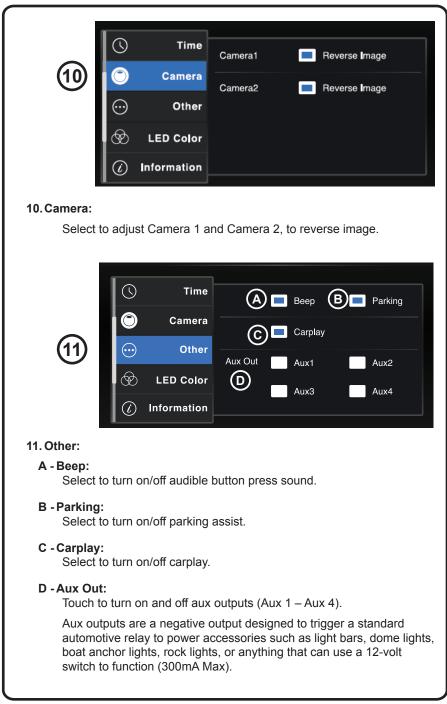
A - Adjust Clock:

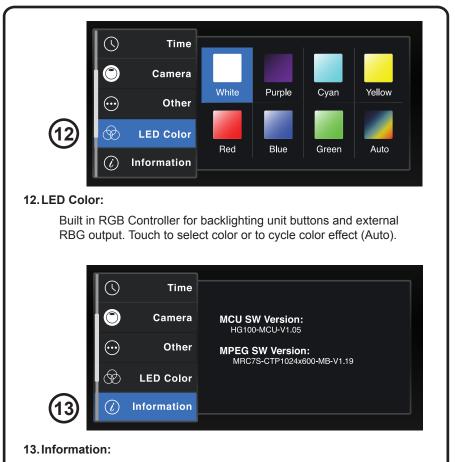
Touch up/down arrows to adjust Year / Month / Day / Hour / Minute.

B - 12hr or 24hr Selection Format: Select your preference.

C - CT Sync:

If the Clock Time or CT setting on your car stereo is set to ON, your device automatically displays the current time using Radio Data System (RDS) information.





Shows the current firmware installed in the unit.



) 🕴	- 🤇	Day/Night	Hour	Min		Hour	Min
Q	b	Reset	^	•		•	^
			6am	00		6pm	00
			V	V		V	V
			Start	time	Off	End ti	
			(A))	U.	(<u>в)</u>

14. Day/Night:

This feature, when set, automatically changes the screen for dark background or chosen background, Night ZMode to white Day Mode screen background (see below for example).

A - Night Mode Start Time:

Touch up down arrows to adjust.

B - Night Mode End Time:

Touch up down arrows to adjust.

C - Day/Night On/Off Toggle:

Touch to turn Day/Night Mode On/Off.

If the selection shows as Off, the screen will stay in Night Mode with the dark background or optional background image.

If the selection shows as ON, use the selectors to adjust the Start Time and End Time for mode.

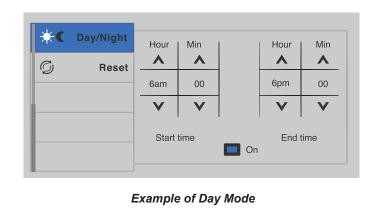


Image: Note that the section of the s		 ★€	Day/Night	
	(15)	Ø	Reset	<u> </u>
		—		

15. Reset:

Touch to perform a factory reset.

Diagnostics & Troubleshooting

Problem	Cause	Solution
No power (Unit does not turn on)	 Incorrect wiring Fuse is blown Wiring harness is not connected 	 Re-check wiring Replace fuse Re-check wiring harness connection
No sound (External amplifiers)	 Amplifiers not connected to power Amplifiers not turning on 	 Check amplifier power/ ground connections Connect blue remote turn on wire
No AM/FM reception	 Antenna cable is not connected The signals are too weak 	 Insert the antenna cable securely Select a station manually
AUX Input or RCA output distortion	1. Volume may be up too much on external device	1. Lower volume on external device until distortion goes away
External amplifiers have low signal input. Gain too high (hiss)	1. Zone control is turned down too far	1. Increase zone control level to provide more signal level to amplifiers
Bluetooth can't/ won't connect	 Mobile device has BT switched off Mobile device is not discoverable 	 Enable the Bluetooth function Make the device discoverable
USB thumb drive not reading	1. Music file is not MP3, WAV or WMA format	1. Convert music file format into MP3, WAV or WMA format
Camera does not display in reverse, only in camera source menu	 Purple/white reverse trigger wire not powered 	 Power the purple/white wire on the back of the unit with +12v trigger

Supported Audio & Video Formats

		Audio			
Audio format	Pro	Profile		Max Sample Rate	
MP3	All	All		48000	
WMA	Standard/Pr	0	384kbps	48000	
OGG	QI / QIO		500kbps	48000	
FLAC	Level 0 - Lev	vel 10	1.60Mbps	48000	
APE		950kbps		48000	
AAC		448kbps		48000	
AC3	Ar3only		132kbps	48000	
ATRA		132kbps		44100	
DTS	Dts only		3.84Mbps	48000	
		Video			
Video Format	Resolution	ļ	Video Dec		
MKV	1280x720	M PEG4/XVID, DIVX4/DIVXS/M SMP EG4V3, M PEG2, RV1.0/RV2.Q/RVG2, RV 3.Q/RV 4.0/R			
	720x480	H 264/AVC			
	640x480	DIVX3			
AVI	1280x720	M PEG4/XVID, DIVX4/DIVXS/M SMP EG4V3, H 263, M JPEG			
	720x480	H264/AVC			
	640x480	DIVX3,			
MOV/MP4 1280x720 M PEG4/XVID, DIVX4/DIVXS/M SMP E M PEG2, M PEG1, H 263, M JPEG					
	720x480	H 264/AVC			
	640x480	DIVX3			
TS	1280x720	M PEG2			
	720x480	H 264/AVC			
AS F	1280x720		ID, DIVX4/DIVX EG 1, H263, MJ	5/M SMP EG4V3, PEG	
	720x480	H 264/AVC			
	640x480	DIVX3			
FLV	1280x720	H 263			
	720x480	H 264/AVC			
PMP	1280x720	M PEG4/XV	ID		
	720x480	H 264/AVC			

Supported Audio and Video Formats

Video Format	Resolution	Video Decode
RMVB	1280x720	RV1.0/RV 2.0/RV G2, RV 3.0/RV4.0/RV8/RV 9
MPGNOB	1280x720	M PEG2, M PEG1
WMV	1280x720	M PEG4/XVID,
	720x480	DIVX4/DIVXS/M SMPEG4V3, MPE G2

NOTE: Video decoder does not support WMV1, WMV2, WMV3, VC1, VP6, M SMPEG-41 /2

Photo					
Photo format	Max resolution	Profile			
JPEG	JPEG Unlimited				
BMP /PNG	2.SM pixels	ALL			
GIF	2.SM pixels	89a/87A			

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a mobile installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complied with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 7.9 inches (20 cm) between the radiator and your body.

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WARRANTY

Maxxsonics, LLC. warrants this product, to the original consumer purchaser, to be free from defects in material and workmanship for a period of one (1) year from the date of purchase.

Maxxsonics, LLC. will, at it's discretion, repair or replace defective products during the warranty period. Components that prove to be defective in materials and workmanship under proper installation and use must be returned to the original authorized Maxxsonics, LLC. retailer from where it was purchased. A photocopy of the original receipt must accompany the product being returned. The costs associated with removal, re-installation, and freight are not the responsibility of Maxxsonics, LLC. This warranty is limited to defective parts and specifically excludes any incidental or consequential damages connected therewith. Please visit the website to view the full warranty.

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