GME

GD9520

MARINE STEREO SYSTEM
AND DVD PLAYER

GR9520W • GR9520B

CONTENTS

GME STRONGLY RECOMMENDS THAT YOU KEEP THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE

FEATURES

- MP3 via CD/USB/SD card and auxiliary input
- Detachable front face panel
- 4 x 45 Watt power output
- Conformally coated PCBs for harsh marine environment.
- Rugged and waterproof case, made using high impact UV protected plastics.
- Waterproof to IP56
- Backlit colour LCD screen
- Infrared remote control
- Portable MP3 player input
- Available in black or white

ACCESSORIES SUPPLIED

The GD9520 is supplied with the following standard accessories:

- Main unit
- Remote control Handset
- USB adaptor
- DC/speaker cable harness
- Flush mount support kit and template
- Spare flush mount screw caps (4)
- Owner's manual

Please immediately contact your point of purchase if any of these components are missing.

INTRODUCTION

Congratulations on the purchase of the GME GD9520 Marine Stereo and Digital Video Disc system.

Your GD9520 has been designed using the latest digital AV technology combined with GME's 35 years of marine product development.

With all circuitry conformally coated, exposed metalwork protected against the harsh marine environment and contained in a UV stabilised water resistant polycarbonate housing, the GD9520 will ensure many years of sterling service.

Read this instruction booklet carefully, drop in your favourite DVD or music selection, sit back and enjoy the performance.

PRODUCT DESCRIPTION AND MODEL DESIGNATORS

The GD9520 is available in the following options:

GD9520W (White) and GD9520B (Black)

Designed for flush mounting into bulkheads or dashboards where the rear case of the product is not exposed to any water ingress or moisture. The GD9520 has a semi open rear case to permit heat dissipation generated by operating the system at high volumes for extended periods of time.

Type of disc	Label on Disc	Recorded material	Size of disc
DVD	DVD VIDEO	Sound and moving pictures	12 cm
VCD	VIDEO CD COMPACT DIGITAL AUDIO	Sound and moving pictures	12 cm
MP3/WMA	MP3/WMA	Sound only	12 cm
MPEG4*/DIVX*	MPEG 4 VIDEO DIVX	Sound and moving pictures	12 cm
CD	COMPACT DIGITAL AUDIO	Sound and still pictures	12 cm

NOTE: The unit is compatible with DVD, DVD +/-R, VCD 1.0/2.0/3.0, SVCD, CD, CD-R, CD-RW and JPEG

CONTROL LOCATIONS

Power On/Off ❶
Mute ❺
LOC/OX Selector ❽
Remote Control Receptor ❿
Band Selector ❿
LCD Display
CD Slot
Clock/Time Selector ❻
Eject ⑫
SD Card Input

Release Button ⑮
Loud ❹
P-EQ Button ⑭
Number Keys mode switch
Mode Switch ❼
USB Input

Select ❸
Audio/Volume Control ❷
Tuning/Selecting Tracks ⑪
Auxiliary Input

AMS ⑬
ST Selector ❾
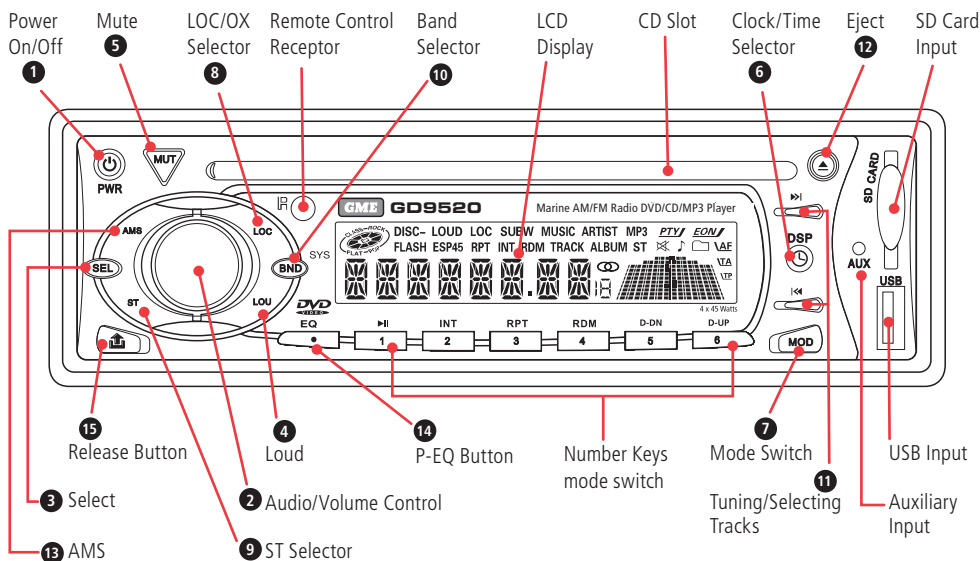
INSTALLATION PRECAUTIONS

If you are connecting your GD9520 for the first time or have just reconnected your boat battery and you are experiencing problems with the unit's operation, we suggest you try resetting the unit. The reset button is located under the removable face panel (see below for instructions). Gently press the reset button with a paper clip or similar object. You can then refit the face panel.
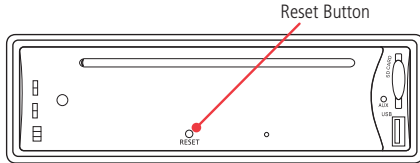
Reset Button

The preset station memories and clock time are retained only while the yellow 'Memory 12 V+' lead is connected (see Electrical Wiring section). If the battery is disconnected or switched off at the master switch, or the unit is removed from the vessel, the station memories will be lost and the clock will need to be reset.

REMOVING & REFITTING THE FACE PANEL

Before removing the face panel, turn the unit OFF by pressing the **PWR** button.

1. Press the **15** release button ▲ to release the left hand end of the face panel.

2. Lift the face panel out towards you.

3. After removing the face panel, place it inside the supplied case to protect it from damage.
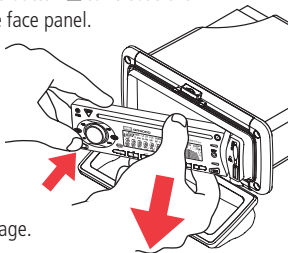
HANDLING COMPACT DISCS

• Handle the CD/DVD by it's edge, avoid touching the disc surface.

• Store your discs away from direct sunlight or heat sources. Keeping the disc in it's original case will help to avoid damage.

• Clean the disc with a soft cloth from the centre to the outer edge, (see diagram) rather than in a circular motion. Do not use solvents.
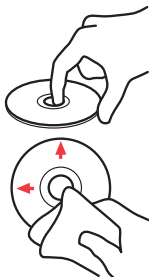
MOISTURE CONDENSATION

Your GD9520 uses optical laser technology. Occasionally damp or humid conditions may cause condensation to appear on the lenses inside the unit. Should this occur, the unit might not operate correctly. Simply eject the disc and leave the unit turned on for a while until the moisture evaporates.

FLUSH MOUNTING

The GD9520 is designed for flush mounting only.

The GD9520 can be neatly flush mounted into a panel or bulkhead so that just the controls and the protective cover are visible.

Using the template provided, select a suitable location on a panel or bulkhead. Examine behind the panel to determine the best method of support. If the thickness of the panel is not sufficient to support the unit, it will be necessary to use the strap supplied (see following diagrams). GME recommends that the unit should be mounted in a position that is free from direct sunlight and excessive vibration.

Flush Mount Support Strap

Rear centre Screw with Spacers

Screw
Screw
Strap
Screw
Screw
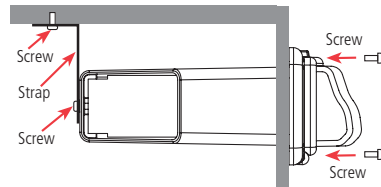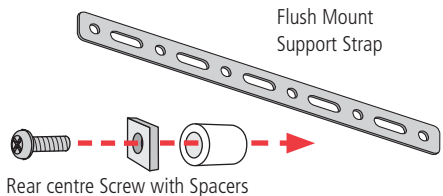
REMOVING CLEAR FRONT COVER

If your GD9520 is to be mounted in a dry protected location away from the possibility of water ingress, the front clear cover can be permanently removed.

1. Remove the 4 screws from each of the top and bottom inside edge of the mount frame as shown below. Remove top latch assembly and clear cover.
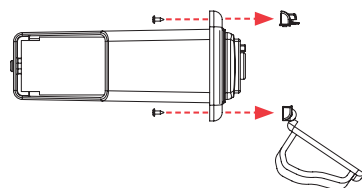
2. Fit replacement fill strips as supplied into top and bottom frame edges.

Screw Caps

Fill Strips
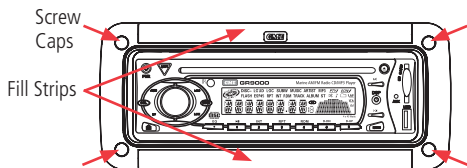
3. Mount your unit into the bulkhead. Use supplied spare screw caps to cover screw heads.

ELECTRICAL WIRING

DC Connections

Caution: **The GD9520 is designed for vessels with a 12 Volt negative ground electrical system only!**

Referring to the wiring diagram below:

1. Connect the Yellow wire directly to the positive terminal of the vessel's battery, or to a point that has +12 Volts available at all times. This lead maintains the memories within the GD9520 and is the main power source for the unit.

2. Connect the RED wire to the vessels +12 V supply via an appropriate isolating switch or circuit breaker. This lead enables the radio to be switched ON and OFF. Alternatively, this wire can be connected directly to the battery's positive terminal and the GD9520 switched ON and OFF using it's own controls.

3. Connect the BLACK wire to the battery's negative terminal or to the common negative bus in the electrical system.

IGN Switch
ACC
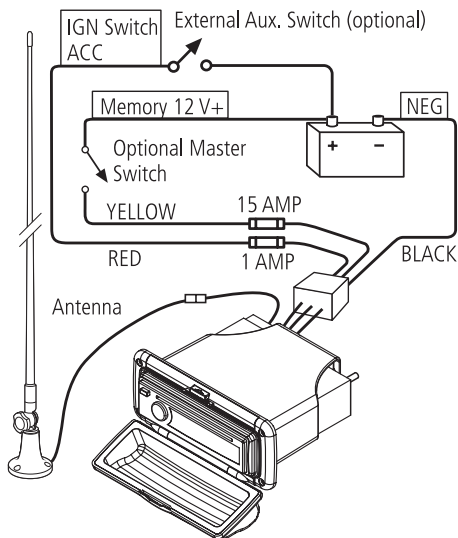External Aux. Switch (optional)
Memory 12 V+
NEG
Optional Master Switch
YELLOW
15 AMP
RED
1 AMP
BLACK
Antenna

Important: Your GD9520 is able to maintain it's memories when it is switched off using the **PWR** button by drawing power directly from your battery via the YELLOW 'MEMORY 12 V+' lead. Although the memory backup current is very small (about 20 mA) it may eventually discharge your battery if left connected indefinitely. The time taken to completely discharge your battery could vary depending on its Amp-hour rating and battery condition.

If you do not run your boat's motor regularly or your battery is not kept charged between outings (e.g. Solar or wind charger), we recommend you disconnect the YELLOW lead each time you secure or trail your boat. This is easily done by connecting the YELLOW 'MEMORY 12 V+' lead via a Master switch, which can be switched off after each outing. This will mean you will lose all your preset station memories and clock settings.

Speaker Connections

When connecting the speakers, observe the correct polarity as shown in the diagram below. Incorrect polarity will result in a reduction of bass response and Stereo effect. The use of speakers with an impedance of less that 4 Ohms is not recommended, as they will cause excessive loading of the GD9520's output circuit and may result with the radio overheating.

Caution: **The GD9520 is a four-speaker system that requires 2 separate wires for each speaker.**

A range of GME speakers are available from your local GME retailer.

LEFT FRONT
RIGHT FRONT
LEFT REAR
RIGHT REAR

REAR LEFT – GREEN/BLACK
REAR LEFT + GREEN
FRONT LEFT – WHITE/BLACK
FRONT LEFT + WHITE
FRONT RIGHT + GREY
FRONT RIGHT – GREY/BLACK
REAR RIGHT + PURPLE
REAR RIGHT – PURPLE/BLACK

YELLOW Video In
BLACK Video Out
BLACK Digital Audio Coaxial Out
Front Audio Out
BLACK Lch WHITE
Rch RED
Rear Audio Out
GREY Lch WHITE
Rch RED
Antenna Connector
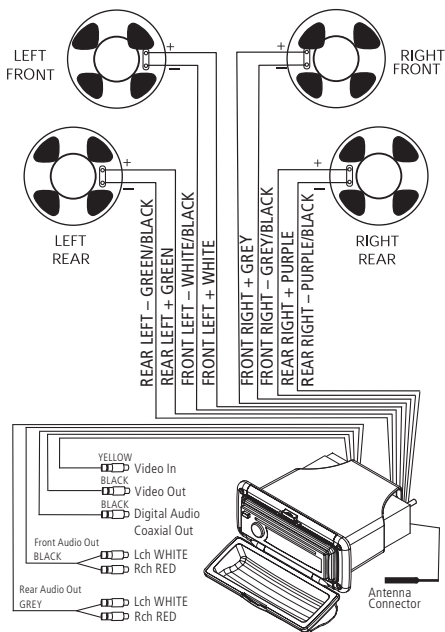
Connect all four speakers as shown in the previous diagram. Adjust the Fader control for the required front/rear balance. If you wish to connect only two speakers, connect these to the Rear speaker wires. The remaining speaker wires should be insulated to ensure they cannot short circuit together or to the vessel's 12 Volt or negative electrical Bus. If using only two speakers, adjust the Fader control to the rear speakers.

Antenna Connections

Connect an AM/FM marine antenna to the antenna socket which extends from the rear of the GD9520. For information on a suitable antenna, contact your nearest GME branch or marine retailer.

Reset Button

When the installation is complete, remove the front panel and press the Reset button using a paper clip or similar object (see 'INSTALLATION PRECAUTIONS' on page 4). This will ensure the GD9520 is ready to operate for the first time. If at any time the controls do not seem to work (after replacing the vessel's battery for example), press the Reset button to reset the microcomputer inside the GD9520.

FUSE REPLACEMENT

If any of the fuses blow, replace them with a standard 30 mm 3 AG type of the same rating, if the fuse blows a second time contact your retailer.

The following fuse ratings are used:

-Yellow 'Memory 12 V +' lead: 15 Amp.

-Red 'Ignition Switch ACC' lead: 1 Amp.

OPERATION

GENERAL FUNCTIONS

❶ Power ON/OFF

To turn the GD9520 **ON**, press the **PWR** Button. The unit will resume the mode and settings that were selected when last turned OFF.

To turn the GD9520 **OFF**, press the **PWR** button again, note that when the GD9520 is turned OFF the clock is displayed without the backlight.

❷ Audio/Volume Control

The Volume, Bass, Treble, Balance and Fader controls are selected electronically. The default setting is the Volume Control.

To select an alternative control, press the **SEL** button ❸ until the desired function is displayed on the LCD. Each press cycles to the next function in sequence. Adjustment of the selected control function is made by the large rotary knob ❷.

❹ Loudness

Pressing the **LOU** button will provide a low frequency (bass lift) boost to the audio output. To indicate selection a 'LOUD' flag will be illuminated on the LCD. Pressing the **LOU** button again will de-select the loudness function.

❺ Mute

Pressing the **MUT** button will temporarily silence the audio output. A flashing 'MUTE' is displayed on the LCD to indicate the GD9520 has been muted. Pressing the **MUT** button again will restore the previously selected audio level.

❻ Clock

To display the current time, press the **DSP** button, after 5 seconds the display will automatically return to it's original status. The time is shown in the 24 hour format.

To set the clock, press and hold the **DSP** button until the time display begins to flash. The hour setting can then be adjusted by rotating the **Volume** knob. To adjust the minutes, press the **DSP** button a second time until the minute segment begins to flash, then rotate the Volume knob until the desired setting is obtained.

❼ Mode

Pressing the **MOD** button will select the GD9520's operating mode. RADIO DISC or AUX IN modes are sequentially selected as the **MOD** is pressed. When the GD9520 is switched ON it will automatically return to the mode it was in when switched OFF.

❽ Local/Distance Control (RADIO mode only)

Pressing the **LOC** button selects an internal attenuator which will help to reduce the interference and distortion often associated with very strong local radio transmissions.

A 'LOC ON' or 'LOC OFF' message is briefly displayed on the LCD to indicate selection or deselection of the Local Distance Control.

❾ Stereo/Mono Selector

Pressing the **ST** button selects either mono or stereo reception. The unit will momentarily display 'MONO' or 'STEREO' when toggling the **ST** switch. The ST flag is displayed when the GD9520 is in the stereo mode. Selecting MONO improves reception when FM signals are weak or noisy, by disabling stereo detection.

Select **stereo** for normal listening on FM radio bands, a ⬭⬭ symbol is displayed when stereo signals are being received.

RADIO OPERATION

❿ Band Selector

To select the required radio band (AM1, AM2 FM1 FM2 or

FM3), sequentially press the **BND** button until the required band is selected.

⓫ Tuning/Selecting Tracks/Chapters

Manual Tuning

To tune the radio manually, momentarily press the ⏮ or ⏭ button to select the desired frequency. Each press will step the frequency by 50 kHz.

Automatic Tuning (Seek)

Press and hold either the ⏮ or ⏭ buttons for 3 seconds. The GD9520 will stop seeking when a strong, clear station is detected.

Storing of Stations in Memory

Once the desired station has been selected, press and hold one of the six pre-set station memory locations on the front panel for 3 seconds. The corresponding button number will appear on the LCD indicating that the selected station is now programmed into the GD9520 memory.

⓭ Auto Programming of Radio Stations (AMS)

Select the required band

Press and hold the **AMS** button for 3 seconds; The GD9520 will now commence searching the band for radio stations. As each station is located it is automatically stored in the next available pre-set memory location. The new stations will replace any stations previously stored in that band.

Manually Selecting the Pre-Set Station Memories

Briefly press the desired station memory **1 - 6**. The GD9520 will jump immediately to that station and the memory number will appear on the LCD.

Preset Equaliser (P-EQ) ⓮

The GD9520 has three preset Graphic Equaliser settings to enhance your audio listing pleasure. To select the P-EQ mode, press the **EQ** ⓮ button sequentially to select and display either POP, CLASSIC or ROCK modes.

Note: the TREBLE and BASS audio settings cannot be adjusted when the P-EQ mode is selected.

CD/MP3/DVD OPERATION

Warning: Do not insert discs containing anything other than CD, DVD or MP3 files into the disc slot. The CD/DVD mechanism contains precision laser components which could easily be damaged by inserting foreign objects.

Important: Because of the wide dynamic range offered by CD/DVD systems, the difference in volume level between very soft sounds and very loud sounds can be quite high. For this reason we recommend that you avoid turning the volume level up to loud when listening to very soft music or tracks with no audio level, otherwise a sudden change to very loud music could damage your speakers.

Inserting the CD/DVD

Remove the CD/DVD from it's case and insert the disc face up into the front panel aperture. The CD/DVD mechanism will automatically draw the disc into the player and start playing track 1 or chapter 1 if it is a DVD.

A disc symbol 🎱 is displayed on the LCD whenever there is a CD/DVD in the player. The symbol will simulate rotation whenever the disc is playing.

Labeled side up
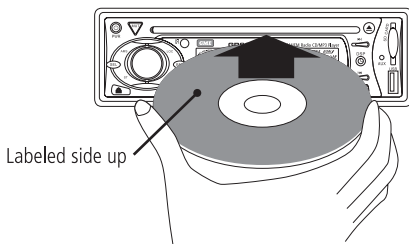
⓬ Ejecting a CD/DVD

Press the **EJECT** button ⏏ to stop the CD/DVD playing and automatically eject the disc.

⓫ Fast Forward/Reverse

To advance through the present track or chapter at high speed, press and hold the ⏭ button. The elapsed playing time will be displayed and will advance rapidly. Release the button to continue playing at the normal speed.

To reverse through the present track at high speed, press and hold the ⏮ button. The elapsed time on the display will decrease rapidly. Release the button to continue playing the present track at the normal speed.

Stop

Press the **STOP** button, (numeric button #5 on the front panel). The disc symbol will stop rotating whenever the **STOP** function is engaged.

To return to the normal play mode press **PLAY**, (numeric button #1 or ⏯ on the remote control).

⓫ Step to the Next Track or DVD Chapter

To step immediately to the next track, press the ⏭ button once. The next selected track will begin playing, press the ⏭ button to advance to the start of successive tracks.

To step immediately to the start of the track currently being played, press the ⏮ button once. The current track will immediately restart. Press the ⏮ button repeatedly to locate the start of previous tracks.

⓫ Pause

To pause playing the CD/DVD, press the ▶❙❙ button once. The disc symbol on the LCD will stop rotating when the pause function has been selected.

Press the ▶❙❙ button again to resume playing the CD/DVD.

Repeat Play

To continually play the current track or chapter, press the **RPT** button (Numeric button #3 on the front panel).

A 'RPT' flag will be illuminated on the LCD when in the repeat mode. Press the **RPT** button again to return to the normal mode.

Random Play

To play tracks on the CD in a random order, press the **RDM** button (Numeric button #4 on the front panel). A 'RDM' flag will be illuminated on the LCD when in the random mode. Press the **RDM** button again to return to the normal mode.

Note: the RDM function is not operational when playing DVDs.

Intro-Scan

The intro-scan feature plays the first 10 seconds of each track allowing you to identify the songs on the CD.
To select intro-scan press the **INT** button (Numeric button #2 on the front panel), the LCD will display INT, track number and elapsed time.
Press the **INT** button again to return to the normal mode.

Note: Intro – Scan does not operate in DVD, MP3 or WMA formats.

OSD (On Screen Display)

Press the **OSD** button (Numeric button #6 on the front panel) to display Track, Chapter, Elapsed Time and other information on the monitor.

MP3 Functions

MP3 (MPEG-1 Layer 3) is a format for the compression of audio files to approximately 8% of their original size. This permits a large number of files to be stored on a CD-R, CD-RW, SD Card or USB memory stick.

Unique Remote Control Functions

There are a number of functions on the GD9520 that are only accessible through the remote control handset.

Zoom (DVD Mode only)

The GD9520 has 6 Zoom settings, to enter the Zoom mode, press the **ZOOM** button on the remote control, the sequentially move to either x2, x3, x4 or 1/2, 1/3 or Zoom mode the cursor keys may be used to pan around the picture.

Subtitles (DVD Mode only)

Press the **SUBTITLE** button on the remote control to display subtitles.

Set Up

To enter the SET UP mode, Press the **STOP** button, then press the **SET UP** button on the remote control.

Use the ▶ / ◀ keys to select SYSTEM SET UP, LANGUAGE SET UP, AUDIO SET UP, VIDEO SET UP or DIGITAL SET UP.

Then use the ▲ / ▼/ ▶ / ◀ keys to navigate around the sub-menu to select and change operating parameters.

Multi Angle (DVD Mode only)

Press the **ANGLE** button on the remote control to view the DVD content from a different angle.

Note: Not All DVDs support this feature.

Slow Motion (DVD Mode only)

Press the **SLOW** button on the remote control to slow the DVD viewing speed. There are 6 speeds available, continue pressing the **SLOW** button to access the different speeds.

PBC Title (DVD Mode only)

Press the **PBC** button to access the menu, then use the ▲ / ▼ / ▶ / ◀ keys to navigate around the screen and select options.

Numeric Keys

In RADIO Mode – Press any one of the 1 to 6 NUMERIC KEYS to select a pre-set radio station.

In the CD mode – Press any one of the NUMERIC KEYS to select a track.

GOTO

The GOTO function allows the operator to select specific tracks or chapters from the disc.

Press the **GOTO** button on the remote control; use the ◀ / ▶ keys to move the highlighted cursor to the required field, then using the Numeric keypad modify the selected field to the track or chapter required, press **ENTER** to confirm selection.

Precautions for CD-R and CD-RW Discs

The GD9520 will not play a CD/DVD that has not been finalised, please refer to the instruction manual of the software or the recorder you are using to write these CDs for the finalisation process.

To ensure a more reliable playback, please follow GME recommendations:

• Use CD-RWs with a speed of 1x to 4x and write with a speed of 1x to 2x.

- Use CD-Rs with a speed of 1x to 8x and write with a speed of 1x to 2x.
- Do not play CD-RWs that have been written to more that 5 times.

Note: If a disc contains audio CD data and MP3 files, the GD9520 will only play which ever is first on the disc. If the first track on the disc is an MP3 file, the unit will only play the MP3 files from the disc, and will ignore all other files and vice versa.

Precautions for MP3

The format of the disc must be ISO9660 level 1 or 2, or Joliet or Romeo in the expansion format.

When naming an MP3 file, ensure the file extension is '**.MP3**'

The GD9520 will not recognise a non MP3 file even though the name extension is '**.MP3**'.

AUXILIARY INPUTS & OUTPUTS

To maximise the owner's listening flexibility and pleasure the GD9520 has several auxiliary inputs and outputs.

FRONT PANEL INPUTS

There are standard USB and SD card inputs located on the front panel.

When using the USB input please ensure the USB Adaptor (Part # AD003) supplied as a standard accessory with each GD9520 is utilised and the transparent front cover is always fully closed to avoid any possibility of water ingress.

The are many styles and sizes of USB memory sticks and SD cards available on the market today, however for optimum performance GME recommends:

- Part # USB001 GME USB Memory Stick
- Part # SDC001 GME SD Card

These devices have been specifically manufactured for GME and are available from your local GME retailer.

Aux Input

The GD9520 has a 2.5 mm stereo jack low level (1 Volt peak to peak) audio input lines. Owners may use this input for external audio sources that they wish to control and play through the vessel's stereo system.

GME offers a custom interface cable for personel MP3 player connection; Part # LE68. When using this connection, it is necessary to use the portable device functions to control play.

REAR OUTPUTS AND INPUTS

The GD9520 has Audio outputs plus Video inputs and outputs. These inputs and outputs are clearly labelled and

colour coded, they are also identified in the wiring diagram shown on page 5 of this manual.

When using the rear external video input, the audio input must be fed via the 'AUX' in at the front of the unit.
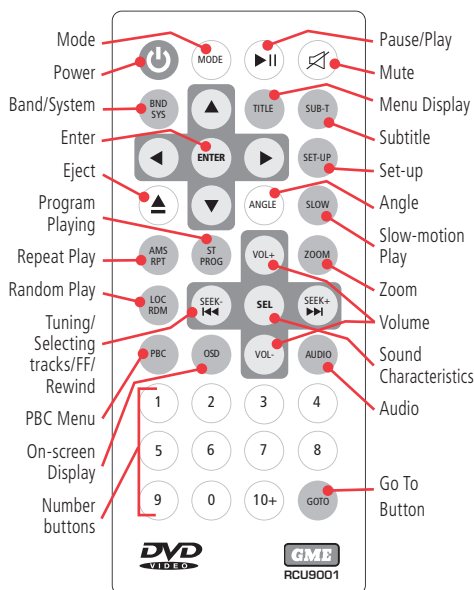
REMOTE CONTROL

A standard accessory with the GME GD9520 is a a wireless remote control (RCU9500). The remote will permit the control of all major GD9520 functions from a distance of up to 3 metres.

Ensure plastic battery protection tab is removed from the handset before initial operation.

Simply point the remote handset at the GD9520 and select the required option on the keypad.

REMOTE CONTROL FUNCTIONS

Cautions
- The remote control handset is not waterproof and should be kept well away from both fresh and salt water at all times.
- The remote control should not be left in direct sunlight for prolonged periods, excessive sunlight and heat could cause damage to the keypad resulting in incorrect operation or non function.

BATTERY REPLACEMENT

Should the working range of remote control handset reduce, or functions fail to operate correctly. The battery should be replaced:

1. Turn remote over, Insert thumb nail between grooves on the battery cover latch and slide to the right, pull out the battery tray.
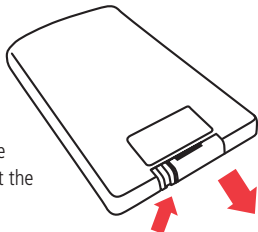
2. Replace the battery, (type CR 2025 or equivalent), with the positive side facing upwards.

3. Slide the battery tray back into the handset.
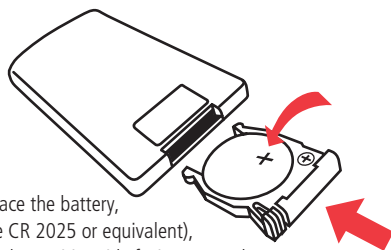
OPTIONAL ACCESSORIES

There are a number of high quality GME accessories available to enhance your marine entertainment experience. These accessories are available through your local GME retailer, should you have any difficulty in obtaining any GME accessory, please call or email your local GME Sales Office (within Australia and New Zealand). Contact details are listed on the back page of this manual.

International customers should also refer to the back page for details of your local importer or visit: www.gme.net.au/export

- Marine Speakers
- Infrared Remote Control - replacement
- SD Cards
- USB Flash Drives
- Comprehensive Range of Marine Antennas
- Interface cable for MP3 devices

From time to time GME may introduce new and additional products to the range or discontinue existing accessories. Details of any changes may be found at our website: www.gme.net.au/marine

SPK001 and SPK002, both available in black or white.

SPK003 and SPK004, both available in black or white.

AE346B, AE83 and AE312B Marine Antennas.

GR9520 TROUBLE SHOOTING GUIDE

SYMPTOM	CAUSE	SOLUTION
No Power.	Vessel's battery switch is not on.	Check master switch if fitted.
	One of the fuses is blown.	Replace the damaged fuse with the correct value.
Error messages displayed on LCD or functions not operating.	Microprocessor lock up.	Press Reset Button.
Poor radio reception.	Damaged or incorrect type of antenna.	Check antenna and replace if necessary.
CD/DVD cannot be loaded.	There is already a CD in the player.	Remove disc, then insert new disc.
	CD/DVD is upside down.	Insert correct way up.
	CD/DVD is damaged or dirty.	Clean or try another disc.
	CD/DVD has moisture on it.	Dry disc and retry.
	CD/DVD reader has moisture on lens.	Leave player on for an hour or so and retry.

SPECIFICATIONS*

FM RADIO

Frequency Range:	87.5 - 108 MHz (Eu./Aust./N.Z.) 87.5 - 107.9 MHz (U.S.A.)
Frequency Step:	50 kHz
Intermediate Frequency:	10.7 MHz
Sensitivity (30 dB S/N):	13 dBuV (typical)
Channel Separation:	>22 dB
Station Memories:	18

AM RADIO

Frequency Range:	522 - 1620 MHz (Eu./Aust./N.Z.) 530 - 1710 MHz (U.S.A.)
Frequency Step:	9 kHz (Eu./Aust./N.Z.) 10 kHz (U.S.A.)
Intermediate Frequency:	455 kHz
Sensitivity (20 dB S/N):	25 dBuV
Station Memories:	12

COMPACT DISC MECHANISM

Mechanism:	Auto Loading
Signal to Noise Ratio:	65 dB
Format:	8 times oversampling
Environmental:	Anti-vibration/Anti-shock

AUDIO AMPLIFIER

Audio Output:	(4 channels x 45 W Peak = 180 W Peak) @ 10% THD.
Speaker Impedance:	4 Ohm
Frequency Response:	40 Hz - 18 kHz
Bass Adjustment Range:	+/- 8 dB @ 100 kHz
Treble Adjustment Range:	+/- 10 dB @ 10 kHz

DVD PLAYER

Aspect Ratio:	4:3 Letter box 4:3 Pan Scan or 16:9
Video Output Level:	1.00 Volt Peak to Peak (75 Ohms Impedance)
Horizontal Resolution:	500
Video System:	Auto/PAL/NTSC

GENERAL

DC Supply Input:	11 – 16 Volts Negative Ground
Memory Back-up:	External Back-up Memory Wire
Back-up Current:	Approximately 20 mA
Overall Size:	232 mm (W) x 97 mm (H) x 200 mm (D)
Weight:	Approx 1.75 kg
Supply Current:	7 Ampere (max.)

*All specifications are typical and subject to change without notice or obligation.

WARRANTY

GME limit this warranty to the original purchaser of the equipment.

GME warrant this product to be free from defects in material and workmanship for a period of twelve (12) months from the date of purchase from their authorised retailer.

Should the product require servicing during this period, all labour and parts used to effect repairs will be supplied free of charge. GME reserve the right to determine whether damage has been occasioned by accident, misuse or improper installation whereby the warranty would be void, including:

Equipment which has been damaged due to:

(a) Incorrect or reverse polarity connection to a battery or power supply.

(b) Connection to incorrect supply voltage.

(c) Effects of water or moisture penetration.

(d) Non-factory modifications.

(e) Use of incorrect replacement fuse.

Procedure to be followed by claimant: In the event of a defect occurring during the twelve (12) month warranty period, the original purchaser may return the defective unit along with suitable proof of purchase date (i.e. receipt, docket, credit card slip etc.) and a full description of the defect to any authorised retailer.

All freight charges incurred for transportation by the retailer or GME are the purchaser's responsibility.

The retailer will forward the unit to the closest authorised GME Service Depot in your particular area.

GME AFTER SALES SERVICE

Your GME GD9520 is especially designed for the environment encountered in mobile or portable installations. The use of all solid state circuitry, careful design and rigorous testing, result in high reliability. Should failure occur however, GME maintain a fully equipped service facility and spare parts stock to meet the customer's requirements long after expiry of the warranty period.

Warning: Extreme care should be taken when connecting any external device to your GD9520 rear inputs or outputs. GME strongly recommends that all connections should be carried out by a suitably qualified technician.

A Division of: **Standard Communications PTY LTD**

ISO 9001 SGS

Head Office: SYDNEY - Locked Bag 2086, North Ryde N.S.W. 1670, Australia. Tel: (02) 9844 6666, Fax: (02) 9844 6600.

MELBOURNE	ADELAIDE	PERTH	BRISBANE	SYDNEY	AUCKLAND
7 Mircro Circuit	14 Phillips St.	Unit 1	Unit 1	Unit B	Unit F
Dandenong South	Thebarton	10-12 Harvard Way	89-101 Factory Rd.	22-24 College St.	35 Neilpark Dr.
Vic. 3165	S.A. 5031	Canning Vale	Oxley	Gladesville	East Tamaki
Tel: (03) 9798 0988	Tel: (08) 8234 2633	W.A. 6155	Qld. 4075	N.S.W. 2111	N.Z. 2141
Fax: (03) 9798 0177	Fax: (08) 8234 5138	Tel: (08) 9455 5744	Tel: (07) 3278 6444	Tel: (02) 9879 8888	Tel: (09) 274 0955
		Fax: (08) 9455 3110	Fax: (07) 3278 6555	Fax: (02) 9816 4722	Fax: (09) 274 0959

For customers outside Australia and New Zealand, please contact your local GME retailer or email to: export@gme.net.au