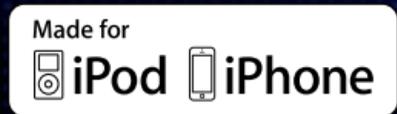




G·DEK MARINE ENTERTAINMENT SYSTEM



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FEATURES

- AM/FM radio
- DAB radio (GM550)
- Made for iPod and iPhone*
- MP3 via USB/SD card
- 4 x 45 watt peak power output
- Conformally coated PCBs for harsh marine environment.
- Rugged construction, made using high impact UV protected plastics.
- Remote head waterproof to IPX6
- Backlit LCD screen
- Infrared remote control
- Portable MP3 player input
- Optional second wired remote
- Available in black or white

FCC PART 15 COMPLIANCE

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 residential 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. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ACCESSORIES SUPPLIED

The G-DEK Multimedia Entertainment System is supplied with the following standard accessories:

- Multimedia hub
- R1 remote head
- RD remote head 5 m extension cable
- R1 remote head mounting template
- Remote control handset
- R1 remote sensor and cable
- DC/Speaker cable harness
- Mount support kit and template
- Instruction manual

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

*Made for:
iPhone 4S, iPhone 4, iPhone 3GS, iPod touch
(2nd generation), iPod classic, iPod nano
(5th generation) and iPod nano (3rd generation).

Made for



INTRODUCTION

Congratulations on purchasing the GME G-DEK series marine multimedia entertainment system, arguably the finest marine entertainment product available today. Your G-DEK has been designed with both the music buff and boat owner in mind.

The G-DEK is a complete digital entertainment system designed specifically for playing music and video from a full range of multimedia sources. With industry-first inclusions such as DAB radio, (GM550) SD and USB inputs, iPod® and iPhone connectivity and generic MP3 player support, the G-DEK multimedia system is destined to become the standard by which all marine entertainment systems are measured.

The G-DEK has all the attributes expected in a superior entertainment system including a public address feature

iPod and iPhone

iPod, iPhone, iPod touch, iPod classic and iPod nano are registered trademarks of Apple Computer, Inc. Registered in the US and other countries.

“Made for iPod,” “Made for iPhone,” mean that an electronic accessory has been designed to connect specifically

that allows the G-DEK to be used to broadcast voice announcements on your vessel.

The G-DEK marine multimedia system has been developed utilising a combination of the very latest in digital electronic technology and the design expertise gained by GME engineers over several decades 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 G-DEK will ensure many years of reliable service.

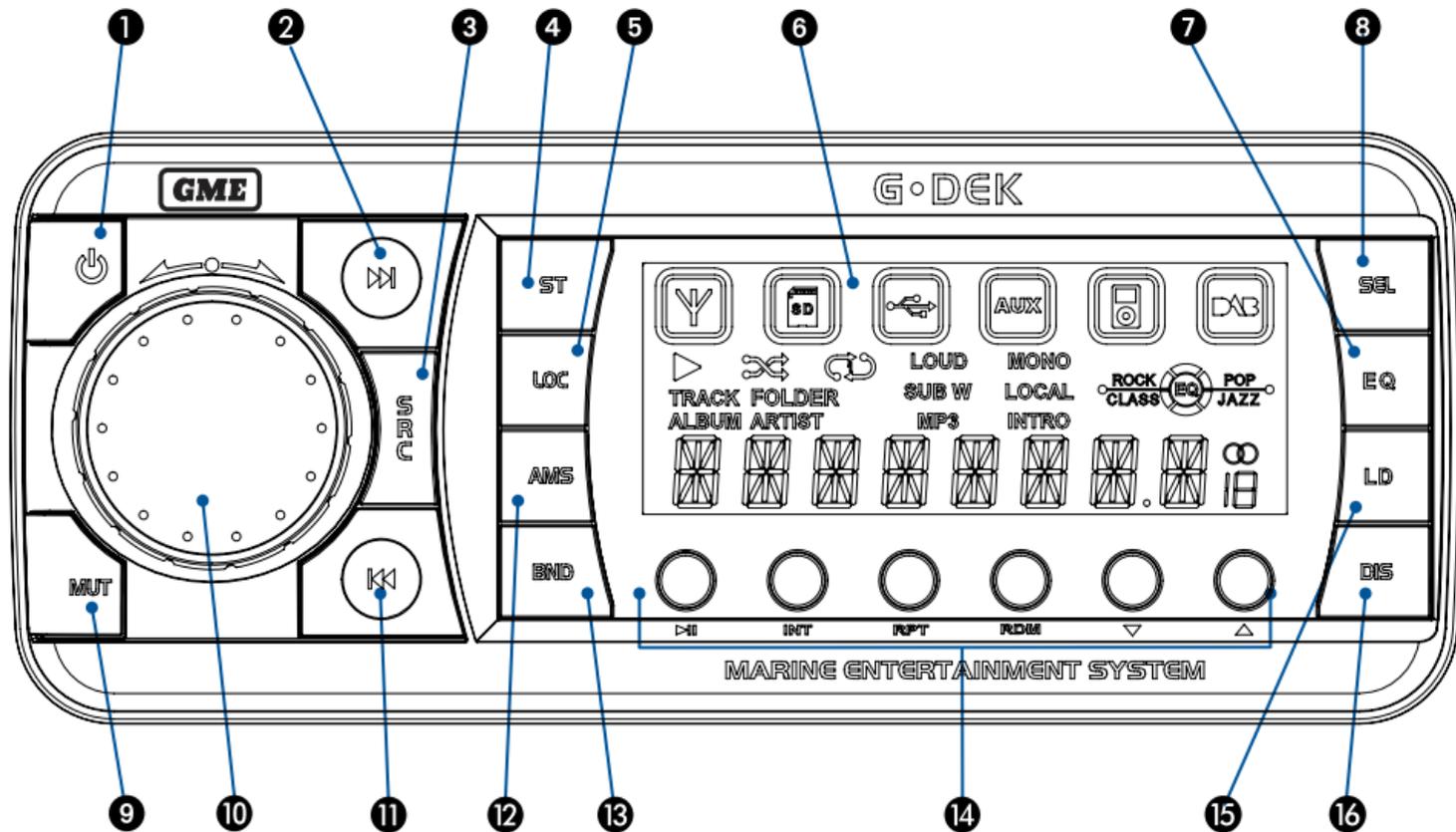
Read this instruction booklet carefully, plug in your favourite music selection, sit back and enjoy the sounds that cannot fail to impress even the most critical audiophile.

to iPod and iPhone respectively and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod and iPhone may affect wireless performance.

CONTROLS

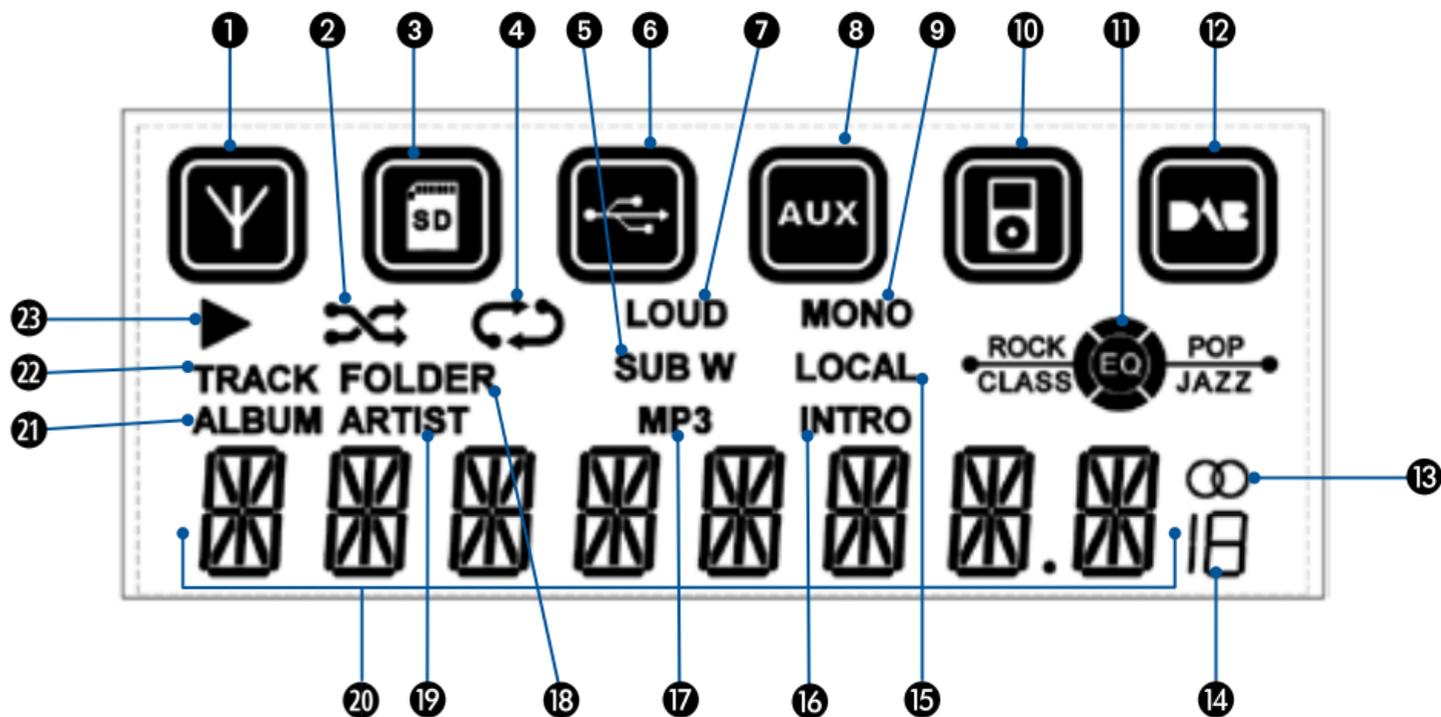
R1 REMOTE HEAD

- 1 Power On/Off
- 2 Search Forward
- 3 Audio Source
- 4 Stereo/Mono
- 5 Local/Distant
- 6 Liquid Crystal Display
- 7 Equaliser Settings
- 8 Selector Options
- 9 Mute
- 10 Selector knob
- 11 Search Backwards
- 12 Auto Music Search
- 13 Band Select
- 14 Memory Buttons
- 15 Loudness
- 16 Display/Clock



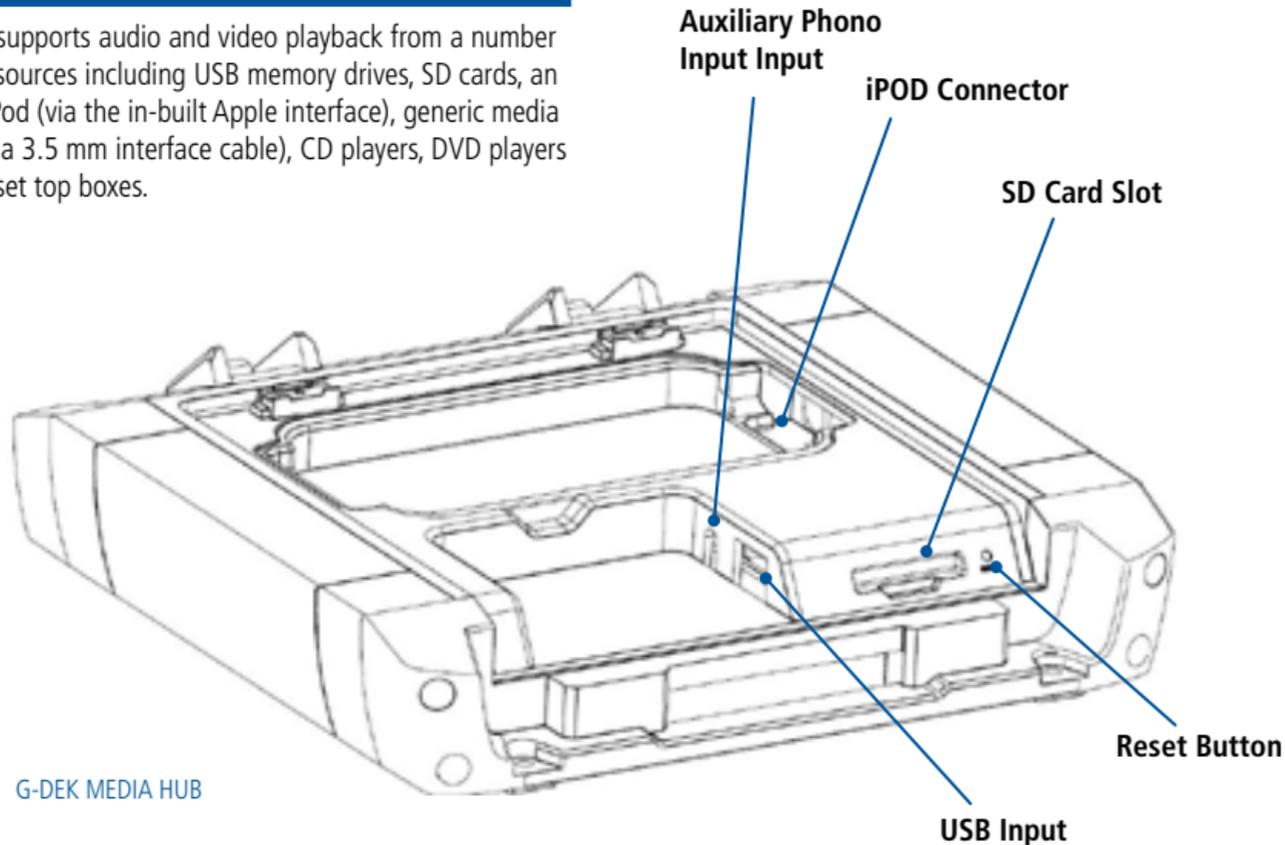
LIQUID CRYSTAL DISPLAY

- 1 Source - AM/FM Receiver
- 2 Random Tracks
- 3 Source - SD Card
- 4 Repeat
- 5 Sub Woofer Enabled
- 6 Source - USB
- 7 Loudness Mode
- 8 Source - AUX
- 9 Mono Mode
- 10 Source iPod
- 11 Equaliser Setting
- 12 Source - Digital Radio (GM550)
- 13 Stereo Indicator
- 14 Station Memory
- 15 Local/DX Mode
- 16 Intro Mode
- 17 MP3 File Playing
- 18 Searching Folder
- 19 Searching Artist
- 20 Text/Frequency
- 21 Searching Album
- 22 Searching Track
- 23 File Playing



MEDIA INPUTS

The G-DEK supports audio and video playback from a number of external sources including USB memory drives, SD cards, an iPhone or iPod (via the in-built Apple interface), generic media players (via a 3.5 mm interface cable), CD players, DVD players and digital set top boxes.



INSTALLATION

INSTALLATION PRECAUTIONS

If you are connecting your G-DEK for the first time or have just reconnected your boat battery and you are experiencing problems with the unit's operation, we recommend you reset the unit. The reset button is located under the lid to the right of the SD card slot. Gently press the reset button with a paper clip or similar object.

The preset station memories and clock time are retained only while the yellow 'Memory B+' lead is connected (see Electrical Wiring and Connections Section). If the yellow 'Memory B+' 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.

LOCATION

The G-DEK remote head can be either gimbal mounted or installed directly to a flat panel in an accessible position near your vessels steering position. GME recommends that the location should be free from direct sunlight and excessive vibration.

The G-DEK multimedia hub can be mounted nearby or installed in a separate location inside the cabin using an extension lead. The cover on the multimedia hub should remain accessible to allow access for connecting your MP3 music source via iPod/ iPhone, USB memory stick, SD card or generic MP3 player.

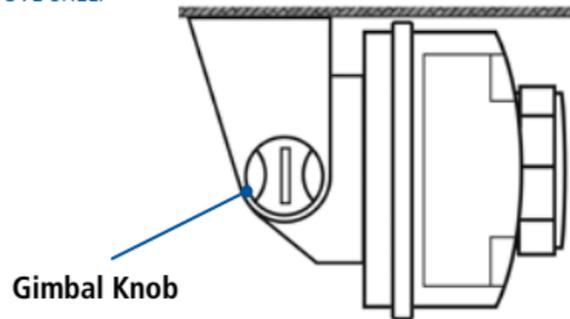
MOUNTING THE REMOTE HEAD

The G-DEK remote head can be neatly flush mounted on a bulkhead or gimbal mounted using the gimbal brackets supplied. The G-DEK remote head is supplied with a cabin cover. When the G-DEK is not in use the cabin cover should be fitted to protect it from the elements.

Gimbal Mounting

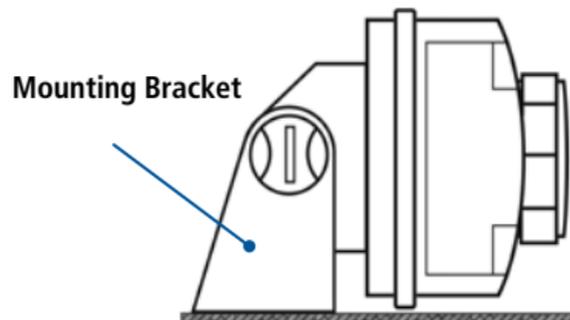
The gimbal mount can be used to mount the remote head above or below a shelf. It can also be used to mount the remote head on flat surface or vertical bulkhead where flush mounting is not possible due to limited access behind the bulkhead.

ABOVE SHELF

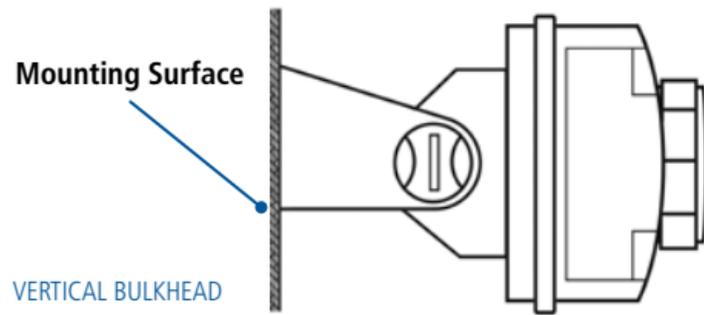


Gimbal Knob

UNDER SHELF

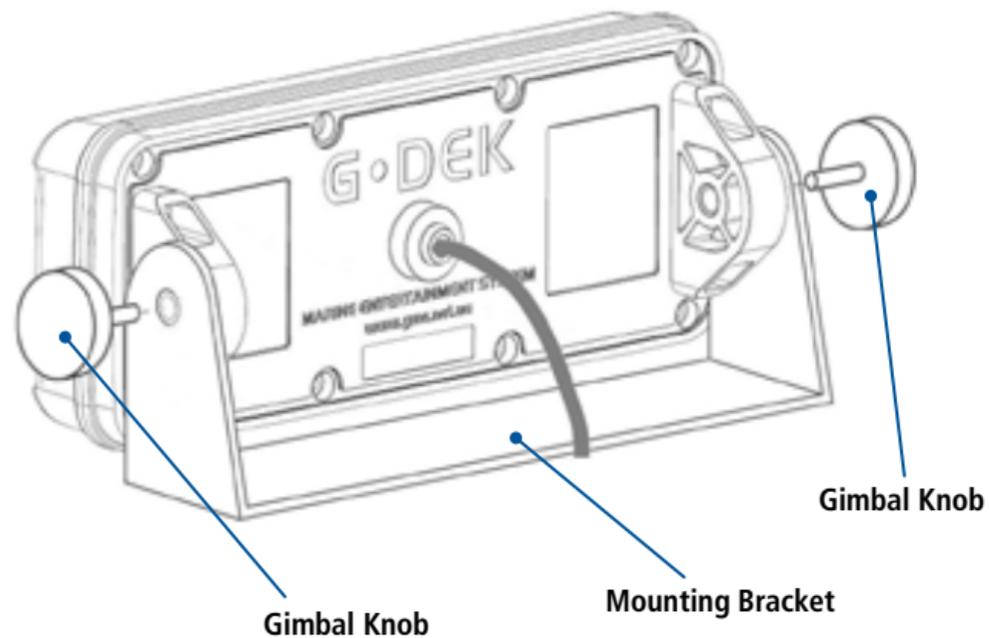
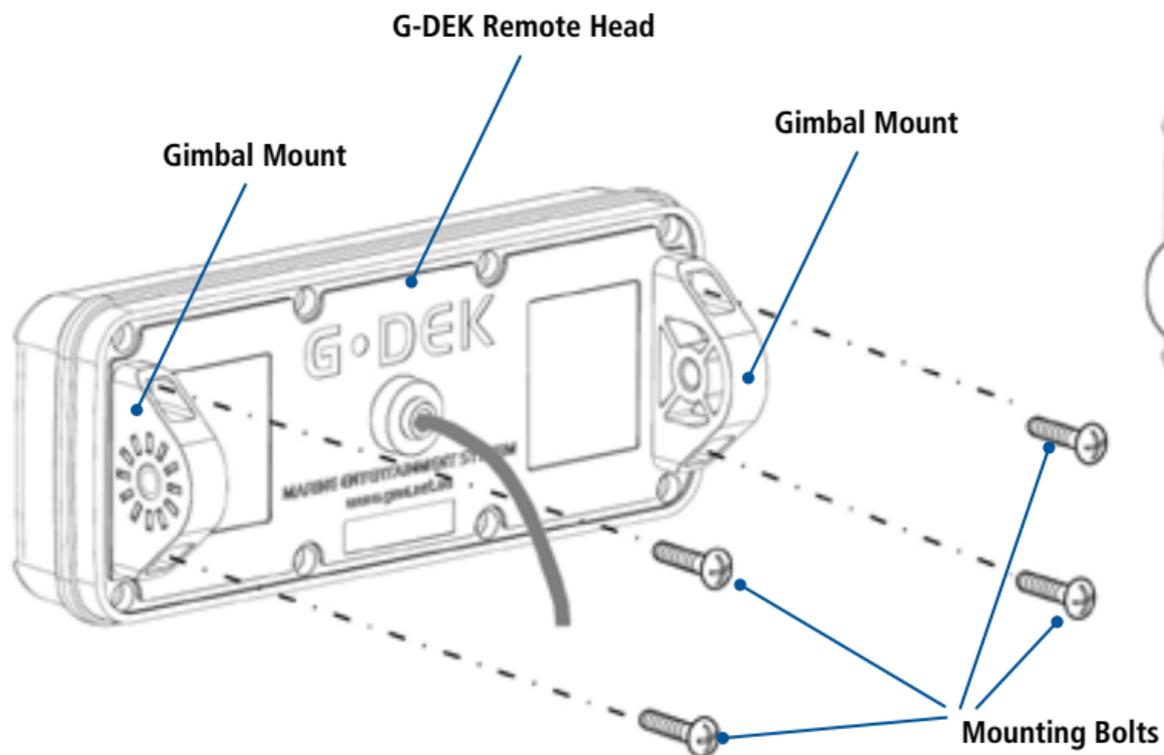


Mounting Bracket



VERTICAL BULKHEAD

1. Fit the two gimbal mounts to the rear of the remote head using the screws provided.
2. Temporarily fit the Remote Head assembly to the mounting bracket and position the assembly in the desired location.
3. Using the mounting bracket as a template, mark the location of the mounting screws.
4. Remove the bracket, drill the holes and screw the bracket into place.
5. Refit the remote head to the mounting bracket using the gimbal knobs. Adjust the remote head to the desired viewing angle and tighten the gimbals.



FLUSH MOUNTING

Before starting, select a suitable panel for the mounting location then examine behind the panel to determine that there is sufficient access for routing the cable and fitting the mounting screws. A template is included for marking the mounting locations.

Screw Mounting

For a screw mounted installation, place the template against the mounting surface and mark the location of the four mounting screws and the connecting cable. Drill the holes using sizes marked on the template. Feed the remote head's interface cable through the centre hole in the panel and position the remote head against the panel with the mounting holes aligned. Install the four screws from behind the panel.

Adhesive Tape Mounting

The G-DEK remote head can be fixed to a flat surface using a good quality 'Very High Bond' double sided adhesive tape such as 3M VHB 4991 or equivalent.

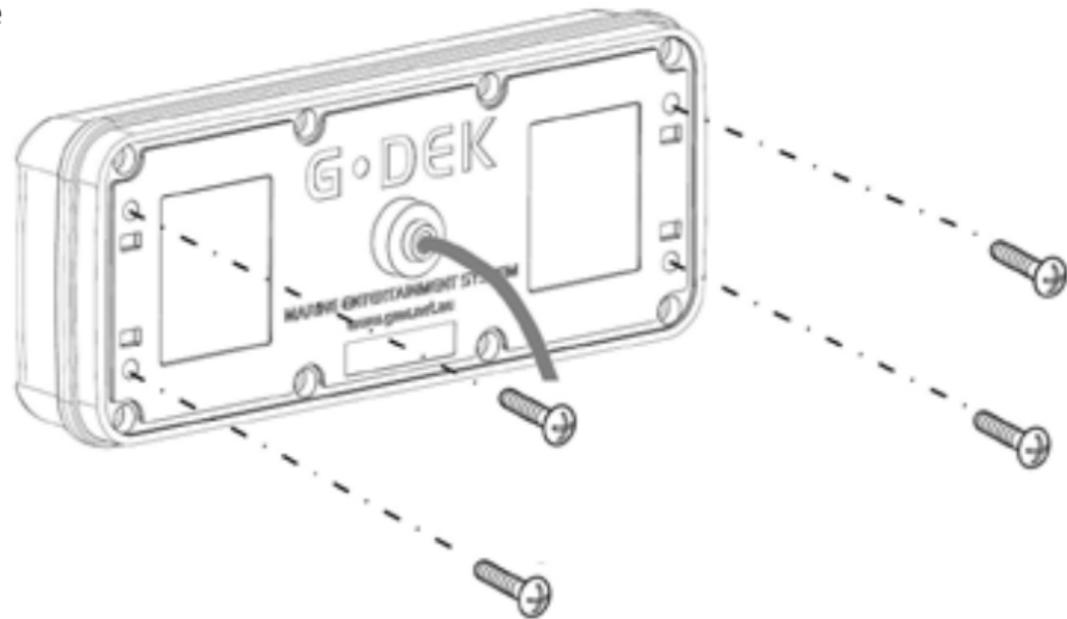
For an adhesive tape mounted installation, place the template against the mounting surface in the desired position ensuring the template is level. Mark the location of the hole for the

interface cable. Drill the hole for the interface cable using the size marked on the template.

Clean the rear of the remote head unit with isopropyl alcohol in the locations where the adhesive tape will be applied (as shown in the diagram). Apply good quality 'very high bond' adhesive double sided tape to these locations.

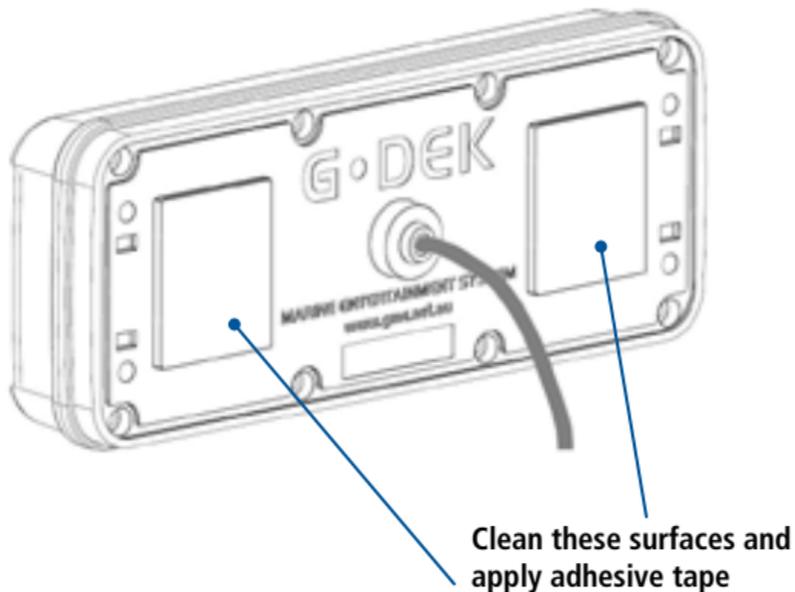
Similarly, clean the surface of the mounting panel using the isopropyl alcohol.

FLUSH MOUNT USING SCREWS



FLUSH MOUNT USING ADHESIVE TAPE

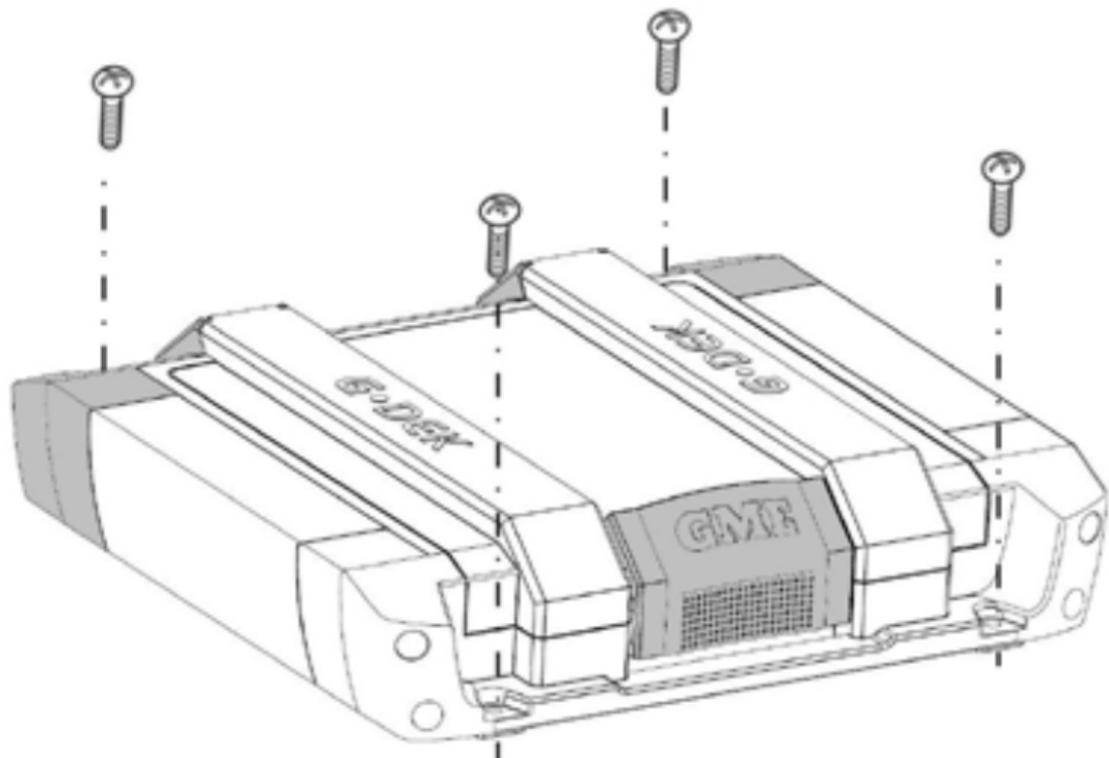
Feed the cable through the centre hole in the panel then peel the remaining backing from the adhesive tape and carefully position the remote head against the panel, ensuring it is level. The adhesive is pressure sensitive so press firmly and hold for several seconds to allow the adhesive to grip.



MOUNTING THE MULTIMEDIA HUB

The multimedia hub can be mounted in almost any convenient location however it should be protected from sunlight and water spray where possible. The multimedia hub contains inputs for your SD card, USB memory stick, iPod/iPhone and generic MP3 player so you will need to be mounted it in a location where it can be accessed such as inside the cabin of your vessel.

The multimedia hub can be fixed to any flat surface using screws or bolts via the four mounting points provided. The mounting location should be free from direct sunlight, water and excessive vibration and there should be sufficient room to open the cover. When fully opened, the cover will latch into place and will maintain its position no matter what the angle of installation.



ELECTRICAL WIRING AND CONNECTIONS

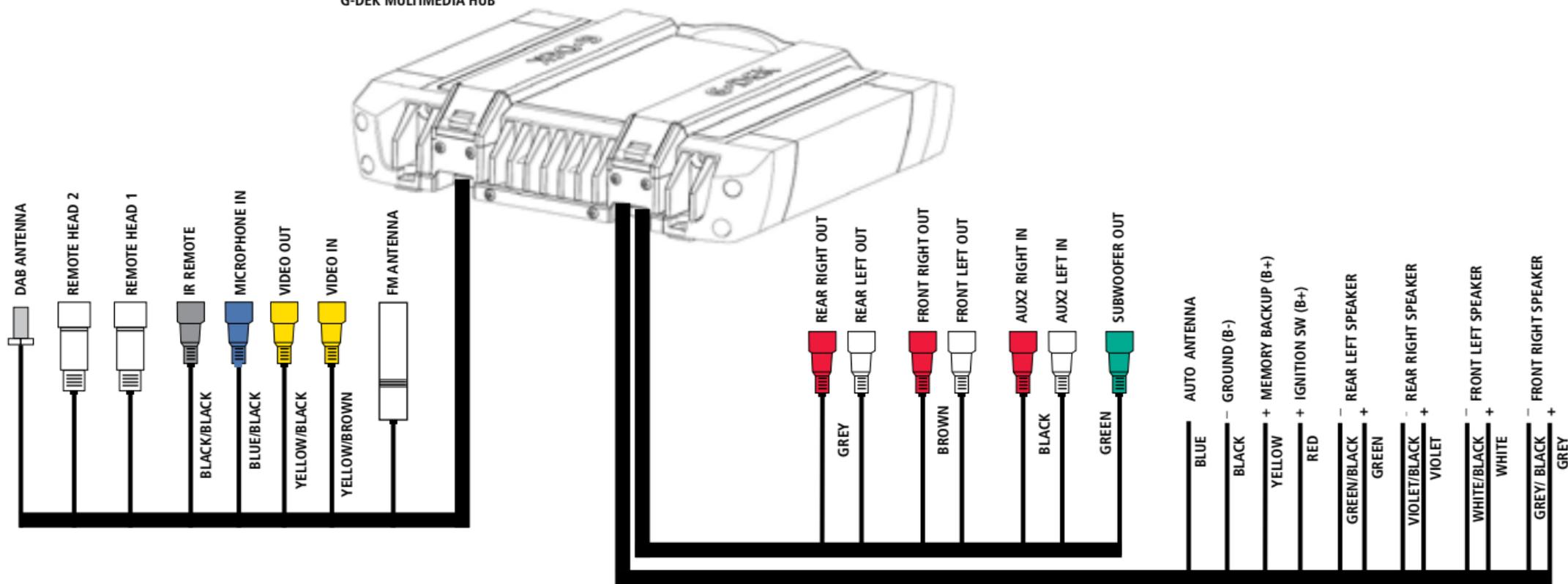
DC CONNECTIONS

Caution: The G-DEK is designed for vessels with a 12 volt negative ground electrical system only!

Referring to the connections diagram:

1. Connect the Yellow wire directly to the positive terminal of the vessel's battery, or to a point that has +12 volt available at all times. This lead maintains the memories within the G-DEK and is the main power source for the unit.
2. Connect the Red wire to the vessel's +12 volt 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 G-DEK switched ON and OFF using its own controls.

G-DEK MULTIMEDIA HUB



IMPORTANT: Your G-DEK is able to maintain its memories when it is switched off by the  button by drawing power directly from your battery via the Yellow 'MEMORY B+' lead. Although the memory backup current is very small (about 20 mA) it could 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 B+' 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.

The blue (auto antenna) wire on the wiring loom supplies 12 volts when the G-DEK is switched on and can be used to turn on an external device whenever the G-DEK is switched on.

SPEAKER CONNECTIONS

CAUTION: The G-DEK is a four-speaker system that requires two separate wires for each speaker. Do not touch the speaker wires together or allow them to touch other wiring.

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

When connecting the speakers, observe the correct polarity as shown in the connections diagram on page 13. Incorrect polarity will result in a reduction of bass response and stereo effect. The use of speakers with an impedance of less than 4 Ohms is not recommended, as they will cause excessive loading of the G-DEK's output circuit and may result in the radio overheating.

Connect all four speakers as shown in the connections 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 rear speakers, adjust the Fader control to the rear speakers.

ANTENNA CONNECTIONS

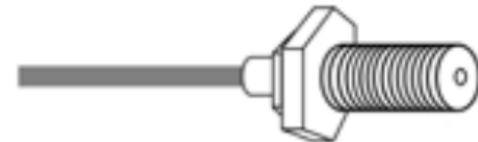
The G-DEK includes an AM/FM tuner (the GM550 also includes a DAB receiver). As these operate on different frequency bands, a separate antenna is required for each. For information on suitable AM/FM and DAB antennas, contact your nearest GME dealer.

Connect the AM/FM antenna to the larger antenna socket (bayonet connector). The DAB antenna connects to the smaller SMA socket (GM550).

AM/FM ANTENNA SOCKET (BAYONET)



DAB ANTENNA SOCKET (SMA)



AUXILIARY INPUTS

There are two auxiliary inputs to allow connection of audio/video from other external sources. Auxiliary input selection is made using the **SRC** button on the remote head unit.

- **Aux 1:** The auxiliary 1 input accepts an audio input via a 3.5 mm phono connector. This connector is located under the cover to the left of the USB input socket. The Aux 1 input allows the connection of generic MP3 or other audio media players. The selection and playback of your media files is controlled by the connected media player.

For best audio performance, set the volume on your media player to its mid-volume point then adjust it as necessary to achieve an output volume consistent with the volume level of the G-DEK's AM/FM radio. If the output from the media player sounds distorted, reduce its volume level until the distortion has gone.

- **Aux 2:** The auxiliary 2 input accepts low level audio from a CD, DVD player, digital set top box or similar device. The left and right audio channels from the device should connect to the G-DEK's left and right AUX 2 input leads. If the device is a DVD player or set top box, connect the video output from the device to the G-DEK's video input lead. The G-DEK's video output lead should be connected to the video input of a television or LCD monitor.

In this way, both video and audio from the device will be selected automatically whenever the AUX 2 input is selected.

NOTE: For the Aux 1 input, GME offers a custom interface cable for personal MP3 player connections; Part # LE68. When using this cable, it is necessary to use the functions on the portable device to control play.

MICROPHONE PA CONNECTION

The G-DEK accepts a microphone input via the 3.5 mm connector fly lead extending from the rear panel. This provides a Public Address (PA) function for making voice announcements over the speaker system and is useful in situations found in commercial vessels or public transport vehicles. A suitable plug-in microphone Part # LE68 is available through your GME dealer.

REMOTE HEAD CONNECTION

Up to two separate Remote Heads can be connected to the G-DEK to allow control from two separate locations. If connecting only one control head, it can be connected to either remote head socket.

LOW LEVEL OUTPUTS

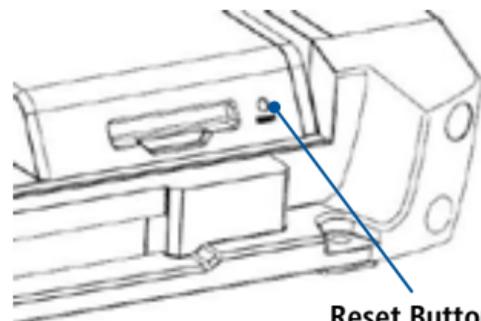
The G-DEK provides low level audio outputs for both front and rear channels. These can be used to feed audio to a separate high powered amplifier system for installations that require increased output power.

SUB WOOFER OUTPUT

A Sub Woofer output allows the connection of a separate active Sub Woofer for superior bass response. If a Sub Woofer is connected the Sub Woofer output should be enabled through the 'Sub Woofer' option in the **SEL** menu.

RESET BUTTON

When the installation is complete, it is recommended to press the Reset Button using a paper clip or similar object (the reset button is under the lid to the right of the SD card slot). This will ensure the G-DEK 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 G-DEK.



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 GME dealer for advice.

The following fuse ratings are used:

Yellow 'Memory B+' lead: 15 amp.

Red 'Ignition Switch' lead: 0.5 amp.

GENERAL OPERATION

GENERAL FUNCTIONS

Power ON/OFF

To turn the G-DEK on, press the  button. The unit will display 'WELCOME' then resume the mode and settings that were selected when last turned off.

To turn the G-DEK off, press and hold the  button. The unit will display 'GOODBYE' and will switch off. While the G-DEK is switched off it will display the clock.

Back Lighting

While the G-DEK is switched on, briefly press the  button to change the brightness of the back lighting. There are three levels of back lighting available - off, dim and bright.

Audio Controls

The VOLUME, BASS, TREBLE, MID RANGE, BALANCE, FADER and SUB WOOFER settings are adjusted using the large selector knob. The default control setting is the Volume.

To adjust the Volume, rotate the knob.

To select an alternative audio control, press the  button repeatedly until the desired function is displayed on the LCD ('BAS', 'TRE', 'MID', 'BAL', 'FAD' or 'SUBW'). Adjust the selected control using the knob.

If no adjustment is made for five seconds the control returns to the Volume setting.

NOTE: The BASS, MID and TREBLE settings on the  button are only available when the Equaliser is set to manual (the icon  is displayed). See instructions below to adjust the equaliser settings.

Equaliser

The G-DEK has four preset Graphic Equaliser settings to enhance your audio listening pleasure. These are 'Classic', 'Pop', 'Rock' and 'Jazz'. Each setting provides a preset adjustment of Bass, Midrange and Treble settings to suit the selected music style.

To cycle through the preset Equaliser settings, press the  button repeatedly. Icons for Classic , Pop , Rock  or Jazz  will be displayed on the LCD. If you prefer to manually adjust the Bass, Midrange and Treble controls set the Equaliser to Off . The Bass, Midrange and Treble settings can now be selected and adjusted manually using the  button.

Loudness

The Loudness function provides a low frequency Bass boost to the audio output at lower volume settings. There are three Loudness settings – Loud 01, Loud 02 and Off. Loud 01 provides a small increase in bass while Loud 02 results in a greater boost.

To cycle through the loudness settings press the  button repeatedly. The selected Loudness setting is displayed momentarily along the bottom edge of the LCD. Whenever the Loudness function is active the 'LOUD' icon is displayed.

Mute

Press the **MUT** button to temporarily silence the audio output. 'MUTE' will flash on the display to confirm the G-DEK has been muted and the speakers will remain quiet. Press the **MUT** button again to restore the previously selected audio level.

Clock

The clock will normally be displayed whenever the G-DEK is switched off. To manually display the clock at any time, briefly press the **DIS** (display) button. After five seconds the display will automatically return to its original status.

To adjust the time:

1. Press and hold the **DIS** button. The time will flash.
2. Turn the selector knob clockwise to adjust the minutes or counter clockwise to adjust the hours.
3. When the correct time is displayed, briefly press the selector knob to store the time and return to the normal display.

The time can be displayed in either 12 hour or 24 hour mode. Refer to the **MENU** settings for details.

Input Source Selection

Press the **SRC** button repeatedly to cycle through the G-DEK's available input sources. The icon for the selected input source will be displayed. Inputs include AM/FM tuner, SD card, USB memory stick, auxiliary inputs 1 & 2, iPod and DAB tuner (GM550).

.....
NOTE: Only input sources that are connected can be selected. The G-DEK will automatically skip over input sources that are not available (connected) e.g. if an SD card is not inserted the SD card source cannot be selected.
.....

Whenever the G-DEK is switched ON it will automatically attempt to return to the input source that was last selected.

RADIO OPERATION

AM/FM TUNER

To select the AM/FM tuner press the **SRC** button repeatedly until the  icon is displayed.

Country Selection

The G-DEK supports both European and USA band settings. The settings control the different band edges and frequency

tuning steps used by these countries (for details on frequencies and tuning steps see 'Specifications' at the end of this manual).

When first connected, the G-DEK will default to the European setting which is compatible with most countries (including Australia). For operation in the USA, select the USA country setting.

To switch between European and USA band sets:

1. While the radio is on, hold the  memory button while pressing the  button. The radio will display 'Goodbye' and switch off.
2. Press the  button to switch the radio ON again. 'USA' or 'Europe' will be displayed to confirm the selected band.

.....
NOTE: If all power is disconnected from the G-DEK, the unit will automatically return to the default European frequency bands.
.....

Band Selector

There are three FM bands labelled FM1, FM2 and FM3 and two AM bands labelled AM1 and AM2. Each band has six station memories allowing you to store up to 18 FM and

12 AM stations. To step through the available FM and AM frequency bands press the **BND** button repeatedly.

Manual Frequency Tuning

To manually tune the radio to the desired frequency, briefly press the  or  buttons. The  button will step upwards in frequency and the  button will step downwards in frequency.

Automatic Tuning (Seek)

To automatically tune a station, hold the  or  buttons for 1 second. Holding the  button will tune upwards in frequency while the  button will tune downwards. The tuning will stop when a station with a strong, clear signal is found.

Manual Programming of Stations

Each band has its own six station memory providing storage for a total of 12 AM and 18 FM stations.

To store a station into one of the memories;

1. Select the required AM or FM band.
2. Tune to the desired station using the  or  buttons.

3. Press and hold one of the six numbered station memory buttons. A beep will be heard and the selected memory number will appear on the lower-right of the LCD.

Repeat to store other stations. If more than six stations memories are required, press the **BND** key to select the next band and continue the steps above to store further stations.

Automatic Programming of Stations using AMS

The AMS (Auto Music Search) feature scans the selected AM or FM band for stations and automatically stores them into memory. Scanning continues until all the memories within the selected band have been filled.

NOTE: The AMS function will overwrite all stations that were previously stored in the station memories.

To use the AMS feature:

1. Select the required band (AM or FM).
2. Press and hold the **AMS** button. The G-DEK will begin searching for radio stations. As each station is found, it is stored into the next available memory location. When the memories in band 1 are full, additional stations will be stored in the other available bands until all memories have been filled.

Recalling Station Memories

Briefly press the **BND** key to select the desired band then briefly press the desired station memory button 1 - 6. The G-DEK will jump immediately to that station and the memory number will appear on the LCD.

Local/Distance Mode

Sometimes very strong radio transmissions can interfere with the reception of other stations on adjacent frequencies resulting in distortion of the desired signal. If these conditions occur, briefly press the **LOC** button to select 'Local' mode. 'LOC ON' will appear briefly on the display and the 'LOCAL' icon will be visible. The receiver will now be less sensitive to strong signals which may help reduce the interference.

To listen to more distant stations briefly press the **LOC** button again. 'LOC OFF' will appear briefly and the 'LOCAL' icon will disappear. The receiver will now be more sensitive to distant stations.

Stereo/Mono Selector

The **ST** button is used to switch between Mono or Stereo reception while on the FM Band. For normal listening on the FM bands, the Stereo option should be selected, however if FM signals become weak or noisy, selecting Mono can reduce the

background noise and improve reception quality by disabling stereo detection.

To select **MONO**, briefly press the **ST** button. 'MONO' will appear briefly on the bottom edge of the LCD and the 'MONO' icon will be displayed. To return to Stereo mode, briefly press the **ST** button again. 'STEREO' will appear briefly on the bottom edge of the LCD and the  icon will be displayed.

DAB TUNER (GM550)

The GM550 G-DEK includes a tuner for receiving high quality Digital Audio Broadcast (DAB) radio signals in areas where these are supported. To select the DAB digital tuner press the **SRC** button repeatedly until the  icon is displayed.

.....
NOTE: The **LOC** (Local) and **ST** (Stereo) button functions are not available in DAB receiver mode.
.....

When the DAB tuner is first selected, it will automatically scan for local digital stations and 'DAB SCAN' will be displayed. This process may take a few seconds depending on the number of stations available. As DAB stations are found they will be automatically stored into the DAB band memories. Once scanning is complete the G-DEK will begin playing the station stored in the first memory location.

Tuning DAB Stations

To tune to a specific DAB station, briefly press the  or  buttons. Press the  button to tune upwards or the  button to tune downwards. 'TUNING' will appear until a station is found then the station identification and description will scroll on the display and the broadcast will be heard in the speakers.

Station Memories and Band Selector

The G-DEK has three DAB bands labelled DAB1, DAB2 and DAB3. Each band is identical but has its own 6 station memory storage allowing a total of 18 DAB stations to be stored across the three bands.

To select a station from the memory, first press the **BND** button to select the desired band (DAB1, DAB2 or DAB3) then briefly press the desired station memory button **1 – 6**. The G-DEK will jump immediately to that station and the memory number will appear on the LCD.

Manually Storing Stations in Memory

During the initial 'DAB SCAN', the first 18 DAB stations that are located are automatically stored into the available DAB memories. If your preferred stations were not stored or

you wish to move your preferred stations to other memory locations you can select and store them manually.

1. Briefly press the **BND** key to select the desired band (DAB1, DAB2 or DAB3).
2. Press the  or  buttons to tune to the desired DAB radio station.
3. Press and hold the chosen memory button **1 – 6**. The G-DEK will beep and the memory number will appear on the display.

Manual AMS (Auto Music Search)

To manually force a search for new stations, press the **AMS** button. 'DAB SCAN' will flash as the radio searches for digital stations. The first 18 DAB stations that are located will be automatically stored into the DAB memories.

Displaying Station Information

Some DAB stations may display additional information such as station identification, electronic program guide (EPG) etc as scrolling text across the display. The content may vary from station to station. To browse the available content, briefly press the **DIS** button.

USING AN IPHONE/IPOD

Connecting an iPhone/iPod*

The G-DEK can be connected directly to an iPhone or iPod via the in-built Apple interface lead. The G-DEK is compatible with the current iPod Nano, Classic, Touch and iPhone models up to the iPhone 4S. The iPhone 5 is currently not supported.

When an Apple device is connected, the iPhone/iPod source can be selected using the **SRC** button. Album, track and artist selections can be made from the G-DEK or directly from the iPhone/iPod itself. Any selections will be displayed on both the iPhone/iPod screen and the G-DEK display.

The iPod/iPhone battery will be charged while it is connected to the G-DEK.

The G-DEK is supplied with two 'nests' to suit the iPhone 4/4S and the iPod Nano 3, 4 and 5. For other models simply remove the nests and rest the device on the rubber pad inside the G-DEK Multimedia Hub.

Switch the G-DEK on using the  button. Plug the Apple connector into the iPhone/iPod. The excess cable on the Apple connector can be inserted into the slot at the end of the

iPod cavity. The G-DEK will automatically select the iPhone/iPod input source and will begin playing the last played song or movie on your device. The iPhone/iPod media can also be manually selected using the **SRC** button.

Searching and Selecting your Music

Although music and videos on your iPhone/iPod can be selected either directly from the device or from the controls on the G-DEK, we recommend you always use the G-DEK controls to make your selections so that your iPhone/iPod remains safely protected inside the media hub.

If switching back and forth between your iPod/iPhone and the G-DEK to make your selections, media data synchronisation issues may occur. This could result in a mismatch between the currently playing song/movie and the title being displayed on the G-DEK. If this occurs simply disconnect then reconnect your iPod/iPhone. To prevent this from occurring we recommend you use only the G-DEK controls to make your selections.

NOTE: While in the iPod/iPhone mode, the **INT**, ▲ and ▼ buttons on the G-DEK have no function.

SONG Search

1. Press the selector knob. 'SEARCH' is displayed.
2. Rotate the knob to select 'SONG' then press to confirm your selection. The title of the first song is displayed.
3. Rotate the knob to select the desired song then press to confirm your selection.

The song will begin playing.

ALBUM Search

1. Press the selector knob. 'SEARCH' is displayed.
2. Rotate the knob to select 'ALBUM' then press to confirm your selection. The title of the first Album is displayed (album titles are displayed in alphabetical order).
3. Rotate the knob to select the desired Album then press to confirm your selection. The first song on the selected album is displayed.
4. Rotate the knob to select the desired song then press to confirm your selection.

The song will begin playing.

ARTIST Search

1. Press the selector knob. 'SEARCH' is displayed.
2. Rotate the knob to select 'ARTIST' then press to confirm your selection. The title of the first Artist is displayed (artist names are displayed in alphabetical order).
3. Rotate the knob to select the desired Artist then press to confirm your selection. The first song from the selected artist is displayed.
4. Rotate the knob to select the desired song then press to confirm your selection.

The song will begin playing.

PLAYLIST Search

1. Press the selector knob. 'SEARCH' is displayed.
2. Rotate the knob to select 'PLAYLIST' then press to confirm your selection. The title of the first Playlist is displayed (playlists are displayed in alphabetical order).
3. Rotate the knob to select the desired Playlist then press to confirm your selection. The first song in the selected playlist is displayed.

4. Press the knob to begin playing songs in the playlist or rotate the knob to select a specific song then press to confirm your selection.

The song will begin playing.

To pause the current song, press the  button. Press the  button again to restore play.

VIDEO Search

1. Press the selector knob. SEARCH is displayed.
2. Rotate the knob until VIDEO is displayed then press to confirm your selection. The title of the first video is displayed.
3. Rotate the knob to select the desired Video title then press to confirm your selection.

The video will begin playing and the image will appear on the attached video screen.

While a video is playing, press the  button to pause the video. Press the  button again to restore play.

PLAYING USB/SD MULTIMEDIA FILES

The G-DEK can play multimedia files directly from an SD card or a USB memory stick. The following file formats are supported:

AUDIO	MP3, WMA
VIDEO	AVI (.avi/.divx), MPG (.mpg/.mpeg), DAT (.dat), FLV (.flv), RMVB (.rm/.rmvb/.rmv/.ra), VOB (.vob), MP4/MOV (.mp4/.mov), OGG (.ogg), ASF (.asf)

For more details on supported file formats please refer to the Specifications on page 29.

NOTE: GME accepts no responsibility for data lost on USB, SD cards or devices connected to the G-DEK.

General MP3 File Information

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 single SD card or USB memory drive.

The G-DEK will play MP3 and WMA files. While playing, the display will continuously cycle the track number and playing time, the filename and the song title. If the file is an MP3 file, the **MP3** icon will be displayed.

USB Flash Memory

The G-DEK accepts USB flash memory drives up to 32GB in size. The G-DEK does not support portable USB hard drives or other USB devices that draw significant power resources from the USB port.

When a USB flash memory drive is first inserted into the USB port the G-DEK will automatically switch to the USB input and begin playing the media on the memory drive.

To select the USB input manually, briefly press the **SRC** button until the  icon is displayed.

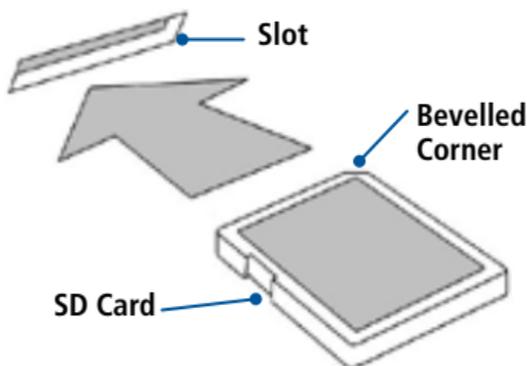
SD Card

The G-DEK accepts SD cards up to 32GB in size.

To install an SD card, hold the card with the label facing upwards and the bevelled corner towards the G-DEK and carefully insert it into the slot until it clicks into place.

The card can only be inserted one way. Do not force it. If inserted correctly it should easily fit into the slot and lock into place.

To remove the card, press the card inwards until it clicks, then release it. Pull the card out of the slot.



When an SD card is first installed the G-DEK will automatically switch to the SD input and begin playing the media on the card.

To select the SD input manually, briefly press the **SRC** button until the  icon is displayed.

Connecting a TV/Video Monitor

Connecting a video monitor or TV to your G-DEK makes viewing and selection of multimedia files much easier, especially when used in conjunction with the remote control. Please refer to the installation instructions for connection details.



Multimedia Controls

Playback Pause

To pause the playback, briefly press the  button. Press the  button again to resume playback.

Fast forward/Rewind

To select and play the next track, briefly press the  button.
To select and play the previous track, briefly press the  button.

To advance through the present track at high speed, press and hold the  button. To rewind the present track at high speed press and hold the  button.

To continue normal play speed at the current position, briefly press the  button.

Intro Scan

The Intro Scan feature cycles through the entire library of songs playing the first 10 seconds of each track. To select Intro Scan press the **INT** button. 'INTRO' will be displayed along with the track number and elapsed time for each song.

To stop the Intro Scan and continue playing the current track, press the  button.

Repeat Play

The Repeat function allows you to either repeat the current track, repeat the current folder or repeat all the songs in your music library.

Briefly press the **RPT** button to select the required option.

- > Press once to repeat the current track. 'RPT ONE' is displayed and the  icon is visible.
- > Press again to repeat the current folder. 'RPT FOLD' is displayed and the  icon is visible.
- > Press again to repeat all the songs. 'RPT ALL' is displayed and the  icon is visible.
- > Press again to cancel the Repeat function. 'RPT OFF' is displayed the  icon disappears.

Random Play

Random play will select and play songs at random.

Briefly press the **RDM** button. 'RANDOM' will be displayed and the  icon will appear.

To cancel Random Play, press the **RDM** button again. 'NORMAL' will be displayed and the  icon will disappear.

Search

The G-DEK allows you to search for specific files on the media source. To access the Search function, briefly press the selector knob. 'MUSIC' will be displayed. Rotate the knob to select from 'MUSIC', 'VIDEO' or 'PICTURES'.

To exit the Search Menu at any time press the  button.

Searching Music

Rotate the knob to display 'MUSIC' then press the knob. Rotate the knob to choose from Track Search or Root Search. 'TRK SCH' or 'ROOT SCH' will be displayed.

Track Search

While in 'MUSIC' search mode, select 'TRK SCH' and press the knob.

For tracks 1-9 simply rotate the knob to select the required track number then press the knob to play that track.

For tracks 10-999, rotate the knob to select the first (left hand) digit in the track number then wait. The digit on the display will move left. Repeat for the remaining digits until the required track number is displayed then press the knob to play that track.

Example 1: To select track 5

Select the 'TRK SCH' mode. **TRK -- --** is displayed.

Rotate the knob to select '5'. **TRK -- -- 5** is displayed.

Press the knob to play **track 5**.

Example 2: To select track 124

Select the 'TRK SCH' mode. **TRK -- --** is displayed.

Rotate the knob to select '1'. **TRK -- -- 1** is displayed.

Wait. The display changes to **TRK -- 1 ☆**

Rotate the knob to select '2'. **TRK -- 1 2** is displayed.

Wait. The display changes to **TRK 1 2 ☆**

Rotate the knob to select '4'. **TRK 1 2 4** is displayed.

Press the knob to play **track 124**.

Root Search

Use Root Search to select from folders in the root directory of your media storage device then select individual tracks within those folders.

While in 'MUSIC' search mode, select 'ROOT SCH' and press the knob. The number of folders in the root directory of your media storage device is displayed.

Rotate the knob to display a folder number, then wait. The folder's name will be displayed. Repeat until the desired folder is selected then press the knob. The number of tracks within that folder is displayed. Rotate the knob to select a track, then wait. The name of the track will be displayed. Repeat until the desired track is displayed then press the knob to play that track.

Picture Search

The G-DEK will display photos/pictures from the USB media or SD card onto a connected monitor or TV.

To select photos or images from your media device, press the selector knob to enter the Search mode then rotate the knob until 'PICTURES' is displayed. Press the knob to select.

If no track is selected the photos will be displayed on the monitor in a slide show.

To manually step forward or backwards through the slide show briefly press the  or  buttons. To pause the slide show, press the  button. Press the  button to resume the slide show.

NOTE: To adjust the timing of the slide show, refer to the VIDEO SETUP option in the 'System Setup' menu.

To repeat pictures in the slide show, press the **RPT** button.

- > Press once to repeat (hold) the current picture. 'RPT ONE' is displayed and the  icon is visible.
- > Press again to repeat the pictures in the current folder. 'RPT FOLD' is displayed and the  icon is visible.
- > Press again to repeat all the pictures. 'RPT ALL' is displayed and the  icon is visible.
- > Press again to cancel the Repeat function. 'RPT OFF' is displayed the  icon disappears.

To manually select individual photos while in Picture mode, press the knob. 'TRK SCH' is displayed. Press the knob to select it then rotate the knob to display the required picture/track number. Press the knob again to select it. The selected picture will be displayed on the monitor.

To return to Music, press the knob to enter the Search mode then rotate it to select MUSIC.

PUBLIC ADDRESS (PA) SYSTEM

The G-DEK has a built-in Public Address (PA) system which can be used to make announcement over the speakers. This PA system is especially useful for G-DEK installations on commercial vessels or coaches.

The operation of the PA system requires the addition of an MC517BPA microphone. The microphone must be plugged into the rear Microphone input.

Operating the PA System

1. To make an announcement over the speakers, press the **PTT** button on the microphone. The current audio source will be muted and 'MIC' will appear on the display.
2. Hold the microphone 5 - 8 cm from your mouth and speak across the microphone in a normal voice. Your voice will be heard in the speakers.
3. To control the microphone gain to the speakers, adjust the selector knob while speaking into the microphone. During this time 'MIC-V' will be displayed along with the selected microphone gain level. The microphone level is adjustable from '00' (minimum) to '20' (maximum).

NOTE: When the PTT is released, the adjusted microphone gain setting will be stored for future PA announcements. The microphone gain setting is separate from the normal volume adjustment.

Preventing Audio Feedback when using the PA Mode

Setting the microphone gain too high may cause audio feedback resulting in a loud squeal in the speakers. If this happens, reduce the microphone gain until the squeal stops. To reduce audio feedback even further, it is recommended to position the speakers so that the sound is projected away from the microphone rather than towards it.

REMOTE CONTROL

The GME G-DEK includes a wireless remote control (RCU G-DEK). The remote control makes adjusting the G-DEK much easier, especially when selecting USB or SD card media files or viewing movies and pictures. The remote will permit the direct control of all major G-DEK functions from a distance of up to 3 metres.

Before initial operation:

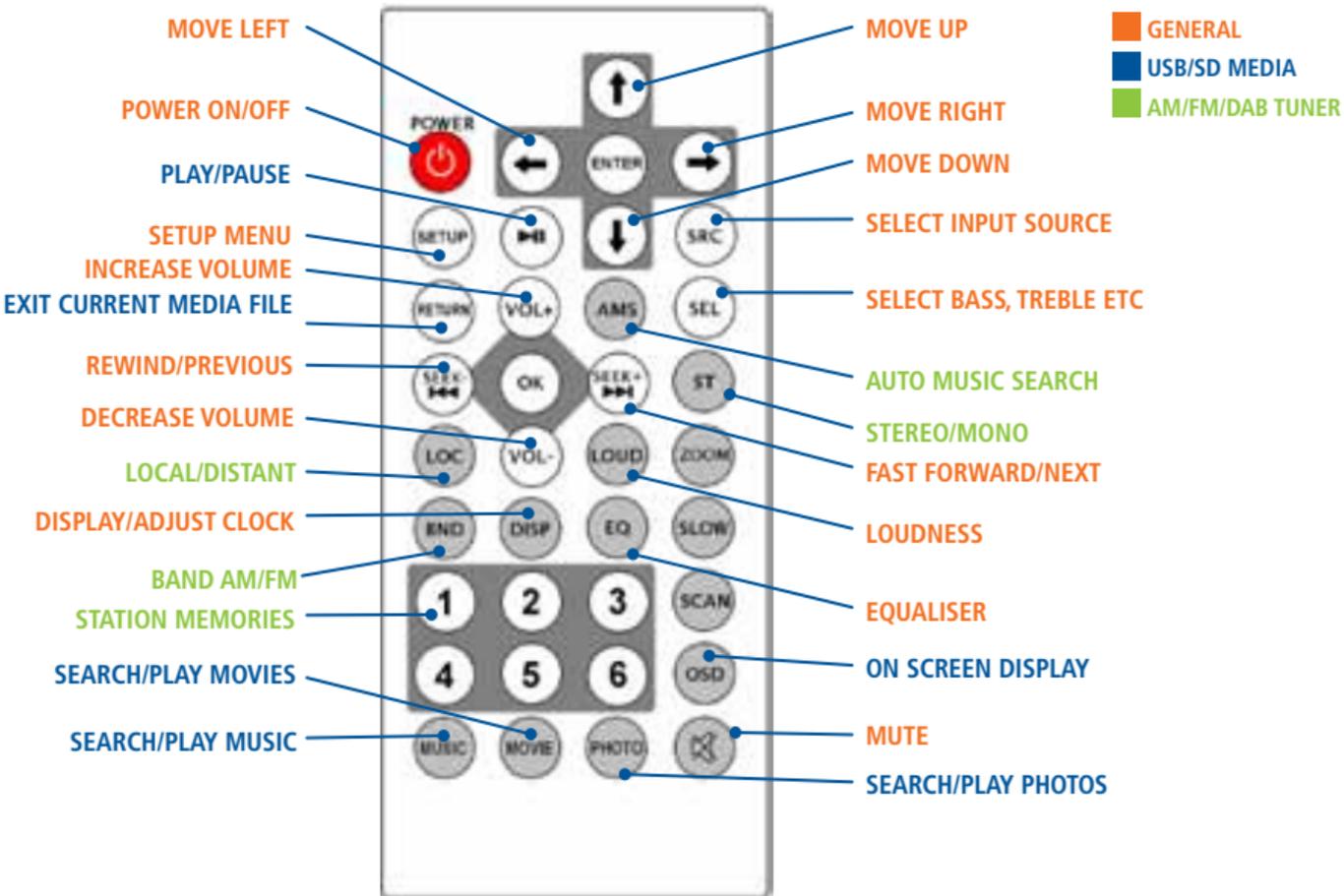
1. Ensure the remote control sensor is connected to the G-DEK as shown in the connections diagram.
2. Ensure the battery is installed and any battery protection tab is removed from the battery compartment in the end of the remote handset.

Point the remote handset at the G-DEK remote sensor and select the required option on the keypad.

Cautions

- The remote control handset is not waterproof and should be kept well away from 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.

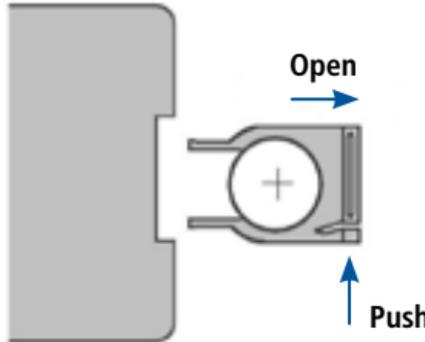
The descriptions in the remote diagram have been colour coded to show which operating modes the various controls are most commonly associated with.



REMOTE CONTROL BATTERY REPLACEMENT

Should the working range of the remote handset become reduced, or functions fail to operate correctly, the battery should be replaced:

1. Turn the remote over, insert a thumb nail between grooves on the battery cover latch and slide the lever to the right to 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.



FUNCTION MENU

The Function menu allows adjustment of the G-DEK's general user functions. A list of the configurable options is shown.

To enter the Function menu, press and hold the **selector knob**. The first available menu option will be displayed.

Briefly press the knob to cycle through each of the available menu options.

Rotate the knob to change the setting for the displayed option then press the knob to accept the change.

To exit the menu, briefly press the  button or simply wait a few seconds for the menu to time-out.

FUNCTION	OPTION	DESCRIPTION
Beep	On, Off	Enable, disable button beeps
Volume	Last, Default	Set preset ON volume level
Clock	On, Off	Enables clock on display
Clock format	12, 24	Sets 12 or 24 hr clock display

SYSTEM SETUP

The System Setup allows access to the G-DEK's full system configuration menu. To access the System Setup menu press the **SETUP** button on the remote control. The following options are available.

MAIN MENU	SUB MENU	OPTIONS
SYSTEM SETUP	TV System	NTSC PAL AUTO
	TV Type	4:3 PS (Pan & Scan) 4:3 LB (Letter Box) 16:9 (Widescreen)
	Default	Restore
LANGUAGE SETUP	OSD Language	English, Spanish, Chinese, French, German, Portuguese
VIDEO SETUP	Brightness Contrast Hue Saturation Sharpness	Level Adjustment Level Adjustment Level Adjustment Level Adjustment Level Adjustment
	Photos Interval	5 Sec, 20 Sec, 10 Sec, 40 Sec

OPTIONAL ACCESSORIES

High quality GME accessories available are:

- Marine speakers
- Comprehensive range of AM/FM and DAB antennas
- Interface cable for MP3 devices
- Wired remote 5 m extension cable
- MK008 flush mount kit
- MK010 flush mount upgrade kit (upgrade from a GD96XX installation).

These accessories are available through your local GME dealer. 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 printed on the back page of this manual. International customers should visit: www.gme.net.au/export for details of your local importer.

*iPod is a trademark of Apple Computer Inc., registered in the U.S. and other countries.

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 on our website.

SPECIFICATIONS

FM Radio

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

AM Radio

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

DAB Radio (GM550)

Frequency Range:	BAND III 174 -240 MHz
Sensitivity (20 dB S/N):	-95 dBm Typical
Station Memories:	18

NOTE: Specifications are typical unless otherwise indicated and may be subject to change without notice or obligation.

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

Video Player

Aspect Ratio:	4:3 Letter Box 4:3 Pan & Scan 16:9
Video Output Level:	1.00 volt Peak to Peak (75 Ohms Imp)
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:	211 (W) x 50 (H) x 190 (D) mm
Weight:	Approx 400 g
Supply Current:	7 amps (max)

MULTIMEDIA SUPPORT

AUDIO

Format	Bit Rate	Sampling Rate
MP3 WMA7, WMA8, WMA9 (CBR, VBR)	16kbps – 320 kbps 16kbps – 320 kbps	8 – 48kHz 8 – 48kHz

VIDEO

Format	Video Codec	Audio Codec	Resolution
AVI (.avi, .divx)	MP4V DIVX3.xx/4.xx/5. xx/6.xx Xvid MPEG-1	Dolby Digital (AC3) WMA/PCM/LPCM AAC-LC (2ch) MPEG-Audio (MP1/MP2/MP3)	720 x 480 720 x 576 (30fps)
MPG (.mpg, .mpeg)	MPEG-1/MPEG-2	Dolby Digital (AC3) LPCM MPEG-Audio (MP1/MP2/MP3)	720 x 480 720 x 576 (30fps)
DAT (.dat)	MPEG-1/MPEG-2	Dolby Digital (AC3) LPCM MPEG-Audio (MP1/MP2/MP3)	720 x 480 720 x 576 (30fps)
FLV (.flv)	H.263	LPCM/MP3 AAC-LC (2ch)	720 x 480 720 x 576 (30fps)
RMVB (.rm, .rmvb, .rmv, .ra)	RV8/9/10	COOK AAC-LC (2ch) Dolby Digital (AC3)	1280 x 720 (30fps)
VOB (.vob)	MPEG-1/MPEG-2	Dolby Digital (AC3)	720 x 480 720 x 576 (30fps)
MP4 / MOV (.mp4, .mov)	MP4V	Dolby Digital (AC3) WMA/LPCM AAC-LC(2ch) MPEG-Audio (MP1/MP2/MP3)	720 x 480 720 x 576 (30fps)
OGG Vorbis (.ogg)		OGG	
ASF (.asf)		WMA, WMA7, WMA8, WMA9 (CBR, VBR)	

NOTE: Specifications are typical unless otherwise indicated and may be subject to change without notice or obligation.

STANDARD COMMUNICATIONS CONTRACT WARRANTY AGAINST DEFECTS

This warranty against defects is given by Standard Communications Pty Ltd ACN 000 346 814 (We, us, our or GME). Our contact details are set out in clause 2.7. This warranty statement only applies to products purchased in Australia. Please contact your local GME distributor for products sold outside of Australia. Local distributor details at www.gme.net.au/export.

1. Consumer Guarantees

- 1.1 Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
- 1.2 To the extent we are able; we exclude all other conditions, warranties and obligations which would otherwise be implied.

2. Warranty against Defects

- 2.1 This warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.
- 2.2 We warrant our goods to be free from defects in materials and workmanship for the warranty period (see warranty table) from the date of original sale (or another period we agree to in writing). Subject to our obligations under clause 1.2, we will at our option, either repair or replace goods which we are satisfied are defective. We warrant any replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.
- 2.3 To the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited
- (a) in the case of goods we supply, to any one of the following as we decide -

- (i) the replacement of the goods or the supply of equivalent goods;
- (ii) the repair of the goods;
- (iii) the cost of repairing the goods or of acquiring equivalent goods;
- (b) in the case of services we supply, to any one of the following as we decide
- (i) the supplying of the services again;
- (ii) the cost of having the services supplied again.
- 2.4 For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three months from the date of the original repair. We agree to re-repair or replace (at our option) any materials or workmanship which we are satisfied are defective.
- 2.5 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. If we are

satisfied that the complaint is justified, and as our sole liability to you under this warranty (to the extent permitted at law), we agree to supply those services again at no extra charge to you.

2.6 To make a warranty claim you must before the end of the applicable warranty period (see warranty table), at your own cost, return the goods you allege are defective, provide written details of the defect, and give us an original or copy of the sales invoice or some other evidence showing details of the transaction.

2.7 Send your claim to:

Standard Communications Pty Ltd.
PO Box 96, Winston Hills, NSW 2153, Australia.
Tel: 1300 463 463
Email: servadmin@gme.net.au

2.8 If we determine that your goods are defective, we will pay for the cost of returning the repaired or replaced goods to you, and reimburse you for your reasonable expenses of sending your warranty claim to us.

3. What this warranty does not cover

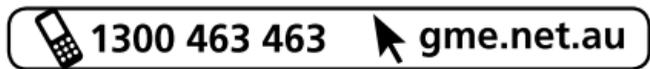
3.1 This warranty will not apply in relation to:

- (a) goods modified or altered in any way;
- (b) defects and damage caused by use with non Standard Communications products;
- (c) repairs performed other than by our authorised representative;
- (d) defects or damage resulting from misuse, accident, impact or neglect;
- (e) goods improperly installed or used in a manner contrary to the relevant instruction manual; or
- (f) goods where the serial number has been removed or made illegal.

4. Warranty period

4.1 We provide the following warranty on GME and Kingray products. No repair or replacement during the warranty period will renew or extend the warranty period past the period from original date of purchase.

PRODUCT TYPE	WARRANTY PERIOD
Entertainment systems	2 years



A division of Standard Communications Pty Ltd.

Head Office: PO Box 96, Winston Hills, NSW 2153, Australia.

New Zealand (09) 274 0955

All other international enquiries email: **export@gme.net.au**

Part Number: 310604 Drawing Number: 46959-1