



ACIES™

GT9600

DIVERSITY DIGITAL TV RECEIVER



INSTRUCTION MANUAL

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

FEATURES

- Fully MPEG-2 and DVB-T compliant
- Specifically designed for mobile digital terrestrial reception.
- Twin diversity tuners capable of receiving signal at speeds up to 150 Km/per hour.
- Conformally coated PCB
- Infrared remote control
- Extension infrared eye for concealed installations
- Tough exterior construction with an easy wall mounting option.
- Simple plug and play installation
- Supports 4:3 and 16:9 formats
- S-Video as well as Composite outputs
- Slimline design 250 (w) x 150 (d) x 35 (h) mm
- Electronic program guide

ACCESSORIES SUPPLIED

The GME ACIES™ Digital TV Receiver is supplied with the following accessories in the standard package:

- Digital Receiver
- Infrared Remote Control Handset
- Remote Control Receiver Extension Eye
- Receiver to Monitor Interconnection Cable
- DC Power Cable
- Mounting hardware (4 brackets)
- Owner's Manual

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

OPTIONAL ACCESSORIES

- **AE960** – Powered diversity antennas for on windscreen installations.
- **AE961** – Stainless steel diversity antenna for mobile applications.
- **AE961B** – Black diversity antenna for mobile applications.
- **AE341T** – Diversity antennas for all Marine grade installations.
- **MDA20H** – Low noise masthead amplifier to suit AE341T.
- **PIK960** – Power Injectors to suit MDA

- **PSK18KR** – 240 V AC to 15 V DC power adaptor for mains powering.
- **VC45** – 24 V DC to 13.8 V DC power converter

INTRODUCTION

Congratulations on the purchase of your GME ACIES™ Diversity DVB-T digital receiver.

The ACIES™ digital receiver overcomes the age old problem of TV reception for mobile installations. By drawing on over 45 years experience in television signal engineering and the latest digital reception techniques, GME's ACIES™ compact digital receiver, provides as the name suggests, clear, focussed pictures whether parked, moored or underway*.

GME's ACIES™ diversity receiver contains two integrated tuners both set to the same frequency. A Digital Signal Processor (DSP) constantly monitors information from both tuners to generate the best signal and consequently the best possible picture at all times.

When first installing the GME ACIES™ receiver or when moving to a new location, it will be necessary to undertake an auto Channel search. See page 5 for details.

The GME ACIES™ receiver package operates from the vessel's standard 12 Volt system and is supplied complete with mounting hardware, all interconnection cables and remote control. For optimum performance, GME strongly recommends that a matching pair of AE341T custom external aerials be used for marine installations, AE960 for automotive use.

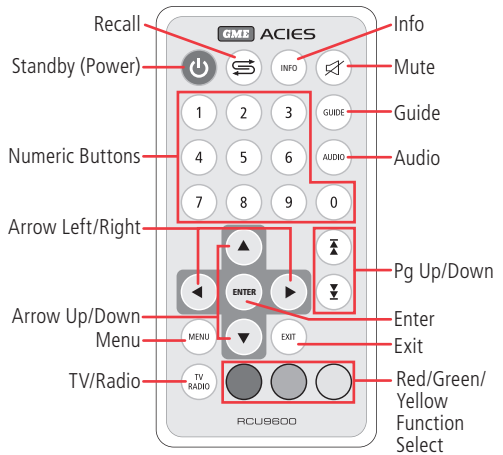
Particular care should be taken to follow the installation diagram on page 7 of this manual. The installation and tuning process is relatively straight forward, however, for

larger vessels where multiple receivers may be required, GME strongly recommends installation be undertaken by an appropriately qualified electronics technician.

GME offers a full range of accessories, including splitters and signal amplifiers to facilitate such installations.

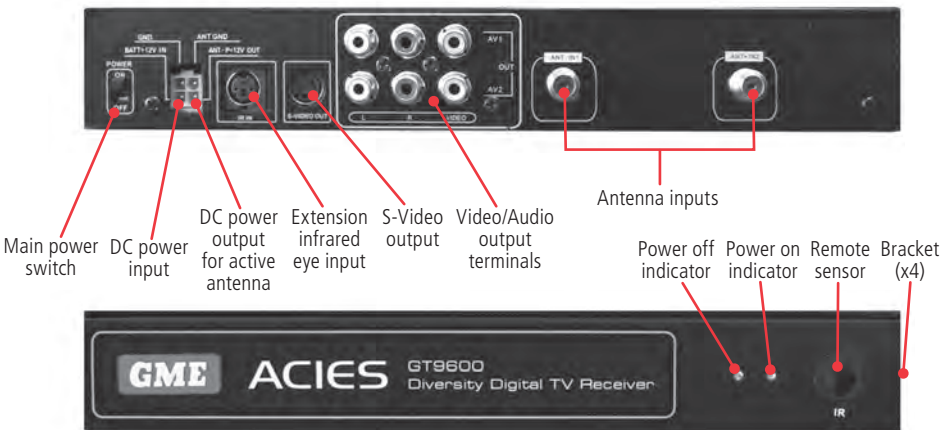
*Within the digital television transmission footprint

REMOTE CONTROL BUTTONS



Remove the plastic battery insulator on the remote control prior to first use.

UNIT CONNECTIONS & FEATURES



REMOTE CONTROL FUNCTIONS

STANDBY (POWER)

Switches receiver on from standby or off from standby.

NUMERIC BUTTONS

Selects channels or enters programming parameters.

ARROWS LEFT/RIGHT

In normal operating mode – increases or decreases volume.

In menu mode – moves highlighted cursor left or right.

ARROWS UP/DOWN

In normal operating mode – channel up/down selection.

In menu mode – moves highlighted cursor up or down.

MENU

Displays main menu on the screen.

TV/RADIO

Switches receiver between TV and Radio mode.

RED/GREEN/YELLOW

Function selection via menu.

EXIT

Cancels menu selection and returns to the normal viewing mode.

ENTER

In normal operating mode – displays channel list.

In menu mode – confirms selected menu function.

PAGE UP/DOWN

Moves the cursor to the next or previous page in the Channel Manager and Favourites Manager menu.

AUDIO

Permits selection of left/right channels and stereo.

GUIDE

Displays TV or Radio program guide (if available).

MUTE

Disables or enables audio.

INFO

Displays current channel status/information.

RECALL

In normal operating mode – returns to last viewed channel.

BASIC OPERATION

GENERAL FUNCTIONS

POWER ON/OFF

Slide the Main **Power Switch** located on the rear of the receiver to the ON position. Initially both the RED and GREEN LED indicators will illuminate. Once the receiver has locked in a signal, the RED indicator will turn off and a picture will be displayed on the monitor.

STANDBY ON/OFF

To turn the receiver OFF, momentarily press the red **POWER** button on the remote control handset. The GREEN LED indicator will turn off and the RED LED indicator will illuminate.

To turn the receiver ON, momentarily press the red **POWER** button on the remote control handset. The RED LED indicator will turn off and the GREEN LED indicator will illuminate.

MEMORY

The GME ACIES™ receiver has a non-volatile memory; consequently all programmed data is retained even when the power to the receiver has been completely switched off.

VOLUME

Press and hold the ► button to increase the audio level.

Press and hold the ◀ button to decrease the audio level.

MUTE

Momentarily press the **MUTE** button to turn the audio off (the screen will display 'MUTE')

To restore the audio momentarily press the **MUTE** button, the sound will be returned at the previous level.

CHANNEL SELECTION

Press the ▲ or ▼ buttons to sequentially select channels.

INPUT & OUTPUT CONNECTIONS

The GME ACIES™ receiver has a number of rear panel inputs and outputs (see page 7 for illustration).

MENU GUIDE

MAIN MENU

Press the **MENU** button to display the main menu.

- To select the desired sub-menu use the ▲ ▼ ◀ ▶ buttons.
- Press **ENTER** to confirm the selection.
- Press the **MENU** button to exit this menu, or press the **EXIT** button to return to the normal viewing mode.

AUTOMATIC CHANNEL SEARCH

Selecting the Channel Search mode will scan all available channels and load them into the receiver's non-volatile memory.

To commence an auto channel search:

- Press the **MENU** button.
- Move the cursor to 'CHANNEL SEARCH'.
- Press **ENTER** to confirm.
- Press the ▲ or ▼ buttons to select country area, confirm selection by pressing **ENTER**.

Note: This process may take several minutes, a bar graph indicator and percentage completed is displayed on the screen.

Note: When you travel long distances between different destinations, it is recommended that you complete a new 'Automatic Channel Search', to ensure you receive the maximum number of channels available.

Once the 'Automatic Channel Search' has been completed, there are 3 options available for the user to view these channels:

OPTION 1 - STANDARD

The channels can be viewed as they are by using the ▲ or ▼ buttons. As the channel is changed from one to another, content information can be viewed briefly at the bottom of the screen.

OPTION 2 - CHANNEL MANAGER

Once the 'Automatic Channel Search' has been completed, the 'Channel Manager' permits simple manipulation or modification of the channel data.

- Press the **MENU** button on the remote control.
- Press the ◀ or ▶ buttons to move the highlighted cursor, selecting 'Channel'.
- Press the ▲ or ▼ buttons to move the highlighted cursor to 'Channel Manager'.
- Press **ENTER** to select.
- Press the ◀ or ▶ buttons to rename, move, skip, or delete a channel.
- Once you have selected the relevant symbol, the ▲ and ▼ buttons are then used to select the channel to which you wish to apply the symbol.

For example, if you wish to 'Delete' unwanted channels from the list:

1. Highlight the 'Delete' symbol use the ▲ or ▼ buttons to select the channel you wish to delete.
2. When you have the channel highlighted, press the **ENTER** button an 'X' will appear, the channel will go blank.
3. Repeat this process until you have the 'X' against all the channels you wish to delete from the list. Press the **EXIT** button once, the data is saved.
4. The new channel manager will then only contain the channels you have not deleted.
5. By accessing the 'Channel Manager' again and utilising the other symbols you can rename, move the order or skip the channels that are left in the 'Channel Manager' list.
6. If you wish to view the deleted channels again, you will need to perform another 'Automatic Channel Search'.

If channels have been selected in the 'Channel Manager' list from an 'Automatic Channel Search' (And you are still within the same digital transmission footprint) and another 'Automatic Channel Search' is performed, the channels that were previously in the 'Channel Managers' list will be retained at the top of the list followed by the newly scanned channels.

If an 'Automatic Channel Search' is performed and there is no digital signal present, the last 'Channel Manager' list will be retained in the memory.

OPTION 3 - FAVOURITE'S MANAGER

Once the 'Automatic Channel Search' has been completed, the 'Favourites Manager' permits the storage of channels into 16 specific categories, enabling the operator swift and simple access to favourite channels.

- Press the **MENU** button.
 - Move the highlighted cursor to select 'Channel'.
 - Use the ▲ or ▼ buttons to move the highlighted cursor to 'Favourites Manager'.
 - Press **ENTER** to select.
 - Press the ◀ or ▶ buttons to select 1 of the 16 'Favourites' lists with corresponding symbols that is relevant for the favourite channels.
 - For example, select 'Leisure' (Coffee Cup symbol).
1. Use the ▲ or ▼ buttons on the remote to select the relevant channel, press the **ENTER** button once. The symbol (Coffee Cup) will appear on the left hand side of the channel. If you wish to add more than one channel to this group, repeat this process again.
 2. To access the favourite groups, press the **GUIDE** button on the remote control, then select 'Fav List' which is done by pressing the **GREEN** button on the remote control.
 3. The 'Fav Type List' menu will then appear, (Including 'All Channel List' which is the standard list received from completing the original 'Automatic Channel Search' and can be selected to view the channels as per option 1), using the ▲ or ▼ buttons on the remote control select the relevant 'Favourites' list and select or press **ENTER**.
 4. Press the **EXIT** button once to remove the menu page. Use the ▲ or ▼ button on the remote control to provide access to only the channels in that particular 'Favourites' list.
 5. To access a new 'Favourites' list or return to the 'All Channel List', simply repeat steps 2, 3 and 4.

Note: Accessing and making changes in the 'Channel Manager' will override anything previously preset in the 'Favourites Manager'.

PROGRAM GUIDE

The integrated electronic program guide (EPG) provides information such as program listings, starting and ending times.

Press the **GUIDE** button to access the program guide display sub menu:

Navigate – Using the ◀ or ▶ buttons, programmed guides can be viewed for up to 4 days.

Channel Change – Using the ▲ or ▼ buttons, the viewing channel may be changed.

Favourite List – Using the **GREEN** function button, channels selected for the favourites list will be displayed.

Reserve – Using the **YELLOW** function button, pre-selected programs may be viewed.

Note: This service is not offered by all TV stations, Data will only be available when it is included in the transmission.

SETTINGS

To access the receiver's operational set up, press **MENU**, then use the ◀ or ▶ buttons to select 'SETTING'.

Follow the on screen prompts to adjust settings as required.

Timer – sets various program timing options within receiver.

Time Setting – sets either GMT or local times.

Factory Default – returns all settings to original factory values.

TV Setting – sets TV operating mode and aspect ratio.

Accessory – password protected, non user setting (factory use only).

OSD Setting – sets contrast level of on screen display and duration of message display.

Language – sets audio and on screen information language.

TELETEXT GUIDE

Teletext is an information retrieval service provided by television broadcast companies. Teletext offers a range of text-based information, including national, international and sporting news, weather and TV schedules. Subtitle (or closed caption) information is also transmitted within the teletext signal.

The GME ACIES™ Receiver features an integrated Teletext decoder, to access the Teletext service, press the **YELLOW** function button on the remote control handset, then press **ENTER** to confirm selection. To exit the Teletext mode, press **EXIT**.

To access specific Teletext pages, use the numeric or ▲ or ▼ buttons.

Note: Teletext is transmitted on Channel 7 (and network affiliates) in Australia. This service may not be available in all areas.

Some Teletext pages may have been deleted by the provider, others maybe extremely slow in downloading due to poor quality transmissions.

GAMES

The GME ACIES™ offers 3 computer style games for entertainment. These are Tetris, Snake and Sokoban.

To access the games menu:

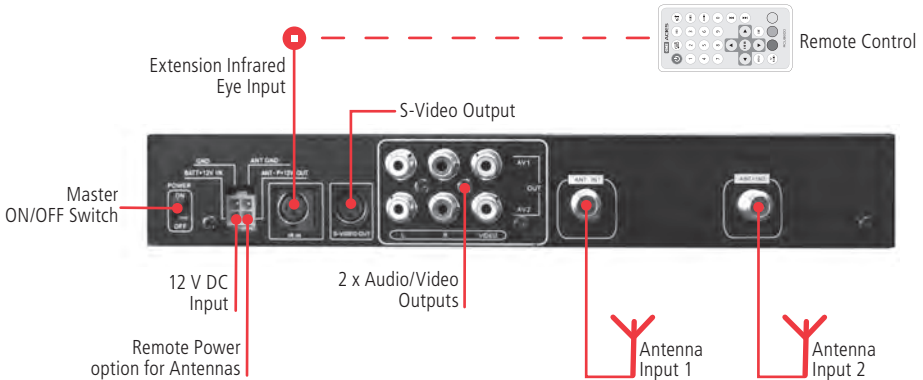
- Press the **MENU** button, then move the highlighted cursor to GAMES.
- Press **ENTER** to confirm choice.
- Follow the on screen instructions and use the ▲▼◀▶ buttons to operate and play the game.

RADIO CHANNELS

Depending on your location, GME ACIES™ may receive a number of radio channels that are transmitted over on certain TV channels. (Currently the ABC and SBS Networks only).

You can access these radio channels by pressing the **TV/RADIO** button on the remote, then select the wanted radio channel using the ▲ or ▼ buttons. A quick press of the **TV/RADIO** button on the remote will toggle you back to the TV channels.

INSTALLATION



TROUBLESHOOTING

PROBLEM	CHECK ITEM
Does not display any message at front panel	Check the main power is plugged into a suitable power outlet. Check the main power is on.
No video and no audio	Check antenna. Based on signal level indicator in channel search menu adjust antenna position. Check if the cable/receiver and receiver/monitor are connected correctly.
Poor picture quality and blocking error are displayed	Change the antenna position. If antenna output is weak, connect to signal amplifier. If antenna is small, change it to the bigger.
Remote control does not operate	Check battery. Make sure the remote sensor window is not under strong fluorescent lighting.

SPECIFICATIONS

GENERAL

DC supply input:	11 – 16 Volts Negative Ground
Power consumption:	Approximately 10 W
Transport stream:	ISO/IEC 13818
Profile & level:	MPEG-2 MP @ ML
Input frequency:	VHF, UHF, 174 - 862 MHz
Input impedance:	75 Ω unbalanced
COFDM spectrum:	2k and 8k mode
Guard interval:	1/32, 1/16, 1/8 and 1/4
Demodulation method:	QPSK, 16QAM, 64QAM
Video resolution:	720 x 576 (PAL), 720 x 480 (NTSC)
Aspect ratio:	4:3, 16:9

AUDIO

Audio decoding:	MPEG-1 layers 1 and 11
Audio type:	Single channel, dual channel, joint stereo, stereo.
Audio sampling rate:	32, 44.1 and 48 kHz

OUTPUTS

Composite video output:	2 x RCA
Audio:	4 x RCA
S-Video output:	1 x S-Video connector

PHYSICAL

Dimensions:	370 mm (W) x 100 mm (H) x 235 mm (D)
Weight:	Approximately 1.6 Kg

***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 GT9600 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.

PRECAUTIONS

Never attempt to remove the receiver covers or undertake repairs. Should any maintenance be required it should only be performed by a GME approved service centre.

Do not connect or disconnect any cables without first turning off the receiver's DC supply.

Do not expose the receiver to areas of extreme temperature, high humidity, dust, steam, water, petroleum products, smoke or direct sunlight.

Use only GME specified adaptors, power sources, amplifiers or aerials.

Never use thinners or other chemical reagents to clean the receiver, should cleaning be necessary use only a soft cloth.

Turn main power off and disconnect DC supply when the receiver is not being used for extended periods of time.



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