

Digital to Analog Converter Box MG2000

Operation Guide v1.01



MicroGEM™
MicroGEM Corporation

MicroGEM Corporation

36 West 44th Street

Suite 711

New York, NY 10036

www.microgem.net

Technical Support Center

Phone: 201-244-4212

Support by phone available Monday- Friday 8AM to 5PM Eastern Standard Time

E-mail: Support@microgem.net

Product Registration Online at www.microgem.net
Spanish user guide available online

Product Return: Please note that this unit should not be returned to the retailer in the event of a defective unit. Please contact technical support during the hours listed above.

***Attention:** This unit cannot be returned for cash or store credit if purchased using a government coupon. Defective units can be repaired or exchanged. For more information regarding this unit and the governmental coupon program, please log on to <http://www.ntiadt.gov/>

MG2000 Converter Box Manual

- I. Specifications
- II. Remote Control
- III. MG2000 Setup
 - a. Basic Setup
 - b. Box Configuration
- IV. Menu Features
 - a. Parental Controls
 - b. Digital Closed Caption
 - c. Language
 - d. Timer

Thank you for purchasing the MG2000 Converter Box. This unit will enable your television to receive digital broadcasts. The MG2000 Converter Box receives and translates digital broadcasts into analog signals that are compatible with any analog television. Simply follow the MG2000 Converter Box Manual to begin receiving digital signals on your television today.

- This unit meets NTIA's functional requirements.

I. Specifications

Hardware Specifications

- CPU: Zoran, ZR39740
- PCB size: 110mm x 100 mm
- PCB layer: 2 layers

Functional Ports –NTIA compliant

- ATSC tuner
- RF out
- NTSC modulated out – channel (3 or 4) selectable by remote control
- Composite Video out
- Stereo out
- Power jack for DC Input
- IR sensor
- Menu buttons on unit – power, channel up, & channel down

Power Consumption

- Normal mode: Max 9.6 watt
- Stand By mode: Max 1.9 watt –NTIA compliant



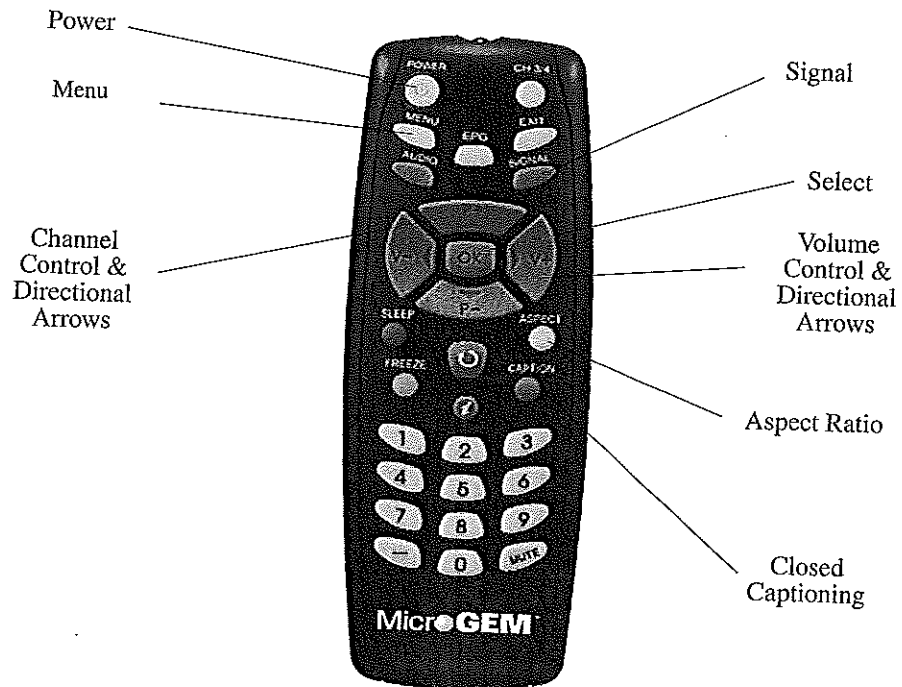
IR Sensor / LED
Status Indicator

Power

Channel
Selection

- Power LED- When the LED is lit red, the unit is in STAND-BY mode. Press the "POWER" button to wake the unit. When the unit is active, the LED will light green.

II. Remote Control



Using the Remote Control Unit

Navigating the ON SCREEN MENU using the Remote Control

- Use the volume and channel controls as the directional controls in the ON SCREEN MENU. Use the "OK" button to select the menu item you wish to access.

Utilizing Feature Buttons

- This remote control unit has a number of different feature buttons that allow the user to access commonly used menu items, without having to access the on-screen menu.

Aspect - Changes the viewable area on your television set. Choose from letterbox, anamorphic, pan and scan, and cinemascope.

Caption - Turns the closed caption feature on / off; also selects one of five pre-programmed closed caption style.

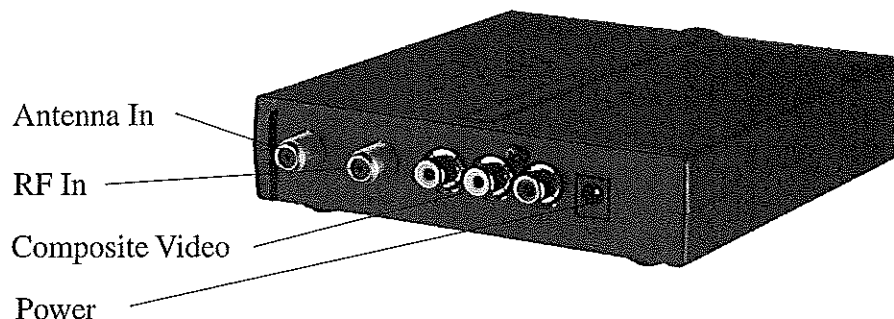
EPG / i - Shows current channel, program information, broadcast strength, broadcast resolution and sound, and content ratings.

Signal - Shows current channel signal strength. Use this feature to improve antenna / broadcast performance.

Sleep - Controls the auto-timer feature on or off; selects 30, 60 or 90 minute auto-off.

III. MG2000 Converter Box Setup

Connecting the MG2000 Converter Box to your Television



1. Connect Power

- a. Connect the provided power cable to the unit, and plug into standard electrical outlet.

2. Connect video

Connecting video using Composite Video (RCA-type) cable

- a. Locate the CVBS Out ports on the back of the MG2000 Converter Box. Plug the Composite Video (RCA-type) cable into the CVBS out port, and connect opposite end of the cable into the "IN" port on your television set.

Connecting video using an RF Modulator

- a. Locate the RF "OUT" port on the back of the MG2000 Converter Box
- b. Plug the RF Modulator cable into the corresponding RF ports on both the MG2000 Converter Box, and your television set.
- c. According to the RF Modulator's user manual, set the operating channel on the RF Modulator device. (Either channel 3 or 4)
- d. Tune your television set to the corresponding channel. (Either channel 3 or 4)

Connecting video using an terrestrial antenna

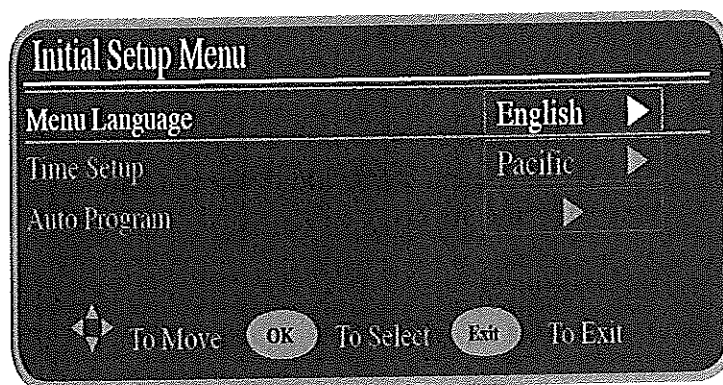
- a. Locate the antenna input, and connect a HD terrestrial antenna using a F-type, 75 ohm, coaxial cable

3. Connecting Audio

Connecting Audio using Stereo (RCA-type) cables

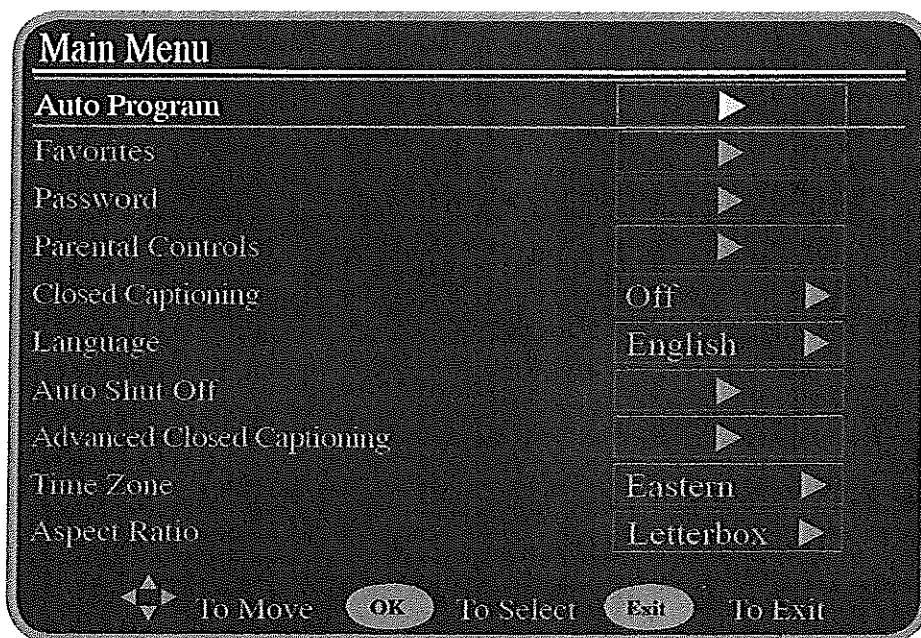
- a. Locate the "LEFT" and "RIGHT" audio out ports on the back of MG2000 Converter Box
- b. Plug the corresponding Stereo (RCA-type) cables into the MG2000 Converter Box audio out ports, and to the corresponding "Audio IN" ports on your television set.

On the first use of this product, you will need to program the digital channels available. On the first power-up of this product, the Initial Setup menu, will require you to input your desired on-screen language and time zone where the unit is located. The unit will also prompt you to auto program this device. Auto programing will take several minutes.



Automatically Programming Digital Channels

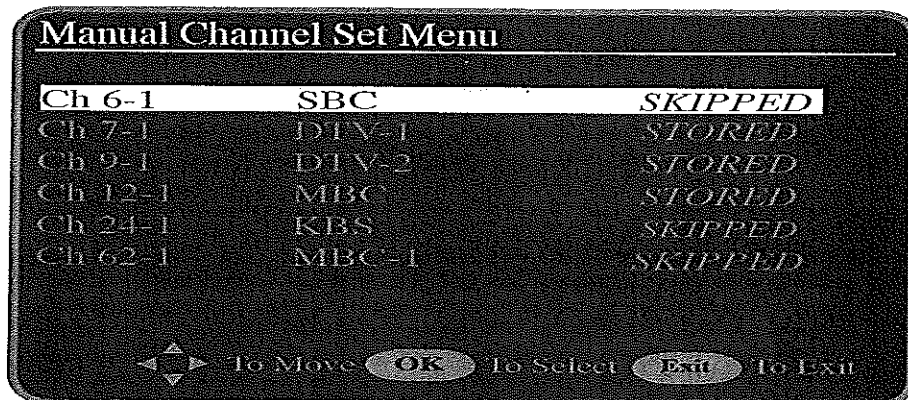
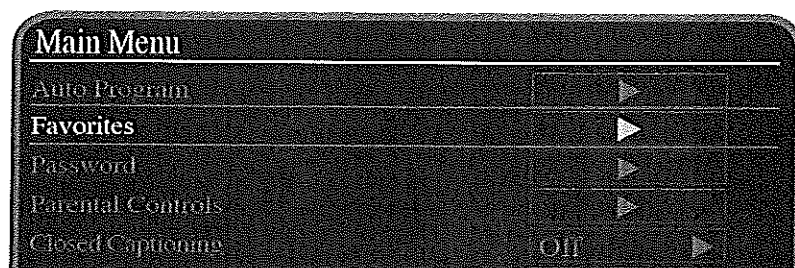
- a. Access the on-screen menu
- b. Using the remote control, select "AUTO PROGRAM" by using the direction buttons (volume & channel) and pressing the "OK" button to select the menu item.
- c. At this time the unit will search for all available digital broadcast channels, and will be updated in the unit. • This may take several minutes •
- d. Press the "EXIT" button on the remote control to exit to the menu.



Manually Programming Digital Channels

** Please configure the unit using "AUTO PROGRAM" first. This will allow you to edit the received channel list.*

- a. Access the on-screen menu
- b. Using the remote control, select "FAVORITES" by using the direction buttons (volume & channel) and pressing the "OK" button to select the menu item.
- c. Using the remote control, select the desired digital broadcast channels, and press the "OK" button. This will change the channel from "STORED" to "SKIPPED," or visa versa.
- d. Press the "EXIT" button on the remote control to exit to the menu.

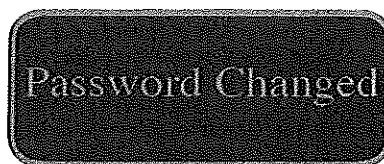
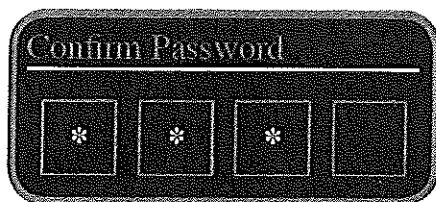
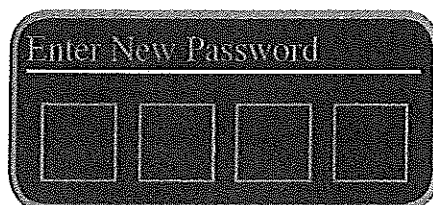
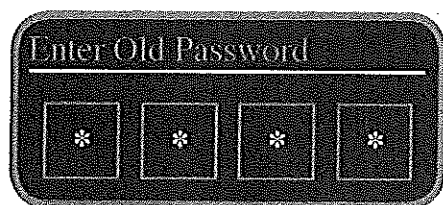


IV. Menu Features

1. Parental Control

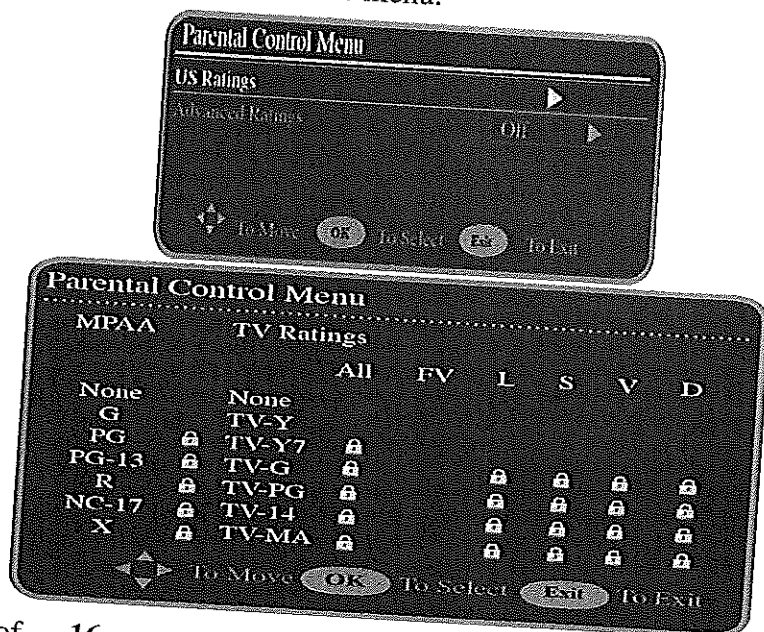
Setting a parental control pass code

- a. Access the on-screen menu
- b. Using the remote control, select "PASSWORD" by using the direction buttons (volume & channel) and pressing the "OK" button to select the menu item.
- c. At this point you will be prompted to enter the old pass code. Enter the default code, "0000" (zeros).
- d. Enter a new numeric code using the remote control. Press "OK" to submit this code.
- e. Re-Enter the new pass code. Press "OK" to submit this code.
- f. When the code change is successful, the pass code box will appear in the upper right hand corner of the screen and will read "PASSWORD CHANGED."



Setting parental controls

- a. Access the on-screen menu
- b. Using the remote control, select "PARENTAL CONTROLS" by using the direction buttons (volume & channel) and pressing the "OK" button to select the menu item.
- c. At this time you will be asked to enter your password. *If you have not reset the password, the default numeric password is "0000," (zeros).
- d. Upon entering the correct password, the parental control menu will be displayed.
- e. Using the remote control, select the US Ratings. In the Parental Control Menu select the channels you would like to block by pressing the "OK" button. A lock will appear on those ratings that are currently restricted.
- f. Press the "EXIT" button on the remote control to exit to the menu.

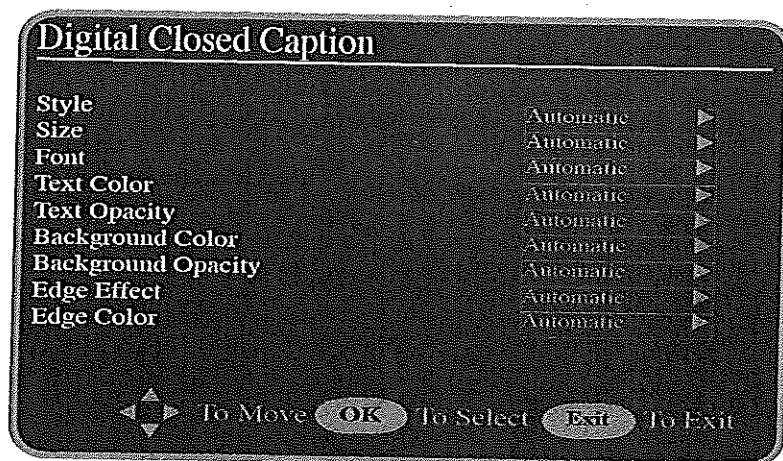


2. Closed Caption

The closed captioning feature can be set two ways. First, by using the default selection provided by your local broadcast, selecting the "CLOSED CAPTIONING" feature on the menu, or, by depressing the "CAPTION" button on the remote control unit. You may also customize captions using the "ADVANCED CLOSED CAPTIONING" option.

Configuring the Advanced Closed Caption feature

- a. Access the on-screen menu
- b. Using the remote control, select "CLOSED CAPTION" by using the direction buttons (volume & channel) and pressing the "OK" button to select the menu item.
- c. Using the remote control select "STYLE" from the top of the menu. Change this menu setting to "CUSTOM" to change the closed caption font style and color, including background effects and color. To use the broadcaster's default settings, select "STYLE" using the "OK" button on the remote control and select "AUTOMATIC."
- d. Press the "EXIT" button on the remote control to exit to the menu.

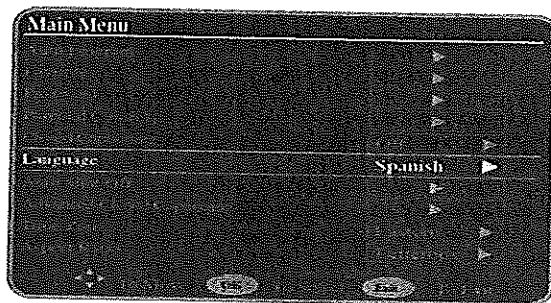


3. Language

Configuring the language setting

** This unit currently supports three languages:
ENGLISH, SPANISH and FRENCH*

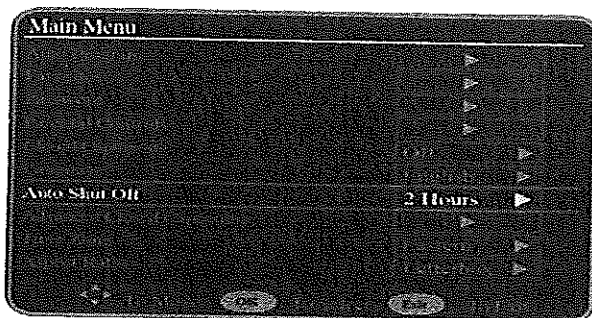
- a. Access the on-screen menu
- b. Using the remote control, select "LANGUAGE" by using the direction buttons (volume & channel).
- c. Press the "OK" button to change the unit language.
- d. Press the "EXIT" button on the remote control to exit to the menu.



4. Automatic Timer

Configuring the automatic off timer

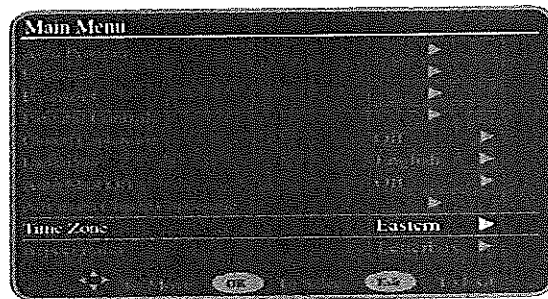
- a. Access the on-screen menu
- b. Using the remote control, select "AUTO SHUT OFF" by using the direction buttons (volume & channel).
- c. Press the "OK" button to change the unit's automatic off setting to power down after two, three or four hours.
- d. Press the "EXIT" button on the remote control to exit to the menu.



5. Time Zone

Configuring the time zone setting

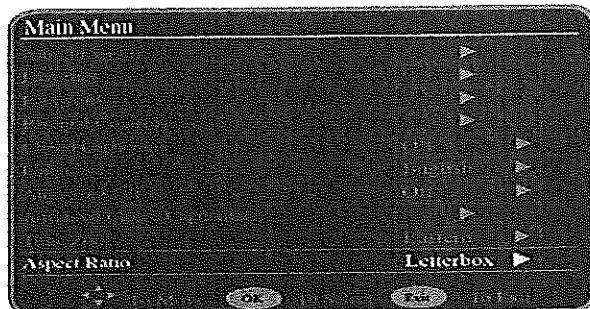
- a. Access the on-screen menu
- b. Using the remote control, select "TIME ZONE" by using the direction buttons (volume & channel).
- c. Press the "OK" button to change the unit language.
- d. Press the "EXIT" button on the remote control to exit to the menu.



6. Aspect Ratio

Configuring the aspect ratio

- a. Access the on-screen menu
- b. Using the remote control, select "ASPECT RATIO" by using the direction buttons (volume & channel).
- c. Press the "OK" button to change the unit's presentation: letterbox, pan and scan, anamorphic, or cinemascope.
- d. Press the "EXIT" button on the remote control to exit to the menu.



Parental Control Ratings Resource

- **EIA766 ratings**

- TV-Y: All children
- TV-Y7: Directed to Older Children
- TV-G: General Audience
- TV-PG: Parental Guidance Suggested
- TV-14: Parents Strongly Cautioned
- TV-MA: Mature Audience Only

- **Content ratings**

- FV: Fantasy Violence
- L: Adult Languages
- S: Sexual Situations
- V: Violent Scenes
- D: Suggestive Dialogues

- **MPAA ratings**

- G: General Audience, all ages admitted
- PG: Parental Guidance Suggested, Some material may not be suitable for Children
- PG-13: Parents strongly cautioned, some material may be inappropriate for children under 13
- R: Restricted, Children under 17 not admitted without accompanying parent or adult guardian
- NC-17: No one 17 and under admitted