

**SB-3790**

1x9 Component/Digital/Audio Distribution Amplifier w/ Loop Output





## SAFETY INFORMATION



1. To ensure the best results from this product, please read this manual and all other documentation before operating your equipment. Retain all documentation for future reference.
2. Follow all instructions printed on unit chassis for proper operation.
3. To reduce the risk of fire, do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
4. Make sure power outlets conform to the power requirements listed on the back of the unit. Keep unit protected from rain, water and excessive moisture.
5. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Dust with a clean dry cloth.
6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
7. Do not force switched or external connections in any way. They should all connect easily, without needing to be forced.
8. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
9. AC voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
10. Turn power off and disconnect unit from AC current before making connections.
11. Never hold a power switch in the "ON" position.
12. This unit should be installed in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign dust and matter.
14. To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. There are no user serviceable parts inside.
15. When moving the unit, disconnect input ports first, then remove the power cable; finally, disconnect the interconnecting cables to other devices.
16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
17. The equipment power cord should be unplugged from the outlet when left unused for a long period of time.
18. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
19. Service Information Equipment should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged.
  - B. Objects have fallen, or liquid has been spilled into the equipment.
  - C. The equipment has been exposed to rain.
  - D. The equipment does not appear to operate normally, or exhibits a marked change in performance.
  - E. The equipment has been dropped, or the enclosure damaged.

THIS SAFETY INFORMATION IS OF A GENERAL NATURE AND MAY BE SUPERSEDED BY INSTRUCTIONS CONTAINED WITHIN THIS MANUAL.

## **SAFETY PRECAUTIONS**

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

## **DISCLAIMERS**

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## INTRODUCTION

### **HDTV Distribution Amplifier Series**

*Thank you for purchasing the SB-3790 HDTV Distribution Amplifier. You will find this unit easy to install and highly reliable but it is essential that you read this manual thoroughly before attempting to use this amplifier.*

Congratulations on your purchase of the SB-3790. The SB-3790 1x9 Component Video/Audio Distribution Amplifier with Loop Out is designed to work as a splitter for Audio/Video applications. Capable of splitting a Component Video and Audio signal from (1) source to (9) devices with compatible inputs. A built in amplifier will boost the signal to the needed level, to prevent signal loss and picture degradation. A maximum bandwidth of 700MHz will support a sharp and highly defined video in multiple resolutions for up to 1080p. This distribution amplifier works with satellite and cable set-top boxes, DVD players, D-VHS players and all other equipment that is equipped with proper Audio/Video connections.

## FEATURES

- Sends Video and Audio to multiple displays at the same time
- Connects (9) displays
- Supports 480i, 480p, 720p, 1080i and 1080p resolutions
- Installs in seconds

## PACKAGE CONTENTS

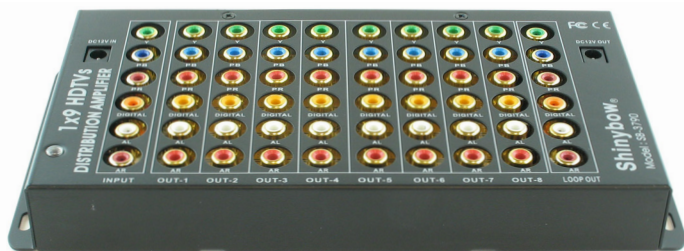
Check that you have the following components;

- SB-3790 Distribution Amplifier
- AC/DC Adapter: 12VDC@1250mA AC/DC Adaptor Types: CE/UL/SAA/BS
- Users Guide

- **Type of Amplifier:** (1) In to (9) Out Distribution Amplifier with Loop output function
- **Type of Signal:** Component Video / Digital Audio / Stereo Audio
- **Input:**
  - **(1) Video:** Component Video YPbPr (YCbCr) / RGB
  - **(1) Audio:**
    - Digital Audio (COAX) or Composite Video (CV)
    - Signal Bandwidth 110MHz
    - Liner-phase pass
    - Band unity-gain
    - 1Vpp terminated to 75Ohms
    - Stereo Audio (Standard Left/HD, Right VD pairs)
- **Outputs:**
  - **(9) Video:** Component Video YPbPr (YCbCr) / RGB
  - **(9) Audio:**
    - Digital Audio (COAX) or Composite Video (CV)
    - Signal Bandwidth 110MHz
    - Liner-phase pass band unity-gain
    - 1Vpp Terminated to 75Ohms
    - Stereo Audio (Standard Left/HD, Right VD pairs)
- **Video Bandwidth:** >700MHz, G=+2
- **Small Signal Bandwidth (-3dB):** 1GHz, G=+1, 700MHz, G=+2
- **Setting Time Low Distortion (SFDR):** 10ns to 0.1%, 2VStep, G=+2
- **Third Order Intercept:** 26dBm@70MHz, G=+10
- **Loop Output:** Loop Output Port, Extends amplifier up to (10) additional units
- **Gain Flatness:** 0.1dB to 75MHz
- **Differential Gain Error:** 0.01%, RL=150Ω
- **Differential Phase Error:** 0.01%, RL=150Ω
- **In/Out Terminal:** Color-coded RCA female connectors
- **Weight:** 1.5 lb (Unit only) / 2.9 lb (Net)
- **Power Consumed:** 350mA Maximum
- **Power Supply:** DC 12 Volts@1250mA
- **Dimensions (LxWxH):** 8.25 x 4.5 x 1 in (210x114x25 mm)

As product improvements are continuous, specifications are subject to change without notice.

# TYPICAL HOOKUP AND OPERATION



## Safeguards and Precautions

- A. Keep this unit away from fire, extremely hot areas, water or moisture of any kind.
- B. Do not place this unit on any support that is not firm, level and strong.
- C. Do not service the unit yourself. Opening the unit's housing will void the warranty.
- D. Servicing must be by Shinybow or by an authorized technician.
- C. Illegal duplication of copyrighted material is strictly prohibited by Federal Laws.

## CONFORMANCE TEST REPORT

FOR **EN 55013/EN 55020** - REPORT NUMBER: ET94S-03-081-1

FOR **FCC 47 CFR/Part 15 Subpart B** - REPORT NUMBER: ET94S-03-081-02

**Model Number:** SB-3790

**Comment Number:** SB-3770, SB-3772, SB-3774, SB-3776, SB-3778, SB-3780, SB-3782, SB-3784, SB-3786, SB-3788

**Component Video:** YPbPr, YCbPr or RGB

**Digital:** PCM or Composite Video

**Stereo Audio:** AR, AL

**Power Supply:** +DC12V@1250mA

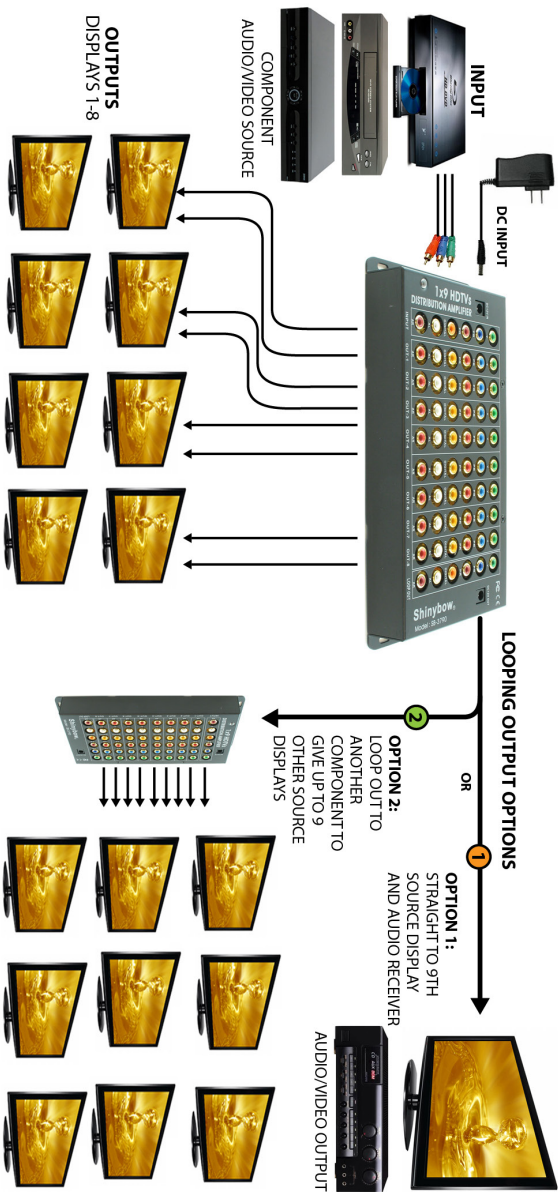
**Other Units Connection:** +DC12V@1200mA~1500mA



# TYPICAL HOOKUP AND OPERATION

## 1X9 DISTRIBUTION AMPLIFIER

Applications: VCR's, Video CD's, DVD's, STB's, Game Consoles, Satellite Receivers  
Connects more than 10 units.





# LIMITED WARRANTY

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