

# PROART

## Operating Instructions



### A 5024 Multi-Zone Amplifier

#### Overview

Congratulations on purchasing the A 5024 multichannel amplifier. It is suitable as a stand alone system for multi room (multi zone) installations, or for connection to an A 5020 matrix controller for more advanced audio switching (contact your dealer for more information on the A 5020).

The A 5024 provides up to 6 stereo speaker zones or 12 mono speaker zones or a combination of both.

Each zone can be configured to accept either a dedicated, or common input source.

Any combination can be used allowing for instance background music to be playing in dining room & entertaining areas while home theatre effects are playing in the lounge.

The BUSS input is best used when it is connected to an audio switching device such as a home theatre receiver. This allows you to quickly switch audio sources across multiple zones at once.

#### Features

- 6 stereo speaker zones or 12 mono speaker zones or a combination of both. Each rated at 40W into 8Ω speakers.
- Each pair of amplifiers are bridgeable delivering 120W into 8Ω.
- Each amplifier has a choice between shared BUSS or individual zone inputs.
- Common BUSS output allows infinite number of amplifiers to be used.
- The unit can be powered up via signal detection or external trigger (5-24V DC).
- Signal LED for each channel
- Amplifier “protect” LED per amplifier pair
- 12 individual volume controls
- Input signal limiter.

#### Installation

The amplifier can be configured in a number of different configurations. Please consult the configuration diagrams on pages 2, 3 & 4 as a guide for setting up your system.

# Proart Multizone Audio Distribution System

## SYSTEM OPERATION

This system can be configured to operate in 3 different modes. These are selected via the rear mounted 3 position power switch, marked ON, Auto, 5-24V.

The front mounted power rocker ON/OFF switch must be ON for any of these modes to operate.

### ON Mode:

All amplifiers are permanently ON regardless of any signal applied.

### Auto Mode:

The appropriate amplifiers automatically switch ON, only when an input signal is present. This saves power and unnecessary heat build up.

### 5-24V Mode:

Applying 5-24VDC to the trigger terminals switches all amplifiers ON. This is useful for when the amplifier is located in a remote, difficult to access location ie: ceiling.

## OTHER FEATURES

### Protection LEDs

Within 1 – 2 seconds after switch on the PROTECT LEDs will turn green indicating normal operation. If there is an amplifier over-load the PROTECT LEDs will turn red indicating a fault.

### Trigger Input / Output

The trigger terminals can be used to turn the amplifier on via a remote switch or external controller. See figure 2 for examples of how this feature can be used.

### Amplifier Bridging

For speakers requiring extra power 2 channels may be bridged to provide a single mono 120W RMS channel.

When using this configuration ensure input source is connected to the RCA labelled “bridged”.

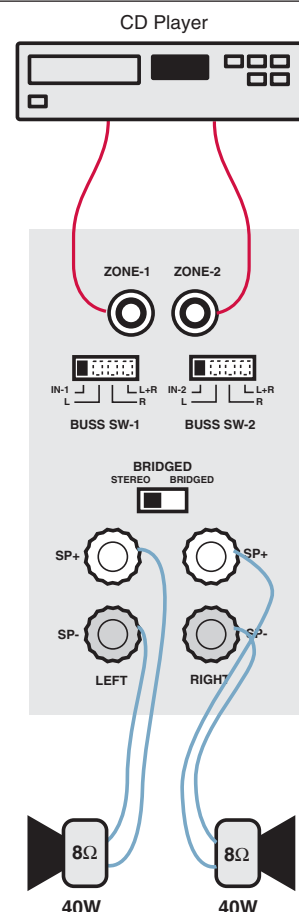
## Specifications

Power (at 8 Ohms THD < 1%): 40W RMS (80W Max.)  
Power (at 4 Ohms THD < 1%): 60W RMS (120W Max.)  
Bridged Power (At 8 Ohms): 120W RMS (200W Max.)  
Distortion: ..... < 0.002%  
S/N Ratio (IEC-A): ..... > 90db  
Frequency Response (+/- 1db) : .....10Hz-40KHz  
Dimensions: .....483 x 132 x 380m(W x H x D)  
Weight: .....13.5 Kg (Net)

### CONFIGURATION 1 Stereo output 40W Dedicated source

1. Set “bridged” switch to stereo
2. Set BUSS switch for Zone 1 to IN
3. Set BUSS switch for Zone 2 to IN
4. Connect input source to zone 1 & 2 input RCA's.
5. Connect speakers to terminals.

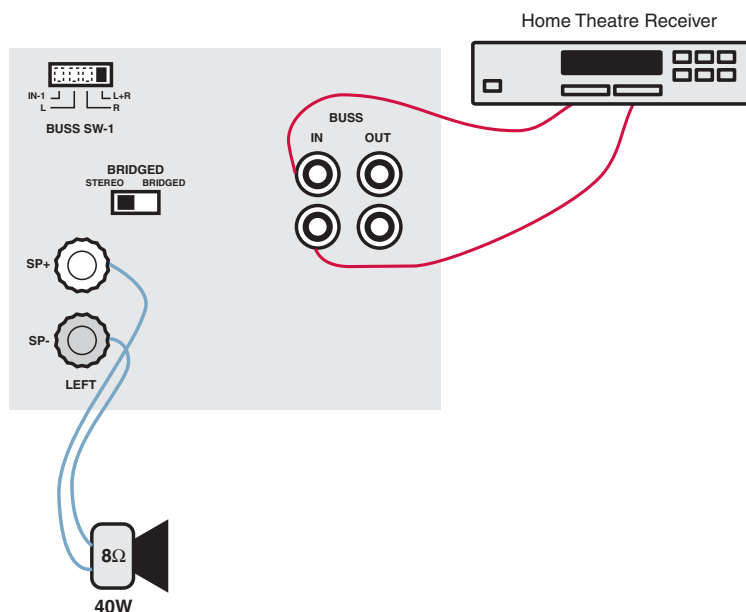
In this configuration the speaker pair has a dedicated input source. This source cannot be shared across other speaker zones.



### CONFIGURATION 2 Single mono speaker Common BUSS input source

1. Set “bridged” switch to stereo
2. Set BUSS switch to L+R
3. Connect input source to BUSS IN RCA's
4. Connect speaker to terminals.

In this configuration all speaker zones can share the BUSS source.  
Note: speaker will receive a mixed L+R signal)



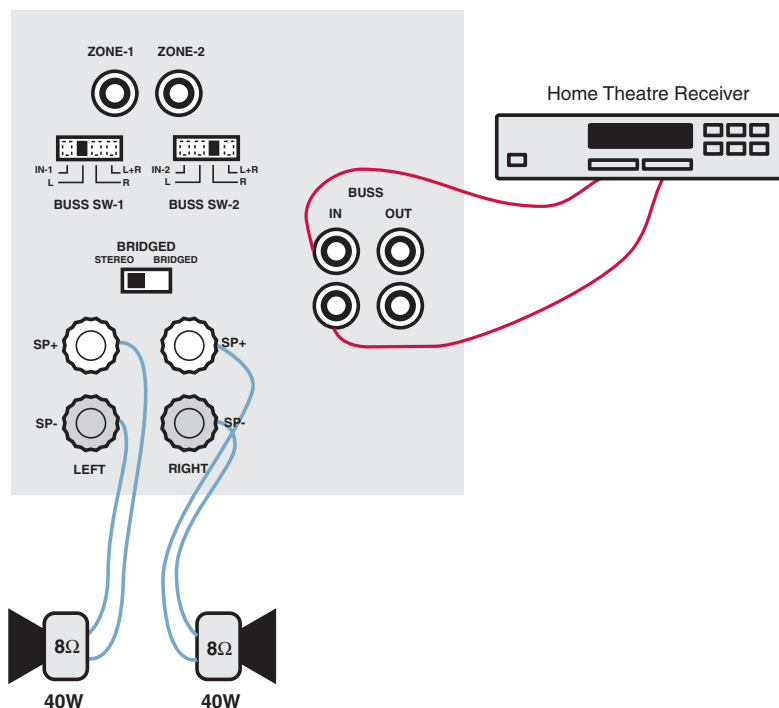
## CONFIGURATION 3

### Stereo output 40W

#### Common BUSS input source

1. Set "bridged" switch to stereo
2. Set BUSS switch for Zone 1 to L
3. Set BUSS switch for Zone 2 to R
4. Connect input source to BUSS IN RCA's
5. Connect speakers to terminals.

In this configuration all speaker zones can share the BUSS source.



## CONFIGURATION 4

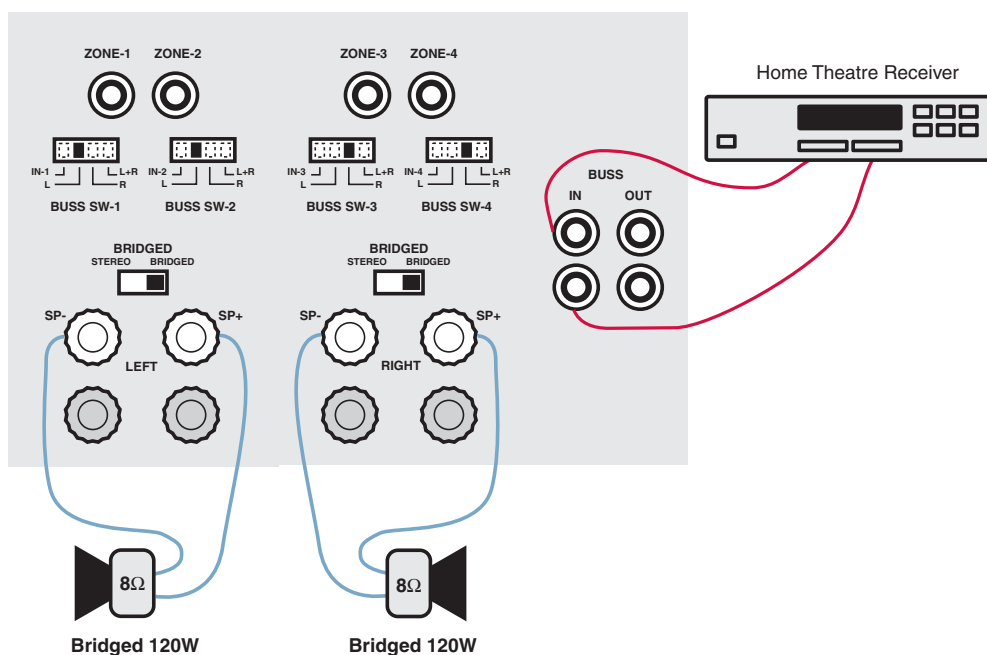
### High power stereo output 120W

#### Common BUSS input source

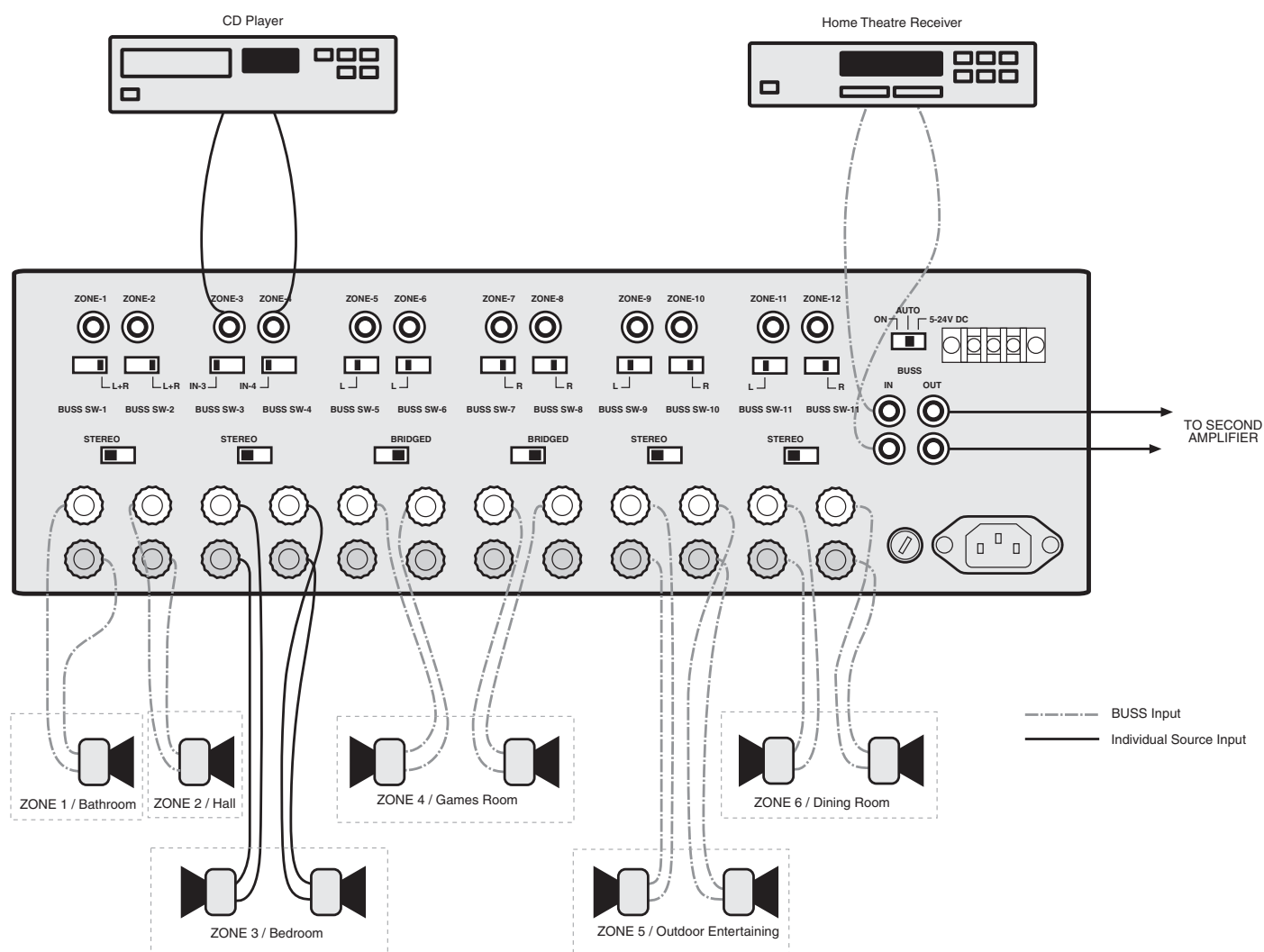
#### Bridged output

1. Set "bridged" switch to bridged
2. Set BUSS switch for Zone 1 to L
3. Set BUSS switch for Zone 2 to L
4. Set BUSS switch for Zone 3 to R
5. Set BUSS switch for Zone 4 to R
6. Connect stereo input source to BUSS IN RCA's
7. Connect left speaker negative wire to SP- and left speaker positive wire to SP+ (Zone 1 & 2 terminals).
8. Connect right speaker negative wire to SP- and right speaker positive wire to SP+ (Zone 3 & 4 terminals).

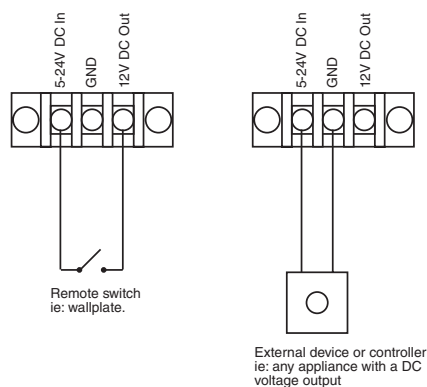
In this configuration all speaker zones can share the BUSS source. Bridging will provide 120W RMS per speaker.



# Proart Multizone Audio Distribution System



**Figure 1:** Complete system configuration. Note that a home theatre receiver can be used as source switcher for the BUSS input allowing music, DVD sound or other audio source to be played through zones using the BUSS input. Additionally the A 5020 Matrix Control Unit (available separately) can be connected to individual source inputs or the shared BUSS input. This provides up to 8 audio program sources which can be easily switched via remote control or wallplate.



**Figure 2:** A 5-24V input & ground is provided for an external controller. The 12V output can be connected to a remote switch.

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