

# 944A

## DISTRIBUTION AMPLIFIER

Video & audio signal generator/Multiple-signal generator



### General

This unit is video distributor (VDA) to distribute composite video signal and audio signal distributor (ADA) to distribute TV sound multiplexed signal and stereo signal in wide band type. Max. 10 units can be installed as VDA : 1 input 4 distribution outputs & ADA : 1 input 5 distribution outputs.

### Features

- Besides video and sound, distribution unit for sync. signal and sound oscillating unit are available which are possible to install in same case, if they are needed.
- VDA unit has cable compensation function, frequency response is flat up to 10MHz (7MHz when cable compensation is used)
- Max. 40 distributions are possible.

### Composition

<b>Main Unit</b> .....	1
Dimensions	425(W)×149(H)×380(D) mm (Excluding projections)
Weight	Approx. 10 kg
<b>Accessories</b>	
Power Cable (Including 3pin→2pin converter) .....	1
Rack Mount Adapter .....	1 set
Instruction Manual and Test Result Sheet .....	1
<b>Power Source</b>	
Input Voltage Allowable Range	: AC90V~AC250V (50Hz/60Hz)
Power Consumption	: Approx. 60VA
<b>Operating Environment</b>	
Temperature	: + 5 °C ~ +40°C
Humidity	: 45% ~ 85%RH (No dew generation)

### Rating

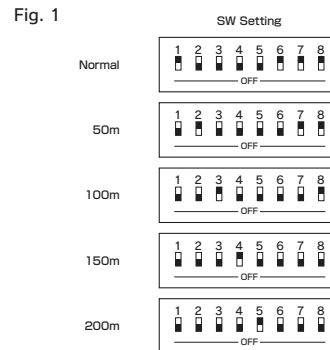
- ◎ **VDA Unit**
  - **Video Input/Output Level**  
VS 1Vp-p
  - **Video Input Impedance**  
High impedance bridge connection
  - **Video Output Impedance**  
75 Ω unbalanced
  - **No. of Circuit for Video Input/Output**  
Input : 1      Output : 4
  - **Polarity**  
Positive
  - **Cable Compensation**  
Possible to switch for 5C-2V coaxial cable of 50m, 100m, 150m & 200m length
- ◎ **ADA Unit**
  - **Audio Input**  
600 Ω (unbalanced) 2.0Vp-p Main Channel 1 input
  - **Audio Output**  
600 Ω (unbalanced) 2.0Vp-p Main Channel 5 outputs  
(1 output among them can be used equivalently with high input impedance usage)  
Frequency Response      Within ±0.5dB for 30Hz~55kHz
  - **Distortion**  
Within 0.5%
  - **S/N**  
More than 60dB
- ◎ **Audio Oscillating Unit**  
Possible to switch audio oscillating (CR OSC) or external sound input (EXT)
- **Audio Distributor**  
Audio Input :  
600 Ω (unbalanced) 2.0Vp-p Main channel 1input (Possible to switch input impedance)  
Audio Output :      600 Ω (unbalanced) 2.0Vp-p Main channel 5 outputs  
Frequency Response :      Within ±0.5dB for 30Hz~55kHz  
Distortion :              Within 0.5%  
S/N :                      More than 60dB
- **Audio Oscillator**  
Audio Generator Output :      600 Ω (unbalanced) 0dBm ±3dB 5 outputs  
Audio Frequency :              400Hz, 1kHz possible to switch  
Frequency Accuracy :              Within ±3%  
Distortion :                      Within 0.1%  
S/N :                              More than 60dB

### Performance

- ◎ **VDA Unit**  
Frequency Response : ±0.3dB for 60Hz~7MHz  
+0~-1dB for 7MHz~10MHz  
Down characteristic for more than 10MHz  
(±1dB for 60Hz~7MHz when cable compensation is used)
- **Wave Form Distortion**  
Rising time :              0.07 μs (input less than 0.05 μs)  
Over shoot :              Ringing Less than 3% for below 11MHz  
                                 Ringing Less than 10% for over 11MHz
- Sag :                      1%
- **Linearity (Input/Output 1.0Vp-p)**  
Differential phase :      ±1% for APL 10~90%  
Differential Gain :      ±1% for APL 10~90%
- **Noise**  
1mVp-p

### Operating Method

- ◎ **VDA Unit**  
(1) Firstly, set SW1 (Switch) as following figure depending on length of 5C-2V coaxial cable to be used.



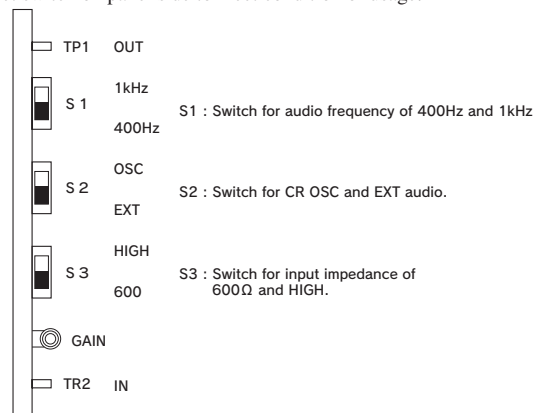
- (2) Next, adjust gain of output signal with GAIN adjuster on panel side by using square wave or sine wave of 1kHz. At this time, terminate input/output with 75 Ω.

### ◎ ADA Unit

Connect audio signal to be distributed to input terminal. Distributed and amplified signal is output to rear side OUT and OUTPUT 1~5.

### ◎ CR OSC Unit (Option)

- (1) Firstly, set switch on panel side to meet condition of usage.



- (2) In case of usage as audio oscillator.  
Open input terminal.  
Turn audio program switching switch to OSC. Further, if audio frequency switching switch is to be 400Hz or 1kHz, audio frequency becomes 400Hz or 1kHz respectively. Select either of them to meet usage.  
At this time, audio signal is output to rear side OUT and OUTPUT 1~4.
- (3) In case of usage as audio distributor  
Connect audio signal to be distributed to input terminal. Turn audio program switching switch to EXT.  
Further, if input impedance switching switch is to be 600 Ω or HIGH, input impedance becomes 600 Ω or more than 10k Ω respectively. Select it to meet impedance of signal source. Distributed and amplified signal is output to rear side OUT and OUTPUT 1~4.

### ◎ Caution on Operation

5 audio outputs are output from ADA unit and CR OSC unit, so that in case of increasing number of distribution by using 2 or 3 units, it can be used for 8~9 distribution, further 12~13 distribution by connecting signal from rear side OUT to INPUT of next unit (s). At this time, input impedance is used as 600 Ω.