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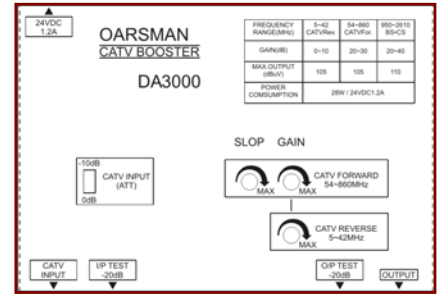
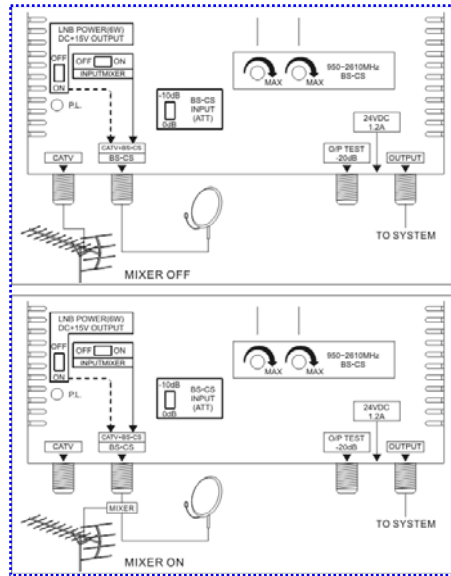
# SMATV Booster-3000 Series



The Oarsman SMATV Series Booster can Distribute all VHF, UHF, Terrestrial (CATV) Digital, Satellite Digital Signals with Separator or Combine Input and Only one Lead-In Cable Output to Distribution System

## Features

- Support All Digital Broadcasting Band
- Gain and Slop Adjustable
- Input 0~-10dB Attenuated Selectable
- Input and Output -20dB Test Ports
- Separator or Combiner Input Selectable (TA3000)
- Optional Reverse band



Specification		TA3000	CA3000	SA3000
Satellite	Bandwidth (MHz)	950 - 2610	-	950 - 2610
	Max. Output Level	110dB	-	110dB
	Gain Adj. Range	30 ~ 40dB	-	30 ~ 40dB
	Slop Adj. Range	0 ~ 20dB	-	0 ~ 20dB
	Input Attenuated	0 / -10dB	-	0 / -10dB
	LNB Power Out (Option)	0 / +15VDC	-	0 / +15VDC
	Return Loss	12dB	-	12dB
	Noise Figure	12dB	-	12dB
CATV Forward	Bandwidth (MHz)	54 - 860	54 - 860	-
	Max. Output Level	105dB	105dB	-
	Gain Adj. Range	20 ~ 30dB	20 ~ 30dB	-
	Slop Adj. Range	0 ~ 10dB	0 ~ 10dB	-
	Input Attenuated	0 / -10dB	0 / -10dB	-
	Return Loss	14dB	14dB	-
	Noise Figure	10dB	10dB	-
CATV Return	Bandwidth (MHz)	5 - 42	5 - 42	-
	Max. Output Level	105dB	105dB	-
	Gain Adj. Range	0 ~ 10dB	0 ~ 10dB	-
	Input Attenuated	0 / -10dB	0 / -10dB	-
	Return Loss	14dB	14dB	-
	Noise Figure	8dB	8dB	-
Power Consumption	28W	20W	8.5W	
Power Supply	AC100~240V 50/60Hz / 24VDC 1.2A			
In/Out Impedance (ohm)	75 (F-female)			
Operating temperature range	-10~+40°C			
Net Weight	1.5kgs	1.2kgs	0.7kgs	
Dimensions WxDxH (mm)	179.4 x 195 x 57	179.4 x 146 x 57	179.4 x 146 x 33	

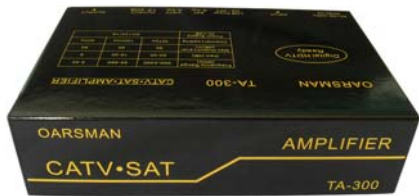
# SMATV Booster-300 Series



The Oarsman 300 Series Booster can Distributed all VHF, UHF, Terrestrial (CATV) Digital, Satellite Digital Signals with Separator or Combine Input and Only one Lead-In Cable Output to Distribution System.

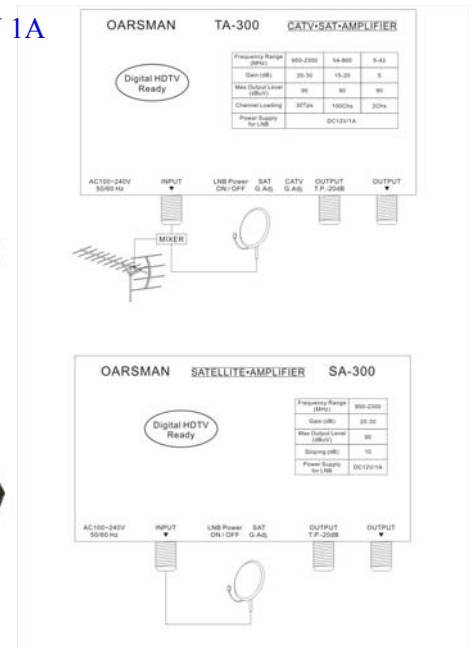
## Features

- Support All Digital Broadcasting Band
- CATV and SAT Gain Adjustable
- Sloping CATV 5dB, SAT 10dB
- Power Supply for LNB at DC12V 1A
- Output -10dB Test Ports



**TA 300 SMATV Booster**

**SA 300 SAT Booster**



Specification		TA300	SA300
Satellite	Bandwidth (MHz)	950 - 2300	950 - 2300
	Max. Output Level	90dB	90dB
	Gain Adj. Range	20~30dB	20~30dB
	Sloping Range	10dB	10dB
	LNB Power Out (Option)	0 / +15VDC	0 / +15VDC
	Return Loss	12dB	12dB
	Noise Figure	12dB	12dB
	Power Supply for LNB	DC12V 1A.	DC12V 1A.
CATV Forward	Bandwidth (MHz)	54 - 860	-
	Max. Output Level	90dB	-
	Gain Adj. Range	15~20dB	-
	Sloping Range	5dB	-
	Return Loss	14dB	-
	Noise Figure	10dB	-
CATV Return	Bandwidth (MHz)	5 - 42	-
	Max. Output Level	90dB	-
	Gain Adj. Range	5dB	-
	Return Loss	14dB	-
	Noise Figure	8dB	-
O/P Test Port	-10dB	-10dB	
Power Consumption	5W	2W	
Power Supply	AC100~240V 50/60Hz / 12VDC 1.5A		
In/Out Impedance (ohm)	75 (F-female)		
Operating temperature range	-10~+40°C		
Net Weight	0.5kgs	0.5kgs	
Dimensions WxDxH (mm)	152 x 100 x 44	152 x 100 x 44	

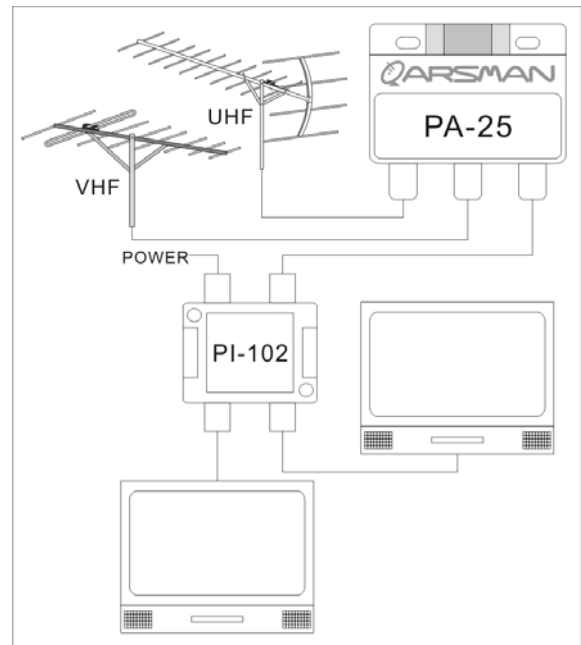
# Pre-Amplifier

This Mast-Mounted Pre-Amplifier made by Oarsman will fulfill most of your Antenna Amplification needs.

This high degree of Amplification is necessary when your Antenna is more than 100 feet from the TV, or when a signal Antenna supplies signals to several units - TVs, VCRs or Set-Top-Box.

## Features:

- High Shielding Zinc Die-cast Housing
- Easy Install with Tie fixation
- F Female Connectors
- With Remote Power Inserter PI-1xx
- With Water-proof Cap and Nylon Tie



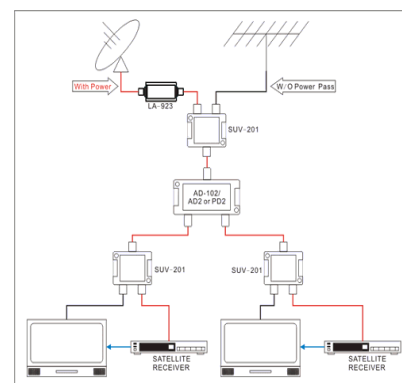
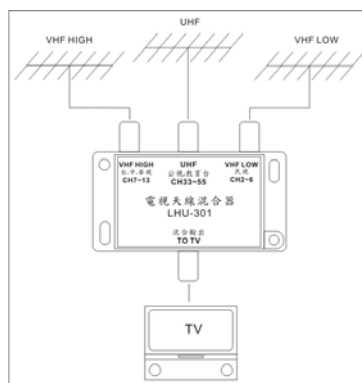
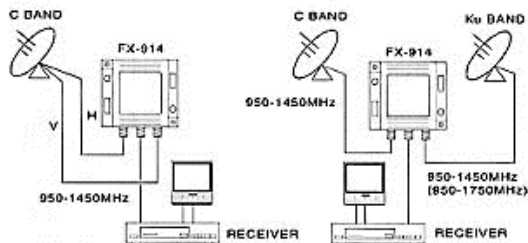
ITEM	PA-20	PA-25	PA-30	UA-25	CA-25
<b>Input # 1</b>	UHF (470-860MHz)	UHF (470-860MHz)	UHF (470-860MHz)	UHF (470-860MHz)	CATV (5-1000MHz)
Typical Gain	20dB	25dB	30dB	25dB	25dB
Return Loss (min.)	16dB	16dB	16dB	16dB	16dB
Noise Figure	4dB	4dB	4dB	4dB	4dB
Rated Output Level	105dBuV	105dBuV	105dBuV	105dBuV	100dBuV
<b>Input # 2</b>	VHF (170-230MHz)	VHF (170-230MHz)	VHF (170-230MHz)	--	--
Typical Gain/Loss	15dB	20dB	25dB	--	--
Return Loss (min.)	16dB	16dB	16dB	--	--
Noise Figure	4dB	4dB	4dB		
Rated Output Level	105dBuV	105dBuV	105dBuV	--	--
<b>General</b>					
Nominal Impedance	75ohm (F-Female)				
RFI Shielding	100dB				
Supply Voltage	DC12V 0.5A				
Total Power Consumption	< 10W				
Dimensions	77(W) x 28(D) x 75(H) mm				
Net Weight	120g				



# Combiner/Separator

## Features:

- High Shielding Zinc Dis-cast Housing
- F Female Connectors
- Satellite Band with Power passive



FX-914



SUV-201S



SUV-201



SAT-301



LHU-301

Specification		FX-914	SUV-201S	SUV-201	SUV-201B	SAT-201	SAT-301	SAT-401	LHU-301
INPUT 1	Bandwidth (MHz)	950-1450	10-800	10-800	10-800	900-1350	900-1350	950-1200	54-88
	Insertion Loss	+3dB	2.5dB	2.5dB	3dB	4dB	5dB	7dB	3dB
	Return Loss	10dB	5dB	5dB	5dB	5dB	5dB	6dB	10dB
	Out of Port Rejection	25dB	20dB	20dB	20dB	15dB	15dB	15dB	8dB
	Power Passing	O	X	X	X	O	O	O	X
	L.O. Frequency (MHz)	600 ± 2	-	-	-	-	-	-	-
	Output Frequency	1550-2050	-	-	-	-	-	-	-
INPUT 2	Bandwidth (MHz)	950-1450	950-2050	950-2050	950-2050	1450-2350	1400-1600	1240-1400	174-216
	Insertion Loss	2dB	3.5dB	3.5dB	3.8dB	3.5dB	5.5dB	7dB	3dB
	Return Loss	10dB	6dB	6dB	5dB	6dB	6dB	6dB	10dB
	Out of Port Rejection		25dB	25dB	20dB	15dB	15dB	15dB	12dB
	Power Passing	O	O	O	O	O	O	O	X
INPUT 3	Bandwidth (MHz)	-	-	-	-	-	1670-2250	1450-1600	470-860
	Insertion Loss	-	-	-	-	-	5.5dB	7dB	3dB
	Return Loss	-	-	-	-	-	6dB	6dB	10dB
	Out of Port Rejection	-	-	-	-	-	15dB	15dB	9dB
	Power Passing	-	-	-	-	-	O	O	X
INPUT 4	Bandwidth (MHz)	-	-	-	-	-	-	1670-2250	-
	Insertion Loss	-	-	-	-	-	-	7dB	-
	Return Loss	-	-	-	-	-	-	6dB	-
	Out of Port Rejection	-	-	-	-	-	-	15dB	-
	Power Passing	-	-	-	-	-	-	O	-
Impedance (ohm)	75	75	75	75	75	75	75	75	
Dimensions (mm)	25x93x86	17x59x48	23x52x59	23x75x59	23x75x59	23x83x68	23x83x68	23x83x68	

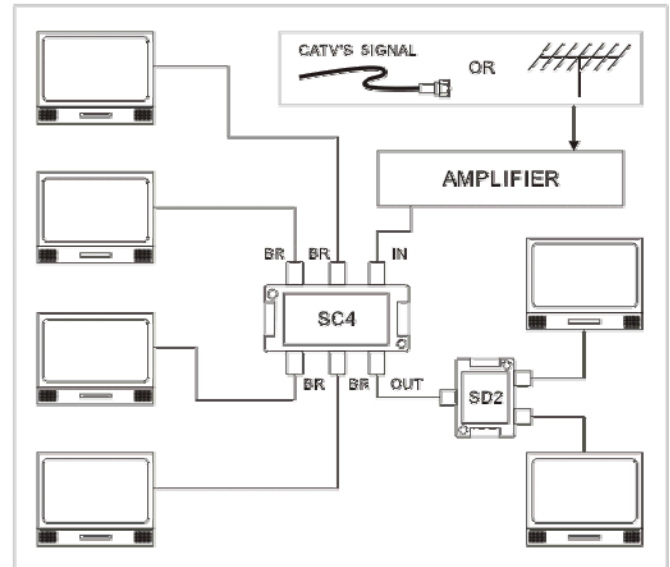
# To use FX - 914 dual band combiner and a 950 - 2050MHz satellite receiver, you can receive two polarization (V / H) or two different bands (950 - 1450 MHz) at the same time without changing V / H or using another switch.

# Tap 10-2610MHz

## Features:

- SMATV Full Band 5-2610MHz
- Zinc Die-cast High Shielding Case
- Output Port Power Passing
- Gold Plated " F " Type Connector

The SC Series are One Port Power Passing Model Taps Designed for Use to Branch RF Signal from FM, HF, VHF, UHF to Satellite - IF.



MODEL	DESCRIPTION	TAP LOSS ITEM (dB)	IN-OUT INSERTION LOSS(dB)	IN-BR INSERTION LOSS(dB)	OUT-BR ISOLATION (dB)	BR-BR ISOLATION (dB)	DIMENSION H x W x D (mm)
SC1-xx	10-2610MHz 1-WAY TAP	8	2.5-4	8-12±1	18-25		23 x 52 x 59
		12		12-16±1			
		16		16-20±1			
		20		20-24±1			
		24		24-28±1			
		28		28-32±1			
SC2-xx	10-2610MHz 2-WAY TAP	12	2.5-4	12-16±1	18-25	16-20	23 x 52 x 59
		16		16-20±1			
		20		20-24±1			
		24		24-28±1			
		28		28-32±1			
SC4-xx	10-2610MHz 4-WAY TAP	12	3.0-4.5	12-16±1	22-25	18-20	23 x 75 x 59
		16		16-20±1			
		20		20-24±1			
		24		24-28±1			
		28		28-32±1			
SC6-xx	10-2610MHz 6-WAY TAP	20	2.5-6.5	18.5-26	22-35	18-22	23 x 119 x 59
		25		24.5-31.5			
		30		26.5-33.5			
SC8-xx	10-2610MHz 8-WAY TAP	20	2.5-6.5	18.5-26	25-35	15-22	23 x 119 x 59
		25		23-31			
		30		28-35			

# Splitter 10-2610MHz

The **PDx** series are all ports power passing model splitter which can split RF signal, from HF, FM, VHF, UHF, to satellite - IF.

The **SDx** series are one ports power passing model which can split RF signal, from HF, FM, VHF, UHF, to satellite - IF.

The power (plus voltage) passing direction is from OUT port to IN port and DC drop voltage is about 0.7V.



PD2



SD3



PD4



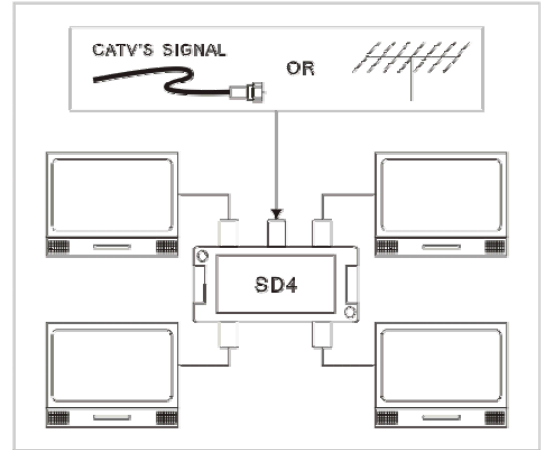
PD5



PD6



PD8



## Features:

- SMATV Full Band 10-2610MHz
- Zinc Die-cast High Shielding Case
- Built-in rectifier diode
- Gold Plated " F " Type Connector

Model	Description	Impedance In/Out	Frequency Range (MHz)	Insertion Loss (dB)	Return Loss (dB)	Isolation Out-Out (dB)
PD2 (SD2)	2-WAY 10-2610 MHz SPLITTER	75ohms	10-76	4.2	10	16
			76-222	4.7	12	21
			222-770	4.8	12	21
			770-1336	4.9	12	23
			1336-2150	5.4	10	22
PD3 (SD3)	3-WAY 10-2610 MHz SPLITTER	75ohms	10-76	6.2	10	20
			76-222	6.3	12	21
			222-770	6.8	15	23
			770-1336	7.2	13	25
			1336-2150	9	12	23
PD4 (SD4)	4-WAY 10-2610 MHz SPLITTER	75ohms	10-76	8.5	10	20
			76-222	8.7	12	23
			222-770	8.8	14	25
			770-1336	9.2	12	17
			1336-2150	10.5	10	15
PD5 (SD5)	5-WAY 10-2610 MHz SPLITTER	75ohms	10-76	10.2	10	18
			76-222	10	12	20
			222-770	10.5	12	18
			770-1336	11.2	10	17
			1336-2150	12.7	10	15
PD6 (SD6)	6-WAY 10-2610 MHz SPLITTER	75ohms	10-76	10.7	10	20
			76-222	10.5	14	18
			222-770	10.6	16	18
			770-1336	12	16	18
			1336-2150	14	10	20
PD8 (SD8)	8-WAY 10-2610 MHz SPLITTER	75ohms	10-76	13.5	10	20
			76-222	12.8	13	23
			222-770	12.8	14	20
			770-1336	13.7	14	16
			1336-2150	15.8	10	16
			2150-2610	16.5	8	18

**PDx** for All Port Power Passing

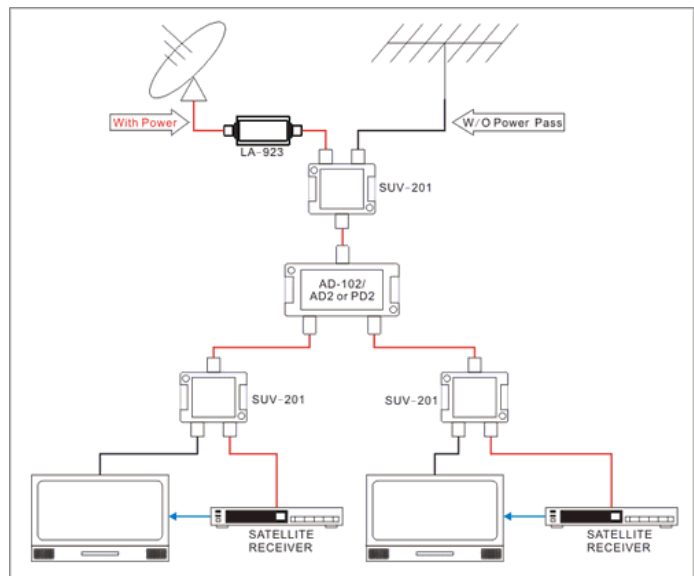
**SDx** for One Port Power Passing

# Active Divider 10-2500 MHz

The ADx series are New designed SMATV In-Line Distribution Amplifier, which can Amplified and split Full-Band 10~2500MHz RF signal, from UHF, VHF, HF, FM, to satellite - IF.

## Features

- New model, mini size
- New amplifier circuit designed
- Built-in regulator
- Built-in rectifier diode
- All ports power passing
- Zinc Die-cast hybrid case
- Gold plated "F" type connector pins



AD-2



AD-4



AD-6



AD-8

Model	Description	Impedance In/Out	Operating Voltage	GAIN	Return Loss	Isolation Out-Out	Dimensions (mm)
<b>AD2</b>	2-WAY AMPLIFIED DIVIDER	75	9~18V	+10dB	6dB	18-25dB	23x75x59
<b>AD4</b>	4-WAY AMPLIFIED DIVIDER	75	9~18V	+6dB	6dB	20-25dB	23x75x59
<b>AD6</b>	6-WAY AMPLIFIED DIVIDER	75	9~18V	+2dB	6dB	20-25dB	23x119x59
<b>AD8</b>	8-WAY AMPLIFIED DIVIDER	75	9~18V	+0dB	6dB	20-25dB	23x119x59



# In-Line Amplifier

The Oarsman In-Line Amplifier can booster optimize signal through long coaxial cable runs and distribution networks.

## Features

- Wide Bandwidth for all Terrestrial Satellite applications
- Models with Slope Gain can Equilibrate Cable Loss
- Models Powered by the Receiver via Coaxial Cable
- High Performance SMD Board Circuitry
- solid-state design
- Digital TV-ready
- Epoxy Backed Cover Plate
- Nickel-Plated Zinc-Alloy Die-Cast Housing

They are manufactured using highly reliable surface mount technology and advanced micro-strip RF circuitry.

Like all other Oarsman RF products, housed in a rugged, extruded housing, the AMP represents the optimum choice for any 10-2450 MHz system application

## 950-2250MHz Multi Launch Amplifier

Model	I/P No.	O/P No.	Gain (dB)	Output Level	Noise Figure	Power Supply	Dimensions (mm)
QLA-4025	4	4	20~26	105dBuV	6dB	13-24V 600mA	32x130x130
QLA-3025	3	3	20~26	105dBuV	6dB	13-24V 600mA	32x130x130
DLA-2024	2	2	20~24	105dBuV	6dB	13-22V 300mA	25x93x99
DLA-2016	2	2	12~16	105dBuV	6dB	13-22V 300mA	25x93x99



## 950-2450MHz In-Line Amplifier

Model	I/P No.	O/P No.	Gain (dB)	Output Level	Noise Figure	Power Supply	Dimensions (mm)
LA-923	1	1	16~21	105dBuV	6dB	13-18V 45mA	18x85x29
LA-925	1	1	18~25	105dBuV	6dB	13-18V 45mA	18x85x29
LA-932	1	1	30	105dBuV	6dB	13-18V 45mA	18x85x29
OM-9220	1	1	16~20	105dBuV	6dB	13-18V 45mA	20x81x27



## 450-2450MHz In-Line Amplifier

Model	I/P No.	O/P No.	Gain (dB)	Output Level	Noise Figure	Power Supply	Dimensions (mm)
LA-423	1	1	17~21	105dBuV	6dB	13-18V 45mA	18x85x29
OM-4220	1	1	17~21	105dBuV	6dB	13-18V 45mA	20x81x27



## 10-2450MHz In-Line Amplifier

Model	I/P No.	O/P No.	Gain (dB)	Output Level	Noise Figure	Power Supply	Dimensions (mm)
LA-123	1	1	16~21	105dBuV	6dB	13-18V 45mA	18x85x29
OM-1220	1	1	17~21	105dBuV	6dB	13-18V 45mA	20x81x27



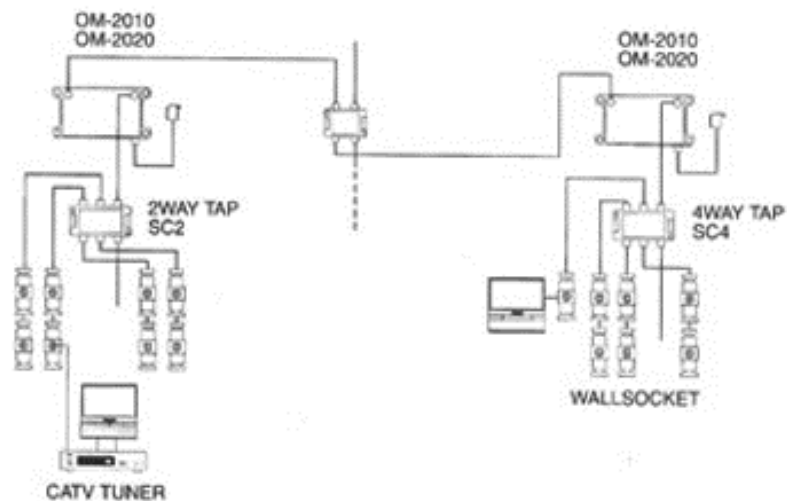
# Drop Amplifier

## Features

- 1GHz Bandwidth
- Bi-Directional
- Optional Reverse band
- Excellent Flatness
- High RFI Shielding
- 6KV Protection

The OM-2000 series are Super Wide Band and Dual Direction Type Amplifiers for Indoor CATV Use. Various Bandwidths are Available in Accordance with Customer Specifications. The Options for Reverse Band are 5-30/5-40/5-55/5-65 MHz. The Other Path is Main Band. The Excellent Specifications are Design to Maximize Picture Quality.

These units are powered by either the DC port or the RF output port using a Power Inserter (Optional).



Specifications	OM-2222(*)	OM-2212(*)	OM-2211(*)	OM-2020(*)	OM-2010(*)	OM-2001(*)
Forward Path (MHz)	54-1G(A) / 70-1G(M) / 85-1G(T)					
Typical Gain	20dB	20dB	10dB	20dB	10dB	-1dB
Return Loss	18dB					
Noise Figure	5dB typ.	5dB typ.	4dB typ.	4dB typ.	4dB typ.	--
Rated Output Level	14dBmV	14dBmV	23dBmV	14dBmV	23dBmV	--
Return Path (MHz)	5-42(A) / 5-55(M) / 5-65(T)					
Typical Gain/Loss	20dB	10dB	10dB	-1dB	-1dB	10dB
Return Loss	18dB					
Noise Figure	5dB typ.	5dB typ.	5dB typ.	--	--	5dB typ.
Rated Output Level	50dBmV	60dBmV	60dBmV	--	--	60dBmV
General						
Nominal Impedance	75ohm					
RFI Shielding	110dB					
Supply Voltage	DC12V					
Total Power Consumption	< 10W				< 5W	
Dimensions	113(W) x 54(D) x 40(H) mm					
Net Weight	150g					

# Mini Drop Amplifier

## Features

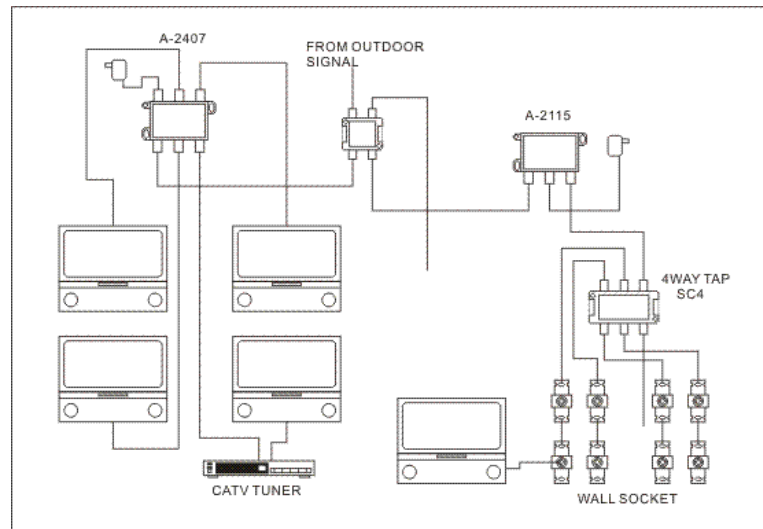
- 1GHz Bandwidth
- Bi-Directional
- Optional Reverse band
- Excellent Flatness
- High RFI Shielding
- 6KV Protection
- Mini Die-Casting Case

The A-2000 series drop amplifiers are perfectly designed for the current multimedia CATV system. The A-2000 series can forward gain either 10dB or 20dB with the superior flatness.

The reverse band of the A-2000 series fits the signals of the two-way communication for phone, fax, cable modems as well as the interactive services from customers.

The soldered-back case provides high RFI shielding, guaranteeing clean signals without interference and keeping out unwanted noise.

These units are powered by either the DC port or the RF output port using a Power Inserter (Optional).



Specifications	A-2222(*)	A-2212(*)	A-2211(*)	A-2020(*)	A-2010(*)	A-2001(*)
<b>Forward Path (MHz)</b>	54-1G(A) / 70-1G(M) / 85-1G(T)					
Typical Gain	20dB	20dB	10dB	20dB	10dB	-1dB
Return Loss	18dB					
Noise Figure	5dB typ.	5dB typ.	4dB typ.	4dB typ.	4dB typ.	--
Rated Output Level	14dBmV	14dBmV	23dBmV	14dBmV	23dBmV	--
<b>Return Path (MHz)</b>	5-42(A) / 5-55(M) / 5-65(T)					
Typical Gain/Loss	20dB	10dB	10dB	-1dB	-1dB	10dB
Return Loss	18dB					
Noise Figure	5dB typ.	5dB typ.	5dB typ.	--	--	5dB typ.
Rated Output Level	50dBmV	60dBmV	60dBmV	--	--	60dBmV
<b>General</b>						
Nominal Impedance	75ohm					
RFI Shielding	110dB					
Supply Voltage	DC12V					
Total Power Consumption	< 10W				< 5W	
Dimensions	80(W) x 55(D) x 23(H) mm					
Net Weight	110g					



# Power Inserter

Oarsman PI-10x Series Multi out Power Inserter, build-in the Super Wide Band Splitter, Use with PA/UA/CA Pre-Amplifier may solve the problem which many television signal intensity is insufficient.

### Features:

- SMATV Full Band DC-2500MHz
- High Shielding Zinc Dis-cast Housing
- F Female Connectors
- Can used to be a TV Splitter
- Work with All OM-series Drop Amplifier



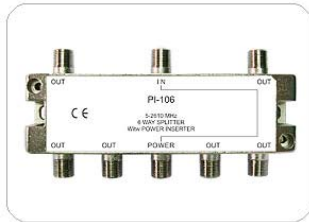
PI-101



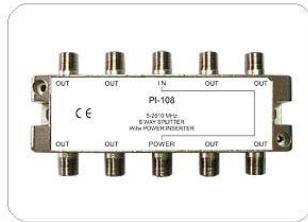
PI-102



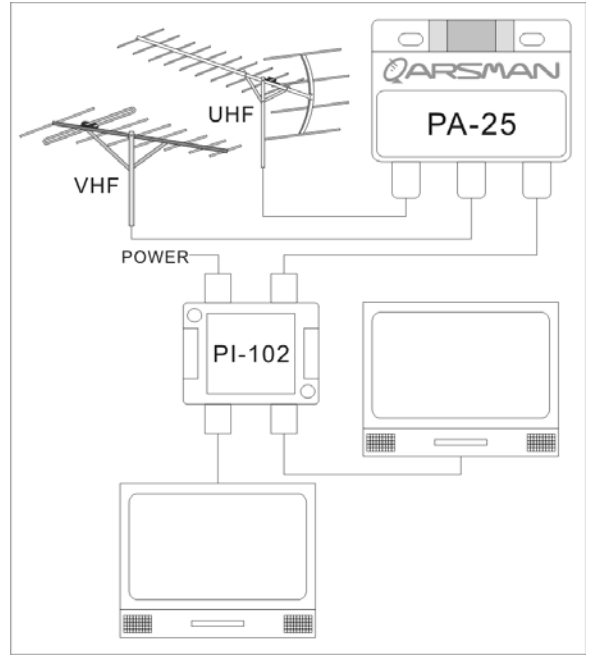
PI-104



PI-106



PI-108



PI-2F



PI-2

ITEM	PI-101	PI-102	PI-104	PI-106	PI-108	PI-22F	PI-22F	
Pass Band	DC-2500 MHz					DC-2250		
Output Ports No.	1	2	4	6	8	2	2	
Pass Band Loss	1.0dB	4.0dB	8.0dB	11.0dB	13.0dB	1.0dB	1.0dB	
DC Connector	F-Female						DC Plug	
Return Loss	10dB Min.							
Max. Power Insertion	DC 24V / 1 Amp Max.							
Out-Out Isolation	-	20dB Min.						
Dimensions (WxDxH mm)	55 x 48 x 15	52 x 59 x 23	75 x 59 x 23	119 x 59 x 23	119 x 59 x 23	99 x 76 x 28	99 x 76 x 28	
Power Output To LNB	-	-	-	-	-	13V + 18V	13V + 18V	

Order Index  
**PA2x1=PA-2x+PI-101**  
**PA2x2=PA-2x+PI-102**  
**PA2x4=PA-2x+PI-104**  
**PA2x6=PA-2x+PI-106**  
**PA2x8=PA-2x+PI-108**

**UA251=UA-25+PI-101**  
**UA252=UA-25+PI-102**  
**UA254=UA-25+PI-104**  
**UA256=UA-25+PI-106**  
**UA258=UA-25+PI-108**

**CA251=CA-25+PI-101**  
**CA252=CA-25+PI-102**  
**CA254=CA-25+PI-104**  
**CA256=CA-25+PI-106**  
**CA258=CA-25+PI-108**



# Broadband HQ Filter

The Oarsman HQ Series Filter Include Band pass filter, Low pass Filter, High pass filter, Window Filter, Band Trap Filter are manufactured by highly reliable surface mount technology & advanced micro-strip RF circuitry to reach excellent Return Loss and low Insertion Loss. The HQ series Filter represents the optimum choice for any 5-3000MHz Terrestrial & Satellite application.

## Features

- Wide Bandwidth for all Terrestrial & Satellite applications
- Low insertion loss, In-Out reduced to a minimum.
- Rejection better than 40dB.
- Excellent Return Loss. Good Impedance.
- Solid-state design
- Digital TV-ready
- Nickel-Plated Brass Tube



Model	Description	Optional Bandwidth	Pass Band Insertion Loss	Stop Band Rejection	Return Loss	Impedance/ Connector	Optional Power Passing	Operating Temperature	Dimensions (mm)
BPF-xxx	Band Pass Filter	5~3000MHz	3dB	45dB	12dB	75Ω / F-Male to F-Female)	+60VDC 1A	0°C~+60°C	14Φ*60
LPF-xxx	Low Pass Filter								
HPF-xxx	High Pass Filter								
WPF-xxx	Window Filter								
TPF-xxx	Trap Filter	5~1000MHz		60dB					

# Mini In-Line Amplifier

The Oarsman Mini In-Line Amplifier can booster optimize signal through long coaxial cable runs and distribution networks. They are manufactured using highly reliable surface mount technology and advanced micro-strip RF circuitry. Like all other Oarsman RF products, housed in a rugged, extruded housing, the AMP represents the optimum choice for any 10-2450 MHz system application.

## Features

- Wide Bandwidth for all Terrestrial Satellite applications
- Models with Slope Gain can Equilibrate Cable Loss
- Models Powered by the Receiver via Coaxial Cable
- High Performance SMD Board Circuitry
- Solid-state design
- Digital TV-ready
- Nickel-Plated Brass Tube



Mini 10/450/950-2450MHz In-Line Amplifier

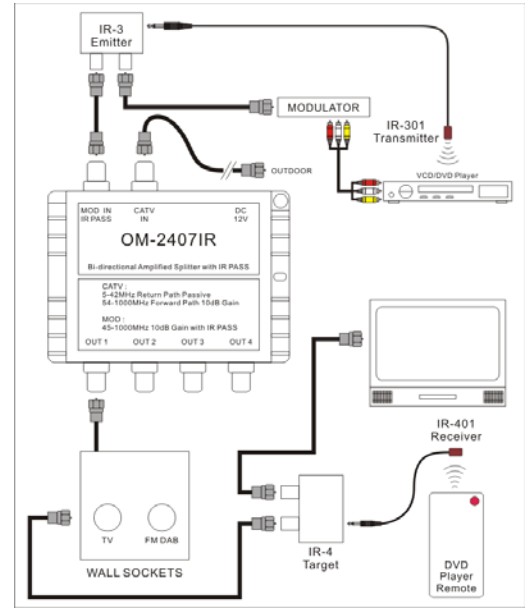
Model	I/P No.	O/P No.	Gain (dB)	Output Level	Noise Figure	Power Supply	Dimensions (mm)
LA-5	1	1	5	105dB	6dB	13-18VDC 45mA	14Φ*60
LA-10			10				
LA-15			15				
LA-20			20				

# Amplifier with IR Passive

This series allows IR signals to pass through the modulator input to the TV outputs, making it a perfect match for the Emitter / Transmitter, Target / Receiver.

## Features

- 5 Inputs for LNB, FM, DAB-T, UHF TV Bands and STB.
- Support All Broadcasting Band
- All Outputs are IR enabled with MOD Input
- Support Dual Function of RF and base band in IR operation



Specifications	LB-58	MA-58	OM-2407IR
Input Ports #	5	5	2
Output Ports #	8	8	4
Infra-Red Control Compatibility	All Outputs are IR enabled (Suit for Oarsman IR-xx series Products)		
<b>Input 1</b>	<b>FM Input - 88~108 MHz</b>		-
Gain to Distribution Outputs	5 dB Gain	10 dB Gain	-
Gain to Living Room Output	5 dB Gain	-	-
Infra-Red Control Compatibility	×	×	-
<b>Input 2</b>	<b>DAB/VHF Input - 174~230 MHz</b>		-
Gain to Distribution Outputs	5 dB Gain	10 dB Gain	-
Gain to Living Room Output	5 dB Gain	-	-
Infra-Red Control Compatibility	×	×	-
<b>Input 3</b>	<b>UHF Input- 470~860 MHz</b>		-
Gain to Distribution Outputs	-	10 dB Gain	-
Gain to Living Room Output	5 dB Gain	-	-
Infra-Red Control Compatibility	×	×	-
<b>Input 4</b>	<b>Satellite Input - 950~2250 MHz</b>		-
Gain to Distribution Outputs	-	10 dB Gain	-
Gain to Living Room Output	5 dB Gain	-	-
Infra-Red Control Compatibility	×	×	-
<b>Input 5</b>	<b>Modulator Input - 470~860 MHz</b>		
Gain to Distribution Outputs	5 dB Gain	10 dB Gain	5 dB Gain
Gain to Living Room Output	5 dB Gain	-	-
Infra-Red Control Compatibility	○	○	○
<b>Uplink path</b>	<b>470~860 MHz</b>		<b>54~1000MHz</b>
Gain to Distribution Outputs	5 dB Gain	-	10 dB Gain
Infra-Red Control Compatibility	-	-	×
<b>Return path</b>	<b>2~10 MHz</b>		<b>5~42MHz</b>
RF Return Path Gain / Loss	5 dB Gain	-	-11dB Loss
Infra-Red Control Compatibility	-	-	×
<b>General</b>			
Band to Band Rejection	≥40 dB		
Output to Output Rejection	≥20 dB		
Connectors and Impedance	F-Type (female) 75ohm		
Power requirement	12VDC 500mA Power Supply		
Operating temperature range	-10~+40°C		
Dimensions (W*H*D)	184 x 130 x 29 mm	124 x 138 x 38 mm	126 x 128 x 27 mm

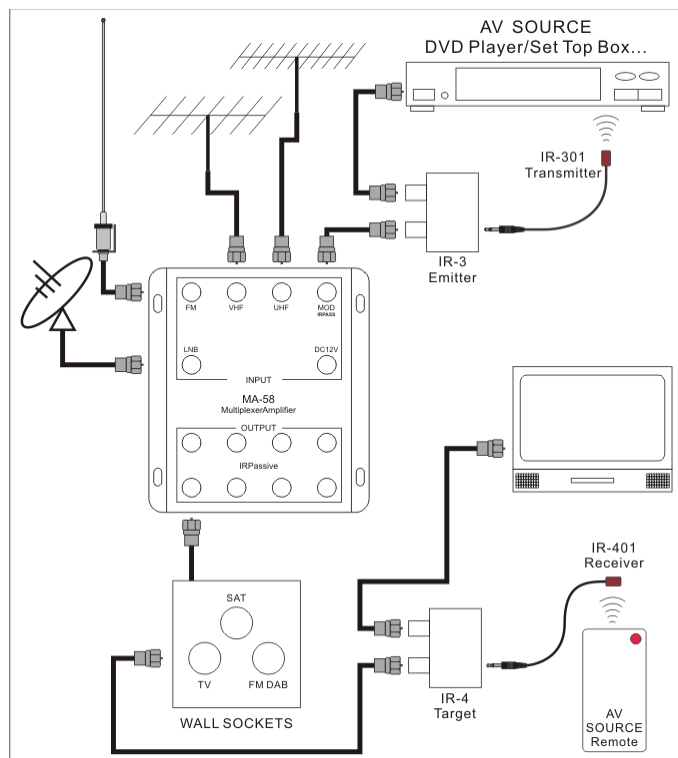


# IR over Coax System

The IR-3 and IR-4 Series can trough IR Signal between any IR Passive Series Equipments in the Cable via AV Sources Remote Control Directly. It will help user to Select channel / program, or radio easily.

## Features

- It is suitable to work in TV network system, RF Broadcasting.
- The signal is able to through via splitter/tap.
- It is able to work with the other IR amplifier.
- Easy Installation.



Specifications	IR Emitter / Transmitter			IR Target / Receiver	
	IR-3	IR-301	IR-302	IR-4	IR-401
ITEM	IR-3	IR-301	IR-302	IR-4	IR-401
Frequency	35~41KHz	35~41KHz	35~41KHz	35~41KHz	35~41KHz
Output ports	1	1	2	1	1
Cable Length	-	3M	3M	-	3M
Insertion Loss	1.5dB@860MHz 3dB@2.3GHz	-	-	1.5dB@860MHz	-
Sensitivity	-90dBm	-	-	-80dBm	-
Power	9V,20mA	-	-	9V,10mA	-
Operation Temperature	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C

# IR Extender System

The IR-xx Infrared Remote Control Extender allows you to use any Existing Remote Control Units to Operate VCR, Stereo, CD Player or Satellite Systems from Anywhere in the Home. The Complete IR Extender System Consists of a Transmitter (IR-2xT) and a Receiver (IR-2xR). Additional Transmitters may be Added to Extend Remote Control to each Room required. Additional Receivers may be added to control additional Equipment in other Rooms.

## Wired IR extension system IR-21 & IR-27 & IR-30 Series

### Features:

- Wired IR remote control signal extension system
- Sending remote signal via Cables
- Carrier frequency : 11MHz
- Plastic IR extender housing, small size

## Wireless IR extension system IRT-25 & IRT-29 Series

### Features:

- IR remote control signal extending by UHF
- Can control any AV equipments through walls
- Carrier frequency : 433.92MHz
- Maximum operation range : up to 50m at open site



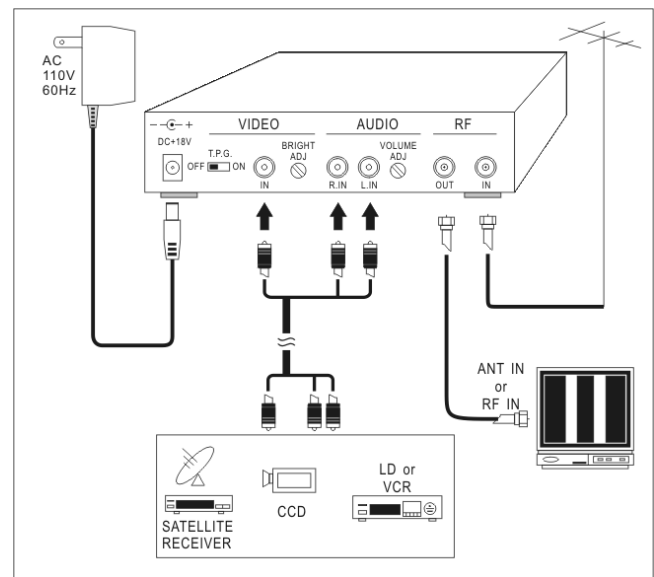
IR Receiver	IR-21T	IR-27T	IR-30T	IRT-25R	IRT-29R
Infrared Frequency Input	35~41KHz	35~41KHz	32~38KHz	35~41KHz	35~41KHz
IR Receiving Range	≥ 5m	≥ 5m	≥ 6m	≥ 8m	≥ 8m
Carrier Frequency	11MHz-ASK	11MHz-ASK	10.7MHz	433.92MHz	433.92MHz
Control Level adjustable	na	0~10dB	0~10dB	--	--
Power Supply	230VAC, 50Hz	12VDC, 100mA	12VDC, 100mA	9VDC, 150mA	12VDC, 100mA
IR Re-emitter	IR-21R	IR-27R	IR-30R	IRT-25T	IRT-29T
Carrier Frequency	11MHz	11MHz	10.7MHz	433.92MHz	433.92MHz
Minimum Level	<50dBuV	<50dBuV	<50dBuV	--	--
Infrared Output	37±1KHz	37±1KHz	37±1KHz	37±1KHz	37±1KHz
IR Re-emitting Range	≥ 3m	≥ 3m	≥ 3m	≥ 3m	≥ 3m
Power Supply	230VAC, 50Hz	12VDC, 100mA	12VDC, 100mA	9VDC, 150mA	12VDC, 100mA

# TV Modulator

The OM-16x series are high quality and high technical audio / video modulator of mini type. Use the DIP-SW to set channel, so you can easy and precise to select any one channel. Other frequency ranges can be made in accordance with your request.

## Features:

- All IC circuit designed.
- PLL controlled RF modulator.
- Can adjust the output channel.
- Simulation STEREO Input (R+L)
- Suitable for the home distribution.
- Audio pre-emphasis circuit designed.
- Build-in amplifier to compensate transmission loss.



Specification	OM-161	OM-164U	OM-166	OM-168x	OM-169U	OM-169V
Frequency Range(MHz)	47~860	470~860	54~870	see the model	110~250	470~860
TV System	NTSC-M & PAL-B/D/G/I/K	NTSC-M or PAL-G/I/K	NTSC-M or PAL-B/G	NTSC-M or PAL-B/G/I/K	PAL-G or NTSC-M	PAL-B or NTSC-M
Audio Sub-Carrier	4.5/5.5/6.0/6.5	4.5MHz or 5.5MHz or 6.0MHz or 6.5MHz (depend on TV system)				
RF Output	IEC 169-2 (female) or F (female) @75Ω (optional)					
Output Level	80~95dBuV	75dBuV	80~90 adj.	70dBuV	73dBuV	73dBuV
Video Input	1 x RCA jack 1Vp-p @75Ω	3 x RCA jack 1Vp-p @75Ω	1 x F-Female 1Vp-p @75Ω	1 x RCA jack 0.7 to 2Vp-p @1KΩ		
Audio Input	2 x RCA jack 2Vp-p @30KΩ	3 x 3.5mm stereo jack 1Vp-p @10kΩ	1 x F-Female 0.5 to 4Vp-p @30KΩ	2 x RCA jack 0.5 to 4Vp-p @30KΩ		
Power Requirement	9VDC 400mA	9VDC 300mA	12VDC 280mA	230VAC or 120VAC (optional)		
Net Weight(w/o Adaptor)	0.25 kg	0.26 kg	0.50 Kg	0.45 kg	0.23kg	0.23kg
Dimensions (W/D/H mm)	130x123x55	132x105x33	104x90x29	140x95x35	114x98x33	114x98x33

※ Model OM-168x series for NTSC-M system: OM-168L 54~89MHz / OM-168M 120~174MHz / OM-168H 174~210MHz / OM-168S 210~300MHz / OM-168U 470~560MHz

※ Model PM-168x series for PAL-B/G/I/K system: PM-168L 54~89MHz / OM-168M 118~174MHz / OM-168H 174~230MHz / PM-168S 230~300MHz / OM-168U 470~550MHz



# Video Sender w/LCD

Portable VS Series is an AV to TV converter with an integrated Wireless. It can transmit the Video and Audio Signal to the portable LCD Receiver. It is ideal for STB/DVD/VCD movie viewing, baby/patient monitoring.

## VS-23/24 Series

### Features:

- Wide-Band FM Modulation,4 Channel System.
- 1.7" TFT-LCD Screen.
- Portable Receiver Provides You More Flexibility.
- Camera :IR LEDs for night are selectable.
- Surveillance or Baby Monitoring.
- Operating Range: Up to 100m at Open Site.
- LED Indicates Battery Low Voltage.
- Ch1...Ch4 Scan in Auto Site.
- Apply Earphone via Earphone Socket.
- Adjustable Volume ,Brightness etc...
- With Alarm Function.

## VS-25 Series

### Features:

- 2.4GHz Wireless Surveillance System with PLL Circuit Design.
- Wide-Band FM Modulation.
- 4 Channel Selection to Avoid Interference.
- 6 IR LEDs Provide Bright View for Darkness.
- 1/3" color CMOS Image Sensor 64° Fixed Wide-Angle Lens.
- 380 TV Lines Clear Picture Display.
- 2.5" LCD Screen Display for Vivid and Bright Images.
- Channel Scan and Skip for Multi-Camera Usage.
- Remote Pan & Tilt Control Auto or Manually Pan: ±90°;Tilt: ±30°.
- Small Palm Size of Receiver for Mobile Usage.
- Operating Range: Up to 100m at Open Site.



Transmitter	VS-23T	VS-24T	VS-25T
Frequency Band	2.4-2.4835GHz		
RF Output Level(Max.)	0dBm / FCC, 10dBm / CE		
Modulation	FM (Audio / Video)		
Image Sensor	-	-	1/3" CMOS, PAL
Lens	-	-	F 1.8/f6.0mm 64° wide angle
Auto Iris	-	-	1/60~1/6,000sec
Picture Element	628(H)x582(V)		
Picture Resolution	380 TV Lines		
Min. Illuminations	1 lux		0.5 lux (LED on)
Microphone	Electrical Condenser		
CH/Low Voltage Indicate	LED(Red)		
Channel Select	Switch		
Power Supply	7.5VDC,500mA or 3AA battery	7.5VDC,500mA or 2AA battery	9VDC,600mA

Receiver	VS-23R	VS-24R	VS-25R
Sensitivity	-80dBm		
IR Extending Frequency	433.92MHz		
IR Receiving Range	More then 8m		
Output Port	3.5mm jack		
Earphone Output Port	3.5mm stereo jack		
Channel Operating Mode	-	-	Auto / Manual Scan
LCD Screen Size	1.7" TFT-LCD		2.5" TFT-LCD
Mode	Alarm / Normal		-
Alarm Sound Level	60dB@30cm transmitter		-
CH/Low Voltage Indicate	LED(Red)		
Channel Select	Button with LED indicated		
Power Supply	5VDC,1A or 3AA battery	5VDC,1A or 3AA battery	5VDC,1000mA

# Vedio Sender

VS Series is an AV to TV converter with an integrated Wireless. It can transmit the Video and Audio Signal to any TV in the other Rooms. It is ideal for DVD/VCD movie viewing, presentations, baby/patient monitoring, burglary detection, theft prevention, or home/company monitoring.

## Features:

### VS-5x Series

- 5.2 / 5.8GHz to send video and stereo signal.
- A complete wireless AV transmission system.
- AES(Advanced Encryption system) for data security.
- Avoid crowd 2.4GHz signal inference.
- IR extending distance: up to 50m at open site.
- Operating range: up to 100m at open site.
- Wide band FM modulation. PLL design.

## Features:

### VS-2x Series

- 2.4GHz to sent video and stereo audio.
- Available 4-channels to avoid interference.
- High quality video compressor.
- IR extending distance: up to 50m at open site.
- Operating range: up to 100m at open site.
- Super quality video , stereo sound.
- Wide band FM modulation. PLL design.



Transmitter	VS-50T	VS-58T	VS-22T	VS-27T	VS-28T	VS-29T
Wireless Standard	IEEE802.11a	IEEE802.11b				
Frequency Band	5.180~5.350GHz(8CH)	5.75, 5.77, 5.79, 5.81GHz(4CH)	2.4~2.4835GHz(4CH)			
RF Output Level	--	20mW / CE	0dBm / FCC, 10dBm / CE			
Modulation	OFDM		FM (Audio / Video)			
Variable Bit Rate	Up to 8 Mbps	--	--	--	--	--
Video Input	RCAX1,S-VHSx1,RGBx1	RCA or SCART	RCA or SCART	3.5mm jack	6 Pin mini DIN jack	SCART Plug
Audio Input	RCA(Audio L+R)x2	jack	SCART			
Video Input Level	1Vp-p@ 75Ω					
Audio Input Level	1Vp-p@ 600Ω					
A/V Output	RCAX1	--	--	--	--	--
IR Blaster	x2	--	--	3.5mm jack	--	--
Power Supply	12VDC,2A	9VDC, 400mA	9VDC, 400mA	5VDC, 300mA	9VDC, 400mA	7.5VDC, 300mA

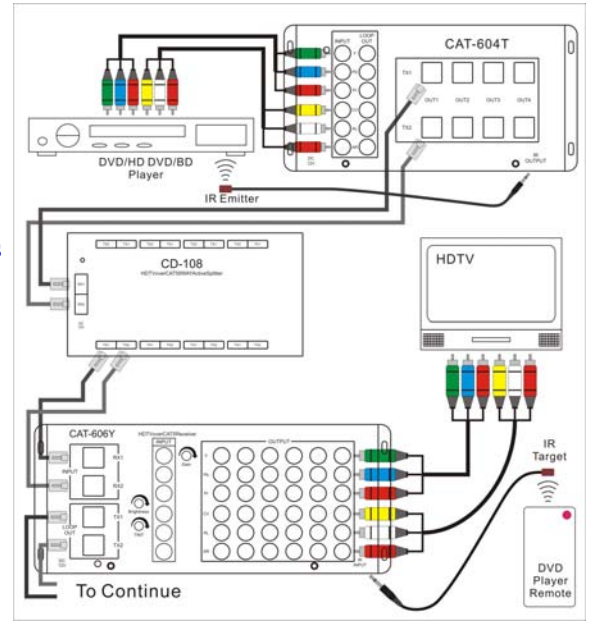
Receiver	VS-50R	VS-58R	VS-22R	VS-27R	VS-28R	VS-29R
Frequency Band	5.180~5.350GHz(8CH)	5.75, 5.77, 5.79, 5.81GHz(4CH)	2.4~2.4835GHz(4CH)			
Compression	MPEG-2		--			
Video Output	RCAX1,S-VHSx1,RGBx1	RCA or SCART	RCA or SCART	3.5mm jack	6 Pin mini DIN jack	SCART Plug
Audio Output	RCA(Audio L+R)x2	jack	SCART			
Video Output Level	1Vp-p @ 75 Ω					
Audio Output Level	1Vp-p @ 600Ω					
Sensitivity	-80dBm					
IR Extending Frequency	433.92MHz (Distance up to 50m at open site)					
IR Receiving Range	More then 8m					
Power Supply	12VDC,2A	9VDC, 400mA	9VDC, 300mA	5VDC, 300mA	9VDC, 400mA	7.5VDC, 300mA

# Cat5 Extender

The CAT System Can Distribute High Definition YPbPr (YCbCr) with Digital Audio and Composite Video with Stereo Audio over extended distances using UTP (Cat5/Cat5e/Cat6) Cable.

## Features:

- Video Bandwidth 450MHz Can Support HDTV 1920x1080i Signals
- Route and Distribute YUV over CAT5 Costly Individual Cables
- DA/CV Port Support Digital Audio & Composite Video signals
- Loop output for use of additional CAT5 Transmitters
- Enclosure Type: Wall Mount Metal Case
- Reduce overall installed cost about 40%
- Long distance extend via CAT5
  - 1. 1000 feet for HDTV resolution 480p.
  - 2. 600 feet for HDTV resolution 720p
  - 3. 450 feet for HDTV resolution 1080i
  - 4. 1000 feet for Composite Video (YPbPr)
  - 5. 1000 feet for Digital Audio (SPDIF) and Stereo Audio



Specifications	TRANSMITTER		RECEIVER			DIVIDER
	CAT-604T	CAT-101T	CAT-606Y	CAT-606R	CAT-101R	CD-108
Type of In/Out Signals	Component Video(YPbPr)+Digital(or Composite Video)+Stereo Audio					
Input RJ-45 Terminal	-	-	1 set	1 set	1 set	1 set
Input RCA Terminal	1 set	1 set	1 set	-	-	-
Output RJ-45 Terminal	4 set	1 set	-	-	-	8 set
Output RCA Terminal	-	-	6 set	6 set	1 set	-
Loop Output RJ-45 Terminal	-	-	1 set	1 set	-	-
Loop Output RCA Terminal	1 set	-	-	-	-	-
Bandwidth	225MHz, -3dB large signal bandwidth 450MHz, -3dB small signal bandwidth		160MHz large signal bandwidth			300MHz, -3dB
Slew Rate	1600V/μs		1600V/μs @G=1, Vo=2Vp-p			750V/μs
Output Balance Error	-60dB@50MHz		-			-
High Isolation	Between Amplifier 80dB @ 10MHz		-			Between Amplifier 80dB @ 10MHz
CMRR	-	-	65dB@10MHz			-
Video In Impedance	75ohms		75ohms			-
Video Maximum In Levels	1.4Vp-p		1.4Vp-p			-
Audio In Impedance	10K Ohms		10K Ohms			-
Audio Frequency Response	20Hz to 20KHz, +/-1dB		20Hz to 20KHz, +/-1dB			-
Audio Maximum In Levels	2Vp-p		2Vp-p			-
Dimensions WxDxH (mm)	227x115x28	64x104x25	312x115x28	227x115x28	64x104x25	184x94x25
Net Weight	0.62kg	0.3kg	0.72kg	0.65kg	0.3kg	0.6kg
Power Requirement	DC12V@1A	DC12V@1A	DC12V@1A	DC12V@1A	DC12V@1A	DC12V@1A

※ When used the CAT-101T with CAT-101R will have Two Power Mode Options.



# YC Distributor Series



YC Series is a HDTV Distribution Amplifier which allows any A/V Source with Component Video, Stereo Audio to Distribute A/V to 8~12 Different Locations without any Signals Loss.

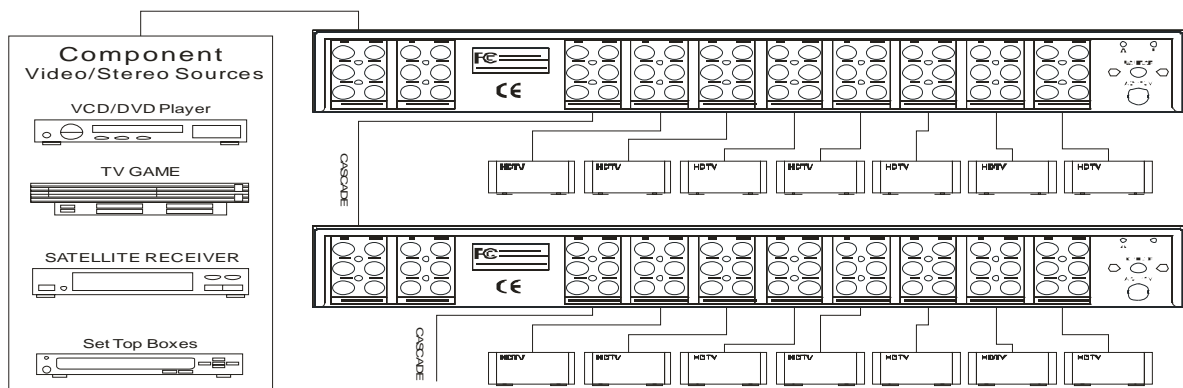
It is ideal for the Home Audio/Video, Transportation, Theater and Commercial AV applications which need Multiple Displays. When more than Twelve Outputs are required, Multiple YC Series can be linked to large number of TVs with equal picture quality, which helps you save the expense of additional A/V receiver. YC Series also has the 19 inch rack mountable accessories kit for the 19 inch cabinet.

## FEATURES

- Component Video: Bandwidth 300MHz Support YPbPr/YCbCr/RGBHV
- Digital Audio: Bandwidth 110MHz Support Composite Video and SPDIF
- Stereo Audio: Standard Left/HD, Right/VD Pairs
- Support 480i/P, 720i/P, 1080i/P
- Metal Rack Mountable



Specifications		YC-208HD	YC-212VD	YC-12V
VIDEO	Bandwidth	20MHz~300MHz		
	Gain	6dB		
	Input Port	2 x YUV (YPbPr/YCbCr) via RCA Connectors		
	Input Level	1Vp-p		
	Output Port	8 x YUV(YPbPr/YCbCr)	12 x YUV(YPbPr/YCbCr)	12 x YUV(YPbPr/YCbCr)
	Output Level	1Vp-p (75Ω Load)		
Digital Audio	Bandwidth	110MHz (Support PCM/CV/SPDIF)		
	Gain	6dB		
	Input Port	2 x Digital Audio (CV/SPDIF) via RCA Connectors		
	Input Level	1Vp-p		
	Output Port	8 x PCM/CV/SPDIF	12 x PCM/CV/SPDIF	--
	Output Level	1Vp-p (75Ω Load)		
AUDIO	Bandwidth	20Hz~60KHz		
	Gain	3dB		
	Input Port	2 x Stereo (R/L) via RCA Connectors		
	Input Level	2Vp-p		
	Output Port	8 x Stereo (R/L)	12 x Stereo (R/L)	12 x Stereo (R/L)
	Output Level	3Vp-p (4.7KΩ Load)		
Power Consumption	15W Maximum	25W Maximum	25W Maximum	
Enclosure Type	Metal Rack Mountable			
Dimension (LxDxH)mm	482(429) x 212 x 70	482(436) x 124 x 45	482(436) x 88 x 65	



# AV Distributor Series



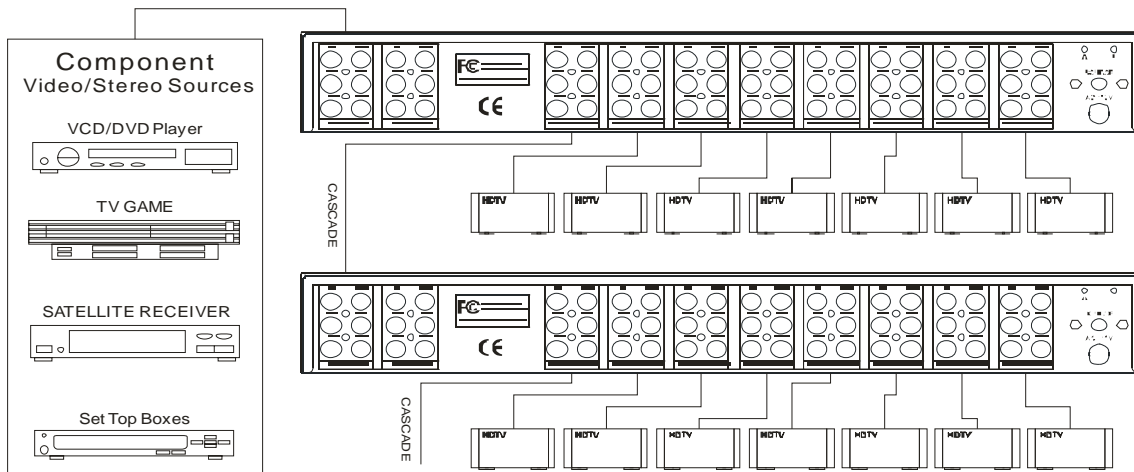
The VA-13 series, newly designed as composite video/stereo distribution amplifier, can expand the RCA output socket of user's AV equipment( satellite receiver, VCR, LD and etc...) to distribute more(TV, CVR, AMP, video sender , modulator ...) and built-in clamp circuit is designed to eliminate up-down.

## Features

- In/Out: Baseband (composite) Video and Left and Right Audio
- Drives up to 12~4 Audio/Video Components from a A/V Source.
- 9.5~17" Component, Space Saving inline Power Adapter
- Low A/V Distortion for Crisp Sound and Picture.
- Adjustable Video and Audio Levels



Specifications		VA-13CX	VA-13BS	VA-13AX	OM-VA13A
VIDEO	Bandwidth	20Hz~8MHz			
	Gain	6dB			
	Input Port	1 x Composite Video via RCA Connectors			
	Input Level	4Vp-p Max. (1KΩ Load)			
	Output Port	12 x Composite Video	8 x Composite Video	4 x Composite Video	4 x Composite Video
	Output Level Adj.	1.8Vp-p (75Ω Load)			
AUDIO	Bandwidth	20Hz~20KHz			
	Gain	11dB			
	Input Port	1 x Stereo Audio (R/L) via RCA Connectors			
	Input Level	5Vp-p Max. (20KΩ Load)			
	Output Port	12 x Stereo (R/L)	8 x Stereo (R/L)	4 x Stereo (R/L)	4 x Stereo (R/L)
	Output Level Adj.	4.5Vp-p (4.7KΩ Load)			
Power Consumption		5W Maximum	5W Maximum	5W Maximum	5W Maximum
Dimension (LxDxH)mm		420 x 240 x 60	345 x 203 x 60	420 x 240 x 60	240 x 150 x 50



# HDMI Splitter & Switcher

## FEATURES

- All support with HDMI 1.3b
- Ideal for home theater integration
- Supports the Video Amplifier Bandwidth up to 2.25Gpbs/225MHz
- Cascaded: Large distribution achieved by cascading HD-10x Series
- Easy to install and simple to operate
- With LED indicators on front panel.



Specification	HD-104E	HD-108E	HD-208E	HD-301E	HD-302E	HD-402E
Characteristics	1 x 4 Splitter	1 x 8 Splitter	2 x 8 Splitter	3 x 1 Switch	3 x 2 Switch	4 x 2 Switch
HDMI Connector	type A 19 pin female					
Input DDC Signal	5 volts p-p (TTL)					
Maximum Single Link Range	1920 x 1200, 1080P					
Video Amplifier Bandwidth	2.25Gpbs/225MHz					
VGA	640x480,800x600,1024x768,1920x1200					
Interlaced(50&60Hz)	480i,576i,1080i					
Progressive(50&60Hz)	480p,576p,720p,1080p					
Output Video	HDMI / HDCP: 1.3, 1.1					
Operating temperature range	0 to +70°C					
Operating humidity range	5 to 90 % RH (no condensation)					
Power Consumption	15 Watts (max.)			10 Watts (max.)		
Power Supply	5V DC@2.5A	5V DC@3A	5V DC@3A	5V DC@2A	5V DC@2A	5V DC@2A

HDMI Cable Limit Length		HDMI Cable Limit In / Out section length (m) ( 1080p Signal )					
Cable Spec.		26#		28#		30#	
ITEM	Length	Input side	Output side	Input side	Output side	Input side	Output side
HD-104E / HD-108E / HD-208E	w/Power	20m	15m	15m	10m	10m	10m
HD-301E / HD-302E / HD-402E	w/Power	15m	20m	15m	10m	10m	10m