



Labgear CATALOGUE JUNE 2005

Signal Distribution Products

- PUM111** 16dB wide band screened masthead
- PUH111** 26dB wide band screened masthead
- PUM141** Multi-4 screened masthead

New UHF preamplifiers have one of the lowest noise figures in the industry, combined with good input filtering.

When signals are weak, noise figure matters far more than gain and these amplifiers are something really special. Typical filter response -20 dB at 410 MHz, -40 dB below 295 MHz, to overcome Tetra interference.



PUM111 and PUH111

- Weatherproof outer plastic housings
- Fully screened, sealed, die-cast modules
- F-connectors throughout
- Ideal for digital
- Fixing options: standard cable tie mast mount or flat surface fix
- Earth bonding terminals

Technical Data

	PUM111	PUH111	PUM141
Inputs	1	1	1
Outputs	1	1	4
Gain (2dB gain flatness)	16dB	26dB	10dB typical
Superb noise figure	1.5dB	1.6dB	1.8dB typical
Output return loss	>14dB	>14dB	>16dB
Output capability	94dBµv	103dBµv	88dBµv
Power 12v DC	25MA	40MA	40MA Powered by any output
Isolation between outputs			>30dB



PUM141

Power Units

PSM114 12v Power Unit

- F-type connections.
- With fitted mains plugs to BS 1363.
- Excellent screening helps prevent ingress of impulse interference in DTT installations.
- Output short-circuit protection with LED fault indication.



- Thermal fuse in mains transformer protects against overheating.

Technical Data

	PSM114
Type-F (female)	
DC output	12 V DC at 100 mA max.
Short-circuit protection	5 minutes max.
Dimensions	65 (H) x 80 (W) x 45 (D) mm
Signal frequency range	44 – 862 MHz
Signal insertion loss	0.5 dB
Output voltage tolerance	±5%
Power requirement	230 V AC 50 Hz at <3 W

Medium and High Gain Unscreened UHF Masthead Amplifier Range

These unscreened products are intended for use as UHF TV domestic preamplifiers. They are suitable for use in areas of poor signal strength or for reception of an out-of-area transmissions.

The Range consists of 5 products.

The **CM7271** gives sufficient gain for most domestic installations.

The higher gain amplifier, **CM7266**, should be used if the down lead is greater than 5dB (25m 100 type cable), or if the amplifier is followed by a passive splitter to feed additional outlet points. Power (12v DC) must be supplied to the masthead via the coaxial cable. Labgear's PSM114 or a distribution amplifier with suitable line-powering capability can be used.

These amplifiers are unscreened and are not intended to be used in areas of high radiated electromagnetic interference.

CM7272 and **CM7274** are multi-output mastheads, 2 and 4 outputs respectively.

CM7372 is a twin output high gain masthead.

Features

- Easy installation and cable connections
- Compatible with PSM114
- Static and Surge protection
- Thoroughly tested, field proven moulded weatherproof housing
- Round Mast or flat surface fixing



CM7271



CM7372

Technical Data

	CM7271	CM7266	CM7272	CM7274	CM7372
Gain	15dB	26dB	12dB	12dB	23dB
Outputs	1	1	2	4	2
Output Capability	104dBµV	96dBµV	85dBµV	85dBµV	92dBµV
Frequency Range (MHz)	470-862	470-862	470-862	470-862	470-862
Noise Figure	2dB	2dB	2.5dB	2.5dB	2.5dB
Power Requirement	12v DC 15mA		12v DC 25mA		12v DC 25mA line through power
Connections	Saddle + Clamp				
Dimensions (H)x(W)x(D)	130 x 90 x 50		100 x 130 x 50		
Operating Temperature	-10...+50_C				

These passive units will satisfy a long need for up-to-date general purpose band selective combiners and splitters. The new design feature low insertion losses, excellent impedance matching and high isolation between bands.



PSF410
4 band combiner/splitter

- Quadruplexer for combining or splitting FM, DAB, UHF and satellite If bands
- Excellent SAT to UHF isolation allows use for combining LNB and the UHF antenna with negligible degradation of the UHF signals
- FM: 87.5-108 MHz
- T-DAB: 217.5-230 MHz
- UHF: 470-862 MHz
- SAT: 950-2300 MHz
- In-band insertion losses VHF/ UHF <1dB, SAT<2dB
- Return losses: VHF <16dB; UHF >13dB; SAT>10dB
- Isolation between bands VHF/ UHF >30dB; SAT to UHF >50dB
- DC line power pass: SAT-Common, 20 V & 400mA. (also passes 22kHz and DiSeqC control signals
- Replaces CM9137

PSF310
FM, DAB and UHF combiner

- Triplexer for combining or splitting FM, DAB and UHF TV bands
- FM: 87.5-108 MHz
- T-DAB: 217.5-230 MHz
- UHF: 470-862 MHz
- In-band insertion losses <1dB
- Return losses: VHF bands >16dB; UHF band >13dB
- Isolation between bands >30dB
- DC line power-pass: UHF-Common, 20v & 400mA max.
- Replaces CM9043

Technical Data

PSF310 and PSF410	
FM	88 – 108 MHz
DAB	217.5 – 230 MHz
UHF	470 – 862 MHz
SAT	950 – 2300 MHz
Inband insertion loss VHF / UHF	<1dB
Isolation between bands	<30dB
DC Line power	20V 400mA



PSC120
2-way VHF/UHF combiner / splitter

- 5-1000 MHz
- 3.7dB insertion loss
- 75 Ω impedance
- power passes in both directions
- ideal for splitting the Uplink on an HDU installation
- f-type connections
- Waterproof Masthead housing
- Mast or wall mount

TF111 Masthead BPF

With the introduction of Terrestrial Trunk Radio (Tetra) is has become apparent that in some areas it causes severe interference.

To overcome this problem Labgear are introducing the TF111 Masthead BPF.

This screened masthead Filter has excellent rejection >30dB at 385 MHz and >20dB at 900MHz.

It is a cost effective product that produces excellent results.

- MSA243D**
Amplifier Dual input – 4 outputs
- MSA263D**
Amplifier Dual input – 6 outputs
- MSA283D**
Amplifier Dual input – 8 outputs



These amplifiers are the latest products in Labgear's proven series of multi-way distribution amplifiers. In recent years the trend has been away from the simple 'aerial amplifier' type of installation toward distribution of the outputs of the VCR and one or more set-top boxes forming the UHF 'loop-through chain'. The amplifiers have been designed with both applications in mind. In the loopthrough fed system, built-in remote control compatibility allows full control of Sky Digital receivers to be provided very simply by using our Digilink accessories.

A separate VHF input has been retained to allow FM radio distribution to be provided on the 'system'.

Features

- Separate VHF and UHF inputs
- Choice of four, six or eight output ways (more outputs may be connected by using multiple amplifiers and splitting the input feeds, FJU402)
- Ideal for both simple 'aerial amplifier' and full 'UHF loop-through chain' distribution applications
- Compatible with Labgear Digilink* remote control extender system, allowing full control of Sky Digibox (or Sky+) from all remote rooms**
- Provides power for all remote I-R receivers
- Fully screened for low emission and high interference immunity
- DTT compatible – suitable for digital and analogue signal distribution
- Reliable UK designs
- Supplied with fitted mains plug to BS 1363

* The Digilink system is for controlling Sky Digital products only.

** Requires one MRX930 Digilink room kit for each remote room.

Technical Data

	MSA243D	MSA263D	MSA283D
Number of outputs	4	6	8
Gain to each output	9 dB	3 dB	3 dB
Noise figure	6 dB	6 dB	6 dB
Output capability ¹	82 dBµV	76 dBµV	76 dBµV
VHF operating frequency range ²	88 – 108 MHz		
VHF operating frequency range ³	88 – 230 MHz		
UHF operating frequency range ⁴	470 – 862 MHz		
Return path frequency range ⁵	5 – 10 MHz		
Output receiver line power	9 V at 15 mA per outlet max. with auto shutdown		
Power requirement	230 V AC 50 Hz at <10 VA		
Connectors	IEC 60169-2 (female)		
Dimensions ⁶	85(H) x 255(W) x 47(D)		
Operating temperature range	-10 – +40°C		

1. For 5 analogue TV channels. Output capabilities are given for a cross-modulation level of -46dB. Use external input attenuator(s) if necessary to ensure that the stated output capability is not exceeded. For 8 analogue TV channels de-rate the figures in the table by 3dB.
2. Band II (standard UK model)
3. Bands II-III (suffix EIR for Irish market)
4. Channels E21-E69
5. Nominal gain 0 dB
6. Excludes connections (note 2)
7. Allow not less than 150mm clearance below and to right of unit for cable entry.
8. These products are not compatible with the Labgear Handylink remote control extender system; for Handylink compatibility use DA-BP series amplifiers.

MSA111

Amplifier VHF/UHF single input single output, 14dB gain

MSA121

Amplifier VHF/UHF single input 2 outputs, 12dB gain

MSA distribution amplifiers offer a low-cost, reliable way to boost weak signals. In addition to terrestrial signals, they can amplify and distribute TV signals from satellite, cable or digital set-top receivers.



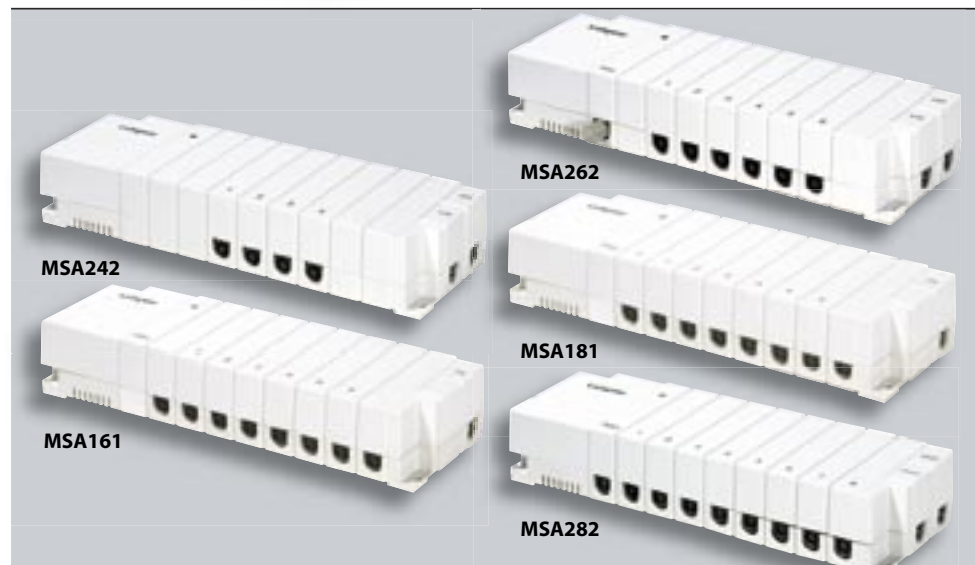
MSA111

Features:

- High-gain, low-noise designs cover VHF and UHF bands
- Transient and static protection
- Suitable for analogue and digital signal distribution
- Rugged, proven design
- Easy plug-in installation, completed in seconds
- Supplied complete with 1 metre flylead

Technical Data

	MSA111	MSA121
Number of inputs	1	2
Gain	14dB	11dB
Noise figure	3dB	3.5dB
Frequency range	44 – 862MHz	
Connections	IEC60169 – 2	
Power requirements	230V AC 50Hz <2w Supplied with fitted mains plug to BS1363	
Dimensions (H)x(W)x(D)	44 x 65 x 80 Excludes connections and fixing flanges	



MSA262

MSA181

MSA282

MSA242

Dual input - 4 outputs, 10dB, with line power facility.

MSA161

Single input VHF-UHF – 6 outputs, 8 dB distribution Amplifier with line power facility.

MSA262 Dual input - 6 outputs, 8dB, with line power facility.

MSA181 Single input VHF-UHF – 6 outputs, 8 dB distribution Amplifier with line power facility.

MSA282 Dual input – 8 outputs, 8dB, with line power facility.

This proven range of mains powered multi-way distribution amplifiers has been designed with the small to medium sized distribution system in mind.

The range comprises of five models encompassing from four to eight outlets, with the introduction of two new single input modes, MSA161 and MSA181.

The six- and eight-way models feature a high gain output which may be used to provide additional outlets.

For example, the addition of an FCU 148 8-way tap enables the MSA281 to drive an additional eight outlets.

Features

- Separate filtered inputs for VHF/ FM radio (Band II) and UHF TV (Bands IV & V)
- Single input 6 and 8 way versions VHF, UHF are now available
- A version with wider VHF bandwidth (Bands I - III) is also available
- Automatic line-power for masthead preamplifier supplied at UHF input of all models
- Reliable proven designs
- Fully screened for low emission and high interference immunity
- Suitable for analogue and digital signal distribution
- Full output port on 6 and 8 way versions

Technical Data

	MSA242	MSA161	MSA262	MSA181	MSA282
Number of inputs	2	1	2	1	2
Number of outputs (1)	4	6+1	6+1	8+1	8+1
Gain to numbered outputs	8	8	8	8	8
Gain to FULL port	18	18	18	18	18
Noise figure	5dB	5dB	5dB	5dB	5dB
Output capability (4 – 8)	88dBµV	88dBµV (max i/p 75dBµV)			
Output capability (Full)	n/a	93dBµV			
Isolation between outputs	24dB	28dB			
Dimensions (H) x (W) x (D)	45x85x155	47 x 85 x 255			
VHF – UHF / FM DAB Frequency range (2)	87.5 – 230	40 – 300 470 – 862	87.5 – 230	40 – 300 470 – 882	87.5 – 230
VHF input frequency range (3)	44 – 270	n/a	44 – 270	n/a	44 – 270
UHF input frequency range	447 – 862	n/a	447 – 862	n/a	470 – 862
Line power capability (4)	12v at 50mA with auto shut down				
Connections	IEC60169 – 2 (femal)				
Power requirements (5)	230V AC 50Hz 7VA				

- (1) '+' indicates Full port (2) Single input versions have >24dB rejection at 385MHz
 (3) Quote 'EIR' version (4) UHF input only (5) Supplied with fitted mains plug

A. This output is provided to allow additional outlet points to be fed using external taps and/or splitters. The design of such external networks is beyond the scope of this data sheet. The 'FULL' port must be terminated with a 75Ω terminator supplied. It is not necessary to terminate the numbered outputs if they remain unused.

B. Output capabilities are given for a cross-modulation level of -46dB. Use external input attenuator(s) if necessary to ensure that the stated output capability is not exceeded. For 8 analogue TV channels de-rate the figures in the table by 3dB.

C. Allow not less than 150mm clearance below and to right of unit for cable entry.

These new range professional mains powered multi-way amplifiers have been designed with enhanced filtering to negate the use of external filters.

These distribution amplifiers are for use in a single dwelling to distribute and control digital satellite receivers. The range comprises of four models encompassing of a 2, 4, 6 and 8-way, each model has separate inputs for FM and UHF.

Features

- **Enhanced Tetra Filters**
- Separate FM, DAB and UHF inputs
- 7dB gain to all ports
- Provides power to all remote IR receivers 9V 15mA per outlet max
- Fully screened for low emissions and high interference immunity
- F-type connectors
- DTT compatible – suitable for analogue and digital signal distribution
- Can be used with MRX120 distribution systems as well as digilink accessories MRX930 TRD

DA222BP



DA242BP



DA262BP



DA282BP



Technical Data

	DA222BP	DA242BP	DA262BP	DA282BP
Number of outputs	2	4	6	8
Forward path FM / DAB	88 ~ 230	88 ~ 230	88 ~ 230	88 ~ 230
UHF(MHZ)	470 ~ 862	470 ~ 862	470 ~ 862	470 ~ 862
Gain (dB)	7dB±1	7dB±1	7dB±1	7dB±1
Noise figure (dB)	<6	<6	<6	<6
Out of band rejection	>25 dB (>30 dB typical), >20 dB at 900 MHz			
Output level 60dB IMD (dBµV)	≥ 90	≥ 90	≥ 90	≥ 90
Return loss (dB) Input	≥ 8	≥ 8	≥ 8	≥ 8
Output	≥ 8	≥ 8	≥ 8	≥ 8
Isolation (dB)	≥ 20	≥ 20	≥ 20	≥ 20
Impedance (ohm)	75	75	75	75
Return path Frequency range (MHz)	3 ~10	3 ~10	3 ~10	3 ~10
Gain	0 ~ 3	0 ~ 3	0 ~ 3	0 ~ 3
Output DC pass (v)	9		9	9 9
Short circuit protection (mA)	≥ 16	≥ 16	≥ 16	≥ 16
Polarity	- to ground	- to ground	- to ground	- to ground
Power requirement	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
Connector	F	F	F	F

This new range professional mains powered multi-way amplifier has been designed with enhanced filtering to negate the use of external filters.

The products are used in small to medium sized distribution systems. The range comprises of five models encompassing from 1 through to 8-way, each model has separate inputs for FM and UHF.

Features

- **Enhanced Tetra Filters**
- Separate FM, DAB and UHF inputs
- Automatic line powering for masthead preamplifier supplied at the UHF input of all models 45mA max.
- Fully screened for low emissions and high interference immunity
- F-type connectors
- Suitable for analogue and digital signal distribution

DA212



DA222



DA242



DA262



DA282



Technical Data

	DA212	DA222	DA242	DA262	DA282
Number of outputs	1	2	4	6	8
Forward path FM / DAB	88 ~ 230	88 ~ 230	88 ~ 230	88 ~ 230	88 ~ 230
UHF(MHZ)	470 ~ 862	470 ~ 862	470 ~ 862	470 ~ 862	470 ~ 862
Gain (dB)	7±1	7±1	7±1	7±1	7±1
Noise figure (dB)	<6	<6	<6	<6	<6
Out of band rejection	>25 dB (>30 dB typical), >20 dB at 900 MHz				
Output level 60dB IMD (dBµV)	≥ 90	≥ 90	≥ 90	≥ 90	≥ 90
Return loss (dB) Input	≥ 8	≥ 8	≥ 8	≥ 8	≥ 8
Output	≥ 8	≥ 8	≥ 8	≥ 8	≥ 8
Isolation (dB)	≥ 20	≥ 20	≥ 20	≥ 20	≥ 20
Impedance (ohm)	75	75	75	75	75
Output DC pass (v)	12v / 45mA	12v / 45mA	12v / 45mA	12v / 45mA	12v / 45mA
Short circuit protection (mA)	≥ 45mA	≥ 45mA	≥ 45mA	≥ 45mA	≥ 45mA
Polarity	- to ground	- to ground	- to ground	- to ground	- to ground
Power requirement	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
Connector	F	F	F	F	F

HDU641
4-way Home Distribution Unit

HDU681
8-way Home Distribution Unit

MDU341
4-way Apartment Distribution Unit

These New series of Home Distribution Units have evolved to incorporate all the features that are required in a modern environment.

The **HDU 641** and **HDU681** are tailored for use in single dwellings whilst the **MDU341** is designed specifically for use with a multiswitch (IRS) system.

Each version has the capability to combine satellite; FM, DAB, UHF and CCTV on to a single drop cable, with the addition of the facility for SKY+.

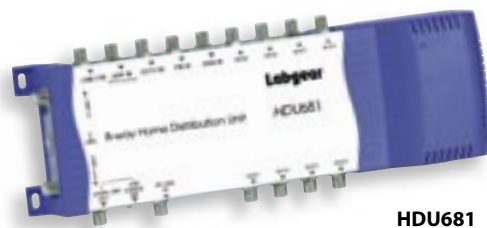
The return feed from the lounge then distributes the RF channels around the house via the Uplink connection on the Home Distribution Units.

Each Secondary points in the house or apartment will receive 5 off air channels, RF 2 output from the skybox and FM, DAB with the facility to control of the sky box (Remote eye required).

- 12v 45mA line powering for Masthead (HDU's).
- Separate inputs for FM, DAB, UHF, CCTV, LNB1 and LNB2.
- Excellent filtering with a Flat UHF response.
- Minimal insertion loss.
- 9v 15mA with short circuit protection.



HDU641



HDU681

Technical Data

	HDU641	HD681	MDU341
Number of Outputs	4	8	4
Gain to outputs	±7dB	±7dB	8dB
Noise figure	4dB	4dB	4dB
FM	88-108 MHz		
DAB	217-230 MHz		
CCTV	470-862 MHz		
UHF	470-862 MHz		
SAT 1	950-2300MHz		
SAT 2	950-2300MHz		
Line power	12 V 45mA with auto shut down		
Remote power	9 V 15mA with auto shut down		
Connectors	Type-f (female) IEC600169-24		
Power requirements	230V AC 50Hz 280 mA Supplied and fitted Mains Plug to BS 1363		

The handylink infra-red remote control extender is an easy and reliable way to control viewing from satellite decoders, set-top boxes, video or Hi-fi from another room in the home, without having to return to the living room.

The handylink uses the existing remote controls to operate satellite, cable, video or Hi-fi equipment from any room in the home by plugging into the existing TV coaxial cable. Anything that you can do via remote control in the living room can be done from a remote room equipped with this kit.

The remote room TV must already be connected to the video and satellite receiver by a coaxial cable distribution system.

MRX120
Infra-red Remote Control extender kit

Features

- Handylink allows full control of all set-top equipment (VCR, satellite and digital TV).
- Handylink performs better than wireless or radio extenders because it uses the existing television coaxial cable and is immune to interference or jamming from neighbours equipment, mobile phones, amateur radio etc.



- Handylink is suitable for analogue and digital signal distribution.

This kit contains everything needed to extend the remote control system to one remote a room. An additional room may be added by using a handylink extra room extender kit (Product code MRX 110).

The MRX 120 kit contains a handylink base unit with two sender buttons, one remote receiver, TV coupler and flylead.

MRX 110 TRD
Extra room extender kit

Intended to be used in conjunction with the MRX120.



MRX930TRD

This professional high quality robust remote eye has been designed to be used with Sky digi-boxes and Sky+ receivers. This unit has a Green LED, which illuminates when the digiboxes 9V has been selected.

Ensure these products are used with Non-isolated plates.

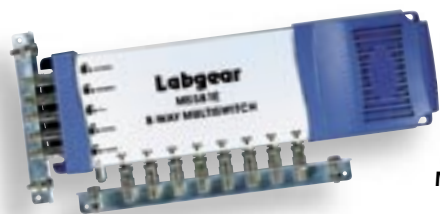
Coupler and Remote Eye form part of MRX930 TRD



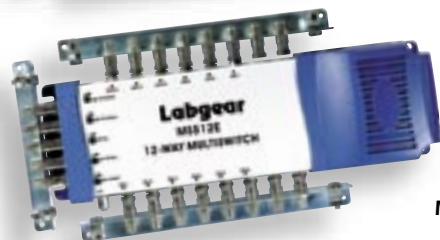
- MS581E**
8-Way Enhanced Multiswitch
- MS512E**
12-Way Enhanced Multiswitch
- MS516E**
16-Way Enhanced Multiswitch

These self-contained switches are intended for stand-alone use in smaller Integrated Reception Systems (IRS). These compact switches have enhanced filtering to overcome the problem of LNB noise bleeding through on the UHF spectrum and increasing the noise floor. In addition the switches have increase isolation between the IF inputs which reduces the risk of missing Low Band channels. This range of switches is a cost effective solution for small to medium IRS systems.

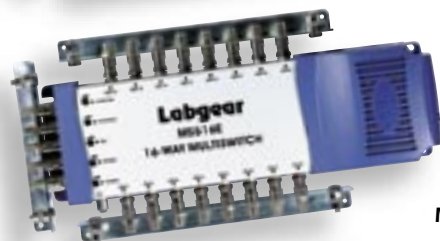
By installing a PSF310 it allows you to combine FM, DAB and UHF on to a common cable to introduce the signals into the Terrestrial input on the switch. The IF filter performance of these products – 25 dB rejection below 854 MHz – reduces noise and other unwanted products from the LNB in the UHF band to a negligible level. Gain controls are provided on all inputs, allowing the switch output levels to be set to optimise delivery of weaker DTT multiplexes whilst not overloading receivers with excessive analogue signal levels.



MS581E



MS512E



MS516E

Technical Specification

		MS581E	MS512E	MS516E
Number of Inputs		4 IF, 1 Terrestrial (VHF-UHF)		
Number of Outputs		8	12	16
Insertion Loss	87.5-862 MHz	-2dB	-3dB	-2dB
	950-2150MHz	5dB	5dB	5dB
	Attenuation			
Attenuation	87.5-862 MHz	12dB	12dB	12dB
	950-2150MHz	10dB	10dB	10dB
	Terr to SAT	25dB	25dB	25dB
Isolation	SAT to Terr	25dB	25dB	25dB
	Cross Polar H/V	30dB	30dB	30dB
	87.5-862MHz	30dB	30dB	30dB
Out to Out	950-2150MHz	30dB	30dB	30dB
Return Loss	87.5-862MHz	11dB	10dB	11dB
	950-2150MHz	11dB	10dB	11dB
Sat (IMA335dB)	EN50083-3	100dB μ V	100dB μ V	100dB μ V
Power Requirements		230V 50 Hz AC supplied with mains plug BS1363		

CM 9128
2-way cable
This earthing block allows two coaxial cables to be bonded conveniently. This block accepts a 4mm² CPC. The product is ideal for MATV systems.

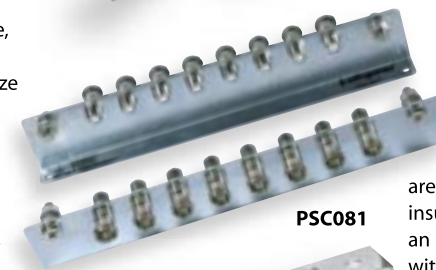
PSC002
8-way braid clamps
This kit consists of an 8-way earth bonding bar with 4 large double clamps which clamp around the exposed braid of up to 8 coax cables, and a small clamp at each end to connect the 4 mm² earth bonding wire, or another bonding bar. The clamps accept cables in the size range CT100 to CT167, with rubber spacers for use with CT167. This method of earth bonding does not require breaking into the cables to fit F-type connectors, but care must be taken not to damage the braid or foil when stripping the outer cover of the coax cables, and again not to over tighten the clamps.

PSC050, PSC080
Earth Bonding Bars
These earth-bonding bars have been designed specifically with 20mm centres to allow the coaxial cables to line up with the Inputs and outputs of the Labgear Range of Multiswitches.

PSC051, PSC081
Earth Bonding Bars
These earth bonding bars have been designed specifically with 16mm and 22mm centres to allow the coaxial cables to line up with the Inputs and outputs of the Labgear Range of Multiswitches (MS E version). Careful selection of a very high-grade type-F back-to-Push on couplers ensures accurate impedance matching and thus freedom from reflection or 'SWR ripple' problems which can lead to inter-symbol interference in digital satellite systems and high BER readings. The protective conductor (earthing) connections are made using standard insulated crimp ring terminals on an M5 stud. Each bar is supplied with two yellow terminals accepting cables up to 6 mm². The ratchet type of crimp tool is recommended to ensure a sound earth connection.) The products are supplied fully assembled and ready for use.



CM 9128



PSC081



PSC080

Technical Data

	CM9128	PSC050	PSC051	PSC080	PSC081
Number of ways	2	5	5	8	8
Frequency Range	DC-2300 MHZ				
Return Loss DC-862 MHZ	>30 dB				
Return Loss DC-2300 MHZ	>23 dB				
Connectors*	f – f	f – f	f – Push	f – f	f – Push
Cable inner	Type-f (female) 0.6 -1.25 mm				
Earthing Stud	M5 20mm				
Connector Pitch	22mm	20mm	16mm	20mm	22mm
Overall length	66mm	100mm	155mm	160mm	247mm
Overall height	26mm	34mm	40mm	40mm	34mm

* f = female Push = Push on male

Features

- Supplied fully-assembled
- 2-way, 5-way and 8-way versions available
- High-grade, high return loss couplers to minimise standing wave effects
- Negligible insertion loss
- Accepts cables upto '125' size
- May be stacked end to end whilst maintaining 20mm centres
- M5 stud for earthing using industry-standard crimp terminals

This new range of outlet plates is specifically designed for the UK market. The compact size of the screened housings makes cable access and wiring easier. The modular approach creates a comprehensive range for extensive applications. The excellent performance means low loss, minimal ingress and negligible module cross talk, available at competitive prices.

Comprehensive range

- Single
- Triplexed
- Diplexed
- With on PSW242T

Excellent performance

- Low insertion loss
- Excellent matching and isolation
- Screened to EN 50083-2 - >65dB to 1 GHz and >55dB to 2.2GHz
- Telephone jack

Applications

- TV
- FM, DAB, TV
- TV FM DAB
- Telephone II

Design features

- Compact screened housings
- Easy cable connections and access
- For 1 mm cable (PF100, H109F, QF100, etc.)
- Requires 35mm mounting box

PSW111
Single IEC female



PSW113
Single F-type female



PSW122
Diplexed FM DAB + UHF



PSW132
Triplexed FM DAB, UHF + Satellite

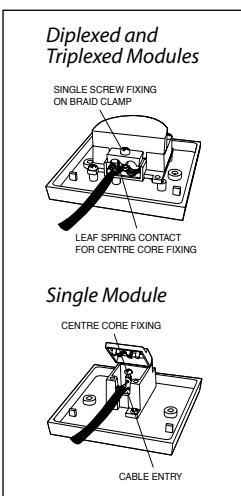


PSW242T
Triplexed with Return + Telephone



Technical Data

Product	Band	Frequency Range	Insertion loss	Connector
PSW111		DC-862 MHz	~0.5 dB	IEC(f)
PSW113		DC-2400 MHz	~1.2 dB	F
PSW122	TV (return)	DC-65 MHz	~1.2 dB	IEC(m)
	TV(forward)	470-862 MHz	~0.6 dB	IEC(m)
	Radio	87.5-230 MHz	~1.0 dB	IEC(f)
PSW132	TV (return)	DC-65 MHz	~1.2 dB	IEC(m)
	TV(forward)	470-862 MHz	~0.6 dB	IEC(m)
	Radio	87.5-230 MHz	~1.0 dB	IEC(f)
	Satellite IF	DC-30KHz 950-2400MHz	- ~1.6 dB	- F
PSW242T	Uplink	DC-862 MHz	~0.5 dB	IEC(f)



1. Isolation between outlets and all return losses comply with EN50083-4.
2. Screening effectiveness complies with EN50083-2(class B) when correctly installed.
3. 'IEC' connectors comply with IEC 60169-2; 'F' connectors comply with IEC601669-24.
4. Telephone socket on PSW242T complies with BS 6312-2. Secondary type, with IDC connection.
5. All modules require 35mm deep mounting boxes.

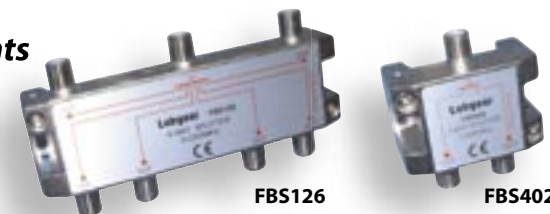
	Band	Frequency Range	Insertion loss	Connector and Dimensions
PSW111M		DC-862 MHz	~0.5 dB	IEC(f) 25x25mm
PSW113M		DC-2400 MHz	~1.2 dB	F 25x25mm
PSW122M	TV (return)	DC-65 MHz	~1.2 dB	IEC(m) 50x50mm
	TV(forward)	470-862 MHz	~0.6 dB	IEC(m)
	Radio	87.5-230 MHz	~1.0 dB	IEC(f)
PSW132M	TV (return)	DC-65 MHz	~1.2 dB	IEC(m) 50x50mm
	TV(forward)	470-862 MHz	~0.6 dB	IEC(m)
	Radio	87.5-230 MHz	~1.0 dB	IEC(f)
	Satellite IF	950-2400MHz	~1.6 dB	F
PSW241M	TV (return)	DC-65 MHz	~1.2 dB	IEC(m) 50x50mm
	TV(forward)	470-862 MHz	~0.6 dB	IEC(m)
	Radio	87.5-230 MHz	~1.0 dB	IEC(f)
	Satellite IF	950-2400MHz	~1.6 dB	F
	Sat 2	DC-2400MHz	~1.2 dB	F



Network Passive Components

The FBS range of wideband Splitters comprises of 2, 3, 4, 6 and 8-way versions.

- FBS402** 2-way
- FBS803** 3-way
- FBS904** 4-way
- FBS126** 6-way
- FBS138** 8-way



Technical Data

	Dimensions mm	Freq range	Insertion loss	Isolation loss	Return loss
FBS402 2 way	54(H) x 58(W) x26(D)	40-1000MHz	4.7dB	20dB	12dB
		1000-1750MHz	5.5dB	17dB	12dB
		1750-2300MHz	6.0dB	16dB	12dB
FBS803 3 way	54(H) x 58(W) x26(D)	40-1000MHz	7.5dB	20dB	12dB
		1000-1750MHz	8.5dB	17dB	10dB
		1750-2300MHz	10.5dB	16dB	10dB
FBS904 4 way	76(H) x 58(W) x26(D)	40-1000MHz	8.5dB	20dB	12dB
		1000-1750MHz	10.5dB	17dB	10dB
		1750-2300MHz	11.5dB	15dB	10dB
FBS126 6 way	120(H) x 58(W) x26(D)	40-1000MHz	12.0dB	20dB	10dB
		1000-1750MHz	15.0dB	18dB	8dB
		1750-2300MHz	16.5dB	18dB	8dB
FBS138 8 way	120(H) x 58(W) x26(D)	40-1000MHz	13.0dB	20dB	10dB
		1000-1750MHz	16.0dB	18dB	10dB
		1750-2300MHz	18.0dB	15dB	9dB

Note: All FBS Splitters have power passing to one port

FBT 2-way series

This compact wideband tap range comprises of 2 and 4-way versions. Tap values from 30dB through to 10dB.



FBT252

Technical Data

Tap Value	Frequency range	10	12	15	20	25	30
In-Out Insertion loss (dB) max	5-40	3.5	3	2.7	2	2	2
	41-450	3	3	2	1.5	1.5	1.5
	451-1000	3.4	3.4	2.5	2.1	2.1	2.1
	1001-1750	3.9	3.9	3	2.8	2.8	2.5
	1751-2050	4.2	4.2	3.4	3.3	3.0	3
	2051-2300	4.5	4.5	3.9	3.5	3.3	3.3
Out-Tap Isolation (dB min)	5-40	27	27	23	32	25	28
	41-450	24	24	25	27	30	33
	451-1000	24	24	23	27	30	33
	1001-1750	22	22	23	24	30	33
	1751-2050	22	22	23	24	30	33
	2051-2300	22	22	20	24	30	33
Tap-Tap Isolation (dB min)	5-40	42	42	438	60	60	60
	41-450	32	32	33	47	48	48
	451-1000	32	32	30	34	34	34
	1001-1750	32	32	30	34	34	34
	1751-2050	32	32	30	34	34	34
	2051-2300	32	32	30	34	34	34
In, Out, Tap Return loss (dB min)	5-40	10	10	10	12	12	12
	41-450	14	14	12	14	14	14
	451-1000	14	14	12	14	14	14
	1001-1750	14	14	12	14	14	14
	1751-2050	14	14	12	14	14	14
	2051-2300	14	14	12	14	14	14

Taps and Splitters 5 to 862MHz

This high quality range of taps and splitters have a frequency range of 5–862 MHz

- Compact die cast housing
- Earth bonding connection
- Minimal insertion loss

Technical Data

	Case code/ dimensions	Through loss	Frequency range	Impedance	Return loss
FJU402	2-Way Splitter C 56 x 48 x 18mm	2 x 3.6 dB	5-862MHz	75 Ω	≥17dB typically ±4dB
FJU603	3-Way Splitter B 79 x 48 x 18mm	3 x 5.7 dB	5-862MHz	75 Ω	≥17dB typically ±4dB
FJU704	4-Way Splitter B 79 x 48 x 18mm	4 x 7.4 dB	5-862MHz	75 Ω	≥17dB typically ±4dB
FJU806	6-Way Splitter A 129.5 x 60 x 37 mm	6 x 9.5 dB	5-862MHz	75 Ω	≥17dB typically ±4dB
FJU108	8-Way Splitter A 129.5 x 60 x 37 mm	8 x 11.5 dB	5-862MHz	75 Ω	≥17dB typically ±4dB

Values given in the tables below are typical values at 860 MHz. At lower frequencies the attenuation is smaller so that the use of these values in network design will provide a safe margin.

The addition of Fixed Attenuators provides greater flexibility in system choice of Tap when drop cables significantly differ in loss.

Max tolerances of values provided: Through loss ±1.0dB, Tap loss ±1.0dB. Note: Min. attenuation between outputs

Taps and Splitters
5 to 862MHz

This high quality range of taps has a frequency range of 5–862 MHz

- Compact die cast housing
- Earth bonding connection
- Minimal insertion loss

Technical Data

		Case code	Through loss	Branch/ Tap loss
FHU061	1-Way Tap, 6dB	C	2.4 dB	6.5 dB
FHU081	1-Way Tap, 8dB	C	1.9 dB	8.5 dB
FHU121	1-Way Tap, 12dB	C	1.6 dB	11 dB
FHU161	1-Way Tap, 16dB	C	0.6 dB	16 dB
FHU201	1-Way Tap, 20dB	C	0.6 dB	20 dB
FHU251	1-Way Tap, 25dB	C	0.6 dB	25 dB
FHU301	1-Way Tap, 30dB	C	0.6 dB	30 dB
FHU082	2-Way Tap, 8dB	B	3.8 dB	2 x 8.5 dB
FHU122	2-Way Tap, 12dB	B	1.6 dB	2 x 11 dB
FHU162	2-Way Tap, 16dB	B	1.1 dB	2 x 16 dB
FHU202	2-Way Tap, 20dB	B	1.1 dB	2 x 20 dB
FHU252	2-Way Tap, 25dB	B	1.1 dB	2 x 25 dB
FHU302	2-Way Tap, 30dB	B	1.1 dB	2 x 30 dB
FHU352	2-Way Tap, 35dB	B	1.1 dB	2 x 35 dB
FHU084	4-Way Tap, 8dB terminated	–	–	4 x 8 dB
FHU124	4-Way Tap, 12dB	A	dB	4 x 12 dB
FHU174	4-Way Tap, 17dB	A	4.3 dB	4 x 17 dB
FHU204	4-Way Tap, 20dB	A	1.7 dB	4 x 20 dB
FHU244	4-Way Tap, 24dB	A	1.7 dB	4 x 24 dB
FHU304	4-Way Tap, 30dB	A	1.7 dB	4 x 30 dB

FCU128 8-way
FCU148 8-way
FCU178 8-way

These high quality 8-way taps allow you to expand the system without compromising its integrity.

They come in three versions: 17, 14 and 12dB terminated.

Technical Data

		Through loss	Branch/ Tap loss	Frequency Range
FCU128	8-Way Tap, 12dB	Terminated	12dB	5-1000MHz
FCU148	8-Way Tap, 14dB	4.5dB	1 dB	
FCU178	8-Way Tap, 17dB	3.0dB	17dB	
Dimensions	125(H) x 55(W) x 50(D)mm			



FHU244



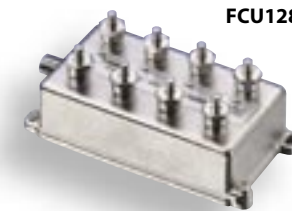
FHU122



FHU081



FHU162



FCU128

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