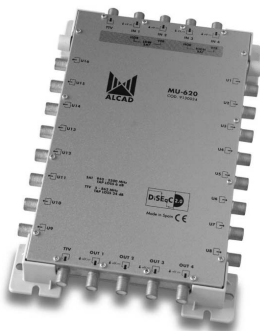




SISTEMA DE MULTICONMUTADORES CASCADABLES
CASCADABLE MULTISWITCH SYSTEM
SYSTÈME MULTICOMMUTATEUR CASCADABLE



SERIE 913 SERIES

MULTICONMUTADORES - MULTISWITCHES - MULTICOMMUTATEURS

CÓDIGO-CODE-CODE		9130033			9130034		
MODELO-MODEL-MODELE		MU-320			MU-620		
Entradas/salidas/derivaciones Inputs/outputs/taps Entrées/sorties/dérivations		5 / 5 / 8			5 / 5 / 16		
Rango de frecuencia Frequency range Gamme de fréquences	Band	VR/TV	SAT		VR/TV	SAT	
	MHz	5-862	950-2150	2150-2500	5-862	950-2150	2150-2500
Atenuación de derivación Tap loss Atténuation de dérivation	dB ±TOL	24 ±2,0	6 ±2,0	6,1 ±2,0	24 ±3,0	7 ±3,0	7,1 ±3,0
Ecuación de derivación Tap equalization Egalisation de dérivation	dB	9	7	-	9	6	-
Nivel de salida de derivación Tap output level Niveau de sortie de dérivation	dB μ V	-	100 90	(IMD ₃ -35 dB) (IMD ₂ -35 dB)	-	100 90	(IMD ₃ -35 dB) (IMD ₂ -35 dB)
Atenuación de paso Through loss Attenuation de passage	dB ±TOL	3,1 ±0,2	1,7 ±0,2	1,9 ±0,2	6 ±0,2	2,5 ±0,2	2,8 ±0,2
Ecuación de paso Through equalization Egalisation de passage	dB	1,2	1,1	-	3	2	-

IMD₃ -35 dB: 2 equal carriers, EN 50083-5

IMD₂ -35 dB: 2 equal carriers, EN 50083-5

Data published in compliance with the definitions and measurement methods of the following standards: EN 50083-3, EN 50083-4 and EN 50083-5

MULTICONMUTADORES - MULTISWITCHES - MULTICOMMUTATEURS

CÓDIGO-CODE-CODE	9130020					9130021				
MODELO-MODEL-MODELE	MU-321					MU-621				
Entradas/salidas/derivaciones Inputs/outputs/taps Entrées/sorties/dérivations		5 / 5 / 8					5 / 5 / 16			
Rango de frecuencia Frequency range Gamme de fréquences	Band	VR	TV	SAT		VR	TV	SAT		
	MHz	5-65	86-862	950-2150	2150-2500	5-65	86-862	950-2150	2150-2500	
Atenuación de derivación Tap loss Atténuation de dérivation	dB ±TOL	18 ±1,0	11 ±2,0	-	-	19 ±1,0	11 ±2,0	-	-	
Equalización de derivación Tap equalization Egalisation de dérivation	dB	-	14	11	-	-	14	13	-	
Ganancia de derivación Tap gain Gain de dérivation	dB	-	-	3 ±2,0	3 ±2,0	-	-	2 ±3,0	2 ±3,0	
Nivel de salida de derivación Tap output level Niveau de sortie de dérivation	dBµV	-		100 (IMD ₃ -35 dB) 90 (IMD ₂ -35 dB)		-		100 (IMD ₃ -35 dB) 90 (IMD ₂ -35 dB)		
Equalización de paso Through equalization Egalisation de passage	dB	1	3	4,5	-	1	3	4	-	
Ganancia de paso Through gain Gain de passage	dB	9 ±1,0	8,5 ±0,5	7,5 ±0,5	7,5 ±0,5	8 ±1,0	6 ±0,5	6,5 ±0,5	6,5 ±0,5	
Nivel de salida de paso Through output level Niveau de sortie de passage	dBµV	119 DIN 45004B 116 (IMD ₃ -60 dB) 109 (IMD ₂ -60 dB)		114 (IMD ₃ -35 dB) 110 (IMD ₂ -35 dB)		116 DIN 45004B 113 (IMD ₃ -60 dB) 106 (IMD ₂ -60 dB)		111 (IMD ₃ -35 dB) 107 (IMD ₂ -35 dB)		

DIN 45004B: 3 unequal carriers, IMD₃ at 60 dB
 IMD₃ -60 dB: 2 equal carriers, EN 50083-5
 IMD₂ -60 dB: 2 equal carriers, EN 50083-5

IMD₃ -35 dB: 2 equal carriers, EN 50083-5
 IMD₂ -35 dB: 2 equal carriers, EN 50083-5

MULTICONMUTADORES - MULTISWITCHES - MULTICOMMUTATEURS

CÓDIGO-CODE-CODE	9130033	9130034	9130020	9130021
MODELO-MODEL-MODELE	MU-320	MU-620	MU-321	MU-621
Rechazo entre bandas Rejection between bands Rejection entre bandes	dB	>25 TV/SAT >65 SAT/TV		
Desacople entre usuarios Isolation between users Isolation entre utilisateurs	dB	>40 TV >30 SAT		
Desacople troncal Trunk isolation Découplage entre lignes	dB	>40 SAT/TV >40 SAT/SAT	>30 SAT/TV >30 SAT/SAT	
Desacople de conmutación Isolation of switching Isolation de commutation	dB	>30 SAT/SAT		
Conmutación de las salidas Switching the outputs Commutation des sorties		DiSEqC 2.0 13 V \pm 17 V \pm 0/22 KHz		
Alimentación Power supply Alimentation	V \pm	-	-	6 \pm 0,5
	mA	-	-	590
Consumo desde el receptor Consumption from the receiver Consommation du récepteur	mA	50 \pm 2,0 (12..20 V \pm)		

INSTALACIÓN DE LNBS INSTALLING LNB INSTALLATION DES LNB



High Horizontal
High Vertical
Low Horizontal
Low Vertical



Low Horizontal
Low Vertical



High Horizontal
High Vertical

AMPLIFICADOR - AMPLIFIER - AMPLIFICATEUR

CÓDIGO-CODE-CODE		9130041	
MODELO-MODEL-MODELE		AU-620	
Entradas/salidas Inputs/outputs Entrées/sorties		5 / 5	
Rango de frecuencia Frequency range Gamme de fréquences	Band	VR/TV	SAT
	MHz	5 -862	950-2500
Atenuación de paso Through loss Atténuation de passage	dB ±TOL	1,5 ±0,5	-
Ganancia de paso Through gain Gain de passage	dB	-	43 ±1,0
Regulación de ganancia Adjustable gain Reglage du gain	dB	-	20
Márgen de ecualización Adjustable equalization range Plage réglage de pente	dB	-	8 Switchable
Nivel de salida Output level Niveau de sortie	dB μ V	-	118,5 (IMD ₃ -35 dB) 110,0 (IMD ₂ -35 dB)
Desacoplo troncal Trunk isolation Découplage entre lignes	dB	>30	SAT/TV
		>28	SAT/SAT
Tensión de salida Output voltage Tension de sortie	V $\ddot{---}$	6,5	
	mA	3040	
Alimentación Power supply Alimentation	V $\ddot{---}$	7,5	
	mA	800	
Alimentación de las LNB Power supply of the LNB Alimentation des LNB		2000 mA / 18 V $\ddot{---}$	

IMD₃ -35 dB: 2 equal carriers, EN 50083-5
 IMD₂ -35 dB: 2 equal carriers, EN 50083-5

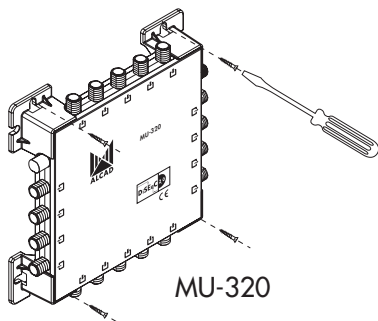
ALIMENTADOR - POWER SUPPLY - ALIMENTATION

CÓDIGO-CODE-CODE		9130054	9130057
MODELO-MODEL-MODELE		FU-612	FU-513
Tensión de salida Output voltage Tension de sortie	V $\overline{\text{---}}$	18	7,5
	mA	2000 (In continuous operation)	3840 (In continuous operation)
Tensión de red Mains voltage Tension du secteur	V \sim	230 \pm 15%	240 $^{+10\%}$ $^{-18\%}$ 50/60 Hz
	VA	105	95

EQUIPO COMPLETO - COMPLETE SYSTEM - ÉQUIPEMENT COMPLET

		913 SERIES
Temperatura en proximidad del equipo Operating temperature close to equipment Température en proximité de l'équipement	°C	-10..+65
Temperatura ambiente con/sin ventilador Room temperature with/without fan Température ambiante avec ou sans ventilateur	°C	-10..+55/+45
Índice de protección Protection index Indice de protection		IP 20

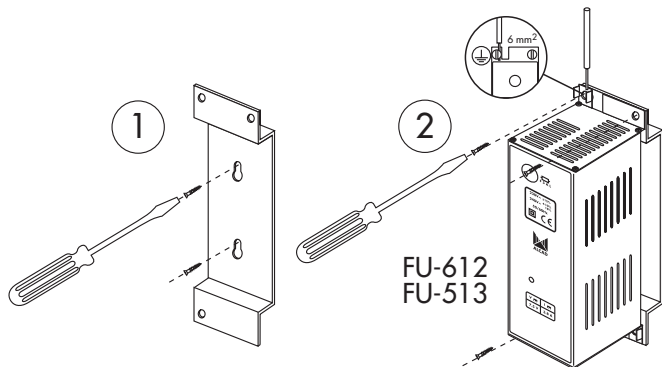
CÓMO FIJAR EL MULTISWITCH HOW TO FIX THE MULTISWITCH COMMENT FIXER LE MULTISWITCH



CÓMO FIJAR LOS ALIMENTADORES

HOW TO FIX THE POWER SUPPLIES

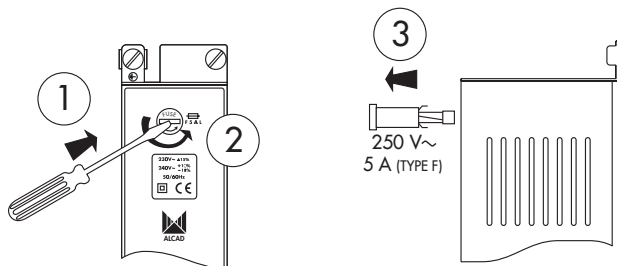
COMMENT FIXER LES ALIMENTATIONS



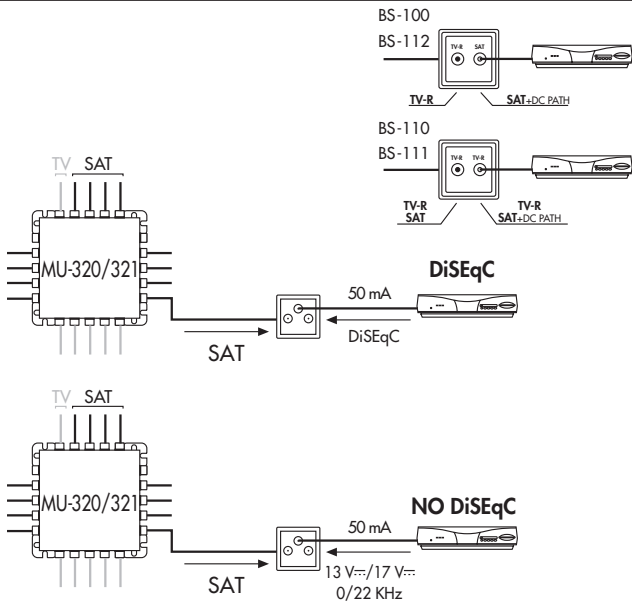
CÓMO SUSTITUIR EL FUSIBLE

REPLACING THE FUSE

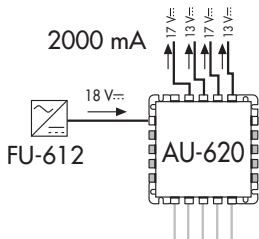
REPLACER LE FUSIBLE



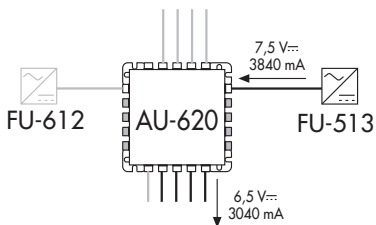
CONMUTACIÓN DE LAS SALIDAS SWITCHING THE OUTPUTS COMMUTATION DES SORTIES



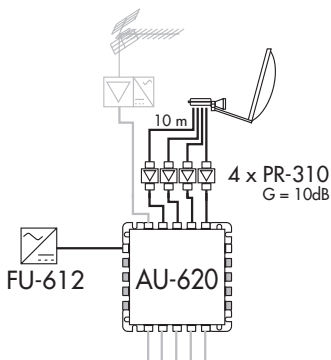
CÓMO ALIMENTAR LAS LNB HOW TO FEED THE LNB COMMENT ALIMENTER LES LNB

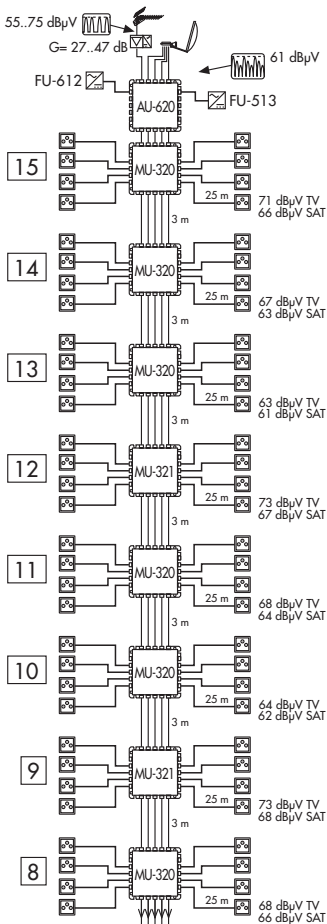


CÓMO ALIMENTAR EL AU-620/MU-321/MU-621
HOW TO FEED THE AU-620/MU-321/MU-621
COMMENT ALIMENTER LE AU-620/MU-321/MU-621

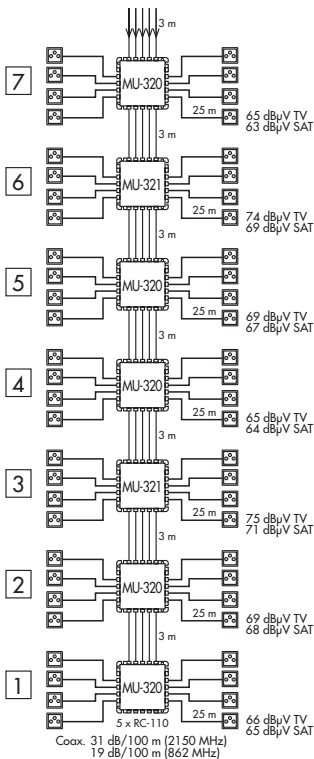


PREAMPLIFICACIÓN DE LA SEÑAL DE ANTENA
PREAMPLIFICATION OF THE ANTENNA SIGNAL
PRE AMPLIFICATION DU SIGNAL D'ANTENNE

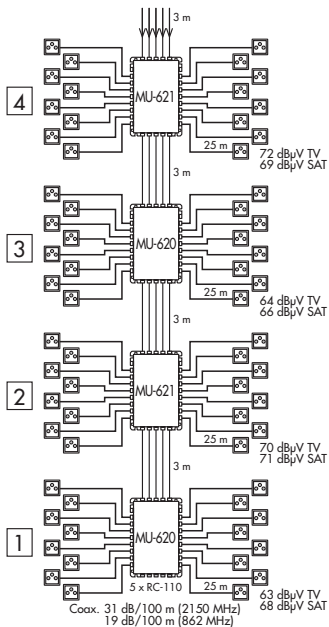
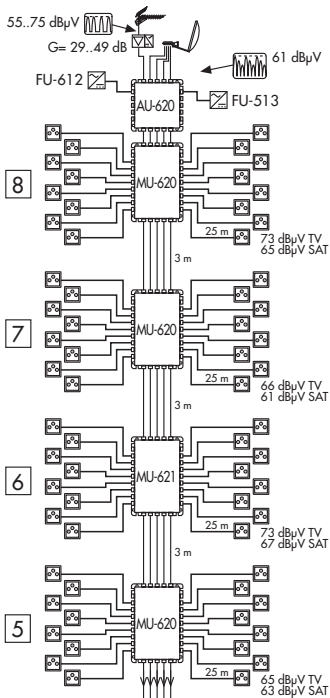




Accesorios PR-310
 Accessories
 Accessoires AV-315
 Accesorios
 Zubehör



Accesorios
Accessories
Accessoires
Accessorios
Zubehör





DECLARATION OF CONFORMITY

according to EN ISO/IEC 17050-1:2004

Manufacturer's Name: ALCAD, S.A.
Manufacturer's Address: Pol. Ind. Arreche-Ugalde, 1
Apdo. 455
20305 IRUN (Guipúzcoa)
SPAIN

declares that the product
Product Name: 913 Series: MULTISWITCH SYSTEM
Model Number(s): MU-320, MU-321, MU-620, MU-621, AU-620
FU-612, FU-513

Product Option(s): INCLUDING ALL OPTIONS

is in conformity with:
Safety: EN 50083-1:1993
EMC: EN 50083-2:2001

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 2006/95/CE and the EMC Directive 89/336/EEC and their relevant amendments, gathered under the directive 93/68/EEC.

Note: to comply with these directives, do not use the products without covers and operate the system as specified.



Irún,

06-02-07

Date

Anton Galarza / General Manager

Especificaciones sujetas a modificación sin previo aviso
Specifications subject to modifications without prior notice
Les spécifications sont soumises à de possible modifications sans avis préalable



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ISO 9001

