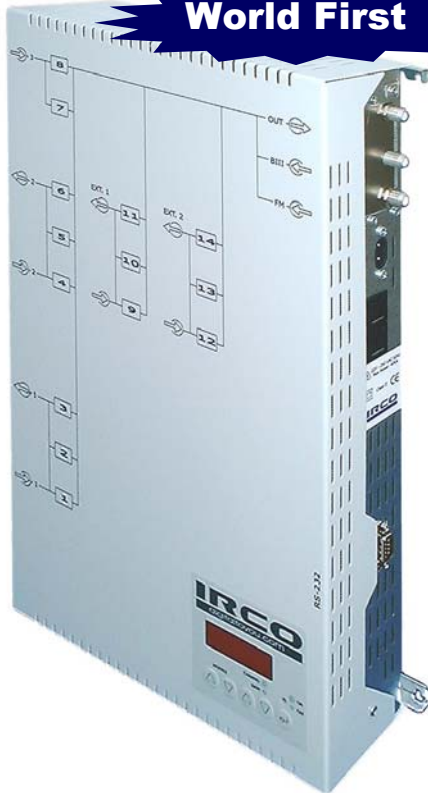




## Super-Selective programmable MATV Head-End **SelectTV**

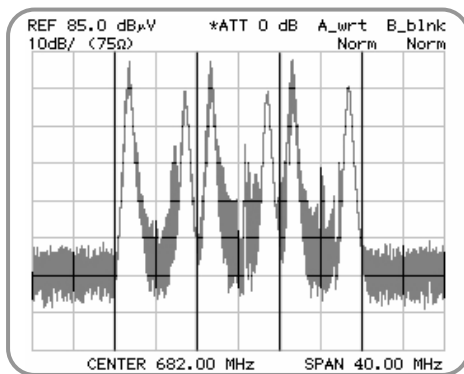
**World First**



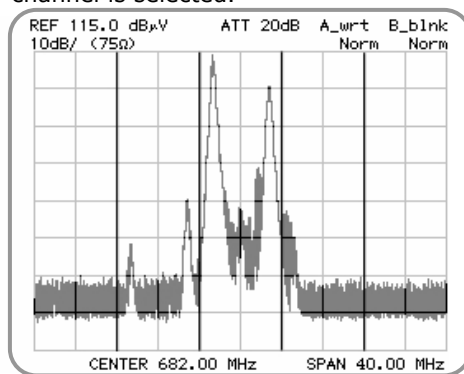
- MATV **Programmable Head-End** transparent to analogue (PAL B/G/I , SECAM L, etc.) and digital (COFDM y QAM) UHF TV channels.
- Permits amplification of **up to 14 UHF channels**.
- **Basic unit provides for 8 UHF channels, FM, and BIII (DAB), power and programmer units.**
- Allows easy expansion with **up to 2 expansion boards** with 3 UHF channels per board.
- Super selective UHF modules provide **45dB rejection** of both video carriers on upper channel and audio carriers on lower channel.
- **Maximum gain of 55dB in UHF.**
- Programmer facilities offer a **gain regulation of 30dB** (steps of 1dB).
- **Separate amplification** of VHF and UHF.
- **Programmable voltage to pre-amplifier** +5VDC, +12VDC, +15VDC, +24VDC, or OFF on input 1 with digital short circuit detection.
- **Remote programming** through the RS-232 serial port.
- **Permits cloning of programmed parameters** through extractable memory chips.
- Employment of in-house technology provides **superior head-end characteristics** at MATV cost level.
- Accessories available for installation in **19" racks**.

### ▪ **Very High adjacent channel rejection.**

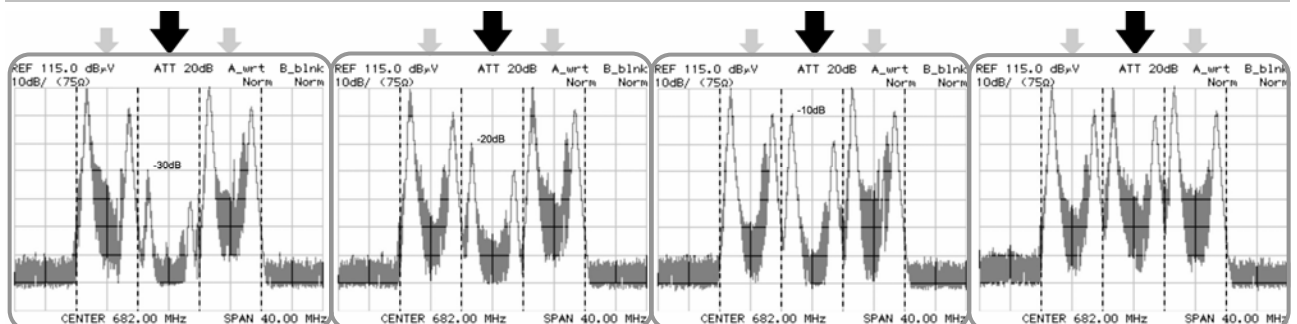
Three adjacent channels with the same antenna signal level at the SelectTV input.



Signal at SelectTV output shows rejection of both higher and lower channels when only the middle channel is selected.



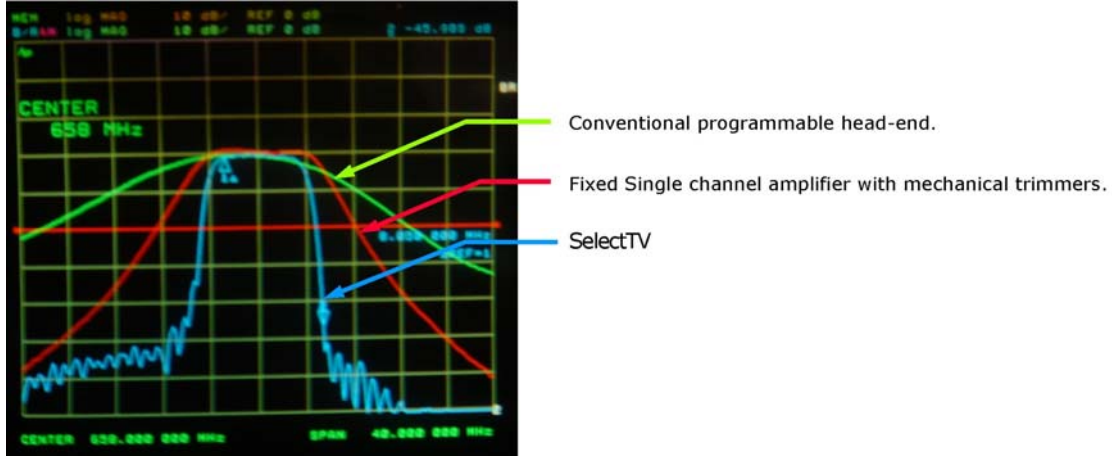
### ▪ **Equalisation of adjacent channels** with up to 30 dB of level difference, in 1 dB steps.



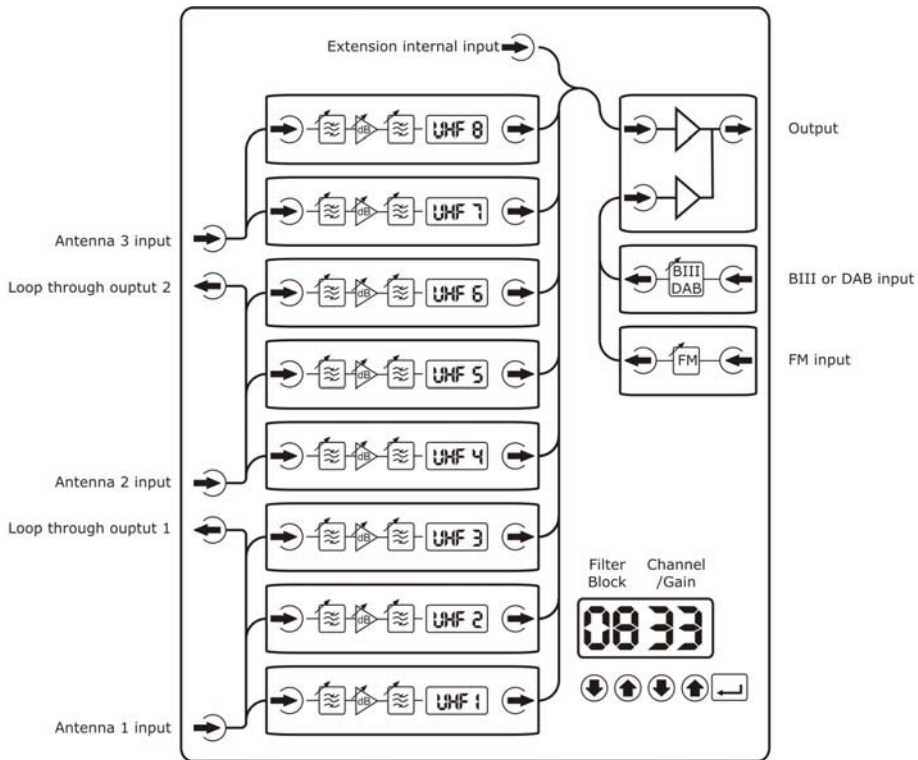


## Super-Selective Programmable Head Unit SelectTV

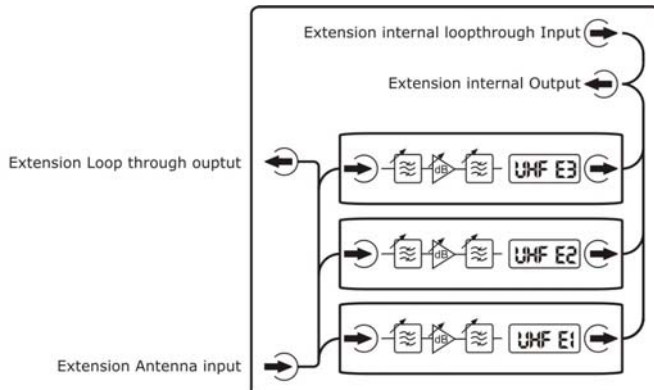
### Comparative Measurements of Selectivity (10dB/division)



Block diagram of base unit:



Block diagram of expansion board :





## Super-Selective Programmable Head Unit SelectTV

Model			
Code	Ref.	Description	EAN-13
9101044	SelectTV01	MATV programmable head unit with 8 adjacent channels	8432252051073
9101101	SelectTV02	SelectTV expansion board - 3 UHF channels	8432252065704
9101102	SelectTV03	MATV programmable head unit with 11 adjacent channels	8432252066329
9101103	SelectTV04	MATV programmable head unit with 14 adjacent channels	8432252066336
9106026	IM-23	Fixings for installation in 19" rack	8432252066343

Bands	FM	BIII-DAB	UHF 1	UHF 2	UHF 3	*UHF 4 Exp. 1	*UHF 5 Exp. 2
Frequencies MHz	87.7-108	174-230	470-862	470-862	470-862	470-862	470-862
Gain (dB)	40dB	40dB	55 dB				
Gain regulation	-18dB	-18dB	30 dB				
Optimum analogue TV input level		60dB $\mu$ V to 93dB $\mu$ V	60dB $\mu$ V a 85dB $\mu$ V				
Optimum digital TV input level (1)	-	-	45dB $\mu$ V a 80dB $\mu$ V				
Maximum input level		93dB $\mu$ V	90dB $\mu$ V				
Maximum output level (2)	-	-	115dB $\mu$ V for 8 channels				
Maximum output level (3)		115dB $\mu$ V	118dB $\mu$ V EN50083-5 at -66dBc				
"Shoulder" level for digital TV output @-30dB ETR290	-	-	127dB $\mu$ V (1 channel)				
Noise figure	6dB	6dB	8 dB				
Return losses	$\geq$ 12dB	$\geq$ 15dB	$\geq$ 12 dB				
<b>Rejection</b>	40 dB@ BIII 40 dB @ BI	40 dB@ UHF 40 dB @ FM	<b>45 dB at +1.25 MHz, 45 dB at-2 MHz</b>				
Flatness of channel	-	-	+/- 0.7 dB en 6MHz – analogue channels				
Flatness of channel	-	-	+/- 1.5 dB en 8 MHz – digital channels				
Flatness of Band			+/- 3 dB				
Input loop-through response	-	-	0 dB +/- 1.5dB				
Voltage to preamplifier	-	-	Programmable on UHF1 input 0/5/12/15/24VDC		-	-	-
Max current to previous unit	-	-	100 mA		-	-	-
Power overload detection	-	-	Digital		-	-	-
Input supply voltage	230 VAC +/-10%						
Power consumption (including power to previous units)	8 modules : 25 VA; 11 modules : 32 VA; 14 modules : 40 VA						
Operating temperature	0° a +50°C up to 90% ambient humidity						
Dimensions	445x280x83 mm						
Packing dimensions	545x350x85 mm						
Gross weight	5 Kg. ( SelectTV01)						
Protection category	IP30 – indoor mounting						
Included in SelectTV01 package (8 channels)	1 x mains power cable, instructions manual, 2 x "F" to "F" cables, 2 x 75 $\Omega$ load in "F" connector.						
Included in SelectTV02 package (expansion board)	1 x "F" to "F" cable, 1 rigid "F" to "F" interconnection bridge, 2 x 75 $\Omega$ load in "F" connector.						
Included in SelectTV03 package (11 channels)	1x mains power cable, instructions manual, 3 x "F" to "F" cables, 3 x 75 $\Omega$ load in "F" connector.						
Included in SelectTV04 package (14 channels)	1 x mains power cable, instructions manual, 4 x "F" to "F" cables, 4 x 75 $\Omega$ load in "F" connector.						

- (1) In order to maintain 15dB between analogue and digital channels, the maximum recommended output level is 75dB $\mu$ V
- (2) Maximum recommended output level for 8 channels once DIN5004B std applied and reduced for the number of channels amplified.
- (3) Max output level according to the EN50083-5 standard applicable to head end amplifiers and using the three carrier method, one at maximum and the other two at -6dB. The maximum output level is measured where intermodulation is experienced at -66dBc. This output level provides sufficient margin for the addition of other channels as noted in EN50083-5.



## Super-Selective Programmable Head Unit SelectTV

Configuration of UHF channels per antenna

ANTENNA INPUT	1	2	3	4	5
Base unit.	8	0	0		
	6	0	2		
	3	5	0		
	3	3	2		
Base unit + 1 expansion board.	11	0	0	0	
	9	0	2	0	
	3	8	0	0	
	6	0	0	5	
	6	0	2	3	
	3	3	0	5	
	3	3	2	3	
Base unit + 2 expansion boards.	14	0	0	0	0
	12	0	2	0	0
	11	0	0	0	3
	9	5	0	0	0
	3	9	2	0	0
	8	0	0	6	0
	8	0	0	3	3
	6	0	2	3	3
	3	5	0	3	3
3	3	2	3	3	

### Remote programming through use of :

1. RS-232 serial port (Null modem cable connection)
2. Wire-less RS-232 connection.

\* Remote programming may require adicional parts or software.