

starBOX Home RF Hubs

Part of the *PROception* core range for the professional aerial and system installer, these fully-featured RF hub products provide ideal wiring centres for comprehensive digital and analogue home entertainment distribution systems. Solo starBOXes (this page) have separate antenna inputs for individual stand-alone home installations. The MDU starBOX (overleaf) has a combined input for use in integrated reception systems (IRS) where the majority of signals arrive on a single cable from a multiswitch in a shared-antenna environment.

Solo starBOX features

- Separate inputs for FM, DAB and UHF antennas, and satellite LNB input.
- Built-in low-gain TETRA-filtered UHF input amplifier for optimum TV reception.
- Auxiliary UHF input for a CCTV camera (via modulator) or similar source.
- LNB 2 input and output for Sky+*.
- UHF return input from main viewing location for distribution to 5 or 10 remote outlet points – all sources viewable on all TVs.
- Line-power available at UHF ANT input for powering a *PROception* masthead preamplifier where required.
- Internal bypass of FM and DAB radio signals to the distribution outputs.



Remote control features

- Infrared remote control capability from all distribution outputs to main viewing location, with a choice of two remote control systems – Sky*-only control with the proSAT1EYE extender (via RF-OUT 2 Digibox connector) or 'universal' remote control with the *PROception* starLINK I-R extender system.
- 9 V I-R receiver 'eye' power provided at all distribution outputs.

Technical data

proSTR5S, proSTR10S – Solo starBOX					
Antenna inputs	FM ANT IN	DAB ANT IN	CCTV IN (UHF) ¹	UHF ANT IN	LNB 1 IN
Signal frequency ranges	87.5 .. 108 MHz	217.5 .. 230 MHz	470 .. 862 MHz	470 .. 862 MHz	950 .. 2150 MHz
Gain or loss to MASTER OUT	2 dB gain	2 dB gain	8 dB loss	3 dB gain	2 dB loss
VHF bypass to distribution outputs	2 dB gain	2 dB gain	–	–	–
Max. recommended input level ²	66 dBμV	60 dBμV	– (passive)	76 dBμV	– (passive)
Input filter rejection	–	–	–	≥ 26 dB ³	≥ 43 dB ⁴
Line power for UHF preamplifier ⁵	–	–	–	8 V at ≤ 25 mA	–
LNB 2 input					
Insertion loss to LNB 2 OUT	≤ 2 dB				
Filter rejection	≥ 23 dB ⁴ (filtered to avoid interference from LNB noise due to wiring or outlet plate crosstalk)				
Line power pass	20 V DC at 250 mA max. (also applies to MASTER OUT to LNB 1 IN)				
Distribution section					
Signal frequency range (UHF)	470 .. 862 MHz (via UHF RETURN IN)				
Number of distribution outputs	5 (proSTR5S) or 10 (proSTR10S)				
Gain to distribution outputs	4 dB				
Max. recommended input level	75 dBμV				
RF return path frequency range	5 .. 10 MHz (gain approx. 2 dB from each distribution o/p to UHF RETURN IN)				
Remote control compatibility	proSAT1EYE (Sky* only) or <i>PROception</i> starLINK system ('universal')				
I-R receiver (eye) line power	9 V DC at 15 mA present at all distribution outputs				
General					
Mains power requirement	230 V 50 Hz at ≤ 6 VA				
Power indicator	Green LED				
Housing dimensions (overall)	292 x 79 x 46 mm (width x height x depth (excludes connectors and power cord bushing))				
Signal connector type	'F' (IEC 60169-24)				
Operating temperature range	–10 .. +40 °C				
Standards compliance	Safety: BS EN 60065:1998; EMC: BS EN 50083-2:2001; earth bonding terminal provided				

Notes

1. CCTV IN is an auxiliary UHF input and can be used for any UHF (modulated) signal source. This input should always be terminated in 75 Ω if not used (a suitable termination is supplied with each unit).
2. Maximum UHF signal levels are given for 5 analogue TV channels plus up to 6 DTT multiplexes at ≤ –14 dB relative level (FM radio signals should not exceed –10 dB relative to analogue TV).
3. For all frequencies ≤ 400 MHz ('TETRA filtering').
4. For all frequencies ≤ 854 MHz (LNB wideband noise filtering).
5. Recommended preamplifier is *PROception* type proMHD11L (required only in weak signal areas or where there is a long cable run from the UHF antenna).

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MDU starBOX features

- Similar to the Solo starBOX overleaf, except that the separate antenna and LNB inputs are replaced with a single IRS input (IRS 1) which accepts signals in the FM, DAB, UHF and SAT IF bands.
- IRS 2 input and LNB 2 output are provided for Sky+* applications. (This of course requires a second IRS feed from the multiswitch.) Unlike the LNB 2 input and output on the Solo starBOX this is an unfiltered straight-through connection.
- CCTV (auxiliary UHF) input allows connection of one or more locally generated UHF sources.
- UHF RETURN input feeds five distribution outputs. VHF radio is bypassed internally to the distribution outputs.
- Remote control features as Solo starBOX overleaf.

Special note (applies to Solo and MDU versions)

These products have no internal UHF path between the UHF antenna or IRS inputs and the distribution outputs. The distributed UHF signal is taken from the UHF RETURN input only. To obtain UHF signals at the distribution outputs there must be a signal connection between MASTER OUT and UHF RETURN IN. This is usually provided by the loop 'down' to the main equipment location, through one or more set-top boxes and back 'up' to the starBOX – thus making the set-top box outputs available on all the distribution outlets.



If for any reason there is no MASTER OUT – UHF RETURN IN signal path present, no off-air TV signals will be available at the distribution outlets. This can be remedied by linking MASTER OUT to UHF RETURN IN via a short coaxial cable, or by using a 2-way splitter on MASTER OUT to feed both an outlet (with no return facility) and UHF RETURN IN.

Technical data

proSTR5M – MDU starBOX					
IRS 1 & CCTV inputs	IRS 1 IN				CCTV IN (UHF) ¹
	FM band	DAB band	UHF band	SAT IF band	
Signal frequency ranges	87.5 .. 108 MHz	217.5 .. 230 MHz	470 .. 862 MHz	950 .. 2150 MHz	470 .. 862 MHz
Gain or loss to MASTER OUT	2 dB gain	2 dB gain	2 dB loss	2 dB loss	3 dB loss
VHF bypass to distribution outputs	2 dB gain	2 dB gain	–	–	–
Max. recommended input level ²	66 dBµV	60 dBµV	– (passive)	– (passive)	76 dBµV
IRS 2 input (DC .. 2150 MHz)					
Insertion loss to LNB 2 OUT	≤ 2 dB				
Line power pass	20 V DC at 250 mA max. (also applies to MASTER OUT to IRS 1 IN)				
Distribution section					
Signal frequency range (UHF)	470 .. 862 MHz (via UHF RETURN IN)				
Number of distribution outputs	5				
Gain to distribution outputs	5 dB				
Max. recommended input level ²	75 dBµV				
RF return path frequency range	5 .. 10 MHz (gain approx. 2 dB from each distribution o/p to UHF RETURN IN)				
Remote control compatibility	proSAT1EYE (Sky* only) or PROception starLINK system ('universal')				
I-R receiver (eye) line power	9 V DC at 15 mA present at all distribution outputs				
General					
Mains power requirement	230 V 50 Hz at ≤ 6 VA				
Power indicator	Green LED				
Housing dimensions (overall)	292 x 79 x 46 mm (width x height x depth (excludes connectors and power cord bushing))				
Signal connector type	'F' (IEC 60169-24)				
Operating temperature range	–10 .. +40 °C				
Standards compliance	Safety: BS EN 60065:1998; EMC: BS EN 50083-2:2001; earth bonding terminal provided				

Notes

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Performance data given are typical unless otherwise stated, and are not intended to constitute a contractually binding specification. Proception Limited reserves the right to change product designs and specifications without prior notice.

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