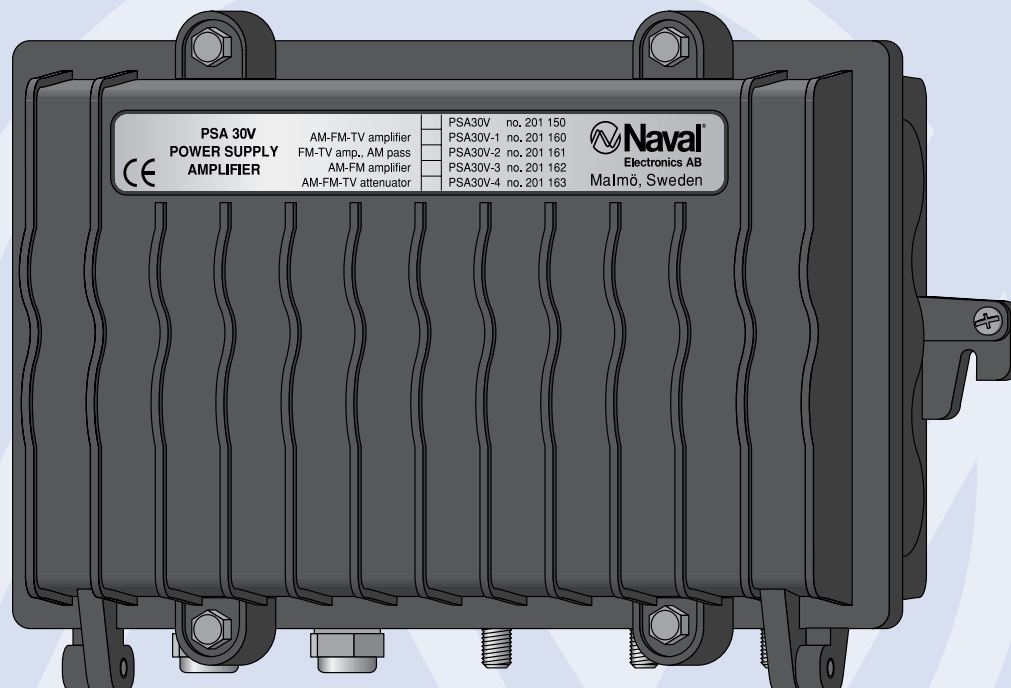


PSA 30V Power Supply and Amplifier

The PSA 30V modular power supply and amplifier is designed to supply power to the Mark and VPA series active antennas as well as amplifying radio, TV and VTR signals with fitted plug-in modules. Factory fitted plug-in modules are available in three versions for the PSA 30V in addition to the basic power supply.

The power supply accepts 24 V DC and 117/230 V AC. As with all other Naval products, the PSA 30V series is specifically designed for the special requirements needed for world-wide marine use. For more details on different applications see overleaf.



Size: (H) 85 x (W) 230 x (D) 160 mm

TECHNICAL SPECIFICATIONS

General

Operating temp. range:	-40 to +55°C
Humidity:	<95% non condensing
EMC:	EN 50082, EN 55024
Safety:	EN 60065 (IEC 65)
Input voltage:	24 V DC \pm 17% 117/230 VAC +10/-15%, 50-60 Hz
Antenna output:	15 V DC \pm 5%, max. 300 mA
Input voltage for cut-out function:	12-24 V DC

PSA 30V-1, AM-FM-TV and

PSA 30V-2, FM-TV with AM feed through

Frequency range:	0.1-26.5 and 40-890 MHz
Gain 40-110 MHz:	17 dB
Gain 170-890 MHz:	20 dB
Gain VTR (ch. 38, 607.25 MHz):	14 dB
Gain 0.1-26.5 MHz, PSA30-1:	10 dB
Gain 0.1-26.5 MHz, PSA30-2:	-2 dB

Att. of antenna sign. at VTR freq:	30 dB
Manual attenuation 0.1-110 MHz:	0-20 dB
Manual attenuation 170-890 MHz:	0-20 dB
Max. output level, 2 signals:	105 dB μ V, 3:rd order IMD
Noise figure:	7 dB

PSA 30V-3, AM-FM

Frequency range:	0.1-26.5 and 68-110 MHz
Gain:	23 dB
Manual attenuation 0.1-26.5 MHz:	0-20 dB
Manual attenuation 68-110 MHz:	0-20 dB
Max. output level, 2 signals:	105 dB μ V, 3:rd order IMD
Noise figure:	7 dB

The unit can be used as a power supply without amplifier. It is then designated PSA 30V.

Since 1971, the objective of Naval Electronics has been to offer the best possible products for TV and Radio reception at sea. Naval began with omnidirectional antennas and is the world leader in this field of technology today. Now, with an expanded product range, the name Naval means much more than antennas. Naval operates in more than 40 countries and has installations on thousands of vessels all over the world.

All specifications stated are subject to change without notice.



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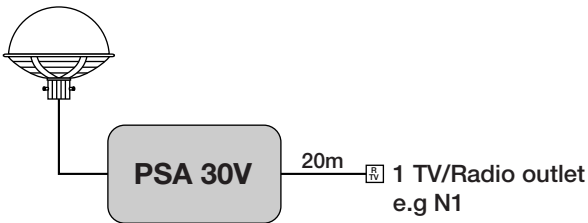
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PSA 30V Power Supply and Amplifier

Examples of different configurations for PSA 30V.

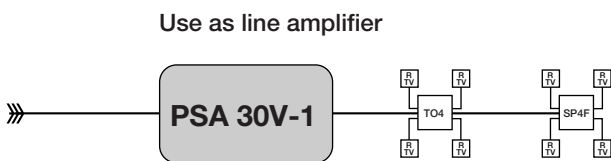
The PSA 30V with amplifier modules can typically supply 4–10 TV outlets and up to 16 radio outlets depending on cable lengths and modules used. The amplifier features a separate VTR input and good intermodulation characteristics. In order to manage earth faults common in a marine environment the amplifier's internal ground can be galvanically separated from external ground by removing a jumper.

The PSA 30V-1 is normally used when a higher gain is required on AM together with a passive AM antenna or Mark 22CA. The PSA 30V-2 is the preferred unit for most installations with TV and radio. It works particularly well with the VPA 30 active short wave antenna. The PSA 30V-3 is an AM-FM amplifier designed to keep second order intermodulation products to a minimum. It's used for distribution of radio signals only.

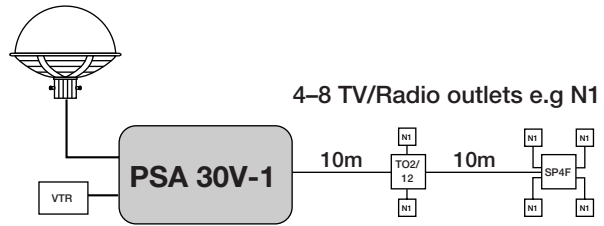


A small system with 1 TV outlet.

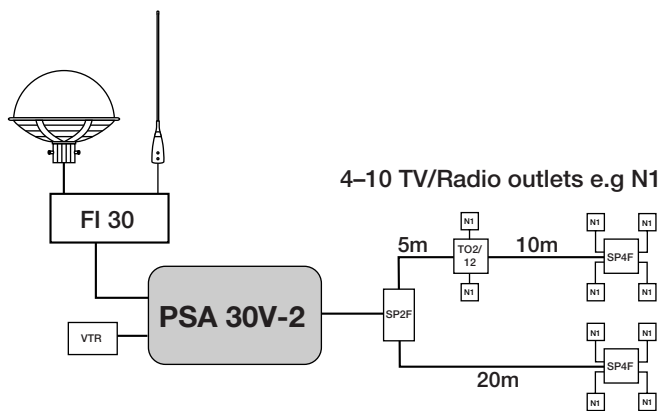
The PSA 30 can also be used to supply power to the antenna and feed output to another amplifier.



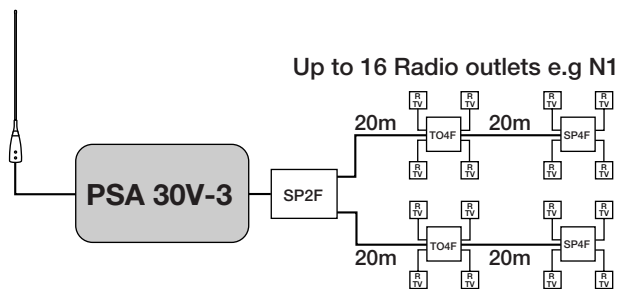
The PSA 30-1 is the ideal line/sub amplifier in larger systems or when long cable lengths are required.



This is a common version for 4–8 radio and TV outlets. The number of outlets depend on the cable lengths in each branch according to the diagram above.



The PSA 30V-2 is the preferred unit in most radio and TV systems. It is similar to PSA 30V-1 but has AM feed through instead of an AM amplifier. This is to achieve best possible results when used together with an active AM antenna such as the VPA 30.



In this configuration with the AM-FM radio version up to 16 radio outlets can be connected.

Description	Order No.	
Complete units		
PSA 30V	201150	
PSA 30V-1	201160	
PSA 30V-2	201161	Weight: 1.8 kg
PSA 30V-3	201162	Volume: 3.5 dm ³
Replacement modules		
PM 30-1	201165	
PM 30-2	201166	Weight: 60 g
PM 30-3	201167	Volume: 50 cm ³