

Broadcast Digital AM Power Amplifier Mod: ASW602D54

Digital AM Power Amplifier controlled by microcontroller










The ASW602D54 Digital Power Amplifier covers the HF Bands in the range of 24.0 ~ 54.0 KHz. It can deliver 600 Watt P.E.P. at 50 Ohm Load (150 Watt Carrier @ 100% modulation) at frequencies up to 30.0MHz and 500W at 30.0 to 54.0 MHz

The LCD screen of ASW602D54 displays RF Power Forward and Reflected , Heatsink temperature and also displays Alarm reasons of any kind of malfunction.

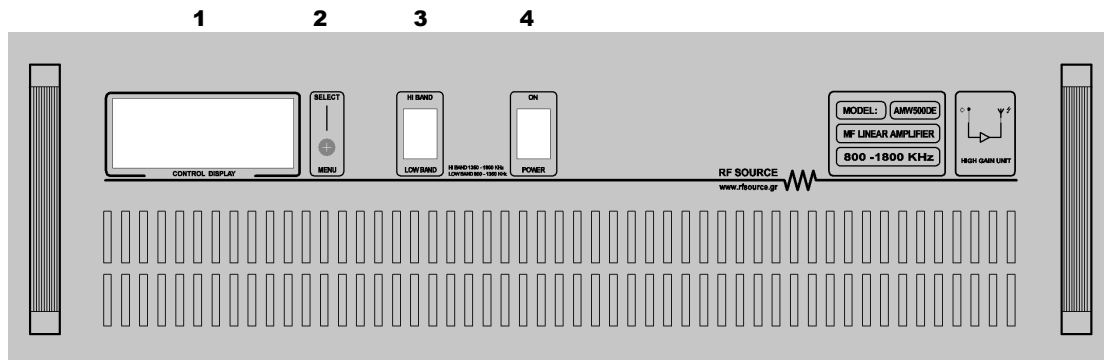
The ASW602D54 has protections from high VSWR , Over output Power , Over Temperature , Power Supply malfunction . When an Alarm gets activated, the controller restarts the Amplifier's operation three times. If this procedure fails to solve the malfunction, the Amplifier goes to STBY mode. The ASW602D54 needs 220VAC or 110VAC (selectable by internal switch) to operate and its weight is 12Kg max.

SPECIFICATIONS :

Frequency Range :	24,0 ~ 54,0 MHz
Input-Output Resistance :	50 Ohm
Output RF Power :	0 ~ 600 Watt P.E.P.
Output Carrier :	0 ~ 150 Watt C.W.
Input RF drive power :	12 Watt P.E.P.
Driver Carrier :	3.0 Watt C.W.
Spurious :	< -65 db
Harmonics :	< -40 db
Modulation Type :	ALL Modes
Supply Consumption :	< 1100 Watt
Supply Voltage :	90 ~ 264 Volt AC (selectable)
Warranty :	1 Year

-  **19" Rack Mounted**
3U High
-  **LCD screen**
2 X 16
character
numerically and
analog bar display
-  **Digital**
readouts
-  **Digital**
controlled by
microcontroller
on screen messages
-  **600 Watt P.E.P.**
OUTPUT
-  **0 ~ 12 Watt**
P.E.P. Drive
3 Watt C.W.
-  **High Efficiency**
Switching
Power Supply
Low RF noise

TRANSMITTING – RECEIVING SYSTEMS



- 1 2 X 16 character LCD backlight Display
- 2 MENU Button
- 3 Hi – Low Band selection (Hi 35.0 – 54.0 MHz , Low 24.0 – 35.0 MHz)
- 4 Power On – OFF switch

1. Preliminary Instructions

• General foreword

The equipment in object is to considering for uses, installation and maintenance from “trained” or “qualified” staff, they conscious of the risks connected to operate on electronic and electrical circuits electrical. The “trained” definition means staff with technical knowledge about the use of the equipment and with responsibility regarding the own safety and the other not qualified staff safety place under his directed surveillance in case of works on the equipment. The “qualified” definition means staff with instruction and experience about the use of the equipment and with responsibility regarding the own safety and the other not qualified staff safety place under his directed surveillance in case of works on the equipment.

WARNING: The machine can be equipped with an ON/OFF switch which could not remove completely voltages inside the machine. It is necessary to have disconnected the feeding cord, or to have switched off the control panel, before to execute technical operations, making sure himself that the safety connection to ground is connected. The technical interventions that expect the equipment inspection with circuits under voltage must be carry out from trained and qualified staff in presence of a second trained person that it is ready to intervene removing voltage in case of need.

RF Source-Greece doesn't assume responsibility for injury or damage resulting from improper procedures or practices by untrained/unqualified personnel in the handling of this unit.

WARNING: The equipment is not water resistant and an infiltration could seriously compromise its correct operation. In order to prevent fires or electric shocks, do not expose the equipment to rain, infiltrations or humidity. Please observe all local codes and fire protection standards during installation and use of this unit.

WARNING: The equipment has to its inside exposed parts to risk of electric shock, always disconnect power before opening covers or removing any part of this unit. Fissures and holes are supplied for the ventilation in order to assure a reliable efficacy of the product that for protect itself from excessive heating, these fissures do not have to be obstructed or to be covered. The fissures doesn't be obstructed in no case. The product must not be incorporated in a rack, unless it is supplied with a suitable ventilation or that the manufacturer's instructions are been followed.

Quick guide for use



1) Welcome screen after Power ON.



2) Push the MENU button once to go to the Forward and Reflected RF Power measurement screen.



3) Push the MENU Button again. This screen shows only the Forward RF Power numerically and also with analog bars.



4) Push the MENU Button again. This screen shows only the Reflected RF Power numerically and also with analog bars.



5) Push the MENU Button again. This screen shows the PA's heatsink temperature.



6) Push the MENU Button again. This screen shows only the Unbalanced RF Power numerically and also with analog bars.



7) This screen appears only when Overload - Over modulation Alarm gets activated (Forward RF Power >620.0 Watts). The RF output shuts down.



8) This screen appears only when HI SWR Alarm gets activated (Reflected RF Power > 40.0 Watts). The RF output shuts down.



9) This screen appears only when HI Unbalance Alarm gets activated (Unbalance RF Power > 40.0 Watts). The RF output shuts down.

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