

FU-30A FM Amplifier USER MANUAL

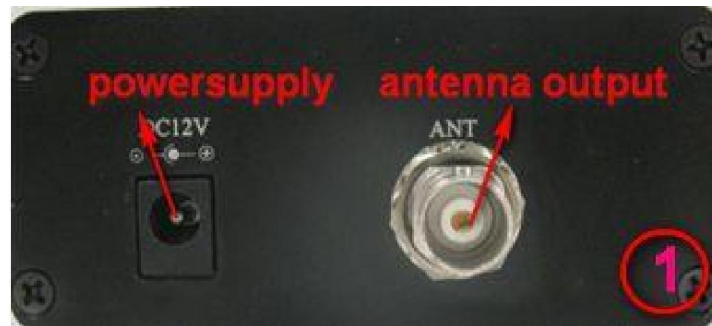


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Product Introduction

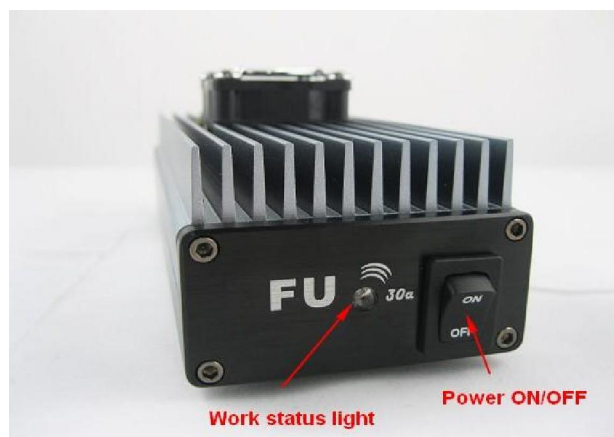
Buttons and Interfaces



Picture1 Exciter(Back)



Picture2 Exciter(Front)

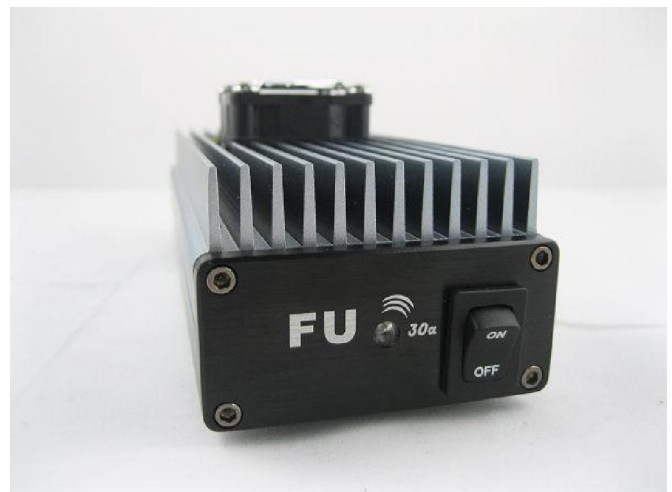


Picture 3 FU30a (Front)



Picture 4 FU30A (Back)

Accessories



Adjustable 1/4 wave GP antenna V2.0



0.5w FM Transmitter (Exciter)

Fu30a FM Amplifier



Power Supply (12V7A)



Antenna Cable



Exciter to Amplifier cable (BNC TO SMA)

Functions and Advantages

1. Advanced stationary wave protection function. When the antenna is wrongly connected or the SWR (Standing Wave Ratio) exceeding 1.5, the device will turn to protection mode automatically.
2. Strong power output. The minimum power output is 28W, it could reach 45W under extreme conditions.
3. Widely applied to exciter of 0.2W-0.4W.

First installation

Antenna frequency setting



Choose Frequency

89.5MHz-94.5Mhz

(A+B1)

95.5-100.5Mhz

(A+B2)

100.5Mhz-105.5Mhz

(A+B3)

Antenna Installation



Installation steps (See picture1 and picture2)



Place the antenna in an open and high area (see picture 3)

Main device installation



Interface



Picture 1 Connect the antenna and power amplifier



Picture 2 Connect the power amplifier to exciter with feeder line.



Picture3 Connect the amplifier and exciter respectively to power supply

Daily Use

Turn-on :

1. Check the connection of all the lines, especially the antenna connection.
2. Check the working frequency, make sure it's within the frequency range of antenna.(See "Antenna installation" for reference)
3. Make sure the switch of the amplifier is turned off, power on the exciter.
4. Adjust the transmitting frequency of the actuator to a proper value(must be within the setting range of antenna frequency, see "Antenna Installation" for reference)
5. Turn on the power of the amplifier.



Turn-off order :

1. Turn off the power of amplifier.
2. Turn off the switch of the exciter.



Attention

- 1 . Before turn on the power of FU30a, make sure the antenna is correctly connected. The resistance of which should comply with that of antenna, which is 50 . With the needed frequency, the SWR (Standing Wave Ratio) should not be over 1.5(see "Antenna Installation"), or there will be a serious consumption to the power amplifying module.
- 2 . For the safety of device, please do not use other FM Transmitter (Exciter). If you have to, please make sure that the Exciter power output(or **FU30a input**) must equal or **less than 0.3w**, or the FU30a amplifying module will immediately be consumed.
- 3 . The turn on order must be: First switch on the exciter, then turn on the power amplifier. Or it will trigger the alarm light, worse to burn the FU30a.
- 4 . The turn off order must be: First turn off the power of the amplifier, then switch off the exciter.
- 5 . The working temperature should not be over 40 , or it will automatically stop running because of high temperature.

Product Parameter

Accessory	Specification	Value
Antenna	Center frequency	92MHz/98MHz/103MHz
	Frequency range	89.5MHz-94.5Mhz (A+B1)
		95.5-100.5Mhz (A+B2)
100.5Mhz-105.5Mhz (A+B3)		
FU30a Amplifier	Rated voltage	12V DC
	Currency	7A
	Frequency	87~108MHz
	Power output	28W~30W
	Output resistance	50
	Input RF power	200mW~300mW
	Input resistance	50
	stray radiation	> -55db
	Environment temperature	-5~40
0.5w FM Transmitter(Exciter)	Rated Voltage/Currency	12V 1.25A
	Output power	200mW~300mW
	Output resistance	50
	Frequency	87~108MHz

Malfunction reminder



Blue light on means working well



Red light on means malfunction, please switch off the power of amplifier immediately.

4 reasons will cause red light on:

1. Antenna being wrongly connected. Or the interface connection needs double check.
2. The working frequency is out of the setting frequency range, which causes the SWR (Standing Wave Ratio) exceeds 1.5.
3. Connected with other exciter, the power output is over 0.5W.
4. The environment temperature is over 35

Special reminder:

- 1 . Antenna should be placed in a high and open area.
- 2 . All the line should be correctly connected.
- 3 . Special attention should be paid to the turn on and turn off order. No reversing.
- 4 . Operate strictly following the instruction, or the device could be destroyed seriously.

Any help needed, please contact us through: rita@fmuser.net