

Standard offer for TBS Mini soundsystem, aircraft application

(all prices mentioned below are valid for 2014)

Recommended items:

Soundunit TBS Mini: 99 Euro

Amplifier:

New: 1x40W digital audio amplifier (weight: 6g, 24x60x15mm): 59 Euro

OR

4x40W amplifier (weight 40g, 55x50x35mm): 55 Euro

Speakers, depending on space conditions:

2pcs BF 45, 4Ohm, 55x26mm, weight 32g: 15 Euro/each (**minimum** speaker configuration)

OR

2pcs R10S speakers (100x100x38mm, 160g weight): 12 Euro / each (**ideal** speaker configuration)

OR

2pcs BF-45 and one large R10S (**compromise** speaker configuration)

optional:

- Audio-Isolator: 18 Euro

(recommended if the main/drive battery is used for powering the amplifier)

- USB programming cable: 24 Euro

Shipping is done usually as registered but NOT insured letter.

Price within Europe: about 13 Euro (depending on weight)

As an **alternative** for conventional speakers, so called "Exciter" or "Transducer" can be used.

They are glued simply inside the hull of the plane, without cutting any wholes.

This solution is ideal for light weight foam models.

Source, f.e.:

<http://www.parts-express.com/dayton-audio-daex25vt-4-vented-25mm-exciter-20w-4-ohm--295-222>

Some questions:

Which sound do you want to have preloaded?

What is the desired control mode (see below)?

("direct soundselection" is recommended for planes)

What is the voltage of the main batteries?

What is the max. size/weight of the speakers your model can afford?

Looking forward to your reply.

P.S.:

E-Mails can't be answered regularly from Tuesday-Thursday.

Thank you for your understanding.

The rest of this mail is my standard offer for airplanes.

It gives some technical and order informations.

If you have any further questions, just let me know.

The soundsystem will be delivered „ready to run“, preloaded with your desired sound and configuration.

The only solder work to be done is connecting the speaker(s) and power supply to the amplifier. All other connections are plugged.

Overview of the possible control modes:

1. Autostart

This is the most simple way of controlling the sound unit. No extra prop. channel is necessary. The first displacement of the throttle stick starts the engine. If the engine runs 20s idle, it is shut down automatically.

Note:

- In this control mode, NO special sounds (f.e. MG sound) are possible !
- Scale looking synchronization of motor start up sound and propeller rotation is not possible !
- The soundunit is delivered with this standard control mode if not changed by your order

2. Indirect sound selection

A spare proportional channel, having a 3 position switch(toggle switch) at the TX is necessary.

The desired sound (f.e. sound #3) is **SELECTED** by pushing the switch 3x in one direction.

The selected sound is **TRIGGERED** by pushing the switch in the other direction.

A common joy stick channel can also be used.

All available special sounds, as well as the switching outputs of the TBS Mini can be used.

3. Direct sound selection (This mode is recommended for airplanes)

A normal prop.channel with 3 position switch (or joy stick) on your radio is used to to start/stop the engine by pushing it in one direction.

Another special sound (f.e. gun) is triggered by pushing the joy stick in the other direction.

The special sound is factory set and can be changed only by the optional programming adaptor.

4. Encoder control

This is a rotary switch combined with a push button, installed in the TX. The desired sound is selected by the rotary switch and is started by the push button. It must be installed by your own in the transmitter and has to be connected at a spare prop.channel.

The encoder must be ordered separately!

Encoder control is the most convenient mode of controlling the soundunit, specially when the whole range of its functionality is used.

The encoder is recommended for models with a lot of special functions, like tanks, trucks, boats,...

Note:

The encoder is tested in different transmitters. It is not guaranteed to work well in all available transmitter brands.

The installation in the transmitter is on your own risk.

There are different external amplifiers available:

1. 1x40W digital audio amplifier, 10-26V (3-**6S**), weight 8g.
2. 2x40W amplifier, 10-18V (3-4S) power supply, weight: 35g (including heatsink)
3. 4x40W amplifier, 10-18V (3-4S) power supply, weight: 40g (including heatsink)
4. 50W amplifier, 22-50V (6-12S) power supply, weight: 50g (including heatsink)

Hint for using the main battery for powering the external amplifier:

To maintain a **galvanic isolation** between drive and receiver supply, a „Audio-Isolator“ is available. It is simply plugged between soundunit and amplifier. This device is highly recommended if a “Opto-ESC“ is already used.

Another advantage of the device is the possibility of using the 1x40W amplifier together with main batteries having **more than 6S**, as long as they are “build” by two identical batteries. (f.e. building a **12S** out of **2x6S** LiPos connected in series).

ONE of the 6S can be used for powering the 1x40W amplifier. The additional load can be neglected in comparison the motor current.

Price: 16 Euro

The recommended base soundsystem consists of:

1. Soundunit TBS Mini with your desired sound and "Autostart" control mode (Weight: 4 gram)
2. 1x40W amplifier (Weight: 8 gram)
3. R10S speaker (100x100mm, weight 160g)
(see http://www.visaton.com/en/chassis_zubehoer/breitband/r10s_4.html)

or

SPH-30 speaker (80x80x42mm, weight 150g)

(see <http://www.monacor.de/typo3/index.php?id=84&L=0&artid=4915&spr=DE&typ=full>)

Smaller speaker can be used in foam air crafts, f.e. :

2 pcs of Visaton BF-45

or

2-4 pcs of K-50 SQ

Of course the sound produced from such small speakers can not be compared with a R10S speaker.

Prices:

Soundunit

Soundunit TBS Mini, with all cables and loaded sound, ready to run: 99 Euro

- Programming cable (necessary for loading new sounds and doing a lot of other adjustments): 24 Euro
- Encoder (control device, recommended for land vehicles, not for aircrafts): 47 Euro

Amplifiers

- 2x40W amplifier, 10-18V power supply, internal volume control: 49 Euro
- 50W amplifier, 24-50V power supply, internal volume control: 79 Euro

Standard speakers:

- Visaton 4" R10S, 4Ohm, 100x100x38mm, weight 160g: 12 Euro
- Monacor 3", SPH-30, 4Ohm, 80x80x42mm, weight 150g: 46 Euro

Speakers for smaller airplanes

(2 - 4 speakers recommended)

- Visaton BF 45, 4Ohm, 55x26mm, weight 32g: 15 Euro
- Visaton K50SQ, 8Ohm, 51x51x18mm, weight 50g: 6 Euro

Fully detailed drawings can be found on the according websites: www.visaton.com or www.monacor.com

Shipping cost

Shipping is done usually as registered but NOT insured letter.

Price within Europe: about 13 Euro

All prices include 19% VAT.

If you are located outside the european union, the VAT does **not** need to be payed.

Methods of payment:

1. PayPal, 4% fees of the total amount are charged.
2. Normal bank transfer by using the IBAN / SWIFT code, supplied by me.

Delivery takes about 1-2 weeks.

When the order is completed, I will send you an e-mail and the money can be tranfered.
After reception the package will be shipped at once.

If you have further questions, you are welcome!

With kind regards

Thomas Benedini
Muellergasse 15
52159 Roetgen
Germany

www.benedini.de