

DVB-T-Outdoor- Antenne BZD 40



KATHREIN

Antennen · Electronic

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Safety Instructions



The antenna and its accessories are not toys for children to play with! Keep any spare installation accessory items away from children (danger of choking on small parts).



Wall mounting: Before drilling the holes, make sure there are no electrical cables in the wall.

Danger to life from electric shock!

- Pay attention to exposed wires, if they are routed close to the installation location. They pose an acute danger to life if touched!
- Never work on antenna systems when a storm is approaching or during a storm. Danger to life!



Earthing and lightning protection measures may only be carried out by specially trained electricians, otherwise work may be of inadequate quality! When mounting on antenna masts, your life and health may be in danger! So please note the following points:

- Always wear a properly fitted and intact safety harness when climbing roofs or other locations where you are at risk of falling!
- Make sure the roof is able to hold your weight. Never walk on crumbling or unstable surfaces! Wear firm, non-slip shoes!
- Ladders or other climbing aids used must be in good working order. Do not construct wobbly „towers“ to climb up!
- If passers-by are at risk from falling objects during installation work, you must cordon off the danger zone!
- The antenna mast must be properly earthed in accordance with DIN EN-60728-11.



The antenna may only be operated in the 5 to 25 Volt range.



Electronic equipment is *not household waste*. In accordance with directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 27th January 2003 on used electrical and electronic equipment, it must be disposed of properly.

At the end of its service life, take this unit for disposal at a designated public collection point.

General

Intended Purpose

The active antenna is suitable for outdoor mounting in order to receive digital terrestrial TV and radio signals in the VHF (band III) and UHF (band IV, V) bands, provided there is an adequate signal level.

Essential Accessories

Reception of DVB-T signals requires a DVB-T-compatible receiver, with remote feeding (5 V) via the coaxial cable or an external remote feed power supply unit (5-25 V).

General Points on DVB-T Reception

In areas of low or excessively high signal strength, interference-free reception is not guaranteed under all circumstances. If the signal level is too weak, a mast-mounted directional antenna installed on the building's roof should be used. In close proximity to the transmitter, reception may be impaired by excessively high signal levels. In such cases use an indoor antenna, such as the BZD 30.

Reception may also be impaired by other factors. Critical installation locations are:

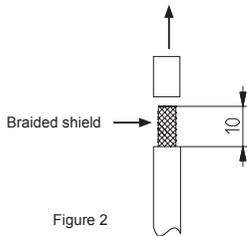
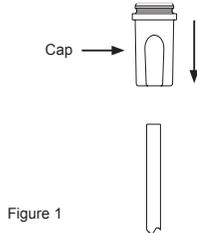
- on steel-reinforced concrete structures
- on enclosed metal structures or cladding etc.
- in close proximity to transmitting electronic devices (such as mobile phones).

Installation, Connection and Setup

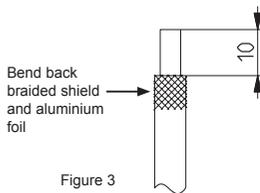
Pre-assembling the Cable

To fit the F standard connector:

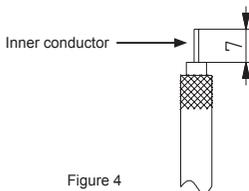
- Slot the cap onto the cable (see figure 1).



- Strip off the outer sheath of the cable, making sure you do not cut through the braided shield (dimensions in mm) (see figure 2).



- Carefully bend back the braided shield (see figure 3).



- Expose the inner conductor as shown in figure 4 (dimensions in mm).

Installation, Connection and Setup

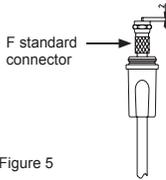
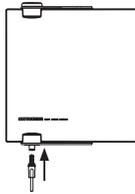


Figure 5

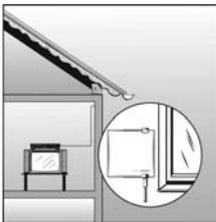
- Before fitting the F standard connector, make sure no strands of the braided shield are touching the inner conductor. This could cause a short-circuit. Carefully twist the F standard connector onto the end of the cable until it is firmly in place. The inner conductor should protrude a maximum of 2 mm out of the connector. The inner conductor must not be bent! (figure 5)

The quality of the received signal also depends on the cable assembly!

Connecting the Antenna and the Receiver



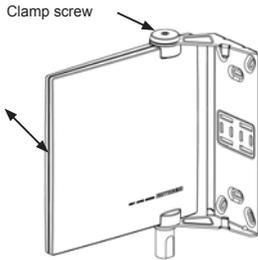
1. Connect the antenna to the DVB-T receiver by the coaxial cable provided. You can install the antenna regardless of the polarisation of the transmitted signals.
 - Screw the F standard connector onto the matching antenna socket. Push the cap over the F standard connector until it locks into the antenna housing.
 - Plug the IEC connector on the rear of the receiver into the opening provided for it.



2. Connect the receiver to the TV set (consult the receiver manual for more details) and switch the receiver on. Set the TV to AV mode, if it does not do so automatically when you switch on the receiver.
3. Check the DVB-T receiver's Setup menu to make sure the power supply to the antenna is connected via the coaxial cable.
4. It should now be possible to receive DVB-T programmes.

Installation, Connection and Setup

Optimising



Try to receive at the most suitable antenna position - preferably where you are intending to fix it later. Pay attention to how the cable is laid. The antenna can be swivelled in order to improve the received signal. To align the antenna:

1. Slacken the clamp screw using the Allen key provided.
2. Swivel the antenna in 30° increments until the reception is satisfactory.
3. Tighten the clamp screw, making sure that the retaining plate locks into the antenna housing.

If optimum reception is not possible, test the antenna at a different location facing towards the transmitting antenna and repeat the above steps.

In close proximity to the transmitter, reception may be impaired by excessively high signal levels.

Optimising with DVB-T Receiver

Some receivers feature on-screen signal level and quality displays, allowing you to optimise the antenna positioning still further. Refer to the operating manual for the receiver concerned for details on this.

Cleaning

Use only a damp cloth to clean the antenna. Do not use aggressive or abrasive cleaning agents, as they may damage the surface of the housing.

Never immerse the unit in liquid.

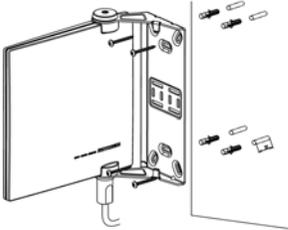
Installation, Connection and Setup



Before installing: Before drilling the holes, make sure there are no electrical cables in the wall.

Danger to life from electric shock!

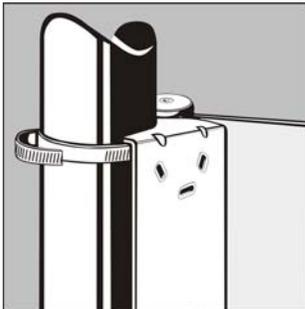
Wall Mounting



The necessary fixings for wall mounting are provided with the antenna. Once you have found the optimum reception position for the antenna you can drill the holes for the wall bracket.

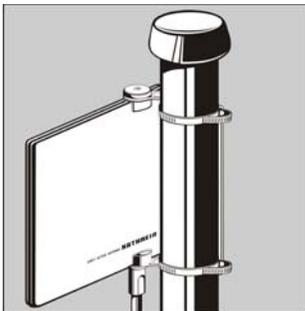
Be sure to mount the antenna with the cap and cable facing downwards.

Mast Mounting



The product package includes the fixings necessary to attach the antenna to a mast. Bolt the two supplied worm drive hose clips to the mast. Do not yet tighten the bolts fully. The mounting bracket of the BZD 40 has lugs at the top and bottom which engage in hose clips to mount and secure the bracket. Rotate the antenna until you get optimum reception. Once you have found the optimum reception, you can tighten the worm drive hose clip and the clamping screw.

Make sure the antenna is mounted so the cap and cable are pointing downwards.



Installation, Connection and Setup

Balcony Mounting



The necessary fixings for mounting on a balcony are provided with the antenna.

Once you have found the optimum reception position for the antenna you can drill the holes for the balcony mounting bracket.

Be sure to mount the antenna with the cap and cable facing downwards.



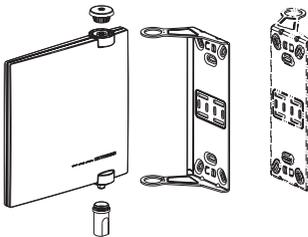
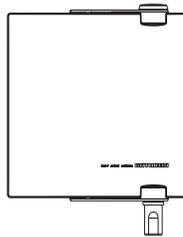
Optional Mounting Position

The range of possible mounting positions of the antenna can be extended by modifying the mounting bracket.

Ex factory status



Modified status



When modifying the bracket, first remove the clamp screw and the cap and cable as necessary. Then remove the bracket and refit it the other way round. In doing so, be sure to slot the bracket in at the bottom first before fixing it back in place with the clamp screw.

Installation, Connection and Setup



Before installing: Before drilling the holes, make sure there are no electrical cables in the wall.

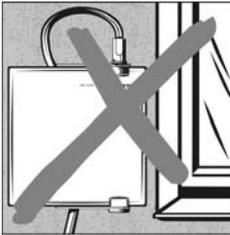
Danger to life from electric shock!

Pushing the Antenna Cable through the Wall

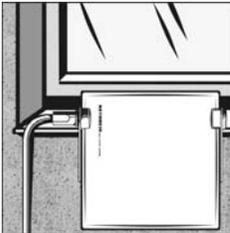
If you are routing the cable to the outside through the wall, after pre-assembling the cable, optimising the antenna alignment and mounting it, as described starting on page 5, carry out the following steps:

1. Remove the F standard connector
2. Detach the cap from the cable
3. You can now route the cable out through the hole in the wall from the inside
4. On the outside refit the cap on the cable, as described on page 5
5. Screw the F standard connector back onto the cable

Incorrect Installation



Cap should be facing downwards - horizontal mounting permitted.



When laying the cable, make sure it is always initially facing downwards. This will prevent rain from dripping in to the antenna through the cap.

Features and Technical Data

Active VHF/UHF antenna for outdoor use in receiving digital terrestrial TV and radio programmes (DVB-T). Easy wall, mast or balcony mounting.

- Reception range VHF: 174-230 MHz; UHF: 470-862 MHz
- For horizontal and vertical polarisation
- Attractive, space-saving design
- Dimensions (with bracket): 204 x 196 x 71 mm
- Wind load at 800 N/m² 39 N
- Clamping area securing strap: width 9 mm
Ø 40 - 48 mm
- Connection: F standard socket with weather shield cap
- Active antenna with integrated amplifier
- Quality: - 32 dB/K ¹⁾
- Gain: B III: 18 dB; B IV/V: 15 dB
- Max. output level: 95 dB μ V ²⁾
- Remote feed (5 V/30 mA) via coaxial cable from connected DVB-T receiver or with external remote feed power supply unit (5-25 V)
- Very low noise figure
- Supplied accessories:
 - Weather shield cap
 - Fixings for wall, balcony or mast mounting
 - 10 m connecting cable, F standard connector and IEC connector
 - Operating manual
- Single pack dimensions (mm): 210 x 250 x 75
- Weight (kg): 1.1

¹⁾ In mid-range, at 8 MHz bandwidth and $T_u = 290$ K

²⁾ To DIN EN 60728-5 for 60 dB KMA (3rd order)