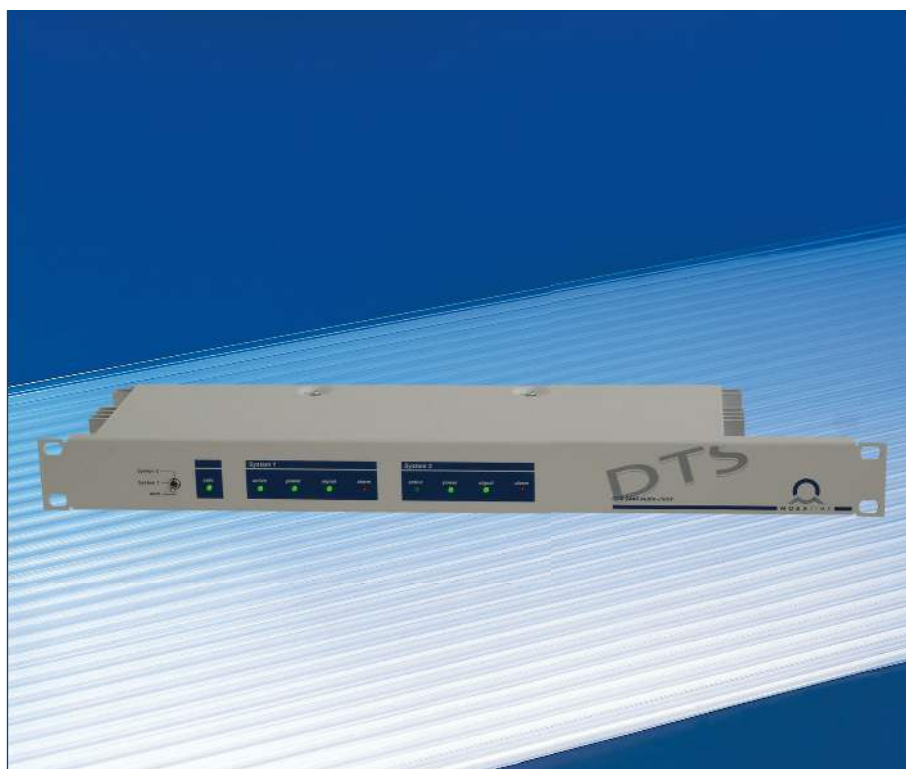




## Speaking Clock and Time Signal Generator

# DTS 2440.audio-clock

How do you announce an exact time via your station or the telephone?

Or how do you record audio announcements in a precisely-timed manner?

The DTS-2440.audio clock provides the answer. It has two operating modes: For one, the device may be used to announce the time (speaking clock), but it may also be used as a radio time signal generator.

### Speaking Clock

Acoustic English-language output of the time in hours, minutes and seconds combined with a concluding

sinus tone. Interval and volume of the announcement may be adjusted.

**Your benefits:** Your voice recording system will additionally record the time announcement made by the speaking clock. This way, all time announcements can be traced back to an exact point in time.

### Radio Time Signal Generator

Output of sinus tones with variable duration and frequency.

**Your benefits:** The DTS 2440 provides a precise audio time signal, which you may conveniently transmit using your station or a special telephone number.

## DTS 2440.audio clock - Technical Data

### Function as a time announcement (Speaking Clock)

Acoustic output of the time in hours, minutes and seconds with a concluding sinus tone. The sinus tone indicates the point in time to which the announced time applies. Time announcement in English and in accordance with the following format: "2 hours - 1 minute - 0 seconds".

The intervals may be selected using a DIP switch. By short-circuiting the inhibit inputs (muting), the time announcement may also be deactivated.

### Function as a Radio Time Signal Generator

At the beginning of every second, a sinus tone may be put out. A maximum of 60 sinus tones per minute are thus audible. The interval setting of the DIP switches do not affect the function of the radio time signal generator in any way. Frequency and duration are adjustable for every individual sinus tone.

### Redundant Design

The audio clock is designed to be redundant and contains two identical systems. In case of a system failure, the monitoring automatically switches from system 1 to system 2. In order to meet the redundancy requirements, both systems need an

independent time source (IF 482 telegram) and an independent power supply.

### Typical areas of application

- At radio and television studies for the exact time signal output via the transmitter
- At airports and railway stations for simultaneous recordings together with the voice announcements (speaking clock)
- For example at Air Traffic Control facilities for a simultaneous recording of the radio traffic → Precisely-timed traceability of the radio traffic
- Telephone number for accurate time output

| Technical Data              |                                                                     | Item no. 203536                                                        |
|-----------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------|
| Power supply                | 20VDC..65VDC $\pm 10\%$ (1 input each for system 1 and system 2)    |                                                                        |
| Power consumption           | < 5 W                                                               |                                                                        |
| Signal Input                | IF482 telegram (RS232) (1 input each for system 1 and system 2)     |                                                                        |
| Audio Output                | 3 Pin XLR-Socket (female), 600 $\Omega$ symmetrical                 |                                                                        |
| Time announcement           | Format                                                              | Hours, minutes, seconds in English                                     |
|                             | Acoustic sign                                                       | Sinus tone, 1 kHz, duration 500ms                                      |
|                             | Volume                                                              | 0dBm..10dBm on 600 $\Omega$ symmetrical, adjustable in 1 dB increments |
|                             | Announcement interval                                               | 60s, 30s, 20s, 10s, OFF                                                |
| Radio Time Signal Generator | Interval                                                            | One sinus tone possible at the beginning of each second                |
|                             | Frequency                                                           | 500Hz..10kHz $\pm 5\%$                                                 |
|                             | Duration                                                            | 10ms..500ms, adjustable in 10ms                                        |
| Dimension                   | 19" rack mounting, 1 height unit (W x H x D [mm]) = 483 x 44 x 125) |                                                                        |
| Weight                      | approx. 1.6 kg                                                      |                                                                        |
| Ambient Temperature         | 0..50°C, 10 - 90 % relative humidity, without condensation          |                                                                        |
| Alarm Contact               | Load: 30VDC / 1A / 30W resp. 125VAC / 1A / 60VA                     |                                                                        |

The following details have to be provided when ordering:

A = function: 1. Radio Time Signal Generator  
2. Speaking Clock

If A: 1 is selected, other details have to be specified:

B = Beep Output: (seconds for beep) e.g. 0,10,20,30,40,50 or 55,56,57,58,59,0

C = Beep Frequency: (500 Hz.. 10 kHz) e.g. 1 kHz or Sec. 55 - 59: 1 kHz, Sec. 0: 1.5 kHz

D = Beep Duration: (10..500ms) e.g. 100ms

Ordering example: DTS 2440.audio-clock / A: 1 / B: 0,10,20,30,40,50 / C: 1kHz / D: 100ms