

The Busy Drone

The Busy Drone was built by the firm Mortier in 1924 as a dancing organ for a Belgian café - an antique jukebox! Many of these kinds of instruments sound daily on the streets of the Netherlands. The Amsterdam-based publishing company De Bezige Bij purchased The Busy Drone in 1965 and with the involvement of graphic designers Alexander Verberne and Karel Beunis, a tradition of composing new music for the instrument began, and continues, to this day.

The organ has keys, but you can't play them yourself. The keys have the shape of metallic 'teeth' that are kept down by the sheets of a cardboard 'score-book'. The book is perforated; by moving it over the keys, the keys that meet a perforation are allowed to become active, making the organ sound. Books were cut by hand, and later by computer. In 2014, the organ was restored and retrofitted with a small computer and magnets enabling control via MIDI. Cardboard 'score-books' can still be played, but are no longer produced. Composers or performers working with the instrument now use MIDI data to perform the instrument.

Manuals, Registers, Ranges

Even though it doesn't possess keyboards in the traditional sense, the Busy Drone acts as an organ with stops and manuals, like the rest of the Orgelpark's instruments:

- It has four manuals: Zang, Tegenzang, Accompaniment, and Bassen
- It is a transposing instrument, sounding a minor third higher than written. This has to do with portability and cost-saving measures in the tradition of barrel organ building.
- In addition to registers, the organ also features a small variety of percussion instruments.

The image displays four musical staves, each representing a manual of the Busy Drone. Each staff shows a 'written' note and a 'sounding' note, demonstrating the instrument's transposition of a minor third. The manuals are: Zang (written G4, sounding Bb4), Tegenzang (written G4, sounding Bb4), Accompaniment (written G4, sounding Bb4), and Bassen (written G2, sounding Bb2). A separate staff for the Bassen manual shows a 'Trombone, with Forte' section with notes G2, Bb2, and D3.

Zang Registers:

Violin I 8'
Violin II 8'
Unda maris 16'
Piston (reed) 16'
Carillon (mixture) 8'
Flute harmonique, pressure sensitive, 8'
Xylophone 8'
Piccolo 4'
Tremolo (gives a quick 16th note pulse effect to stops on Zang)

Tegenzang Registers:

Bourdon 8'
Flute 8'
Celeste 8'
Baritone 16'
Baxophone (reed) 16'
Cello 16'
Cello grave 32'

Accompagnement

Has only one sound which is always on, a string mixture

Bassen

Is comprised of a 'Grond' which is a mixture of 16', 8' and 4' pipes. If the 'Forte' stop is activated, a powerful trombone stop is added but shifts a 7th down from D to E-flat.

Percussion - Forte

The Busy Drone also has limited percussion possibilities of a bass drum and wood block. However, when the Forte stop is activated, this changes to bass drum + cymbal (sounding together) and snare drum. The combination of snare drum / wood block, or cymbal / wood block are not possible.

Timbral Quality of Registers

The Busy Drone's soundscape departs radically from the rest of the organs in the Orgelpark and aligns itself much closer to the high pressure world of the Theatre Organ. Additionally, the Busy Drone is LOUD, meant to sound above the noise in a dance hall. Even the softest registers pack a punch in the Orgelpark's round acoustic. Short sound samples of all registers can be found in the folder labelled "Register Samples" in this package.

Writing for the instrument

Score-based music

Write as you would for a normal organ and each manual separately with its own staff/staves within the written ranges specified keeping in mind that the instrument sounds a minor third higher.

Write for percussion on two separate staves underneath clearly labelled (1. bass drum OR bass drum+cymbal and 2. wood block OR snare). Indicate registration information clearly where desired.

The score then must be mapped and programmed. This is done by Trevor Grahl of the Orgelpark (trevorgrahl@orgelpark.nl). Deliver the score as written and also as a MIDI file respecting the following conditions:

- Delete all non midi-note information
- Keep manuals as separate tracks, including percussion
- Transpose the Zang three octaves higher
- Transpose the Tegenzang one octave higher
- The Accompagnement and Bassen do not require transposition

Thus, if you use all possibilities of the organ, in total you will deliver 6 tracks, Zang, Tegenzang, Accompagnement, Bassen, and 2 percussion tracks; the Zang transposed 3 octaves higher and the Tegenzang one octave higher. The registration information will then be added by Trevor.

Non-score based music (improvisations, electronic manipulations etc.)

Using a MIDI interface, it is possible to connect directly to the Busy Drone and manipulate all parameters directly via software such as Ableton, PD, Max/MSP, etc. In this case, the maker must program a mapping for notes, since the MIDI notes do not correspond directly with sounding notes. Registers and percussion can also be activated with MIDI notes mapped in a similar way. For specific mapping information, please see the file "Busy Drone Mapping" included in this folder. Contact Trevor for more information.