

# Heavy Duty Combination – Multi-Tone Siren with Xenon Flash

## Your benefits

The WERMA Heavy Duty Combination - Multi-Tone Siren with Xenon Flash features a very robust housing. The combination device provides safety and security through reliable, loud signalling in particularly harsh environments. Up to 120 dB for use in extremely noisy environments and signalling over long distances.

- Multiple visual and audible escalation levels possible
- Includes standardised tones (including those used in fire alarms)
- Up to 42 tones for signalling various statuses

## Typical applications

Signalling of faults or alarms

- Outdoors in extreme conditions
- In larger industrial plants
- As an evacuation alarm

## Installation options

- Wall mounting

## Features

- High protection rating IP66
- Multi-voltage versions available



Size comparison Heavy Duty / Design



# 439 Xenon Flash / Multi-Tone Sounder Combination (105 dB)



## ① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

|                          |  |                   |
|--------------------------|--|-------------------|
| Dimensions (L x H x W):  | 136 mm x 138 mm x 119 mm                                       |                   |
| Housing:                 | ABS  |                   |
| Connection:              | Screw terminal 0.28-2.5 mm <sup>2</sup>                        |                   |
| Cable entry:             | Cable gland M20 x 1.5 mm<br>(not included in assembly)         |                   |
| Flash frequency:         | 1 Hz   |                   |
| Flash energy             | 1.6 Ws   |                   |
| Tone type and frequency: | Selectable via DIP switch, 2 tones can be externally triggered |                   |
| Voltage:                 | 9-60 V DC  | 110-230 V AC      |
| Current consumption:     | 230 mA (24 V)  | 30 mA (230 V)     |
| Housing/Flash            |  |                   |
| red / red                | <b>439 010 55</b>  | <b>439 010 68</b> |
| red / yellow             | <b>439 030 55</b>  | <b>439 030 68</b> |
| grey / red               | <b>439 110 55</b>  | <b>439 110 68</b> |
| grey / yellow            | <b>439 130 55</b>  | <b>439 130 68</b> |

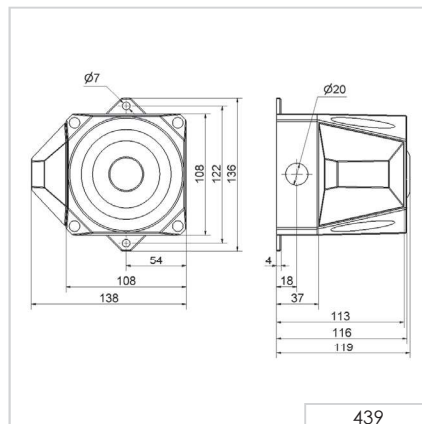
## ✂ ACCESSORIES:

|  |                   |
|--|-------------------|
| Cable gland M20 x 1.5 mm (for cable strain relief)             | <b>975 444 01</b> |
| Protection rating IP 65 is guaranteed even without cable gland |                   |

## ♪ TONE TYPES AND FREQUENCIES:

For further details see [www.werma.com](http://www.werma.com).

## ↔ TECHNICAL DIAGRAMS:



# 441 Xenon Flash / Multi-Tone Sounder Combination (110 dB)



## ① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

|                          |  |                   |
|--------------------------|--|-------------------|
| Dimensions (L x H x W):  | 165 mm x 169 mm x 132 mm                                       |                   |
| Housing:                 | PC/ABS-Blend   |                   |
| Connection:              | Screw terminal 0.28-2.5 mm <sup>2</sup>                        |                   |
| Cable entry:             | Cable gland M20 x 1.5 mm<br>(not included in assembly)         |                   |
| Flash frequency:         | 1 Hz   |                   |
| Flash energy             | 2.5 Ws   |                   |
| Tone type and frequency: | Selectable via DIP switch, 2 tones can be externally triggered |                   |
| Voltage:                 | 9-60 V DC  | 230 V AC          |
| Current consumption:     | 230 mA   | 35 mA             |
| Housing/Flash            |  |                   |
| red / red                | <b>441 010 55</b>  | <b>441 010 68</b> |
| red / yellow             | <b>441 030 55</b>  | <b>441 030 68</b> |
| grey / red               | <b>441 110 55</b>  | <b>441 110 68</b> |
| grey / yellow            | <b>441 130 55</b>  | <b>441 130 68</b> |

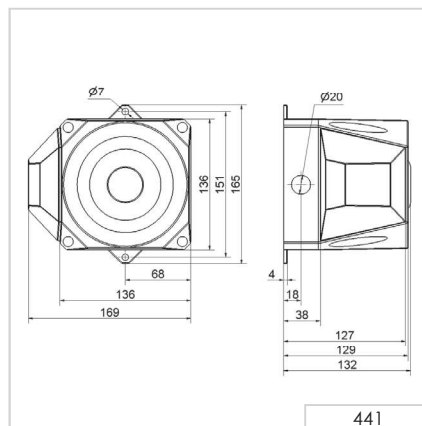
## ✂ ACCESSORIES:

|  |                   |
|--|-------------------|
| Cable gland M20 x 1.5 mm (for cable strain relief)             | <b>975 444 01</b> |
| Protection rating IP 65 is guaranteed even without cable gland |                   |

## 🎵 TONE TYPES AND FREQUENCIES:

For further details see [www.werma.com](http://www.werma.com).

## ↔ TECHNICAL DIAGRAMS:



# 442 Xenon Flash / Multi-Tone Sounder Combination (120 dB)



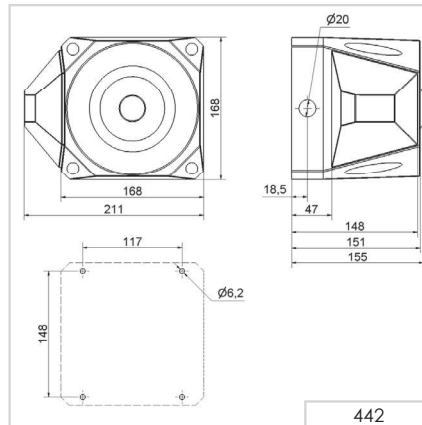
## ① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

|                                   |  |   |   |
|-----------------------------------|--|---|---|
| Dimensions (L x H x W):           | 168 mm x 211 mm x 155 mm   |   |   |
| Housing:                          | PC/ABS-Blend   |   |   |
| Connection:                       | Screw terminal 0.28-2.5 mm <sup>2</sup>  |   |   |
| Cable entry:                      | Cable gland M20 x 1.5 mm<br>(not included in assembly)                           |   |   |
| Tone type and frequency:          | Selectable via DIP switch, 3 tones externally triggered<br>see table on page 221 |   |   |
| Voltage:                          | 18-30 V DC   | 115/230 V AC  |   |
| Current cons. Multi Tone Sounder: | 450 mA   | 130/65 mA   |   |
| Current consumption Flash:        | 127-389 mA<br>(dependent on voltage<br>and flash frequency)                      | - /15 mA<br>(dependent on voltage<br>and flash frequency) |   |
| Flash frequency                   | 0.75 Hz/1 Hz   | 1.25 Hz/2 Hz  | 1 Hz (Flash can only be operated with 230V) |
| Flash energy                      | 3.5 Ws   | 2 Ws  | 2 Ws  |
| Housing/Flash                     |  |   |   |
| red / red                         | <b>442 010 55</b>  | <b>442 010 68</b>   |   |
| red / yellow                      | <b>442 030 55</b>  | <b>442 030 68</b>   |   |
| grey / red                        | <b>442 110 55</b>  | <b>442 110 68</b>   |   |
| grey / yellow                     | <b>442 130 55</b>  | <b>442 130 68</b>   |   |

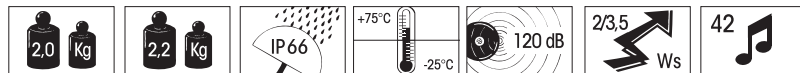
## ✂ ACCESSORIES:

|  |                   |
|--|-------------------|
| Cable gland M20 x 1.5 mm (for cable strain relief)<br>Protection rating IP 65 is guaranteed even without cable gland | <b>975 444 01</b> |
|--|-------------------|

## ↔ TECHNICAL DIAGRAMS:



442 XX0 55      442 XX0 68



## 442 Combination

The Flash/Multi-Tone Sounder Combination 442 offers a large choice of internationally recognised signal tones for the widest spectrum of applications. 3 tones can be triggered externally. The first two tones can be freely chosen. The third tone is paired with the second tone.

### ♪ TONE TYPES AND FREQUENCIES:

| Tone 1+2 No | Tone type  | Use                                       | Output (dbA) | Tone 3 |
|-------------|--|---|--------------|--------|
| 1           | alternating 800/970 Hz in 2 Hz stroke (250 ms-250 ms)            |   | 120          | 14     |
| 2           | rising 800/970 Hz in 7 Hz stroke (7/s)                           |   | 120          | 14     |
| 3           | rising 800/970 Hz in 1 Hz stroke (1/s)                           |   | 120          | 14     |
| 4           | continuous 2,850 Hz  |   | 111          | 9      |
| 5           | rising 2,400-2,850 Hz in 7 Hz stroke                             |   | 109          | 4      |
| 6           | rising 2,400-2,850 Hz in 1 Hz stroke                             |   | 110          | 4      |
| 7           | 500-1,200 Hz rising in 3 sec., 0.5 sec. OFF                      | Slow Whoop Holland                        | 119          | 14     |
| 8           | falling 1,200-500 Hz in 1 Hz stroke                              | DIN/PFEER (PAPA), DIN 33404-3, VDS tested | 119          | 14     |
| 9           | alternating 2,400/2,850 Hz in 2 Hz stroke (250 ms-250 ms)        |   | 113          | 4      |
| 10          | pulse 970 Hz in 0.5 Hz stroke (1 sec. ON / 1 sec. OFF)           | PFEER Alarm                               | 117          | 14     |
| 11          | alternating 800/970 Hz in 1 Hz stroke (500 ms-500 ms)            |   | 118          | 14     |
| 12          | pulse 2,850 Hz in 0.5 Hz stroke (1 sec. ON / 1 sec. OFF)         |   | 112          | 4      |
| 13          | 970 Hz pulse: 0.25 sec. ON / 1 sec. OFF                          |   | 117          | 14     |
| 14          | continuous 970 Hz  | PFEER - Toxic gas                         | 118          | 8      |
| 15          | 554 Hz/100 ms alternating 440 Hz/400 ms                          | French alarm signal AFNOR NFS 32S 32-001  | 115          | 14     |
| 16          | 660 Hz pulse: 150 ms ON, 150 ms. OFF                             | Swedish alarm signal                      | 114          | 14     |
| 17          | 660 Hz pulse: 1.8 sec. ON, 1.8 sec. OFF                          | Swedish alarm signal                      | 115          | 14     |
| 18          | 660 Hz pulse: 6.5 sec. ON, 13 sec. OFF                           | Swedish alarm signal                      | 115          | 14     |
| 19          | continuous 660 Hz  | Swedish alarm signal                      | 116          | 1      |
| 20          | alternating 554/440 Hz in 0.5 Hz stroke (1 sec. ON / 1 sec. OFF) | Swedish alarm signal                      | 115          | 19     |
| 21          | pulse 660 Hz in 1 Hz stroke (500 ms-500 ms)                      | Swedish alarm signal                      | 115          | 4      |
| 22          | pulse 2,850 Hz in 4 Hz stroke (150 ms ON / 100 ms OFF)           | Swedish alarm signal                      | 110          | 4      |
| 23          | rising 800-970 Hz in 50 Hz stroke                                | Swedish alarm signal                      | 117          | 14     |
| 24          | rising 2,400-2,850 Hz in 50 Hz stroke                            | Swedish alarm signal                      | 110          | 4      |
| 25          | 970 Hz pulse.: 3 x 500 ms. ON, 500 ms OFF, break 1.5 sec.        | ISO 8201 / US Temporal                    | 118          | 14     |
| 26          | 2,850 Hz pulse.: 3 x 500 ms. ON, 500 ms OFF, break 1.5 sec.      | ISO 8201 / US Temporal                    | 112          | 4      |
| 27          | continuous 4,000 Hz  |   | 105          | 6      |
| 28          | alternating 800/970 Hz in 2 Hz stroke (250 ms-250 ms)            |   | 118          | 14     |
| 29          | alternating 990/650 Hz in 2 Hz stroke (250 ms-250 ms)            |   | 117          | 14     |
| 30          | alternating 510/610 Hz in 2 Hz stroke (250 ms-250 ms)            |   | 116          | 14     |
| 31          | rising 300-1,200 Hz in 1 Hz stroke                               |   | 118          | 14     |
| 32          | continuous Bell  |   | 117          | 3      |
| 33          | continuous Bell: 3x500 ms. Pulse, 1.5 sec. Silence, then repeat  | Bell / US Temporal                        | 117          | 14     |
| 34          | alternating 1,000/2,000 Hz in 1 Hz stroke (500 ms-500 ms)        | Singapore                                 | 115          | 4      |
| 35          | pulse 420 Hz (0,625 sec.)  | Australian alarm signal                   | 118          | 14     |
| 36          | 500-1,200 Hz rising in 3.75 sec., then 0.25 sec. OFF             | Australian alarm signal (Evacuation)      | 117          | 14     |
| 37          | rising 1,400-1,600 Hz in 1 sec., falling in 0.5 sec.             | NF C 48-265                               | 116          | 14     |
| 38          | 500-1,200 Hz rising and falling in 3 sec.                        | Siren                                     | 117          | 14     |
| 39          | pulse 720 Hz: 0.7 sec. ON, 0.3 sec. OFF                          | German industrial alarm                   | 118          | 14     |
| 40          | rising 422-775 Hz in 0.85 sec., 1 sec. silence, then repeat      | NFPA Whoop                                | 118          | 14     |
| 41          | continuous 470 Hz  | Horn (USA)                                | 114          | 3      |
| 42          | continuous 370 Hz  | Air Horn (USA)                            | 113          | 3      |

