

IMAGES WORK BETTER THAN NUMBERS

Images are more effective than numbers to reduce speeding in critical areas. Often drivers are not aware about speed limits in the region, even that it might be familiar area. Numeric information is not relevant enough and many displays do not indicate clearly enough when speed limit is exceeded. In field tests it was clear that image caught driver's attention better than conventional number display. Surprising was that many drivers maintained speed while driving pass the numeric speed display, but slowed down while approaching "Smiley Face" display. It was obvious that triangular warning sign shape and bright red LED:s caught drivers attention better.

INDUSTIRES ONLY INSTANT FEED BACK (IFF) FUNCTION

Instant feedback enables enforcement of correct driving behavior. Speed is verified and compared to speed limit 10 times in second. This allows display to react any speed changes while driver is still approaching display. Display turns bright red and shows sad face if limit is exceeded. If driver reduces speed under the limit while still approaching display, it will show immediately green smiley face display and this way awards driver for reducing speed. This type of approach enforces correct behavior more effectively than conventional speed display. Display was also designed as warning sign / triangle shape, which enhances visibility and noticeability.

VERSATILE PROGRAMMIN OPTIONS

Speed limit, minimum and maximum speeds are set by using control panel equipped with back light LCD screen and five control buttons. Screen and buttons are located behind separate and lockable hatch. USB and serial connections for data transfer are also located behind this same hatch. With maximum speed setting it is possible to filter out extreme speed limit violations. With minimum speed setting it is possible to filter out light traffic like push bikes and pedestrians.

SMILEY FACE SPEED DISPLAY TECHNICAL SPESIFICATIONS:

LED BOARD

Type: Smiley face with Red and Green LED:s inside red LED triangle

Smiley Face diameter 33 cm LED-quantity: 439 PCS

Angle and brightness: 40° / Red 6000 and Green 7000 mcd with automatic brightness adjustment

Colour: Green and Red Temperature range: -40°C - +70°C

Housing: Oven baked black powder painted aluminium (Almg 3)

Size: H 78 cm x L 78 cm x W 20 cm

Front class: 5 mm durable Polycarbonate class (PC) with antireflective surface

RADAR:

Frequency: K-band 24.150 GHz +/- 50 MHz

Beam width: 12° +/-1° Range: 920 m Speed range: 1 - 240 km/h Accuracy $\pm 1,25 \text{ %}$

Cosine angle error correction: Automatic cosine angle correction up to 45 degrees vertical & horizontal

Programmable functions - KPH or MPH

- Sensitivity / range

- Vertical & horizontal angle

- Directionality (approaching, resending or both directions)

Target lock & hold timesMinimum & maximum speedsClosest or fastest target in range

DATA COLLECTION & CONTROLL MODULE FOR 2 DIGIT 7-SEGMENT SPEED DISPLAY

Functions: Module will control

- Two digits and trigger e.g. external "SLOW DOWN" text.

- Or three digits where first digit is "1"

Data collection: SD-card based, millions of samples depending SD-card size.

Accuracy: Speed is stored in full kilometres or miles
Data transfer Via SD card or wirelessly with SD-WiFi -card

Directionality

Both directions, only approaching or targets going away.

(System will relay only approaching targets to digits)

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Optons: Automated data transfer thru GSM-data connection (option)
Automated date and time update over GSM network.

POWER

Nominal power: 220-240V / 12V Power consumption (minimum) 0,23 A (2,8 W) Power consumption (maximum): 8,13 A (97,8 W)

CONTROLL FUNCTIONS

LCD-display with back light and 5 controls Possibility to set following functions with menu & control buttons:

- Radar sensitivity

- Speed limit (when exceeded module will flash speed digits few times)

Maximum speed show in displayMinimum speed show in display

- Speed information shown in seconds

- Automatic brightness adjustment meter (0-7)

- Date and time

- GSM number for data transfer (GSM/GPRS -data transfer option)

- Number of samples collected before initiation of an automatic

data transfer (GSM/GPRS -data transfer option)

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