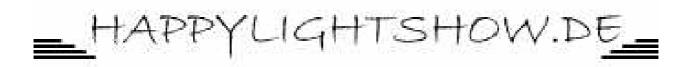
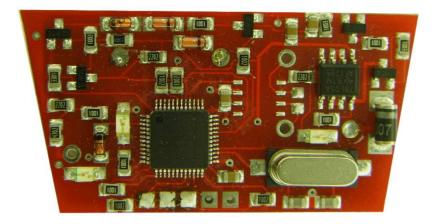
User Manual Happylightshow Software Version 2.22

for Astra H / Zafira B







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## 1.Introduction

The HAPPYLIGHTSHOW is a additional electronical device, that communicates through the on-board CAN-Bus system.

Therefore additional new functions are possible.

The HAPPYLIGHTSHOW is very easy to install, because it's only being put on the diagnostic link connector (DLC).

-> No wiring or soldering necessary

## 2.1 Einbau Astra H

mounting place: diagnostic link connector (DLC) underneath the cover of the handbrake

procedure:

Holt the device a little bit angular and put the two pins on top inside Pin 1 and 4 of the DLC. After that, put the single Pin inside Pin 16 of the DLC (see figure)

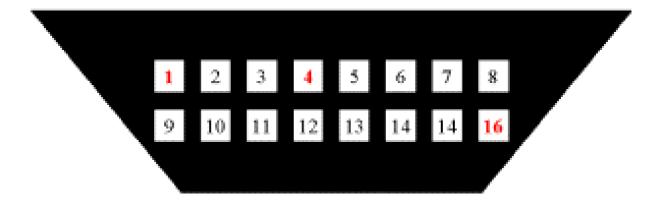


## 2.2 Einbau Zafira B

Mounting place: Diagnostic link connector (DLC) behind ashtray

procedure:

Put the **black** wire into Pin 4 of the DLC, Then put te **red** wire into Pin 16, Finally put in the **pink** wire into Pin1 of the DLC. (see figure)



## 2.3 functional test

Activate the ignition.

If the installation was successful the Leds on the HAPPYLIGHTSHOW will work like this:

Green Led lights up continuous Red Led toggels every second

 $\rightarrow$  Installation successful, go on with setup procedure

## **3 Setup Parameters**

### 3.1 Activation setup modus

# Requirements: Ignition on, Engine off. Clutch must not be pushed and Lightswitch off

Procedure: Push Brake, FlashToPass and TurnLight Left at the same time.

Advice:

Best way to do it is: PushBrake and FlashToPass and then add TurnLightLeft. The odometer is now in the parameter menu.

#### 3.2 Change parameters Adjustment

The value of the digits will be count upwards by pushing the **brake pedal**. Changing from digit to digit is made with **clutch pedal**.

Cars with *automatic* Transmission have the possibility to change between the digits by using the **parking light switch** (on/off.)

#### 3.3 Save Adjustments & Resetting Trip Computer

To save the adjustments you have to push turn switch **right** once. Now "333333" should be shown inside the odometer

The Setup procedure is now finished.

## **3.Setup Parameters**

#### 3.4 Parameters

#### Digit 6:

- 0 = menulayer 0
- 1 = menulayer 1
- 2 = menulayer 2
- 3 = menulayer 3

#### Digit 0.1: OPC

0 = OPC Scan off

- 1 = OPC Scan on
- 2 = OPC Scan New on (Indicator sweeps faster back to 0)

#### Digit 0.2: Coolant temperature / Trip Computer

- 0 = off
- 1 = with rear window heater switch\*
- 2 = until Engine reaches 75 °C
- 3 = with Centrallocking
- 4 = until Engine reaches 75 °C OR rear window heater\* and warning over 105 °C
- 5 = until Engine reaches 90 °C OR rear window heater\* and warning over 105 °C
- 6 = Trip Computer 1\*
- 7 = Trip Computer 2
- 8 = till Engine reaches 75°C, then vehicle speed

\*only with automatic climate control

#### Digit 0.3: WTTC lights rear (with REC)

0 = off

- 1 = Reverse Light + License plate
- 2 = Taillight + License plate
- 3 = Reverse Light + Taillight + License plate
- 4 = Red Taillights without foglamp + License plate (Caravan)
- 5 = Turn Lights + License plate

#### Digit 0.4: WTTC lights front (with REC)

- 0 = off
- 1 = Low Beam + Parking light
- 2 = Low Beam + Parking light + Repeater
- 3 = Fog lamp + Parking light
- 4 = Fog lamp + Parking light + Repeater
- 5 = Parking light
- 6 = Low Beam + Fog lamp + Parking light + Repeater
- 7 = Turn Lights
- 8 = High Beam + Parking light + Fog lamp + Repeater

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— menulayer

and warning over 105 °C

and warning over 105 °C

and warning over 105 °C

### **3.Setup Parameters**

#### Digit 0.5: WTTC Function Time

Number multiplied by 10 seconds (e.g. 3 = 30 seconds)

#### Digit 1.1 WTTC Activation

0 = WTTC off	
1 = WTTC1 (with lightsensor)	on
2 = WTTC1 (without lightsensor)	on
3 = WTTC2 (with lightsensor)	on
4 = WTTC2 (without lightsensor)	on
5 = with single push of the key	on
6 = with double push of the key	on

#### Digit 1.2: Thief Protection simulation

0 = Simulation off (Happylightshow power off after 10 minutes)

1 = Simulation on

#### Digit 1.3: daytime running light

0 = DRL off

1 = DRL with foglights on\*

2 = DRL with parkinglight on

#### Digit 1.4: Speedlock

0 = Speedlock off

1 = Speedlock 1 on

2 = Speedlock 2 on

#### Digit 1.5: Chirp

0 = Chirpfunction off

1 = Chirpfunction short on

2 = Chirpfunction long on

#### Digit 2.1: hazardlight function

- 0 = hazardlightfunction off
- 1 = hazardlightfunction on

#### Digit 2.2: Distance Signal (extra) & FlashToPass with foglights \*

- 0 = Distance impulses off & FlashFoglights off
- 1 = Distance impulses on & FlashFoglights off
- 1 = Distance impulses off & FlashFoglights on
- 1 = Distance impulses on & FlashFoglights on

\* With REC

## **3.Setup Parameters**

#### Digit 2.3: Thief Protection simulation time

0 = 20 h 1 = 40 h 2 = 60 h

3 = 80 h

#### Digit 2.4: REC equipped

0 = no

1 = yes

#### Digit 2.5 WTTC lights (without REC)

0 = off

- 1 = Low Beam, Taillight and License Plate
- 2 = High Beam, Taillight and License Plate

## 4. Functional Description

### Lightshow:

Requirements: Ignition on, engine off

Procedure:

Push Brake, FlashToPass and TurnLight Right at the same time.

Advice:

Best way to do it is: PushBrake and FlashToPass and then add TurnLightLeft.

> highbeam and turnlight telltales begin to flash

To switch between lightsamples push brake pedal, the speedometer

Shows the sample (180km/h = Sample 18)

To switch betwenn the variations use parklightswitch on/off,

The tachometer shows variation (2000 rpm = variation 2)

Variation 1: lights changing clockwise/anticlockwise Variation 2: lights clockwise Variation 3: lights anticlockwise

Hint:

Digit 0.3 and Digit 0.4 are only relevant, if Digit 2.4 is 1 (for Vehicles <u>with</u> REC) Digit 2.5 is only relevant, if Digit 2.4 is 0 (for Vehicles **without** REC)

## **4.**Functional Description

### OPC-Scan:

Speedometer and tachometer go to limit and back when activating the ignition

### Speedlock 1:

Car locks automatically if faster than 20km/h

Unlocks manually.

### Speedlock 2:

Car locks automatically if faster than 20km/h

Unlocks automatically if the engine is turned off.

Trip Computer:

Shows following informations inside the odometer:

Engine Coolant Temperature (first digit = 0)

Actual Consumption on 100km (first digit = 1)

Average Consumption on 100km (first digit = 2)

True Speed (first digit = 3)

To switch between the values press rear window heater or internal light switch twice.

To reset the average consumption setup the devices once.

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## **4.**Functional Description

### Thief Protection Simulation:

The Led inside the central door lock button flashes, if car is locked (its looks like a regular system)

### WTTC Function:

The driving lights light up, if car gets locked/unlocked. Details in attachment.

## **4.**Functional Description

### Daytime Running Light:

Fog (only with REC) or Parking Lights are activated meanwhile the lightswitch is off, or the lightsensor recognizes daylight.

### Chirp function :

Vehicle honks two times (short/long) when opening the car and once when closing the car.

<u>Hazardlight function:</u> Hazardlight will flash while the hatchback is open

### **Distance Signal Function:**

Distance signal for a internal Navigation System.

### Particel Filter Regeneration Display:

When the vehicle is cleaning the particel filter, you will see the following message in your odometer. (df = DieselFilter)

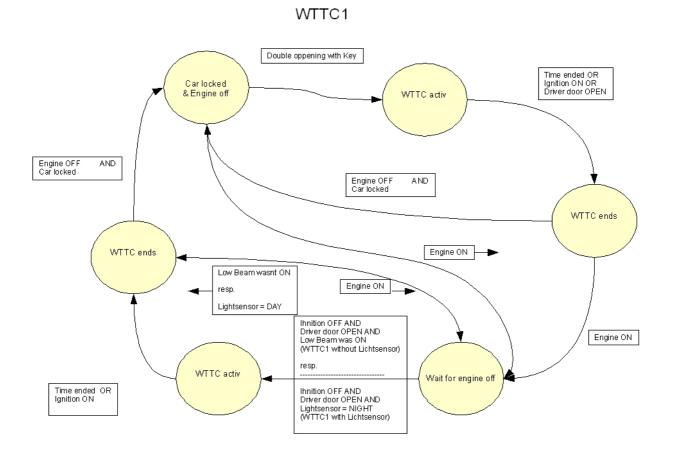


5. Legal meaning

The devices has no general type approval, thus it is not allowed to use it within the laws of road traffic.

By noncompliance the user will be responsible for any loss.

## 6. Attachment



## 6. Attachment

