XION MILITARY SCALE MODELS Hochwertige Militär Modell-Bausätze ©©©

XION – PC Quadrat GMBH Äußere Bayreuther Str. 57 90409 Nürnberg GERMANY www.xion.de

Fusion PUMA – List of Functions

Radio control

- control with a common RC gear (radio and receiver, 40 MHz or 2.4 GHz) with at least two channels (acceleration and steering). Five channels are necessary for the control of all options.
- connection of up to six channels. One channel is reserved for the remote volume control.
- the receiver does not need an additional battery. 5V BEC are supplied.
- connection with a Multiplex Smart SX 9 FLEXX radio with an optional receiver cable.

Drive

- a strong 10A motor driver (up to 30 Amps peak), short circuit and overload protected.
- optional connection of a external driver for alternative motor types (for example brushless motors).
- physics engine 2.0: a driving experience of commanding a prototypical vehicle by simulation of mass inert.
- all parameters of the physics engine may be adjusted by a PC or Notebook.

Steering

- configurable steering by a servo.
- various setup options for the steering like speed dependent steering lock angle.

Turret and weapon functions

- full proportional turret rotation with a motor (max. 2 A).
- full proportional elevation of the main gun with a servo.
- simulation of the barrel recoil by a servo with independently configurable retraction and extraction speed and configurable steering lock angle.
- connection for Taigen® Xenon flash and HengLong® LED muzzle flash.
- MG muzzle flash may be connected directly by LED with configurable rate of fire.

Lighting and miscellaneous functions

- one to four LEDs may be connected to all light channels.
- no further wiring or additional resistors are necessary.
- all light channels are short circuit protected. The LEDs can't be damaged by false polarity.
- included color-coded cables with polarity reversal protection.
- front light may be dimmed and switched on and off by the radio.
- an additional light (for example camo light) may be dimmed and switched off by the radio.
- the brightness of the combined rear lights and brake light may be adjusted separately.
- support for a smoke unit with smoke emission depending on engine load and motor sound.

Sound Generation

- support of all ElMod sample sets and the ElMod NextGen Sound Technology for particularly prototypical sound playing. The default sound set simulates an air cooled 12 cyl. Tatra engine.
- integrated sound unit plays several different sounds simultaneously.
- Sound types:
- various sound events: several motor start sounds with distinction between coldstart and warmstart, several engine off sounds. Engine sounds for the movement with simulated gear change, distinguishing between acceleration, cruising and braking. No audible steps between the engine sounds.
- optional collateral driving noises such as chassis squeal and optional surrounding noises.
- turret rotation sounds with optional distinction of operation with or without main engine support.
- sound for elevation of the main gun.
- shooting sound for MG and main gun.
 variable sounds for the projectile's implication
- variable sounds for the projectile's impact with simulation of the impact in different distances.
- up to eight sounds that can be freely triggered by the user, like a horn.
- plain text announcement if battery voltage is too high/low.
- sounds for the IR battle mode.

XION MILITARY SCALE MODELS Hochwertige Militär Modell-Bausätze ©©©

XION – PC Quadrat GMBH Äußere Bayreuther Str. 57 90409 Nürnberg GERMANY www.xion.de

- separate volume control of every sound type (for example the engine noise) and extensive configuration of the sound parameters.
- adjustment of the entire volume by the provided rotary knob.
- adjustment of the volume by a slide/knob on the radio.
- all sample sets are provided on a microSD card. They can be activated by an application on your PC/Notebook.
- integrated digital audio amplifier for the connection of a 8 Ohm loudspeaker.

Servos

- connection of up to three servos for barrel recoil, steering and main gun traversion.
- max. 1,5 A constant current consumption for all servos together.

IR battle functions

- connection with an optionally available adapter to Tamiya® Battle Unit or ElMod® Battle Set.
- simple configuration with three DIP-switches.
- selectable vehicle type: light, medium, heavy.
- battle type: infinite lives (vehicle returns to battle after being destroyed) or Hard Core (vehicle stays destroyed until it's switched off an on again).

General

- large configuration possibilities on a computer with over 100 parameters. An USB cable is provided.
- parameterization, status information and control of all vehicle functions.
- individual vehicle profiles may be created and saved.
- operation with NiCd-, NiMh- or LiPo-Batteries with a voltage between 7.2 V and 10 V.
- under voltage shut down for protection against deep discharge.
- overvoltage shut-down.
 integrated 10 A mini fus
- integrated 10 A mini fuse for the drive protection.
- integrated, resettable SMD-fuse for the protection of the turret functions.
- compact size: 92mm x 55mm(3,6"x2,2").