KAVAN KAV20.0001 GO Servo USB Programmer Instruction Manual

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KAVAN KAV20.0001 GO Servo USB Programmer

SYSTEM REQUIREMENTS

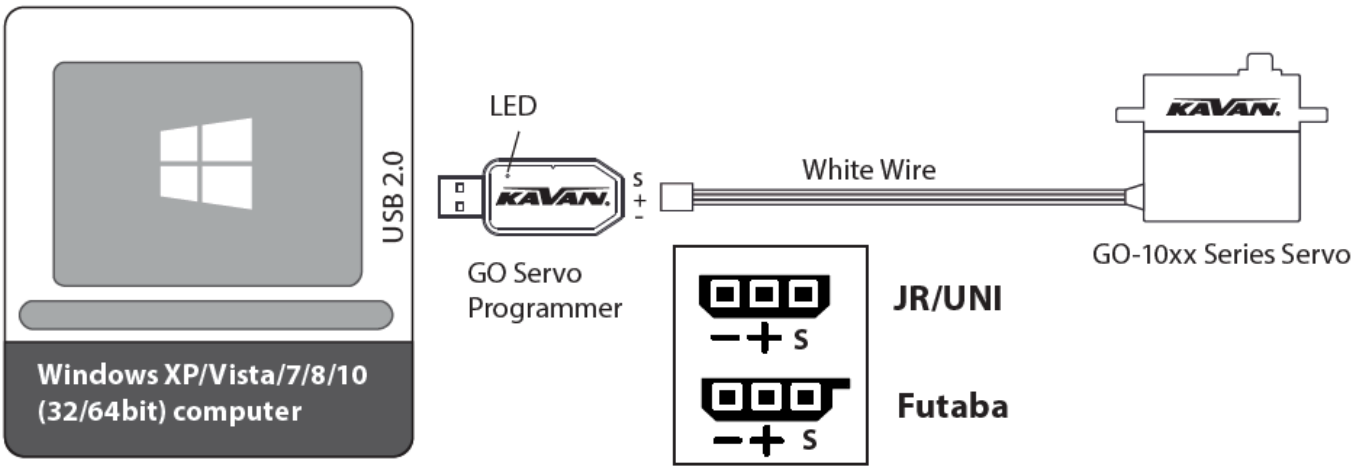
- Operating Voltage: USB (5 V/ 500 mA)
- Operating System: Windows® XP/Vista/7/8/10 (32/64bit)
- Compatible Servos: KAVAN GO-10xx Series servos

SOFTWARE INSTALLATION

1. Download the software package from the KAVAN website (**https://www.pelikandaniel.com/dld/KAVAN0.11.zip**) or scan the QR code to download it. Decompress the .zip file, save it on your PC and run the “KAVAN0.11.exe“ file.
2. Plug the USB programmer in a free USB 2.0 port of your PC. The PC detects the device and the driver installation starts automatically; it might take some time depending on your system. The PC announces the installation progress; once finished, the restart of your PC might be required (the actual dialog window depends on your system).
3. Open the programmer software, and “Adapter plug-in!” will appear in the information window. If not, you will have to remove the USB programmer and plug it again.

4. Connect your GO-10xx series servo to the USB programmer; the software recognizes it au-tomatically and will read the servo data and settings. “Servo plug-in!” will appear in the in-formation window and servo name, manufacture date and firmware version will appear in the Servo Information box. Green LED on the USB progra-mmer flashes.

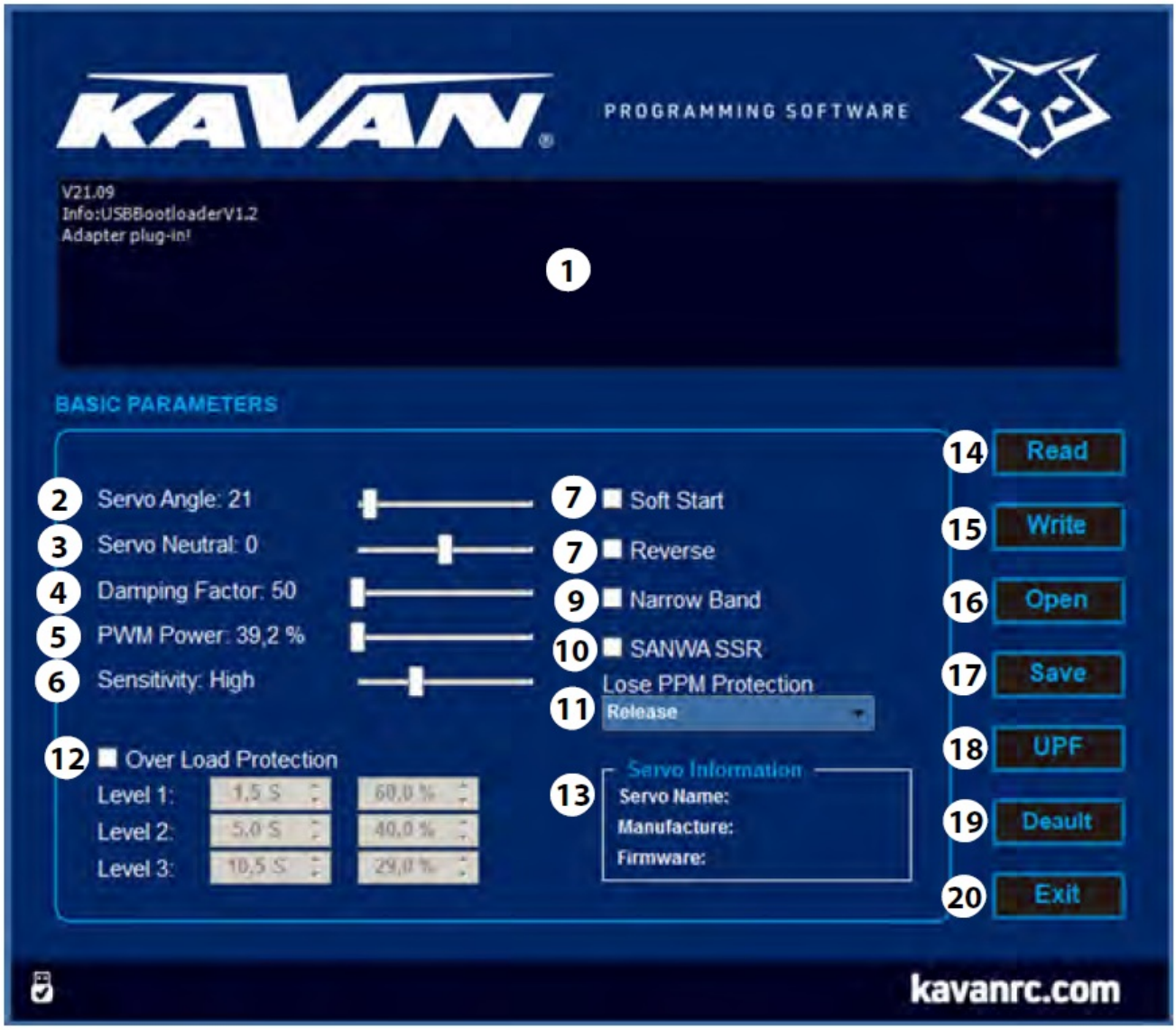
Wiring Diagram



Note: If the servo is not detected, it might be connected to the USB programmer in a wrong way. Remove the servo and programmer and plug them again correctly (the signal wire – marked with a white stripe – has to be connected to the “S” pin of the servo programmer socket).

THE PROGRAMMER SOFTWARE FUNCTIONS

1. Information Window – displays the connection status of your programmer and servo and other messages.
2. Servo Angle: Maximal servo rotation angle range setting. The default range is ca 120° within the regular RC signal pulse width range (900~2100 µs); ca 180° within the max. signal pulse width range (500~2500 µs). Range: 1~255
3. Servo Neutral: Servo neutral (centre) position setting. Range: -127~127
4. Damping Factor: Servo damping setting – adjust the characteristics of the servo when stopping. Range: 50~600
5. PWM Power: Adjusts the servo output power. Ihe higher the power, the higher the speed and torque of the serv0 – indeed also the Current consumption will be higher. Range: 39.2-100.0%
6. Sensitivity: Servo sensitivity (Dead Band) setting. The higher sensitivity the narrower the dead band-servo moves only if the change of the signal pulse width is bigger than the dead band width. Too high setting may cause servo jitter in some applications.
   Range: Ultra High (ca 1 us dead band)- High (ca 2 us)- Medium (ca 3 us) – Low (ca 4 us)



7. **Soft Start:** Turns on/off the soft start feature. If ON, the servo goes slowly to the initial position corresponding to the servo signal once the power is switched on.

   Note: This function prevents sudden servo movement once it is turned on thus prevents the possible damage to the servo gears.
8. **Reverse:** Reverses the servo movement direction.
9. **Narrow Band:** FUTABA SR Mode – only for use with FU-TABA radio channels working in the SR mode. Do not turn the option on if you are using a different setting of your FU-TABA radio or any other radio.
10. **SANWA SSR:** SANWA SSR Mode – only for use with SA-NWA radio channels working in the SSR mode. Do not turn the option on if you are using a different setting of your SA-NWA radio or any other radio.
11. **Lost PPM Protection (Fail- Safe):** In the case the control signal from the receiver is lost completely or cannot be decoded correctly (due to interference) the servo can use choose one of three fail-safe modes:
    1. **Release:** No fail-safe protection.
    2. **Keep Position:** Keeps the position corresponding to the last correct control signal.
    3. **Go Neutral Position**: The servo returns to the neutral (1500 µs pulse width) position.
12. Over Load protection: Enables or disables overload protection of the servo in three levels – once the overload conditions last for the pre-set time (in seconds), the output power of the servo is reduced to the corresponding pre-set level (% of the max. power).

    Level 1: Set the activation time and reduced output power value of the primary protection.

    Level 2: Set the activation time and reduced output power value of the secondary protection.

    Level 3: Set the activation time and reduced output power value of the tertiary protection.

Note: The default setting means: if the servo is overloaded (stalled) the output power will be cut down to 62.7% after 5.1 sec, to 50.2%after 8.2 sec and finally to 25.1% after 12.2 seconds.

13. **Servo Information:** Servo type, manufacturing date and firmware version information.
14. **Read:** Read the current settings from the servo via the USB Programmer/interface.
15. **Write:** Writes the current parameter settings displayed on the screen into the servo. Note: No change of parameter setting takes effect unless it is written to the servo. “Success write parameter!” will appear in the information window once the parameters have been successfuly written into your servo.
16. **Open:** Opens servo parameter file previously saved on the computer.
17. **Save:** Saves the current parameter settings displayed on the screen to the computer memory. Note: Save saves the settings on the computer, not into the servo!
18. **UPF:** Servo firmware upgrade function.
19. **Default:** Restores the factory default setting of the connected servo.
    Note: All your previous changes will be lost – we recommend saving the servo parameter settings using the “Save” function first.
20. **Exit:** Exit and close the configuration software.

PROGRAMMING YOUR SERVOS

1. Plug the USB programmer in a free USB 2.0 port of your PC.
2. Open the programmer software, and “Adapter plug-in!” will appear in the information window.
3. Connect your GO-10xx series servo to the USB programmer; the software recognizes it automatically and will read the servo data and settings. “Servo plug-in!” will appear in the information window and the servo name, manufacture date, and firmware version will appear in the Servo Information box. Green LED on the USB programmer flashes.
4. Now you can make any adjustments; once satisfied, click on “Write” in order to write the current setting displayed on the screen into the servo. You can also save your settings on your computer by clicking on “Save” or you can download the previously saved servo settings file by clicking on “Open” and write it into another servo clicking on “Write”.
5. Disconnect your servo – now you can use it. However, it is advisable to connect the servo once more and re-reading the parameter settings in order to be 100% your desired settings were correctly written into your servo.

RECYCLING AND WASTE DISPOSAL NOTE (European Union)

Electrical equipment marked with the crossed-out waste bin symbol must not be discarded in the domestic waste; it should be disposed off via the appropriate specialized disposal system. In the countries of the EU (European Union) electrical devices must not be discarded via the normal domestic waste system (WEEE – Waste of Electrical and Electronic Equipment, Directive 2012/19/EU). You can take your unwanted equipment to your nearest public collection point or recycling center, where it will be disposed off in the proper manner at no charge to you. By disposing off your old equipment in a responsible manner you make an important contribution to the safeguarding of the environment!

EU DECLARATION OF CONFORMITY

Hereby, PELIKAN DANIEL declares that this KAVAN GO Servo USB Programmer is in compliance with the essential requirements as laid down in the relevant European directives and norms. The full text of the Declaration of Conformity is available at **www.pelikandaniel.com/doc/**

GUARANTEE

The PELIKAN DANIEL products are covered by a guarantee which fulfils the currently valid legal requirements in your country. If you wish to make a claim under guarantee, please contact the retailer from whom you first purchased the equipment. The guarantee does not cover faults caused by: crashes, improper use, incorrect connection, reversed polarity, improper maintenance, modifications or repairs which were not carried out by the PELIKAN DANIEL or authorised by PELIKAN DANIEL, accidental or deliberate damage, defects caused by normal wear and tear, operation outside the Specification. Please be sure to read the appropriate information sheets in the product documentation!

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Made in China

Documents / Resources

	**KAVAN KAV20.0001 GO Servo USB Programmer** [pdf] Instruction Manual KAV20.0001, GO Servo USB Programmer, KAV20.0001 GO Servo USB Programmer

References

- **KAVANRC.com**
- **DOC - ProhlÃ¡Å¡enÃ o shodÄ›**