KO PROPO EX-5AD ICS Manager Operating Manual

Before starting

This software aims to operate the functions of EX-5 AD by connecting to a personal computer.
By use of the personal computer, in addition to the contents set-up on the EX-5 itself, you can set-up and edit further functions were only possible with high end radios. You can save the set-up contents in the personal computer.

Usage EnvironmentUsage

OS: Microsoft Windows 98 or later version
A personal computer with above OS
An RS-232C Port is needed for communication. (There may be a case of non-operation, if USB cord or other conversion cords are used for connection.

Conditions of Usage

This software is released as free software. However, all the copyrights and legal rights belong to KONDO KAGAKU CO., LTD. Distribution and modification etc. of this software without our approval are strictly prohibited. KONDO KAGAKU CO., LTD. takes no responsibility for malfunction, damages, etc., caused by use of this software. Please use this software after you agree to above conditions.

Re RS-232C Port

An RS-232C Port is necessary on your personal computer, in order to use this software. Please the operation manual of your personal computer to check if your computer has this port. If your personal computer does not have the RS-232C Port, you are required to buy a conversion adapter from USB to 232C, which is sold as accessory in the market. Using this kind of adapter, it should work. But, it may not work depending on your personal computer, combination of conversion adapter, etc. Please note that, in such a case, we are not in a position to take any responsibility.
You can confirm the state of 232C Port on your personal computer by referring to the device manager from the "system" of "control panel" or from the "property"of "my computer".

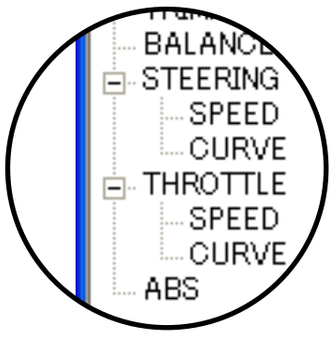
Installation of Software

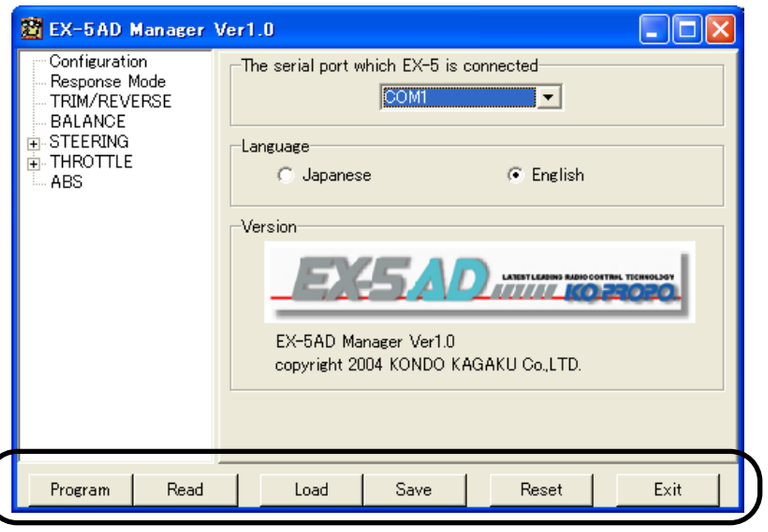
Please make a proper folder on your personal computer for the software and make a copy of the file.
When you use the software, either you click (or double-click) the copied program file or you make the shortcut on the "desk top" to click.

To use the software

When you start the software, the following window will show up.
This example is from "Windows XP". The window is different, depending on the OS used or set-up.

The list on left of the window indicates what you can set-up using the software. By clicking, the set-up item is indicated on right. Also, the items with +mark on left mean that those items have hidden sub-items. By clicking the +mark, the hidden sub-items will appear.





TFunction of Buttons

Using the buttons located lower part of window, you can transmit/receive and save the data.

Transmission Transmits the date to the connected EX-5 AD. The set-up contents in EX-5 AD are overwritten by the transmission, so be careful.

Read-out Receives the set-up data from the connected EX-5 AD. However, the data set-up in the window at present is overwritten by this. So if you have data under compilation, save it first.

Open Opens the data file saved in your personal computer. Also in this case, the data under setting-up is overwitten and be careful enough.

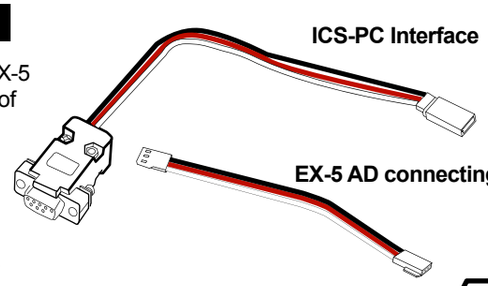
Save Saves the data in optional place in your personal computer.

Reset Resets the contents of the set-up to those which were set-up at the factory originally. This is equal to make "all reset" on EX-5 AD.
When you push the button, you are required to confirm if you reset the shown data. After choosing "yes", you are required to confirm on reset of the data in the transmitter.

Close Closes this software.

Connecting the interface

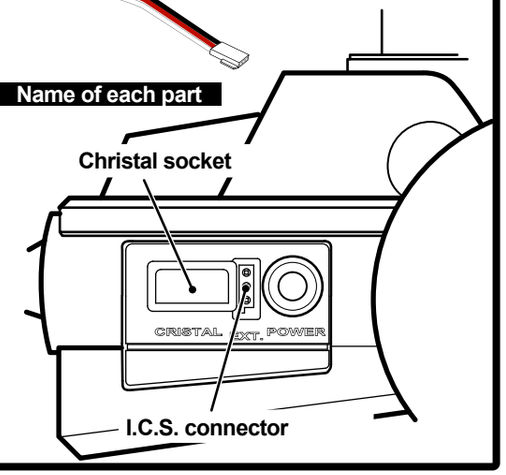
Connect the 232C Port of your personal computer and EX-5 AD, using the ICS-PC Interface and the connecting cord of EX-5 AD.



On connection, mind the following points:

1. To start the set-up software on your personal computer.
2. Remove the crystal of EX-5 AD.
   (Please avoid radio wave occurrence. Radio wave may cause malfunction.)
3. On connection, turn off the switch of EX-5 AD, and turn on the switch after connection.If you turn on the switch in the connected state, it works on communication set-up mode (I.C.S. mode). In this state, the functions of trimming etc. will not be active.

Name of each part

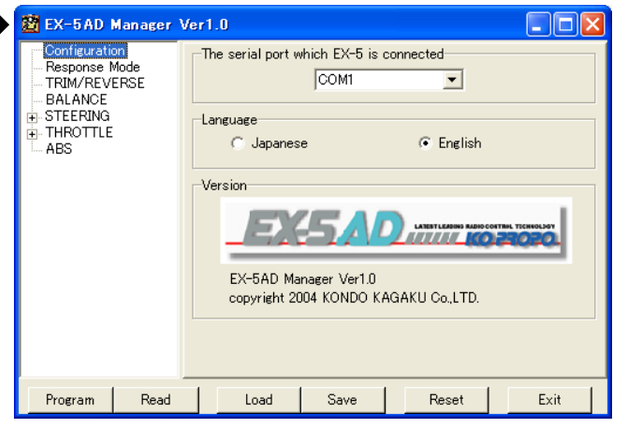


Set-up of Environment

Serial port: Designates the communication port. Usually it is COM 1, but other numbers may be designated depending on the personal computers used. So, check and designate right one.

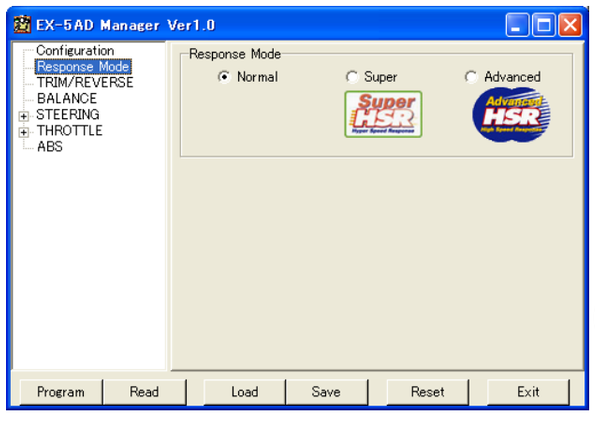
Change of Language: Designates the language to be shown. You can choose either Japanese or English.

Information of Version: Indicates the version number etc. of this software.



Re Serial Port Number:

When you are not sure of the used serial port number, you can visit to our home page (website), where you will find the explanation how to check it.



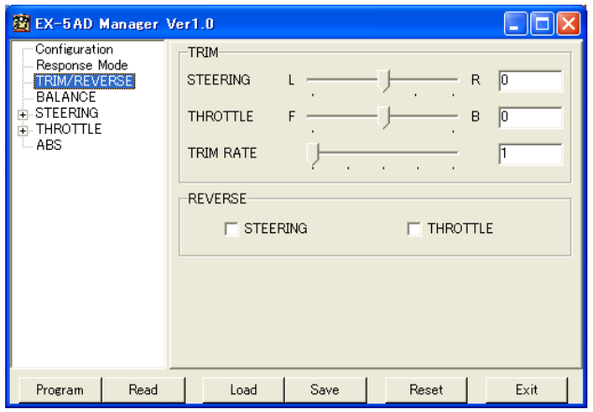
Response Mode

Designates the response mode to be used. In the factory, for EX-5 AD, it is originally set-up to work with normal response, but as the receiver unit in the set corresponds to super high speed response, you can change the response mode and use.
As the receiver unit does not corresponds to advanced high speed response, do not set-up this mode. When you adopt the non-corresponding mode, it may cause malfunction like wrong response.

What is response mode?

By upgrading the response mode, you can improve the response speed by increasing the information volume (per unit time) of the signals sent from the transmitter to the receiver. In comparison with normal response, super high speed response makes about 45% speed up and advanced high speed response makes about 2 times faster.
In order to use higher response mode, not only transmitter but also receiver must comply with it. However, EX-5 AD has a receiver unit corresponding to super high speed response, and therefore you can also choose high speed response and normal response.

Trim/Reverse

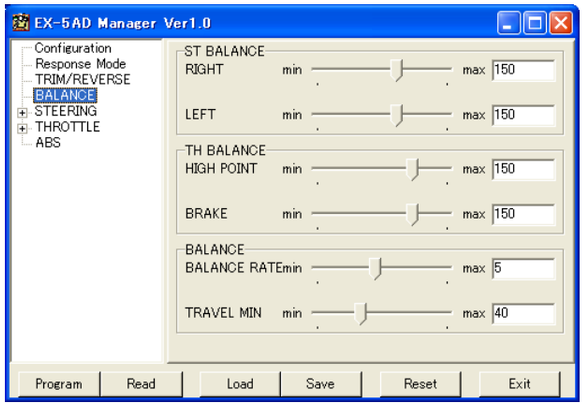


Makes set-up of trim of steering and throttle. You can check and adjust the position of each trim.
The center position becomes 0.

Trim Rate: Adjusts movement of trim per one click. However, you cannot check the effect in the software on your personal computer. You can check the effect when you operate the EX-5 AD after writing-in. Please note that when movement per click increases, the number of steps of whole trim decreases.

Reverse: If you put the check mark, the reverse switch is turned on and the operating direction and moving direction become vice versa.

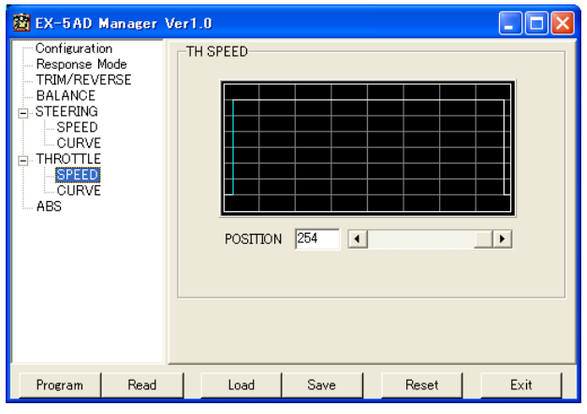
Balance



It is possible to adjust the volume of movement separately for steering (left and right) and throttle (forward and reverse).If you change left and right (forward and reverse) likewise, it means adjustment of whole movement.

Balance Rate: Increases and decreases movement volume per one click. This is applied to steering and throttle at the same time.However, the data already set-up on software and the data on EX-5 AD are not affected. You can tell the effect when you change the set-up of the balance by operating the trim lever.

Minimum Value: Adjusts the minimum value to be adjusted by balance. Works to steering and throttle at the same time. If you set each value below 100, the value of the balance may be adjusted automatically depending on the minimum value.

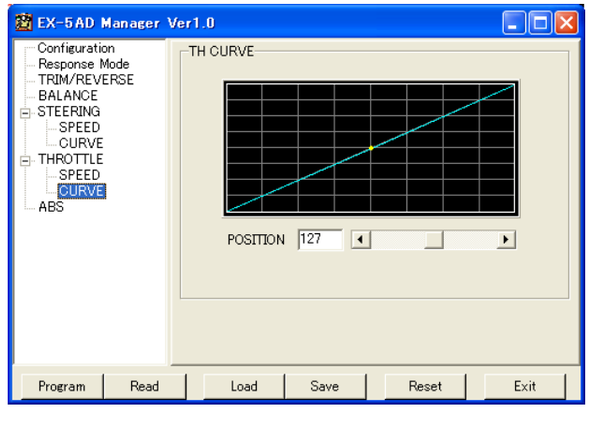


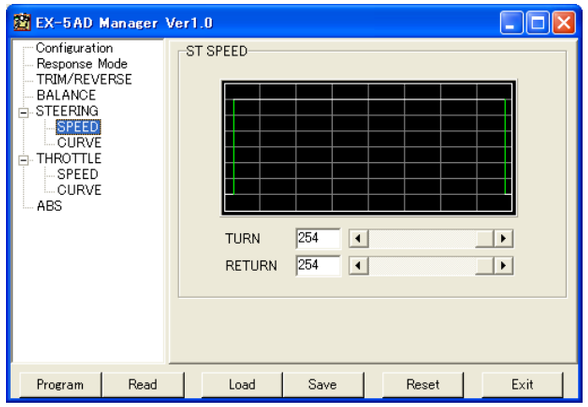
Throttle Speed

Adjuts the changing speed of actual signals against the operation of throttle trigger. It functions only to the direction of pulling trigger on forward side, and it does not function at the operation of brake and returning the trigger. Throttle speed functions as limiter to hold the changing speed of throttle under a certain speed. So, you can expect a good effect when you make a quick full throttle on s slippery surface. The right graph indicates the image of time at horizontal axis and throttle operation and movement at vertical axis.
If the set-up values are changed, the slant of the graph will change and you can tell how the set-up values are changed.

Throttle Curve

Sets-up the curve to the movement of the actual throttle against throttle trigger. Larger number makes qucker start-up and smaller number makes mild one. Throttle curve functions only at forward.
The right graph makes it easy to see the changes by the set-up values, with the operating position of throttle trigger as horizontal axis and with movement volume of throttle as vertical axis.





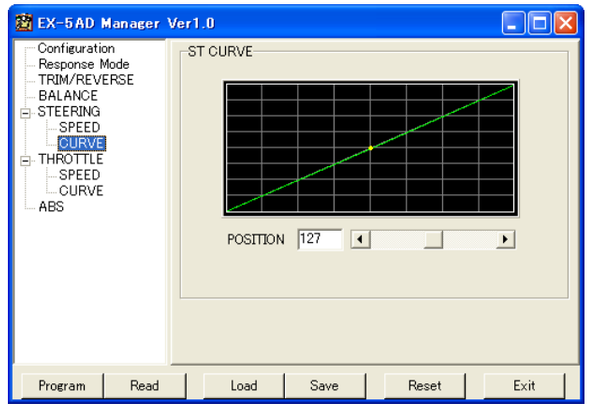
Steering Speed

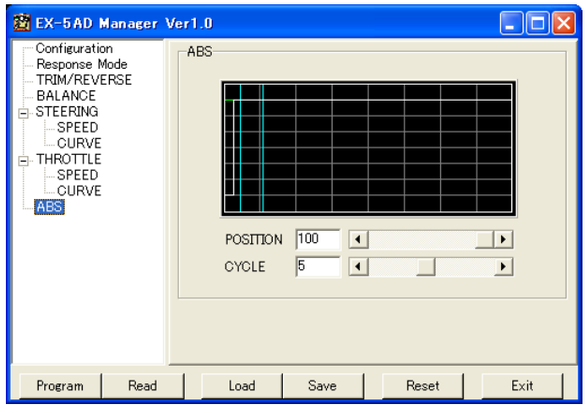
Same as throttle speed. In case of steering, you can set-up the turning and returning speed of steering wheel separately.

In both, the maximum numerical value indicate the normal speed, and by making the number smaller, you can lessen the speed. Extreme change of numerical value makes no sense. Better to change the value little by little.

Steering Curve

Like thrttle, you can put curve on the movement of steering operation.
In case of throttle, it is applicable only to forward. But, in case of steering, you can put curve effect on whole. Larger number makes starting quicker, and smaller number makes it mild feeling.





Throttle - A B S

Sets-up the pumping brake effect on throttle brake side.
ABS gets the effect by returning the brake periodically. You can set-up 2 items, i.e., returning position (to what extent) and the operating cycle (speed).
The display indicates these effects visually with time as horizontal axis and value of braking operation as vertical axis.

Position: ABS does not function at the maximum value. When making the value less and less, it starts the movement of returning the braking position to the set-up position periodically.

Cycle: Sets-up the cycle of the movement (repeating number per time unit).
By the way, setting-up is to be made in 10 steps from 1 to 10.

Trouble Shooting

? Cannot transmit or read-in to EX-5 AD Re-check the set-up of 232C Port of your personal computer. Having not 232C Port in your personal computer and using USB-232C adapter may cause malfunction.Or, the number of 232C Port might be other one than COM1.

? It seems that the changed set-up is not effective at transmitter side. After you change the set-up with the software of your personal computer, you are required to transmit the changed set-up to the transmitter by transmitting button. Then, after you disconnect the connection, and turn on the switch of the transmitter again. Then you recognize the change.

? Forgot the contents of the original set-up It is recommended to save the data by reading it out from the transmitter side, before you change the set-up at your personal computer side. With this, by reading out the saved set-up, you can have the old set-up before the change easily. Or, if you make reset on the software, you can have the original set-up which was made at the factory.

Where to inquire:

Please visit our home page (http://www.kopropo.co.jp) where you can have the latest information.