

LCD Xpansion Unit 2 EXP-201

Startup Guide Ver.1.00

KONDO KAGAKU Co., Ltd.

Thank you for purchasing our products. Please read this Startup Guide before using it and read the Instruction manual downloaded from KO PROPO site(refer below URL).

EX-NEXT

<https://www.kopropro.co.jp/en/supports/view/283>

For Safe Operation

Due to the nature of radio controlled models, improper handling may lead to dangerous situations. Therefore please read the following information carefully in order to ensure safe operation. Please also understand that KO Propo is not responsible for any injuries or damage which result from noncompliance of these cautions and notices.



Warning Improper handling/usage may lead to a high probability of material damage as well as a possibility of serious personal injury or even death.



Caution Improper handling/usage may lead to personal injury or material damage.

When Installing Components



Warning Prohibited matters

- When inserting the batteries of the transmitter and receiver, do not mistake the polarity.
 - *The product will be damaged.



Warning Enforcement matters

- Within Japan, this product is limited to usage with models which operate on the ground or in the water.
- KO Propo is not responsible for any damages or injuries which result from use of this product in combination with other manufacturer's products.

Notes for Usage

- Do not use when there is thunder.
 - * It is possible for lightning to strike the antenna.
- Do not use in the rain or in areas where water has accumulated.
 - * If water enters the product it may lead to an uncontrollable model.
- Do not use in the following locations:
 - Near R/C circuits (within 3km)
 - Near crowds, on streets, or near actual vehicles or ships.
 - Near high-voltage power lines or communication facilities.
- Do not use when your concentration levels are compromised by tiredness, alcohol, medication, etc.
 - * Mistakes in judgment may result in serious accidents.
- Do not allow glow engine fuel or engine exhaust to contact the product.
 - * These may attack the plastic and damage the product.



Warning Enforcement matters

- Check to ensure that the selected model memory matches the model to be controlled.
 - * Using an incorrect memory may lead to an uncontrollable model.
- Make sure to stop the engine (disconnect motor cables) before changing transmitter settings.



Caution Prohibited matters

- When switching on, always turn on the transmitter first, followed by the receiver. Follow the reverse order when switching off.
 - * If the wrong order is followed, it may lead to an uncontrollable model.
- Dismantling or modifying the RF Module (internalized in the case of the EX-NEXT) is prohibited and is punishable by law.
 - * Doing so may lead to accidents such as short circuits and KO Propo Customer Service Department may not accept dismantled/modified products for repair.



Caution Prohibited matters

- Do not use this product in aircraft, hospitals, or near fire alarms or medical equipment.
 - * This may lead to malfunctions and result in serious accidents. Also, by law you must cease operation if the product affects other wireless or electrical devices.



Caution Prohibited matters

- 2.4GHz transmitters must be registered with the Japan Radio Control Safety Association.
 - * The transmitter which you have purchases is already registered. Products which do not have proof of registration are illegal.

Notes After Usage

- Remove batteries from transmitter if it will not be used for a considerable time.
 - * If batteries are left in the transmitter, battery leakage may result in damage.
- Do not store transmitter/receiver in the following conditions:
 - Extremely hot (over 40°C) or cold (below 10°C) temperatures.
 - Locations in direct sunlight.
 - Locations with high humidity.
 - Locations subject to vibrations.
 - Locations with lots of dust.
 - * These conditions may cause the case to deform and damage the product.

Parts List : No.10672 LCD Xpansion Unit 2 EXP-201

LCD Xpansion Unit 2 EXP-201	x1
Monitor Bracket/Nut Holder	x1
M2.6-8BH Self tapping screws	x4
M2-6 Cap screws	x1
Servo Twin Extension Wire II	x1

Items that you should especially should pay attention to.

- When the installation of each unit (Steering unit / Xpansion unit / Grip unit) or disassembling, please make sure that the power is switched off.
- If the Xpansion unit is not assembled or used, do not use a LiFe/LiPo battery.
 - When using Xpansion unit
 - No.10546 Battery Stand Unit can be used along with a LiFe/LiPo battery.
 - <For overdischarge protection, please be sure to configurate"the battery">
 - Move the cursor to [SYSTEM] > [BATTERY] on the Function Menu screen, then press the ENTER key.
 - Use LR key to move cursor over using battery type, then press the ENTER key.
 - * When setting the battery type by mistake, cancel the warning message by pressing and holding the BACK key. The initial display screen will be shown and please set it to the correct battery type again.
- Operation alarm acts when leaving EX-NEXT unattended for three minutes when assenbling Xpansion unit. When an operation key is pressed the sound will stop.
- EX-NEXT cannot use analog servos (old product such as PS-401). There is a possibility of the servo breaking.
- EXP-201 is for EX-NEXT only.

Explanation of product warranties

KondoKagakuco. ltd guarantee after-sale service and others about this product. However, please understand that it cannot guarantee about the following points on the character of this product.

- Breakage of the part by assembly.
- Damage judged to be based on the operation after assembling.
- When reconstruction of this product and analysis are conducted.

Explanation of Licensing

The company name or the brand name for each reference in the text is a registered trademark. Downloading the software from the attachment or from our homepage for this product and being used for the sole purpose of this product is accepted. Please do not use this for any other use. This product, software and the intellectual property rights are the legal rights of Kondo Kagaku Co. ltd. The act of which breaks the law, can result in penal regulations and other applicable laws in the region that the violation takes place.

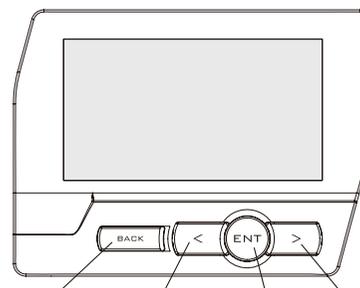
Contact information for repairing goods

* **KONDO KAGAKU CO., LTD.**
Service department
 ADDRESS : 4-17-7 Higashi-Nippori, Arakawa-ku Tokyo
 Japan 116-0014 Japan
 TEL : **03-3807-7648** (service)
 9:00-12:00 & 13:00-17:00 M-F except
 national holidays Saturday and Sunday
 closed
 Latest information can be accessed here.
 >> <http://www.kopropro.co.jp>

Names of Parts

Basic Operations to Change Settings

Controlling of the setting adjustments is done via the L(<) key, R(>)key, ENTER(ENT) key, and BACK key.



BACK key L (<) key ENT key R (>) key

ENT Key :
 Selecting item to be modified; Confirming a change after a setting change.

L (<) Key :
 Used to move cursor between menu choices and to change a setting value. Lowering a value (for L/R cases: raising toward L); Return to a previous menu item.

R (>) Key :
 Used to move cursor between menu choices and to change a setting value. Raising value (for L/R cases: raising toward R); Proceed to next menu item.

BACK Key :
 Returning to previous screen; Canceling change

L (<) Key · R (>) Key Pressing simultaneously :
 Resets the value to default setting.

※Please refer to an instruction manual for the detailed function and operation.

Installation <To be fixed to Master Unit EX-NEXT>

Xpansion unit can be mounted facing the front or the side. For details, please refer to the EX-NEXT User's Manual.

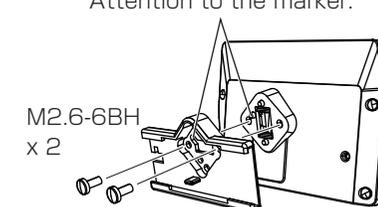
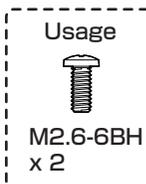
⚠ Be careful to not misuse the M2.6-6BH and TP2.6-8BH screws.

P directions using the monitor base and bracket..

A ▼ : setting to the front

- Attach a monitor base parallel to Xpansion unit. ※ Factory setting.

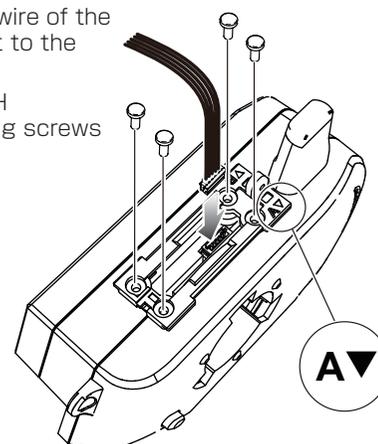
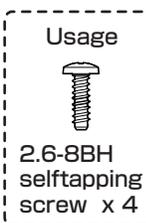
Attention to the marker.



- Attach the monitor bracket to the master unit. ※ [A ▼] mark to the steering side

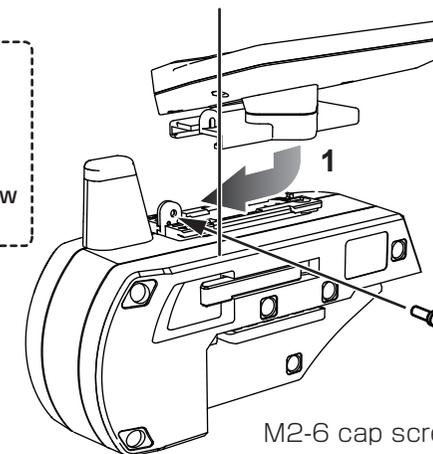
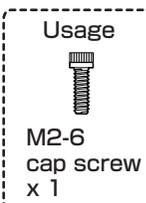
Connect the wire of the Xpansion unit to the master unit.

TP2.6-8BH
 Self tapping screws
 x 4



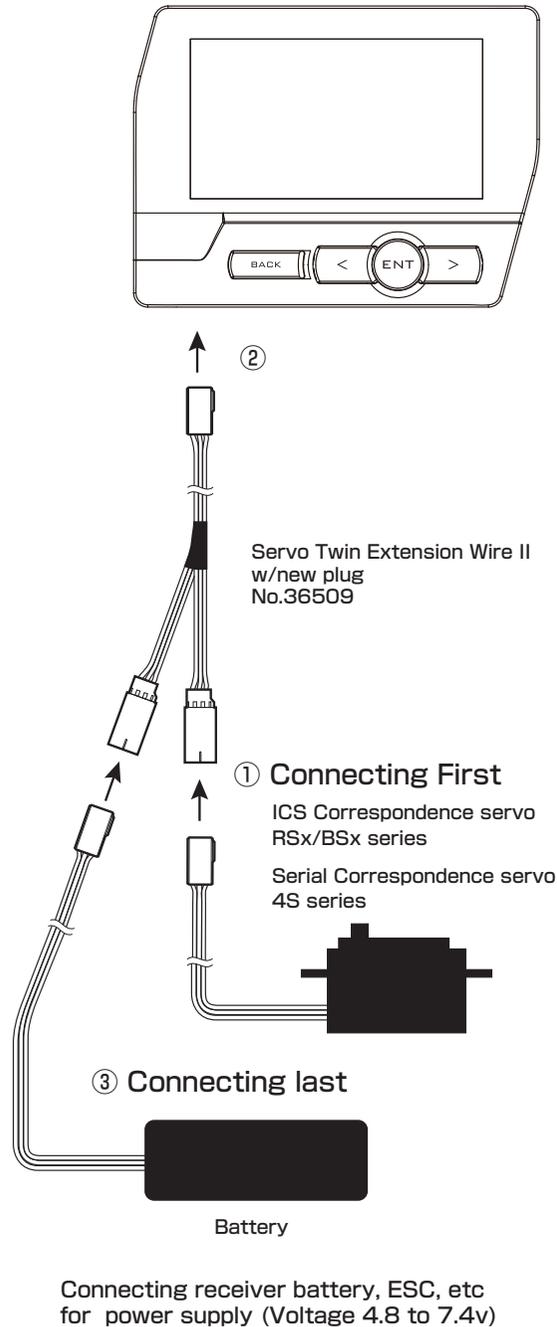
- Attach expansion unit to a master unit.

While matching the edge of the base with the dent of the bracket, slide it until the Xpansion unit locks.



Installation is not necessary if you are only using the servo setting.

1 Connecting Expansions and Servos

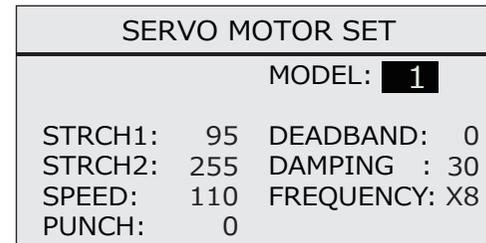
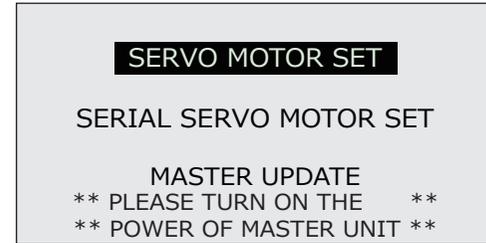


2 Setting ICS parameters

<ICS coresspondence servo>
for RSx/RSx2/RSx3/BSx2/BSx3 each series, select "SERVO MOTOR SET"

- ※The "SERIAL SERVO MOTOR SET" is for serial-compatible servos.
- ※The "MASTER UPDATE" is not used.

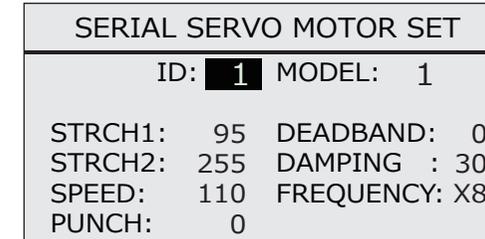
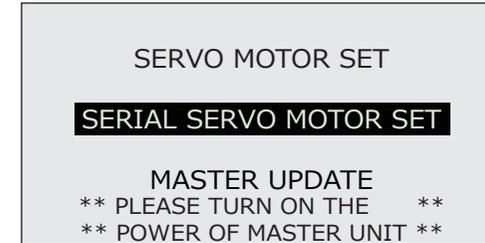
Wait about 5 seconds after powering on before operating.



- ▶MODEL
1.Select model memory of the servo.
[Setting Range] MODEL : 1~5
2. Change ICS parameters. Each setting value is sent to the servo when each data is changed, characteristics of the servo will be changed.
Please back up the default values by making a memo.
- 3.Please remove the battery for this function to exit.

- ⚠ Be sure to select the menu that corresponds to the servo you are using. If you select the wrong menu, the servo will malfunction or you will not be able to change the settings.
- ⚠ The initial value of the ICS setting differs depending on the servo model and is not retained.It is recommended that you keep a memo if necessary.

<Serial coresspondence servo>
for 4S series, select "SERIAL SERVO MOTOR SET".



- ▶ID
ID of servo is changed.
[Setting Range] ID : 1~4
※ID5-8 are displayed but can not be used.
- P Case of connecting to B/S port of the KR-420XT, please use the below settings.
- ID1 : Steering operation
ID2 : Throttle operation
ID3 : 3CH control
ID4 : 4CH control
※ID5-8 can not be used. (As of Jan 2021)
- ▶MODEL
1.Select model memory of the servo.
[Setting Range] MODEL : 1~5
- 2.Change ICS parameters. Each setting value is sent to the servo when each data is changed, characteristics of the servo will be changed. Please back up the default values by making a memo.
- 3.Please refer to P39 for parameters of the servo.
- ⚠ Be sure to select the menu that corresponds to the servo you are using. If you select the wrong menu, the servo will malfunction or you will not be able to change the settings.
 - ⚠ The initial value of the ICS setting differs depending on the servo model and is not retained.It is recommended that you keep a memo if necessary.

<About parameters>

- [Setting Range]
- Stretch1
(Setting of holding characteristics in the range of near neutra)
0-255
 - Stretch2 ストレッチ2
(Setting of holding characteristics in the range of except Stretch1)
0-255
 - SPEED
(Maximum speed setting)
0-127
 - PUNCH
(Initial response settings)
0-30
 - DEADBAND
(Neutral width setting)
0-5
 - DAMPING
(Brake characteristic setting)
0-255
 - FREQUENCY
(Motor drive frequency setting)
x1, x2, x4, x8, x16, x32, x64

FREQUENCY
The characteristics can be changed by changing the drive frequency. The frequencies increase in the order of x1 >> x2 >> x4 Driving at high frequencies will result in smoother operation and better fuel economy, but will reduce speed and torque. Driving at low frequencies will improve speed and torque, but will result in rough operation and poor fuel economy.

- ⚠ If the data is not displayed properly and each parameter is set to 0.
 - 1) Please check if there is any error in the type of "ICS-compatible servo" or "Serial-compatible servo".
 - 2) Check the connection between the expansion and the servo (e.g., the direction of the connector if the claws are cut).