

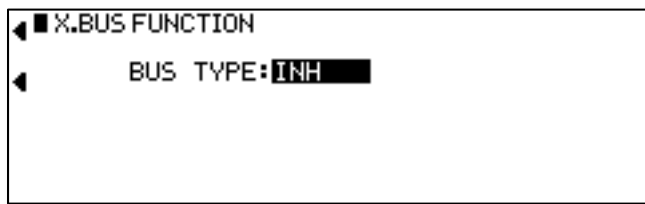


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Getting Started with XBus  
Component ID Assignment

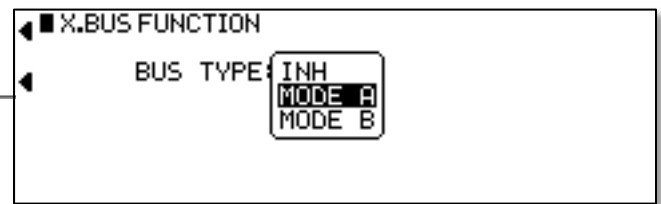
## XBus Setup Menu

To activate XBus, enter your transmitter's system menu. Navigate to, and highlight XBUS to enter the menu. Once in the XBus menu, you will see that there are two types of XBus programming from which to choose:



### MODE A

This is JR's proprietary XBus Airplane mode that is be used in conjunction with XBus receivers, conversion harnesses, servos, and gyros.



### MODE B

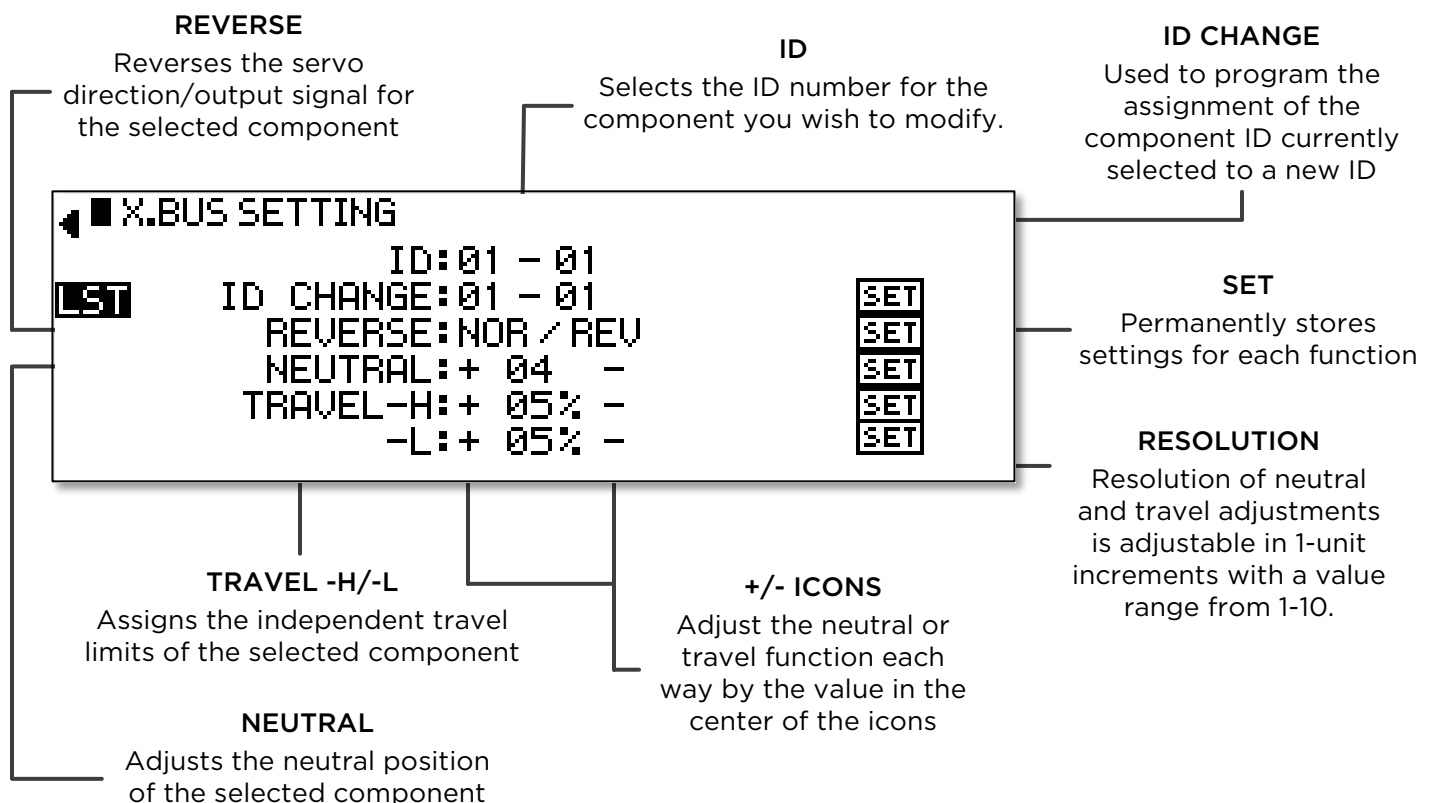
This is the serial protocol mode for Helicopter applications, and is compatible with non-JR components such as Freakware, Beast X and Mikado VBar flybarless systems.

Please note that in Mode A, it is possible to utilize both PWM and XBus outputs from the receiver simultaneously. In Mode B, all PWM outputs on the receiver are disabled when this mode is used.



**CAUTION:** ONLY ACTIVATE XBUS IF YOU ARE UTILIZING XBUS EQUIPMENT IN YOUR MODEL. WHEN OPERATING IN NORMAL DMSS MODE, LEAVE XBUS SETTING TO "INH".

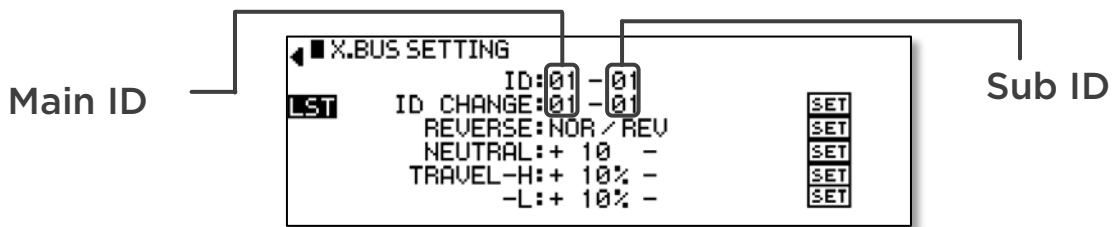
After selecting the appropriate mode for your model and equipment, highlight the SETTING menu to access the following main setup screen. The functions available on this screen are as follows:



## Programming your XBus Components

There are a few key points to remember when setting ID numbers for XBus components.

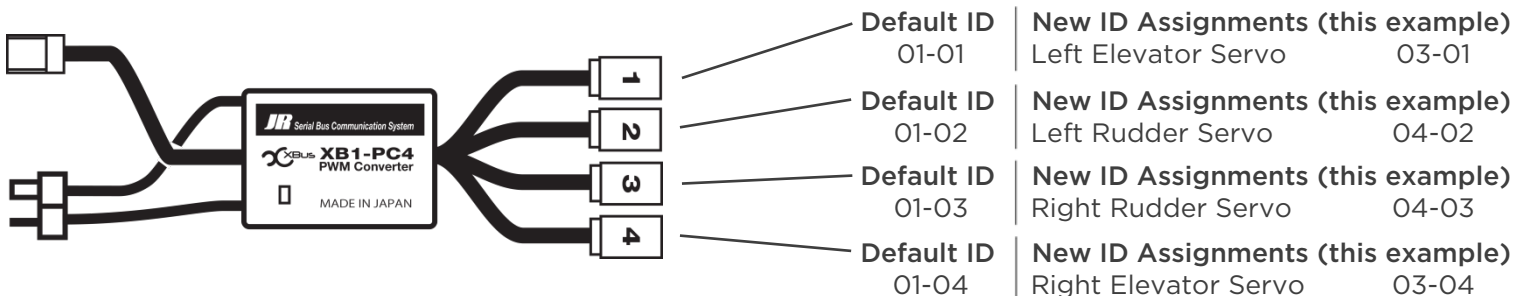
- XBus components operate on the basis of a main ID and sub ID where:
  - The **main ID** number identifies the function of that particular component, e.g. aileron, elevator, rudder, throttle, and so forth. In Type A, these numbers correspond with the typical JR channel assignments.
  - The **sub ID** number identifies the location of the component lead within a harness. XBus has a limit of four components per function, meaning that each channel or lead can control up to four servos.
- All XBus components are shipped from the factory with the main ID set to 01 and the sub ID set to the number that corresponds with the label on the component. Using PWM conversion harness for example, the lead labeled 1 will have a default sub ID of 01, the lead labeled 2 will have a sub ID of 02, and so forth.



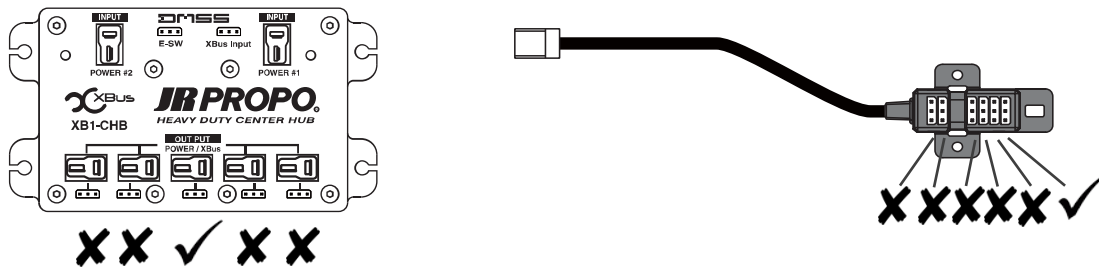
- Only one parameter may be adjusted at a time, and settings will not save to the component until the SET command has been issued. Temporary adjustments will be visible immediately, however the settings will not be stored to the component until SET has been commanded for that particular XBus function.
- The default channel assignments for JR products are as follows:

MODE A (JR Proprietary Products)				MODE B (Third-Party Compatibility)			
Channel	Function	Channel	Function	Channel	Function	Channel	Function
1	Throttle	8	AUX 3	1	Aileron	8	AUX 3
2	Aileron	9	AUX 4	2	Elevator	9	AUX 4
3	Elevator	10	AUX 5	3	Rudder	10	AUX 5
4	Rudder	11	AUX 6	4	AUX 1 (Flap)	11	AUX 6
5	Gear	12	AUX 7	5	Throttle	12	AUX 7
6	Flap (AUX1)	13	AUX 8	6	Gear	13	AUX 8
7	AUX 2	14	AUX 9	7	AUX 2	14	AUX 9

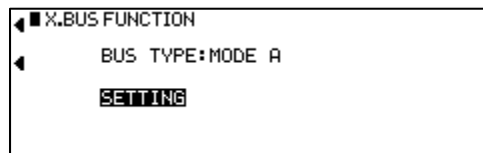
The following example will walk you through assigning ID numbers in **Mode A** for a four-output PWM conversion harness controlling two separate channels with two servos each for a total of four servos used. This example will show the typical tail servo setup of a 35% aerobatic airplane which will utilize two servos for the rudder and one servo for each elevator half. Once complete, the harness will be assigned as follows:



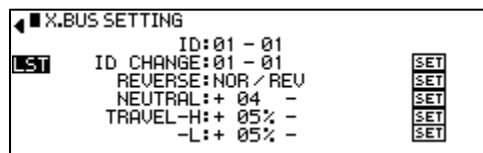
1. Ensure the component being programmed is the only item currently plugged into the center hub or receiver. **NOTE- It is only possible to program one component or conversion harness at a time.**



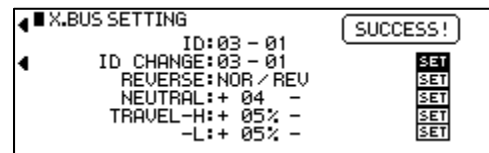
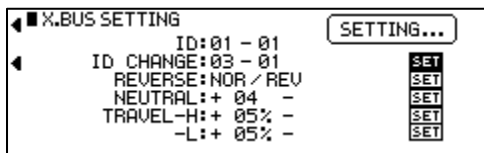
2. Power up your transmitter and model and enter the XBus setting menu while in Mode A.



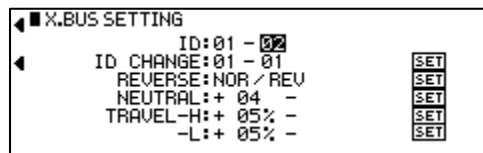
3. Set the ID in the ID field to 01-01. This means that we are working with the lead labeled “1”, with the default identification set.



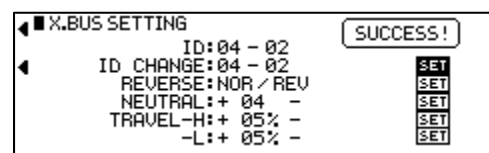
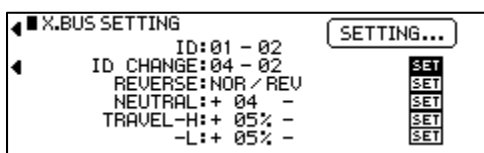
4. To assign 01-01 to the left elevator servo, scroll to the ID CHANGE field and set the main ID number to 03 and the sub ID number to 01. Scroll over to highlight SET and depress the scroll wheel. A notification will appear to indicate either a timeout (failure) or success. This lead's ID has now been set.



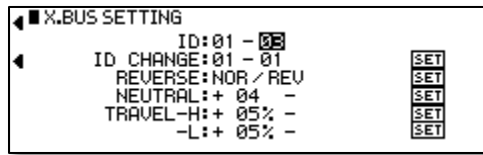
5. Scroll back up to ID, and set the ID to 01-02 to program the lead labeled “2”. Failure to reset the ID field to the second lead’s default identification (01-02 versus 01-01) will reprogram the first lead.



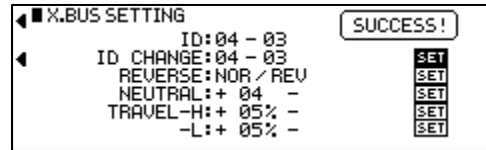
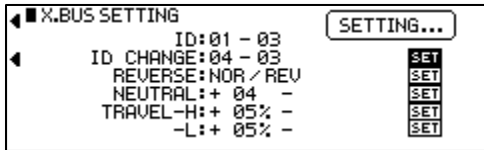
6. In the ID CHANGE field, set the main ID number to 04 and the sub ID number to 02. Scroll over to highlight SET and depress the scroll wheel to finalize settings. This lead's ID has now been set.



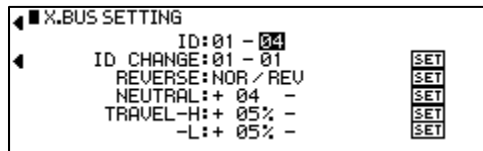
7. Scroll back up to ID, and set the ID to 01-03 to program the lead labeled “3”. Failure to reset the ID field to the second lead’s default identification (01-03 versus 01-02 or 01-01) will reprogram a previous lead.



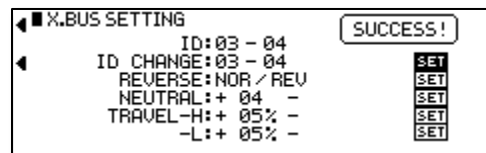
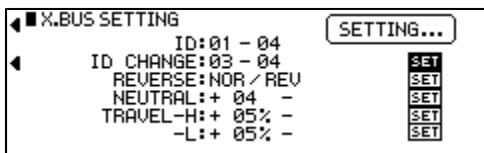
8. In the ID CHANGE field, enter a main ID number of 04 and a sub ID number of 03. Scroll over to highlight SET and depress the scroll wheel to finalize settings. This lead’s ID has now been set.



9. Once again, scroll back up to ID, and set the ID to 01-04 to program the lead labeled “4”. Failure to reset the ID field to the second lead’s default identification (01-04 versus 01-03, 01-02 or 01-01) will reprogram a previous lead.



10. In the ID CHANGE field, enter a main ID number of 02 and a sub ID number of 04 this time, since there are two servos utilizing the aileron channel’s output signal. Scroll over to highlight SET and finalize.



By now, you may have noticed, that if no ID changes were performed, the factory default for each of the leads would be set such that all four servos would move when the throttle (channel 01) stick was deflected. By changing the IDs and activating the SET command, we are able to now control two elevator servos, and two rudder servo out of the same harness. More importantly, we are able to control the physical lead into which the servo is plugged to customize wiring.

For more advanced applications, it is possible to change the sub ID from the default setting to a customized number (1-4) to identify the component. This is particularly useful for symmetrical applications, such as a wing where there is a conversion harness dedicated to each wing panel. If the numbering system described above were employed here, then each wing would have components with identical ID numbers, which will restrict adjustability on the wing panels because they employ the exact same ID numbers for both the main and sub IDs. The true flexibility of XBus is demonstrated here, where any component can be plugged into any lead and assigned an ID number to allow it to work, rather than being limited to plugging only certain components into a specific port.

We hope that this quick start guide has proven useful and will assist you in realizing the full potential of XBus in your model. As you can see, the system is very easy to operate and make adjustments and integrates seamlessly into the existing settings of the transmitter and into your model. We wish you many successful flights with DMSS and XBus



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