



Installation and operating instructions for the pod and Schottel controls

SST2

#### Symbole und deren Bedeutung:

	Dieses Symbol hebt Hinweise hervor, welche durch den Anwender unbedingt beachtet und eingehalten werden müssen. Jegliche Missachtung des Hinweises kann die sichere Funktion, sowie die Sicherheit des Betreibers selbst beeinträchtigen.
	Dieses Symbol hebt Hinweise hervor, welche durch den Anwender beachtet werden sollten, um einen sicheren Betrieb des Moduls zu gewährleisten.

#### Warnhinweise:

	Nicht für Kinder unter 14 Jahren, kein Spielzeug!
	Das CE-Zertifikat entbindet nicht von der Verpflichtung, äußerste Vorsicht zu bewahren.
	Benutzen Sie das Modul nur in den genannten Spannungs- und Strombereichen!
	Lassen Sie Ihr RC-Modell niemals unbeaufsichtigt, solange ein Akku angesteckt ist. Im Falle eines Defektes, könnte dies Feuer am Modell oder seiner Umgebung verursachen.
	Das Modul oder andere elektronische Komponenten dürfen niemals mit Wasser in Berührung kommen. Schützen Sie das Modul vor Staub, Schmutz, Feuchtigkeit, Vibration und anderen Fremdteilen.
	Benutzen Sie verpolungssichere Stecksysteme, um ein Verpolen zu verhindern. Vermeiden Sie Kurzschlüsse und Überlastungen.
	Alle Kabel und Verbindungen sollten gut isoliert sein. Kurzschlüsse können zur Zerstörung des Moduls führen.
	Das Modul ist ausschließlich für den Einsatz in Batterie- bzw. Akkubetriebenen, funkferngesteuerten Modellen vorgesehen. Ein anderweitiger Betrieb ist nicht zulässig. Der Gebrauch in einem Modell zur Personenbeförderung ist verboten!
	Motoren, Getriebe, Schiffs- oder Luftschrauben sind gefährliche Gegenstände. Halten Sie sich daher niemals neben oder vor dem Gefährdungsbereich des Antriebes auf!
	Technische Defekte mechanischer oder elektronischer Teile können zum unverhofften Anschalten von Verbrauchern führen, die erhebliche Verletzungen verursachen können.
	Es dürfen keinerlei Veränderungen am Modul durchgeführt werden, es sei denn, diese sind in der Anleitung beschrieben.
	Es dürfen nur von uns empfohlene Komponenten und Zubehörteile verwendet werden.
	Verschluckte Magnete sind lebensbedrohlich, insbesondere in der Kombination mit weitem Magneten und magnetischen Teilen. Kontaktieren Sie beim Verschlucken sofort einen Arzt.
	Vergewissern Sie sich vor jeder Inbetriebnahme, dass alle Steckverbindungen richtig sind und kontrollieren Sie alle Funktionen, bevor Sie Ihr Modell in Betrieb nehmen.
	<b>Haftungsausschluss:</b> Sowohl die Einhaltung der Montage- und Bedienungsanleitung, als auch die Bedingungen und Methoden bei Installation, Betrieb, Verwendung und Wartung des Moduls können von der Fa. IMT nicht überwacht werden. Daher übernimmt die Fa. IMT keinerlei Haftung für Verluste, Schäden oder Kosten, die sich aus fehlerhafter Verwendung und Betrieb ergeben, oder in irgendeiner Weise damit zusammenhängen.

Thank you for choosing our Pod / Schottel control SST2, the successor to the well-known SST1. Please read the entire operating manual in advance before installing or commissioning the control. It contains important safety instructions as well as information for the installation, the parameterization and the operation of the control.

The steps described up to the complete implementation may read a bit complicated, but you will find during the implementation that the installation is actually very simple - also because we developed the control in a practical way.

If you have any questions about installation, parameterization or operation, watch the videos on [www.imth.de](http://www.imth.de) or contact us.

These operating instructions are part of the product. You should therefore keep the operating instructions and pass them on to third parties if you pass on the product. Failure to observe the operating instructions or the safety instructions will invalidate the guarantee.

We are constantly working on the further development of our products. Changes to the scope of delivery We must therefore reserve ourselves in terms of form, technology and equipment. Please understand that no claims can be derived from the information and illustrations given.

#### What's Included:

- 1 x instruction manual
- 1 x control board SST2 - controller
- 1 x sensor board SST2 - sensor
- 1 x 5 pin patch cable
- 1 x disc magnet

#### Safety instructions:

The control board SST2 was developed for use in ship models and may only be used there according to the intended use.

Please note that the control may only be operated within the specified limit values (see technical data).

Only use and store the controller in a dry environment.

Any mechanical or electrical change to the control or exceeding the specified limit values leads to the immediate loss of all claims against the manufacturer, including the guarantee.

Swallowing a magnet can lead to life-threatening complications, especially if more than one magnet has been swallowed. Be sure to consult a doctor in any case.

Please also note the note that in the so-called master-slave mode, the operation of the control becomes less secure and that this mode may therefore only be switched on in a safe environment. For more information, see "Master-Slave Mode" (page 12) in this manual.

Check that the controls are working correctly before every trip outside of the water.

#### Technical specifications:

Operating voltage:	5,0 - 10,0 V
Operating current:	ca. 20 mA bei 6,0 V
Max. Current load:	1,0 A
Pulse input voltage:	< 5,5 V
Pulse output voltage:	ca. 4,5 V
Weight:	ca. 12 g
Dimensions controller / sensor (WxDxH):	37,5 x 35 x 11,5 mm / 25 x 25 x 6 mm
Operating temperature:	0 - 40 °C
Required channels:	2

## Introduction:

Various types of drives are used in shipping. One of these types of drive are so-called pod drives (pod [eng.]; Gondola), which are offered by various manufacturers. They all have one thing in common: The pods can drive through complete full circles and have no rotation limit.

Since the direction of rotation of the propeller is always identical, the ship's direction of travel can only be changed by turning the pod around a semicircle.

The advantage of these drives is, among other things, that ships can be maneuvered exactly in any direction and work extremely powerfully.

The generally available servo and remote controls have so far not allowed such a prototype-like control, since the servos are always limited in terms of rotation.

This restriction is lifted with the SST2 controller. With this control you can drive your model ship absolutely true to the prototype and that with the common model building components.

After installing the SST2 and making the appropriate mechanical and electrical adjustments, you need to adapt the SST2 to your remote control and the pod. This parameterization only needs to be done once, as all values are saved and called up again at the next restart.

## Basic requirement for the use of the SST2:

In order for you to be able to drive your ship true to the original with the SST2, two requirements must be met in the model:

1.) The pod must be electrically rotatable through 360 degrees without a rotation limit.

Two different systems can be used to implement this requirement, but they basically have an identical function:

- You are using a servo in which you remove the rotation limit and thus have a unit of speed controller, motor and gear in one housing. We recommend the Graupner Servo DES 577 BB / Article No. : 7944. Many of the digital servos cannot be converted as desired. It is important that the servo behaves like a gear motor with a connected speed controller - left and right rotation, as well as analog speed change up to the end deflection of the joystick!
- EA speed controller controls a geared motor in both directions, which can turn the pod on both sides by rotating it left or right. (**approx. 1.5 ms standstill**). Speed controllers with a dead center around the neutral range are unsuitable for the control.

There are advantages and disadvantages for each variant. Take a look at one of our videos at [www.imth.de](http://www.imth.de), there you will also find an example of a servo conversion.

2.) The current setting angle of the pod is recorded by the sensor, which is located directly on the SST2 sensor. This is done without contact with the help of a magnet, which, like the pod, has to rotate exactly 1: 1.

If the pod rotates a full circle, the magnet must also rotate a full circle! It doesn't matter whether the direction of rotation of the magnet is the same as that of the pod or vice versa - you don't need to worry about that at the moment. It is only important that the magnet rotates in the same way as the pod and thus a transmission ratio between the magnet and the pod of exactly 1: 1 is given.



3.) A free joystick that uses its information to transfer the two channels to the controller.

4.) Even if you can adjust the maximum travel speed via the SST2 and the DIP switches, the drive motor should not be too oversized. Larger reductions reduce the control range of the control and thus prevent a sensitive change in speed.

### Mechanical installation:

The sensor supports two installation variants. Each variant has its advantages and disadvantages. We consider the "overhead" assembly to be the better variant, since the angle accuracy there is much more precise than in the "side by side" variant.

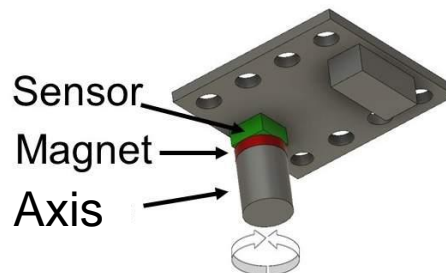
That is why we deliver a disc magnet as standard for "overhead" assembly. You can optionally order a ring magnet (MAG2) for the height-optimized "Side by Side" variant.

The disc magnet included in the scope of delivery should, if possible, be mounted on a plastic axis - under no circumstances should this axis be magnetic! Note that magnetic parts in the immediate vicinity may prevent correct measurement.

The distance between the circuit board and the magnet should be approx. 0.5 to 1.5 mm.

ATTENTION: The magnet must be aligned axially and centrally to the sensor for good positioning accuracy (see chapter: "First commissioning and parameterization").

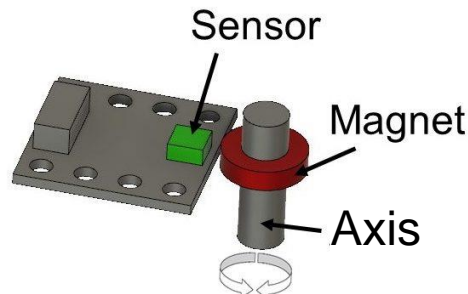
Here is the "overhead" assembly:



In the "Side by Side" variant with the optimized installation height. There are major deviations here, especially in the lateral adjustment areas (approx. 90 and 270 degrees). We recommend using this variant only if space problems make it necessary.

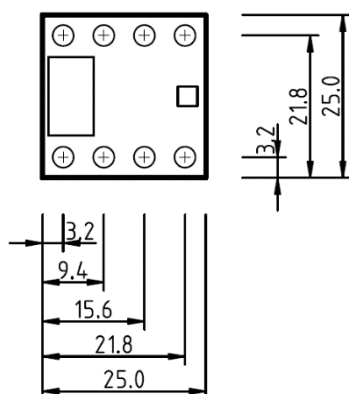
The installation is much easier in this variant, since the sensor can be more easily aligned with the magnet.

Here is the "Side by Side" assembly:

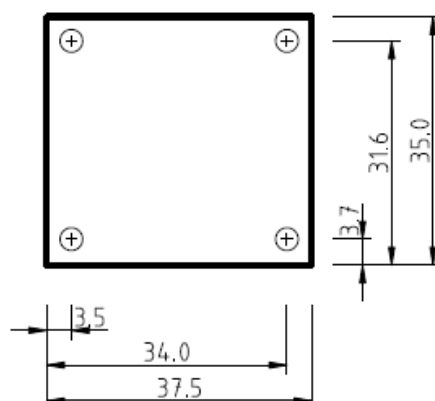


### Dimensions and mounting holes:

SST2 – Sensor



SST2 - Controller



### Electrical installation:

For safe operation, the control board requires an interference suppression DC voltage of 5.0 - 10.0 volts, which must be supplied via the remote control cable to be connected via the pin strips X1. Please note that all (+) connections within the SST2 are connected to one another, as are all (-) connections.

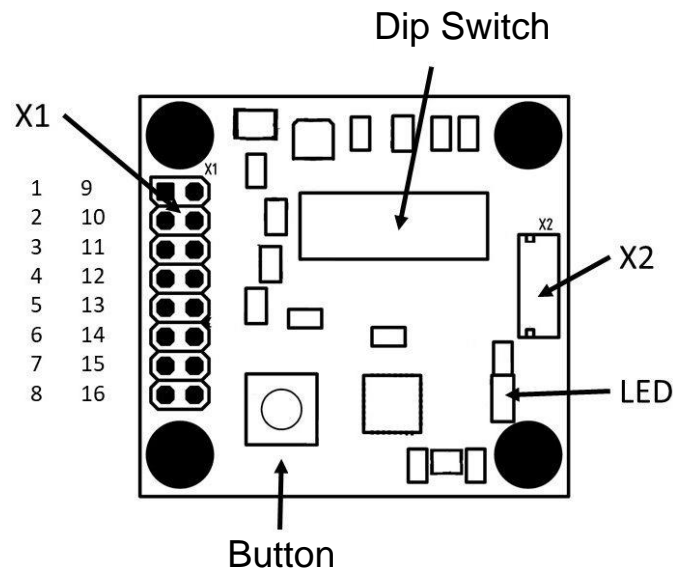
Only pulses are read in, processed and output in the control system. To control the model, two channels of a joystick are required, we designate these channels with A and B. There is no assignment of the channels, the control takes over.

With a supply voltage between 5.0 and 6.0 volts, you can usually connect the servo and the speed controller directly to pin strip X2, provided the current drawn does not exceed a value of 1.0 A - please note the maximum permissible operating voltage of the connected assemblies.

If more power is required, supply the external modules (servo, etc.) via a bypass.

Please ensure that only voltages up to 5.0 V are applied to the pulse inputs. This is usually the case when you establish a direct connection between the receiver and the SST2.

Connect the controller board and the sensor board with the enclosed patch cable.



Pin Assignment X1

1	□		9	□	
2	+	Channel A	10	+	Channel B
3	-		11	-	
4	□		12	□	
5	+	Speed-	13	+	Pod /
6	-	Controller	14	-	Servo
7		TxD	15		RxD
8		Masse / GND	16		Slave



### First commissioning and parameterization:

Now comes the exciting part that you have been waiting for a long time. But before you put the control into operation, please check the correct assignment of the connections and the mechanical structure again.

Switch on the transmitter, the receiver and all required voltages. When you parameterize the controller for the first time, neither the pod nor the drive motor should turn.



If you have connected everything correctly, the LED should flash briefly every approx. 4 seconds. You should aim the pod manually for driving ahead. Now turn the magnet manually on the axis slowly until the LED lights up continuously. Please glue the magnet in this position. This step should be carried out especially when using ring magnets in the "Side by Side" variant.

This basic setting is only carried out once on the model and will probably only change through conversion work.

This presetting is completed with the first parameterization.

You can repeat this step at any time by resetting the control to the factory settings (see chapter "Resetting the saved values to the factory settings").



The SST2 is very versatile and has many setting options. This is why some DIP switches have a double assignment that is saved when the parameterization is completed. After parameterization, these DIP switches have a different function (see table).

1. If you want to use a co-pilot (joystick attachment), inform the control of this via DIP switch 1 before setting the parameters.
2. Before parameterization, you can also use DIP switch 2 to specify whether the pod should automatically move ahead or keep the last setting angle. This option is disabled in copilot mode, as it does not make sense there.
3. With the SST2 you can use electronic speed controllers (ESC) of all types that have their rest position at 1.0 or 1.5 ms. Use DIP switch 3 to select the type before parameterization.
4. The DIP 4 reduces the drive power to <70%

Bring the trimming of the joystick on the transmitter to zero and, in particular, set DIP switches 1 to 4 to the desired position.

All values determined during a successful parameterization are saved on the SST2 and are available again at the next start. The parameterization therefore only has to be carried out once or after every change to the existing components.

But first you have to know how the direction of travel of the pod relates to the magnet. Does the magnet rotate in the same way as the pod or in the opposite direction?

If the direction of travel of the magnet and the pod are identical, please note the direction of travel "right", otherwise "left". You need this information during the parameterization in step 3.

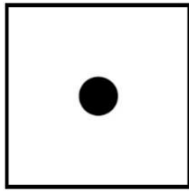


If an error occurs during the parameterization, the LED flickers for approx. 4 seconds and the parameterization is aborted. There can be different reasons. Please read the back of the operating instructions under "Errors and possible causes".

You can of course restart the parameterization at any time and overwrite it with a new parameterization.

And now things really start!

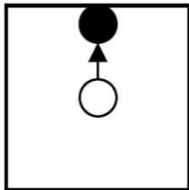
#### Step 1:



Bring the joystick to its center or neutral position.  
Press the button for approx. 3 seconds until the LED starts to flash slowly.  
When using a copilot attachment, please turn the attachment at least one turn during the step with the throttle lever turned back. If you want to drive with a joystick, leave the joystick in its neutral position.  
Briefly press the button, then the LED flashes faster and you go to the next step.

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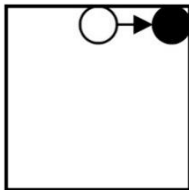
#### Step 2:



Push the joystick to the straight-ahead position. You can also choose a different position than shown, but only in a 90 degree grid. For copilots, push the throttle forward.  
Leave the joystick / copilot (CP) in this position and then briefly press the button. The LED flashes more slowly again. And so it goes to the next step.

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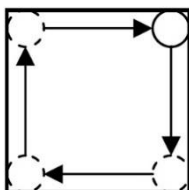
#### Step 3:



Now you determine the direction in which the pod should turn. If you have memorized "right" beforehand, move the joystick / CP to the right to the position shown and leave the joystick there.  
For models with the "left" direction, please move the joystick / CP to the opposite position (top left).  
Briefly press the button. The LED flashes again at a faster rate to blink and it goes back to the next step.

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#### Step 4:



Now move through all end areas with the joystick / CP. It doesn't matter whether you do it clockwise or counterclockwise.  
Please turn the co-pilot by at least one turn with full ahead.  
Then move the joystick / copilot to the neutral position and briefly press the button.

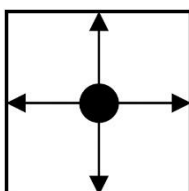
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#### Schritt 5:

The LED now lights up continuously.  
This is an automatic step, usually less than a minute.  
After a waiting or initialization time of 5 seconds, the controller automatically determines some values from the pod. To do this, the pod is turned quickly by the control.  
After the values have been recorded, the actuating speed is significantly reduced (down to zero, depending on the installed servo).  
Then the LED starts to flash again in a slow rhythm and you can go to the next step.

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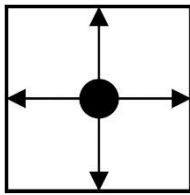
#### Step 6:



Now you need to bring the pod / servo to a complete stop using the joystick / CP.  
To do this, move the joystick / CP into one of the 90 degree positions. As you do so, you will find that the pod will spin faster or slower. If the Pod spins faster, move the joystick in the other direction.  
If the servo no longer turns and no longer tries to change the position of the pod (the servo must then not hum either), then briefly press the button and continue with the next step.



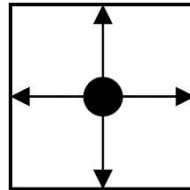
Step 7:



The LED now flashes at a faster rate again.  
Now the pod has to be aligned for its straight ahead travel.

Move the joystick on the outer edge clockwise or counterclockwise, the pod aligns itself to the adjustment angle.  
As soon as the Pod is aligned to drive straight ahead, please briefly press the button.  
The LED then flashes more slowly and this goes to the last step of the parameterization.

Step 8:



Here you can ring the propeller to zero rotation, if this is necessary at all with the connected speed controller.

Most speed controllers recognize their own zero point, in which case you can "skip" the step with a short press of the button.

The LED stops flashing and the propeller reports the successful parameterization with three short starts of the drive motor.

DIP Switch functions during parameterization:

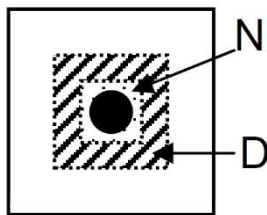
DIP 1	Function / Mode Copilot
ON	The controls go into copilot (CP) mode. Control ranges switch to the ring function, so you always have a constant drive power when using a CP - in every setting angle of the CP. You control Ihr modell like the captain his ship.
OFF	You can use the joystick to regulate the drive power outside of the tolerance ranges, analogous to the deflection up to the corners of the joystick. This mode is recommended if you are I your modell Want to drive with a joystick.
DIP 2	Function / Mode Advanced
ON	If the joystick is in the neutral range, the POD automatically moves ahead
OFF	The last position of the Schottel / Pod is saved here, in which the Pod when it reaches the zero point
DIP 3	Function / Mode Flight controller
ON	when using a flight controller (rest position at approx. 1.0 ms)
OFF	Standard speed controller (ESC), which has its neutral point at approx. 1.5 ms

### DIP switch during operation:

There are 12 DIP switches on the SST2, with which you can adapt the control to your personal requirements. You can find an overview of the possible parameters in the table below. However, we would like to describe the parameters here in detail:

**Zero point\*:** Via DIP 1 and 2 you can place 4 different sized areas around the neutral position (N) of the joystick so that smaller movements of the joystick have no effect on the pod. This range also suppresses minor fluctuations in the remote control signal in the neutral range (N).

**Rotation without drive \*:** Here, too, you have a tolerance range (D), which you can choose from in 4 widths



can be set via DIP 3 and 4. In this area the pod can be rotated without the propeller starting to rotate. Only when areas N and D are left does the propeller begin to turn.

Please note the following for these two tolerance ranges: The larger you make these two ranges, the shorter the travel from leaving the tolerance range to the end stop. The shorter travel makes it more difficult to control the drive power.

**Actuating speed:** You can use DIP 5 and 6 to change the setting speed of the Pod in four stages, from very fast to extremely slow.

**PID Regulator:** Each model requires individual controller settings due to the different components. Four different permanently stored parameters can be selected via DIP 7 and DIP 8. Try out which parameters are best for your model.

**Drive power:** Here you have 16 options via DIP 10 to 12, as well as DIP 4, to adapt the maximum drive power of the propeller to a model-like driving behavior. DIP 4 is queried during parameterization. A change in operation therefore has no effect (please re-parameterize if necessary):

\* This function is automatically deactivated with the copilot attachment.

**Advance:** Here you can use DIP 3 to set whether the pod automatically rotates to the angular position for the advance movement - provided the joystick is in the neutral position - or whether it remains at the last selected angle of the joystick (of course, this does not apply to the co-pilot, because there doesn't make sense).

## DIP Switch Operation

Zero point		Range
DIP 1	DIP 2	
OFF	OFF	Small
ON	OFF	↓
OFF	ON	↓
ON	ON	Large

Rotation without Engine		Range
DIP 3	DIP 4	
OFF	OFF	Small
ON	OFF	↓
OFF	ON	↓
ON	ON	Large

Turnout speed		Range
DIP 5	DIP 6	
OFF	OFF	Fast
ON	OFF	↓
OFF	ON	↓
ON	ON	Slow

PID Regulator		Range
DIP 7	DIP 8	
OFF	OFF	Soft
ON	OFF	↓
OFF	ON	↓
ON	ON	Hard

## Description

Area of tolerance around the neutral position to balance smaller fluctuations of the remote control. (\*)

Within this area of tolerance the Pod can be moved around without the engine starts. (\*)

To achieve realistic behaviour the Speed of the Pod can be reduced. (\*\*)

Various controller settings to adjust the actuator as optimally as possible. (\*\*)

Reduction of the drive power				Performance in %
DIP 10	DIP 11	DIP 12	DIP 4 (***)	
OFF	OFF	OFF	OFF	100
ON	OFF	OFF	OFF	96
OFF	ON	OFF	OFF	92
ON	ON	OFF	OFF	88
OFF	OFF	ON	OFF	84
ON	OFF	ON	OFF	80
OFF	ON	ON	OFF	76
ON	ON	ON	OFF	72
OFF	OFF	OFF	ON	68
ON	OFF	OFF	ON	64
OFF	ON	OFF	ON	60
ON	ON	OFF	ON	56
OFF	OFF	ON	ON	52
ON	OFF	ON	ON	48
OFF	ON	ON	ON	44
ON	ON	ON	ON	40

\* Switches are not required in copilot mode and are inactive

\*\* Easily influence each other

\*\*\* DIP 4 is accepted during the parameterization

### Master-Slave Mode:

If you use two SST2 controllers, you have the option of one of the two control boards (the so-called master) transferring the setpoints to another control board (the slave). To do this, however, both controls must have been parameterized separately, as described above.

In the so-called master-slave mode, the slave will then try to align the pod in the same way as the master. You control the master and the slave together using a joystick.

Such a mode can be useful if you do not have to maneuver the model exactly or if you only want to drive the model using a joystick. You can then use the currently free joystick for other functions during this time.

This mode has one drawback that must be taken into account before using it:

The master sends a lot of data to the slave via an additional connection cable. Normally this is not a problem and the data is also safely received by the slave. Due to the transmission path, however, external disturbances can lead to data being incorrectly transmitted and the model not reacting as it should. Therefore, please only use the master-slave mode if you are sure that damage of any kind can be excluded through this operation.

Do not switch to master-slave mode until the master and slave are connected to the data transmission cable and both work independently of one another for at least 5 seconds.

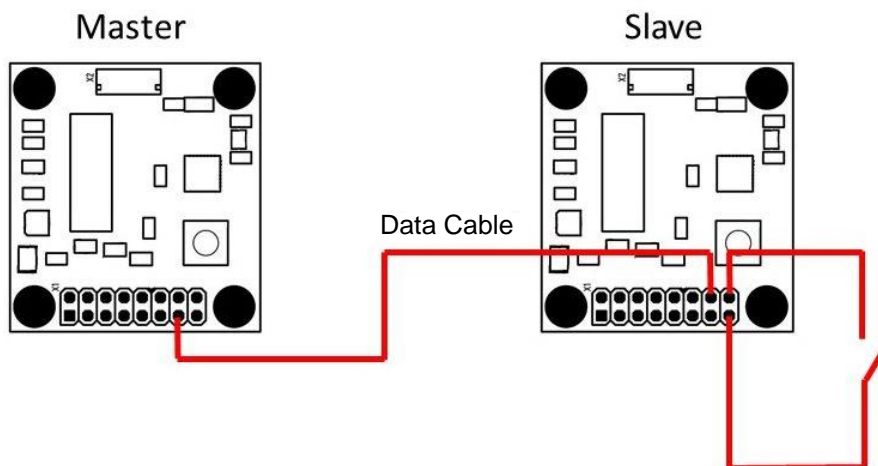
If the data transmission fails in the master-slave mode, the slave will not change its last received values - **the failsafe function is switched off in this mode**. It can therefore happen that your model continues to drive with full drive power.

Therefore, only use the master-slave mode if you are sure that damage of any kind can be ruled out by this operation!

A cable must be established from the master (X1 / 7) to the slave (X1 / 15) for data transmission. The master-slave mode is switched on via the connection (X1 / 16) with a cable that must be connected to ground (-). You can switch on permanent slave operation via DIP 9.

If the slave rotates in the opposite direction to the master, swap the two channels A and B of the slave and then parameterize the slave again. Then both pods run synchronously.

When the switch is closed, the slave controller goes into slave mode. Of course, you can also replace the switch with a relay or something similar and then switch it remotely.



### Resetting the saved values to the factory setting:

To reset the parameters completely to the factory settings, hold down the button for approx. 5 seconds when switching on. Then the LED starts to flash. This is the sign that all parameters have been reset to the factory settings.

The next time you switch it on, you will find that your SST2 behaves like "new".

### Errors and possible causes:

Parameterization aborts	Presumably the impulses of the remote control were not recognized or have no standard values. Please test each channel once with a servo connected directly to the receiver.
LED flashes irregularly	The magnet is too far away from the sensor.
After parameterization, the pod rotates in the wrong direction	The direction of travel was selected wrong during parameterization (step 3). If necessary, move the joystick to the other side during parameterization alignment.
The pod is turning too slowly in one direction	It is likely that you did not precisely regulate the rotary movement of the servo in step 6 - the servo must not hum when it is at a standstill or try to adopt a different position.
In copilot mode, the reset angle changes in the neutral range	The further the control lever goes in the direction of the neutral range, shifts of the joystick within the setting change the target angle. A more precise alignment of the CP to the center can significantly reduce the systemic problem.

### Firmware Update:

We are constantly working on the further development of all products. As a result, small adjustments to the software may be made over time, e.g. to integrate new functions or to make operation even more secure.

Basically, of course, we deliver our products with the latest software version.

If your controller still contains an older software version, you can of course send it to us for an update. You can find more information about an available update at [www.imth.de](http://www.imth.de) or contact us at [service@imth.de](mailto:service@imth.de) or +49 (40) 67 38 05 27.

IMT Innovative Modell Technik Hamburg  
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### Environment:



The symbol on the product indicates that this product must not be disposed of with normal household waste. It must be taken to a collection point for recycling electrical and electronic devices. The materials are recyclable according to their labeling. By reusing, recycling or other forms of recycling old devices, you are making an important contribution to environmental protection. Please inquire at the municipalities, the municipal administration etc. about a competent disposal point.











## SST2 by Joystick

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
LED	off ----- -----	fast flashing ----- -----	slowly flashing ----- -----	fast flashing ----- -----	on ----- -----	slowly flashing ----- -----	fast flashing ----- -----	slowly flashing ----- -----
Press Button								
Pod	—	—	—	—	—	—	—	—
Pro- pulsion	—	—	—	—	—	—	—	—
length of time	> 3 sec.	until you press the button	until you press the button	until you press the button	(mostly < 10 sec.)	until you press the button	until you press the button	until you press the button
what to do	press the button until the LED starts to flash	let the joystick in the center- position	move the joystick into forward motion	move the joystick to the right (left) position *	go to all mechanical end stops	automatic step - move the lever in the center position	bring the pod to standstill - move to left or right position *	bring the prop- ulsion to standstill - move to left or right position

\* see instruction manuel

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## SST2 by Copilot

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
LED	off ----- -----	fast flashing ----- -----	slowly flashing ----- -----	fast flashing ----- -----	on ----- -----	slowly flashing ----- -----	fast flashing ----- -----	slowly flashing ----- -----
Press Button								
Pod	—	—	—	—	—	—	—	—
Pro- pulsion	—	—	—	—	—	—	—	—
length of time	> 3 sec.	until you press the button	until you press the button	until you press the button	(mostly < 10 sec.)	until you press the button	until you press the button	until you press the button
what to do	press the button until the LED starts to flash	rotating the Copilot through 360 degrees - lever in center position	move the Copilot to the right (left) position *	go to all mechanical end stops	automatic step - move the lever in the center position	bring the pod to standstill - move to left or right position *	bring the pod into forward position - move around	bring the prop- ulsion to standstill - move to left or right position

\* see instruction manual

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## Konformitätserklärung

Der Unterzeichner, der den nachstehenden Hersteller vertritt,

**IMT Innovative Modell Technik Hamburg**  
Pezolddamm 127a in 22175 Hamburg

erklärt hiermit, dass das Produkt

**Schottelsteuerung SST2**

in Übereinstimmung mit dem nachstehenden EN-Standard

**DIN EN 55014-1**

ist.

Hamburg, 08.03.2021

  
Jürgen Hartwig, Inhaber