

# T18MZ SOFTWARE UPDATE CHANGES (Editor Version: 2.1 and 2.2 Encoder version: 2.0)

This software updates or alters the functions and features noted below. The instructions and information that follow are meant as a supplement to the original instruction manual that accompanied the T18MZ transmitter. Please refer to the original instruction manual where applicable, but replace the steps indicated below with these instructions. Please note that the software update will be finalized the first time that the T18MZ is powered up, after the software has been applied. As such, it may require a few moments before the Start screen appears.

Please check to ensure that the update has been installed.

- 1) Select the System Menu.
- 2) Touch the [Information] button.

3) Confirm that the information in the display indicates the Editor and Encoder version numbers as noted above.

#### Home 2 screen telemetry display function

The Home 2 screen telemetry display function has been refined to display more information. In addition to the current measured value, the display also indicates the minimum and maximum values.

#### [Setting method]

- ① Touch the [Home 2] button in the Home screen to open the [Home 2] screen.
- 2 Select the desired sensor unit, and open the details display screen.
- ③ Touch the [Select] button on the [Home 2] screen. The Home 2 setting screen appears.

Bat	<hor< th=""><th>ne 2&gt; Display ON</th><th>Slot 0</th><th>Sensor Type Receiver</th><th>Value Type Battery</th><th>Close</th></hor<>	ne 2> Display ON	Slot 0	Sensor Type Receiver	Value Type Battery	Close
Ext	2	ON	1	Temperature		]
	3	ON	2	RPM		]
	imer& T&THR	ON	Sp	beech Interval 05	Sec.	

- Alternatively, the detail display screen may be accessed as follows: [Linkage Menu] → [Telemetry] → selected sensor → Home 2 [Select]
- ④ It is possible to display up to three types of telemetry data on the Home 2 screen.
- [Display]: The value indicated (on/off) determines whether or not the sensor data will be displayed in the Home 2 screen.
- [Slot]: Sets the slot number of the sensor unit to be displayed.
- [Sensor type]: Displays the selected sensor type.
- [Value Type]: Indicates the data to be displayed from among the measured data of each sensor unit.
- [Timer and PIT and THR]: When set to [ON], displays the timer (when the model type is helicopter, pitch/throttle position) on the Home 2 screen. When set to [OFF] displays the telemetry data maximum and minimum values and the voice button on the Home 2 screen.

Home 2 screen when [OFF]

Home 2 Model1		Condition 1	<b>1</b> 1 65%
Receiver(Battery)	Receiver(Battery)		Speech
8.4V		8.4 / 8.4V	INH
Receiver(Ext.Battery)		Min/Max	Speech
3.6V		3.6 / 3.6V	INH
1. Temperature		Min/Max	Speech
<b>25</b> °C		25 / 25℃	INH

# Audible telemetry information

In addition to the on-screen telemetry data information, the T18MZ now has the ability to audibly indicate the aircraft status.

- The voice is in English.
- The audible indicator is capable of noting the data from any (or all) of the three sensors selected.
- When using the voice read function set the [Timer and PIT and THR] setting of the Home 2 screen to the [OFF] mode.
- It is possible to adjust how often the data is conveyed to the modeler. The frequency ranges from 0-30 seconds. If set at 0, updates will occur continuously. If set to 30, updates will occur every 30 seconds.
- The T18MZ offers the ability to adjust the volume of the audible telemetry data. The volume for the telemetry data is combined with the Error/Warning volume. To access this adjustment: [System Menu] -->[Sound Volume] -->Error/Warning.
- It is also possible to turn the audible information on/off by the use of an arbitrary switch and/or switch position.
- When only one kind of data is set to read ON, the data is repeatedly read in the following order:

[Sensor Type, Data, Units] [Data] [Data] [Data] [Data]

(Example) Reading of receiver voltage

"Battery eight point one volt, eight point one, eight point one, eight point

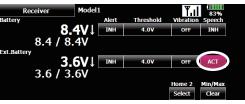
one, eight point one, Battery..." is repeated. If you have activated the audible indicators for multiple sensors, the T18MZ will cycle through the indicators at the selected timing intervals accordingly.

When the voice read function is turned on for telemetry data with alarm set when an alarm is activated; a voice alarm is given in addition to the alarm sound when the alarm was activated.

["Warning"] [Sensor Type, Data, Units]

# [Setting method]

- ① In the Linkage menu, select the telemetry screen to make adjustments to the sensors. Touch the button associated with the sensor for which you would like to adjust.
- ② If both the alarm (alert) and the speech (audible information) indications are active, and the alarm threshold is exceeded, the T18MZ will sound a warning accordingly.



- ③ Touch the [Select] button of [Home 2]. The Home 2 setting screen appears. Set [Timer and PIT and THR] to [OFF]
- ④ Select the telemetry data that is to be read by voice.

Bat	<hor< th=""><th>ne 2&gt; Display</th><th>Slot</th><th>Sensor Type</th><th>Value Type</th><th>Close</th></hor<>	ne 2> Display	Slot	Sensor Type	Value Type	Close
	1	ON	0	Receiver	Battery	
Ext	2	ON	0	Receiver	Ext.Battery	Δ
	3	ON	1	Temperature		▼
	imer& T&THR	OFF	S	peech Interval 05	Sec.	<u></u>

(5) As mentioned previously, it is possible to adjust the time, or interval, between the audible updates from the sensor(s). To do so, press the speech Interval button then use the rate adjustment buttons to select the desired interval. The interval ranges from 0 (continual updates) to 30 (information noted every 30 seconds). Press [Close] when done.

Bat	<ho< td=""><td>ome 2&gt; Display</td><td>Slot</td><td>Sensor Type</td><td>Value Type</td><td>Close</td></ho<>	ome 2> Display	Slot	Sensor Type	Value Type	Close
	1	ON	0	Receiver	Battery	
Ext	2	ON	0	Receiver	Ext.Battery	Δ
	3	ON	1	Temperature		▼
	Timer8 PIT&TH		S	peech Interval	ISec.	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>

6 Press the [Home 2].

Home 2 Model1		Condition 1	<b>1</b>
Receiver(Battery)		Min/Max	Speech Switch
8	.4V	8.3 / 8.4V	OFFOFF
Receiver(Ext.Battery	/)	Min/Max	Speech Switch
3	.6V	3.6 / 3.6V	OFF OFF
1. Temperature		Min/Max	Speech Switch
2	3°C	23 / 23°C	OFF OFF

⑦ Speech ON/OFF can be switched by switch. When the [Switch] button is touched the switch setting screen opens. When the set switch is operated voice reading starts. When multiple switches were set to ON simultaneously, setting of the top line has priority.

# Variometer melody function

When using a variometer, the T18MZ offers the option of incorporating a tonal indication of the aircraft's rate of ascent or descent.

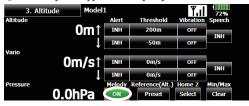
- To ensure that the pilot is aware as to the model's status, the T18MZ incorporates a different melody for ascent and descent. Additionally, depending upon the rate of climb or descent, the tones vary to indicate whether or not the airplane is climbing or descending at a rapid rate.
- The melody function and the voice read function can be used simultaneously. When the voice read function was turned on data is read as follows:

Climbing: [ "Climb", climb speed, "m/s" ] Sinking: [ "Sink", sink speed, "m/s" ]

#### [Setting method]

1 Open the altimeter details setting screen from the [Telemetry] screen in the Linkage Menu.

# ② Set the [Melody] button to [ON].

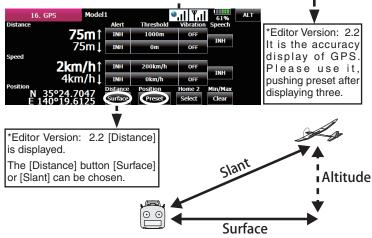


#### **GPS display function** \*The change part of V2.2 is only this.

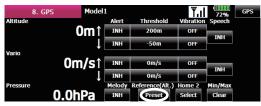
This function allows some GPS units to be compatible with Futaba's GPS unit (SBS-01G).

#### [Setting method]

- Register the GPS unit at the transmitter from the [Sensor] setting screen in the Linkage Menu.
- ② The [Telemetry] screen in the Linkage Menu opens. The GPS unit information is displayed.
- GPS (distance) and GPS (speed) setting screen
- This screen displays the distance, speed, and position. When the [Preset] button of [Position] is touched, the distance measurement reference position is initialized.



GPS (altitude) and GPS (variometer) setting screen This screen displays the altitude, variometer, and air pressure. When [Preset] of [Reference Point (Altitude)] is touched, the altitude measurement reference altitude is initialized.



# Telemetry display units setting

The telemetry display units can now be set to metric system or Imperial system.

# [Setting method]

- Open the telemetry display units setting screen by touching [Unit System] in the System Menu.
- Select [Metric] or [Yard-pound].

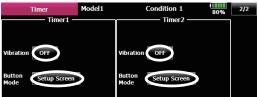
# **Timer function**

This update to the T18MZ incorporates vibration alerts that notify the modeler when the programmed time limits have been reached.

This function also allows the timers to be controlled via the home screen.

# [Setting method]

1 Press the 1/2 button to access the second page of the [Timer] menu.



- (2) The vibration pattern when the timer reaches the set time can be selected by touching the [Vibration] button. When set to [OFF], the vibe function is not performed.
- ③ Operation when the timer button on the home screen was touched can be changed by touching the [Button Mode] button.
- [Setup screen]: Timer is controlled via the setup screen. [start/stop]: Timer start/stop

A timer reset button has been added to the home screen.

00:00.0®TIBMZ	Futaba Corporation (IIIIII) コンディション 1 82%
System Linkage	AIRPLANE
18ch Rx 0.0V +0 <th< th=""><th>+0 Model1</th></th<>	+0 Model1
45:18:42 System Menu   Linkage Menu   Model I	Menu Return   12/02/13 11:35:20

# Touch panel lock function

To prevent any unwanted or undesired transmitter input, this update incorporates touch panel locking functions.

The Start Up Lock function, if active, will automatically lock when the power is turned on.

The Automatic Lock function will lock the transmitter when the backlight timing has elapsed.

#### [Setting method]

① Open the screen setting screen by touching the [Display] button in the System Menu.

Display Model1	82%		
Auto power off time	Backlight		
- Never +			
Backlight decrease	Backlight decrease time		
	- Never +		
Back color	Touch screen		
	Start-up lock Automatic lock		

② To activate the start up lock function, press the INH button below Start -up lock.

- [ON] : Start-up lock on
- [INH] : Start-up lock inhibited

③ To activate the automatic lock function, press the INH button below the Automatic lock.

[ON] : Automatic lock on

[INH] : Automatic lock inhibited

# S.BUS servo setting screen

It is now possible to check servo operation at the S.BUS servo setting screen.

#### [Setting method]

- ① Open the S.BUS servo setting screen by touching the [S.BUS Servo] button in the System Menu.
- ② Connect an S.BUS servo to the S.BUS setting connector on the back of the transmitter. Connect the battery to the sensor unit using a 2-way cord, etc.

\*Please note, this function is not applicable to the S9070SB servo.

- ③ Read the servo data by touching the [Read] button.
- ④ An operation check signal is output to the servo from the transmitter. When the transmitter switch or stick that controls the channel allocated to the S.BUS servo is operated, the servo will move accordingly.

#### Data reset screen

This update allows the user to separately reset the information for user menus and telemetry data, if desired. For example, it is now possible to reset the telemetry information without impacting the other model programming.

# [Setting method]

- ① Open the data reset screen by touching the [Data Reset] button in the Linkage Menu.
- ② To reset the user menu setting, touch the [User Menu] button. To reset the telemetry settings, touch the [Telemetry] button.



#### Camera function shutter switch

This update allows the user to assign a switch/position to control the camera function of the T18MZ.

#### [Setting method]

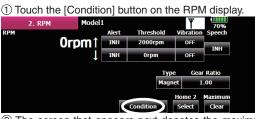
- ① Open the camera screen by touching the [Camera] button in the System Menu.
- ② To determine the switch to be used for the camera shutter, press the switch select button located below the shutter button. Next, determine the switch and the activation direction.



# Maximum engine revolution display by each condition

It is now possible to display maximum engine revolutions by each condition.

#### [Setting method]



② The screen that appears next denotes the maximum RPM achieved for each of the flight conditions programmed into the transmitter.

Normal	Idle up-3	Condition 7
Orpm	Orpm	Orpm
Idle up-1	Hold	Condition 8
Orpm	Orpm	Orpm
Idle up-2 Orpm	Condition 6 Orpm	Close

# Next explanation is required when using two or more the same kind of sensors.

**[Example 1** Altitude sensor × 1, Temperature sensor × 1] A setup is unnecessary.

Two sensors are packed by HUB and it connects with S.BUS2 of a receiver.

# [Example 2 Altitude sensor × 1, Temperature sensor × 2]

One altitude sensor and one temperature sensor, it is unnecessary to set up.

Sensor registration is needed about the 2nd temperature sensors.

< Assignable slot >

\*Altitude sensors, GPS sensors and other data sensor units may use multiple slots.

\*The sensor which uses two or more slots has restriction in a start slot.

Sensor	The required number of slots	The number which can be used as a start slot	Selling area
TEMP (SBS-01T)	1 slot	1~31	
RPM (SBS01RM,SBS- 01RO)	1 slot	1~31	Global
Altitude (SBS-01A)	3 slots	1,2,3,4,5, 8,9,10,11,12,13, 16,17,18,19,20,21, 24,25,26,27,28,29	Giobai
GPS (SBS-01G)	8 slots	8,16,24	
TEMP125-F1713	1 slot	1~31	
VARIO-F1712	2 slots	1,2,3,4,5,6, 8,9,10,11,12,13,14, 16,17,18,19,20,21,22, 24,25,26,27,28,29,30	Europe
VARIO-F1672	2 slots	1,2,3,4,5,6, 8,9,10,11,12,13,14, 16,17,18,19,20,21,22, 24,25,26,27,28,29,30	
GPS-F1675	8 slots	8,16,24	

# Sensor unit ID setting

There are two methodologies that may be used to register the identification of the sensors used with the T18MZ. This may be done manually within the transmitter's program. Alternatively, registration of the sensor may be accomplished through the sensor unit registration function which follows.

#### [Setting method]

① Open the sensor unit setting screen by touching the [Sensor] button in the Linkage Menu. The name and ID of the sensor assigned to each slot is displayed.

	Sensor	М	odeli	l			80%	1/2
Slot	Sensor	ID	Slot	Sensor	ID	Slot	Sensor	ID
1	Altitude	200	7	Inhibit		13	Inhibit	
2	Altitude		8	Inhibit		14	Inhibit	
3	Altitude		9	Inhibit		15	Inhibit	
4	Temperature	300	10	Inhibit		16	Inhibit	
5	RPM	100	11	Inhibit		17	Inhibit	
6	Inhibit		12	Inhibit		18	Inhibit	

② Touch the [ID] button of the desired slot.

(3) To manually enter, or change the identification of the desired sensor(s), input the identification using the touchpad. When completed, press OK.

Sloi 1	Please input sensor ID. (Integer value between 0 and 65535)	CANCEL
2	$\mathbf{O}$	ок
3 4	U	
5	0 1 2 3 4 5 6 7 8 9	BS
6		

# Sensor unit registration

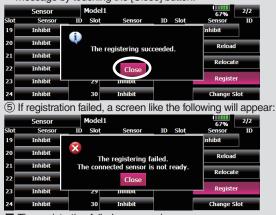
The sensor unit of each transmitter slot is registered and the slot number of each sensor unit is changed automatically.

#### [Setting method]

- ① Insert a two-way cord, such as a dual servo extension (FUTM4135), into the S.BUS setting connection in the rear of the T18MZ. Connect a battery to one port of the two-way cord and then insert the sensor to be registered into the other.
- ② Open the sensor unit setting screen by touching the [Sensor] button in the Linkage Menu.
- ③ Touch the 1/2 to enter the second page of the sensor screen. Then, touch the [Register] button.

	-	0 1				
	Sensor	Model1			67% 2/2	
Slot	Sensor	ID Slot	Sensor	ID Slot	Sensor ID	l
19	Inhibit	25	Inhibit	31	Inhibit	
20	Inhibit	26	Inhibit		Reload	
21	Inhibit	27	Inhibit		Relocate	
22	Inhibit	28	Inhibit		Relocate	
23	Inhibit	29	Inhibit		Register	
24	Inhibit	30	Inhibit		Change Slot	

④ If registration is successful, the following screen will appear. Close the message by touching the [Close] button.



The registration failed message is:

#### [There are not enough available slots]

Some sensors require multiple continuos slots for their operation. For example, slots 3-6. If continuous slots are not available, these sensors will not be registered accordingly.

If there are unused slots, but they are not continous, please use the sensor unit reallocation feature, which follows, to change the slots of the existing sensors to accommodate the sensors which require continuous slots.

-Altimeter: 3 slots required

-GPS: 8 slots required

#### [The connected sensor is not ready]

No response from sensor unit. Check the connections.

#### Sensor unit reallocation \*Normally this function does not have to be used

This function is used to reallocate slots to ensure that all sensors are registered and operate as desired.

As noted above, some sensors require adjoining, or continuous, slots in order to register properly. Examples of such sensors include but are not limited to, altimeters and GPS units.

#### [Setting method]

- ① To properly reallocate the slots, it is necessary to connect all registered units to the S.BUS connection in the rear of the transmitter. Additionally, it is necessary to connect a battery to these sensor units via a two-way cord such as the dual aileron extension mentioned above.
- 2 Open the sensor unit setting screen by touching the [Sensor] button in the Linkage Menu.
- ③ Touch the 1/2 to enter the second page of the setting screen. Then, touch the [Relocate] button.



④ If reallocation was successful, a screen like the following will appear:



If all the registered sensors are not connected, the following message is displayed and reallocation is not performed. Set slots allocated to unused sensors to [Inhibit] on the sensor unit setting screen.



# Sensor unit setting reread

This function rereads the slot number setting of the connected sensor units. This is a convenient way to allow another T18MZ user to pilot your aircraft.

#### [Setting method]

- ① Connect all registered units to the S.BUS connection in the rear of the transmitter. Additionally, it is necessary to connect a battery to these sensor units via a two-way cord such as the dual aileron extension mentioned above.
- 2 Open the sensor unit setting screen by touching the [Sensor] button in the Linkage Menu.
- ③ Touch the 1/2 to enter the second page of the setting screen. Then, touch the [Reread] button.

	Sensor		Mode	1			76% 2/2
Slo	Sensor	IC	) Slot	Sensor	ID	Slot	Sensor ID
19	Inhibit		25	Inhibit		31	Inhibit
20	Inhibit		26	Inhibit			Reload
21	Inhibit		27	Inhibit			Relocate
22	Inhibit		28	Inhibit			Relocate
23	Inhibit		29	Inhibit			Register
24	Inhibit		30	Inhibit			Change Slot

④ If reread was successful, a screen like the following is displayed:

	Sensor	Model1				82%	2/2
Slot	Sensor	ID Slot	Sensor	ID S	ilot	Sensor	ID
19	Inhibit	•				Inhibit	
20	Inhibit	The relo:	ading the con	figuratio	'n	Reload	
21	Inhibit		ensors succe				
22	Inhibit		Classe			Relocate	•
<u> </u>			Close				_
23	Inhibit	29	Innibit		L	Register	
24	Inhibit	30	Inhibit			Change Sl	ot

# Sensor name function

As the name suggests, this feature allows you to rename the sensors accordingly. This is very useful when a model has multiple sensors of the same variety (e.g., temperature).

#### [Setting method]

1 Touch the [Sensor Name] button in the Linkage Menu to open the setting screen. A list of sensor units is displayed.

		Please note,	only sensor	units assigned	a slot are	displaye
--	--	--------------	-------------	----------------	------------	----------

Sensor Name	Model1		85%
	Please sele	ct a sensor.	
Receiver	Temperature		
RPM		Altitude	

2 Select the type of sensor unit for which the name is to be changed. A name change screen appears. When multiple sensor units of the same type are registered, the [Slot] button is displayed. Select the slot to which the sensor unit whose name is to be changed.

<sensor name=""></sensor>		
Slot 1		Close
Current —		Δ
Temperature	Rename	
Defauit		V
Temperature	Reset	
remperature		

③ Touch the [Rename] button. A character input screen appears. Input the new name. (Up to 16 characters)

Esc 1 2 3 4 5 6 7 8 9 0 - = BS Caps Lock q w e r t y u i o p [ ] \													
Caps Lock	q	w	е	r	t	у	u	i.	0	р	L	]	λ
Shift	а	s	d	f	g	h	j	k	1	;	4	ret	urn
	z	х	С	۷	b	n	m	,		1	del	←	$\rightarrow$
Enter and Exit : [Return] Key, Cancel and Exit : [ESC] Key													

se input sensor name. ( $\leq$  16 Characters )

Temperature

④ If so desired, the sensor name can be returned to the default by pressing the [Reset] button.

	<sensor name=""></sensor>				
	Slot 1				Close
		- Current -		·	
	Temperature			Rename	
_		- Default -			
	Temperature	bondunt	Sure ?	Reset	
ļ			Yes No		

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