Infrared Thermometer with LinTech* Bluetooth® module

This infrared thermometer allows wireless data transfer with the aid of Bluetooth technology. System requirements:

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- Windows®-compatible computer (operating system NT, 2000, XP or higher)
- Bluetooth system fully installed on the computer (not included)
- BlueTool configuration software (included)

After the Bluetooth system has been installed as required on the computer, the thermometer can be operated in two different modes:

1. Passive (Slave) Mode

In this mode, the thermometer is constantly activated and is searched for by the computer. This is advantageous when continuous temperature monitoring should take place.

Attention: As a result of continuous operation, the thermometer's batteries are discharged much faster then during intermittent use.

Proceed as follows:

1 Switch on the thermometer with the measurement button.

2. Press the Setup button at the side. The words "Bluetooth on-up, off-down" appear on the display. Activate Bluetooth with the button below the display. A

lightning symbol in the display 20:43:09 şΩ indicates that the Bluetooth MAX

module is ready - the lock

symbol signals continuous operation.

Note: If the automatic battery test finds that the battery is too weak here (display: "LowBat - no BT"), the Bluetooth application is not started.

and allow it to search for and connect the Bluetooth devices. (Please refer to the relevant operating instructions for how this happens in the case of your Bluetooth application)

IR Therm 4C001 Not Connected

4. The thermometer is recognized as "IR Therm ". The Bluetooth-PIN-Code

3. Now start the Bluetooth software on your computer

nizeu as in menn	
requested PIN is "1234" when	
the unit is delivered. With the	R Therm 400011 Personal Computer
right mouse button click on the	Open
	Connect COM-COM

right mouse button, click on the	Open
Ight mouse button, click on the	Connect COM-CONFIG
symbol for the device and select	Discover Available Services
Symbol for the device and select	Unpair Device
"Properties" in the submenu	Paste
	Properties
Make a note of the ComPort's	
number. The green LED on the	COM Port: COM6 V

left above the thermometer's

display nection.

5. If you so, now application software for the

thermometer. Before you can exchange data between the thermometer and computer, you must set in this software the number of the ComPort found under Point 4.

6. Press the Setup button and then the Down button below the display to end the Bluetooth connection. If data is being transferred at this time. vou cannot deactivate the Bluetooth module.

Important note: The above refers to the thermometer as delivered. It can be programmed on a user-defined basis with the aid of the "BlueTool" software. For details, see the section "User-defined configuration".

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2. Active (Master) Mode

After switching on, the thermometer automatically establishes contact with the computer, the address of which has been programmed for the thermometer. This is done by the supplied BlueTool software (for details, see the section "User-defined confiduration"). The active mode is particularly suitable for intermittent operation of the infrared thermometer. The thermometer's power consumption is significantly less than in passive mode.

Making contact with the computer and data transfer

Open the thermometer's handle and switch the DIL switch 9 to ON (Master). Switch on the thermometer

with the measurement button.



In the display, a framed lightning symbol points to the Bluetooth module in active mode and the

thermometer starts to search for the associated computer. When the connection has been made. a green LED lights up on the left above the display and the color





of the Bluetooth symbol changes on the connected computer. You can now transfer data to the thermometer's user software

The thermometer automatically switches itself off after approximately 7 seconds if the measurement button is not pressed and if there is no data transfer.

3. User-defined Configuration

Preparing the thermometer

Open the device's handle and set the DIL switch 5 to ON (Set Default). "Default

?" appears in the display. At this point in time, it is essential for the DIL switch 9 to be set to OFF (Slave). Now start the Bluetooth module as described under "Passive mode".

Programming the thermometer with the aid of Blue-Tool

Start the Bluetooth software on your computer and start

the device search. Make the connection (signaled by the green LED on the left above the display and the color of the Bluetooth symbol changes on the computer) by double clicking on the symbol for the infrared thermometer . The properties can be displayed by



* Please refer to the LinTech specifications overview for the exact specification of the Bluetooth module used.

°C

signals the existing con-
have not already done
v start the relevant
tion software for the

right-clicking on the service under Serial Ports. Note the number of the

connected ComPort.

application, enter the

ComPort number just

window opens.

LinTech BlueTool 1.4 × Now start the BlueTool found and then click on Connect. A configuration

Sprache / Language	
englisch / english	•
Connect to COM-Port	5
Connect	Cancel

LinTech BlueTool				_ 🗆 🗙
Gerätename:	IB Therm 40	20011		
Bluetooth Adresse:	00-a0-96-05	-73-ec		
Firmware:	4.00P_18a_	128_MX4 SPP_IND Oct -	4 2004 ©LinTech GmbH	
(d.		dr	dr
Device- setti	ngs	UART - settings	Master- settings	Lowpower- settings
Befresh	1	Save settings	Beset settings	Evit program
		ouve solurigs		

It shows various details of the device and several fields for calling up additional setting possibilities. First open "Device settings".

IR Therm 4C0011	Bluetooth-address
Firmwareversion	
4.00P_18a_128_MX4 SPP_IND Oct 4 2004 @LinTech	GmbH
Use authentification / encryption	Pin 1234
Class of Device Unclassified computer	Com hardware mode
AT-command response	
user friendly standard	Use connection-indicator

Here you can give the thermometer a name and change the PIN.

Attention: Be sure to make a note of this PIN, because you will be asked to provide it for encrypted transmissions and connections with the aid of the BlueTool software. SPP must be selected as the ComHardware mode and the connection indicator must be deactivated. Confirm the settings with OK. Now open "Master settings".



Here, place a tick in front of both "Master - automatic connection attempt" and "Master attempts to establish connection when starting". The address of the current computer is in the Remote BTA field

Note: You must enter the Bluetooth address of the other computer here only if you want to address another computer (e.g. PDA or notebook) with the thermometer. The same applies to the PIN in this window. It is then binding for the connection with the other computer. It is therefore essential to note it.

Click on OK. In the main window, first click on "Save settings" - the data is transferred to the thermometer. With "Update", you can call up the current settings to check them.

Then end the program. Now switch the DIL switch 5 in the thermometer's handle back to OFF. Press the DOWN button under the display. Now wait until the device switches itself off automatically (approximately 7 seconds).

FCC NOTICE

This device complies with Part 15 of the FCC Rules. Operation issubject to the following two conditions: (1) this device may not cause harmful interference, and

(2) this device must accept any interference received. including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING: Modifications not expressly approved by this company could void the user's authority to operate the equipment.

FCC ID: STG-DFQMX4.

IMPORTANT NOTE:

DIP switch number 8 is used for AutoOff function. This is different to the reqular unit's manual. There the Dip switch number 8 controls the function of the portable printer (this is not valid for Bluetooth units).



We recommend having the AutoOff switch in

the ON position when using the Active (Master) Mode.