

Mobile Module – Continuous, TIR, & Absolute Read Modes

APPLICABLE DEVICES

MINI MOBILE MODULE | COMMAND MOBILE MODULE | RS-232 V2 MOBILE MODULE

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1. Entering Mobile Module Setup in Extended Setup Program

- 1. Open MobileCollect Extended Setup software and find the base.
- 2. Click on the Mobile Module Setup tab



3. Follow the procedure shown in the window to put the Mobile Module in "Setup Mode". Once in setup mode, press the setup button again.





- 4. The "Configure MobileCollect Mobile Module" Window will appear.
- 5. Press the Read Mode Button to open the Read Mode Window. Proceed to Section 3.

Module ID Module label Read mode Battery voltage Radio type The Mobile Modu	= 070042 = 070042 = Single = 2.70/2.93 volts = RM2.4	Serial number = MC-M3R-07 Model number = MC-XMM-R2 Firmware version = 5.38 Firmware date = 7-1-24 1 Network S/N = 07230307-0 Gage type = Mitutoyo ou e unit connected to this setup program	23030706004210 4:49:51 66004210 tput m.	Target Base PAN ID Base Networ Module RF C Base RF Cha	ID = 183804 = 3eba k S/N = 1825040 hannel = 21 nnel = 21	19-10380420
ser definable Mini I	Mobile Module parameters	:	Mini Mobile Module Ba	se pairing:		
Module label	070042 (must	t contain from 1 to 8 characters)	Target Base ID	183804	PAN ID	3eba
Description	Mini Mobile Module		Base Network S/N	18250409-10380420	RF Chan	nel 21
Read mode	Single Rea	d with Button Press	O Do not change o	urrent Mobile Module pairin	ng	
RF channel	Channel	21 @ 2.455 GHz	O Remove the Mol	pile Module pairing	-	
Gage output	Gage output t	type = Mitutoyo output	 Pair with Base u Pair with another 	nit connected to this setup p r Base unit	orogram Select Base Unit	
structions:						
he Mobile Module - Press and hold - Press and relea - Once both LED: - When the Mobil	must be in the setup moo the Setup button on the M se the Read button. s start to flash release the le Module is in the setup n	le in order to receive updates from thi lobile Module. Setup button. 10de, both LEDs will flash every 300 n	; dialog. Isec (0.3 seconds).			
You can change the	e Mobile Module paramete	rs even if the Module is not paired with	the current Base.			Send Setup Mobile Mode

2. Entering Mobile Module Setup in Xpress Setup Program

- 1. Open MobileCollect Xpress Setup software and find the base.
- 2. Click on the "Setup MobileCollect" Button

	Clabel measure						
UCP Miss Pass with DM2.4 EVO Partie found on COM11	Global measurement channel setup: Use Global channel						
USB MICroBase with RM2.4-EVO Radio found on COMTT							
Find Disconnect Base Info Reset Base & Config Base	Output forma Sample outpu	t: O it: 3.	Meas only 5795{CR}	O Module IC) + Meas 🔿	Module Label + Meas	
ase setup:	Module type:		Pair with U-W	/ave Transmitte	r		Module Type Help
Baud rate: Automatic More Info	Pair						
End-of-packet char: • Carriage return Tab None							
Field separater: O Comma O Tab O Carriage Return	-Individual mea Vse indivi	suremen dual char	t channels seti inels	up:			
RF Channel: 21 @ 2.455 GHz RF Channel	Output forma	t: 🔘	Meas only	◯ Mod	ıle ID + Meas	O Module Label + Meas	O Channel + Meas
MicroBase Output Format: 🔵 Serial 🛛 🧿 Wedge		0	GagePort Prin	iter 🔿 Mitul	oyo MIG	Mitutoyo MUX10	O Meas + Channel
		0	U-Wave	⊖ Modi	ıle ID + Meas +	Channel	
lobile Module setup:	Sample output: 3.5795{CR}						
To setup a MicroRidge MobileCollect Mobile Module or a Mitutoyo U-Wave Transmitter, press 2 Setup MobileCollect	Module type: Pair with U-Wave Transmitter					Module Type Help	
instructions.	Gage Channel	Pair	Module Type	Module ID	Module Label	Pairing Inform	ation
	1						
ommunications test:							
ommunications test:	2	0					
ommunications test: Enable communications test	2 3 4						
ommunications test: Enable communications test	2 3 4 5						
ommunications test: Denable communications test	2 3 4 5 6						
ommunications test: Denable communications test	2 3 4 5 6 7						
ommunications test:	2 3 4 5 6 7 8						
ommunications test:	2 3 4 5 6 7 8 9						
ommunications test:Enable communications test	2 3 4 5 6 7 8 9 10						
ommunications test: Enable communications test	2 3 4 5 6 7 8 9 10 11 12						
ommunications test:	2 3 4 5 6 7 8 9 10 11 12						
International Sector Contractions Test	2 3 4 5 6 7 8 9 10 11 12						
>mmunications test: > Enable communications test //cobile Module ID = //cobile Module Ideel =	2 3 4 5 6 7 8 9 10 11 12 Base update st						

3. Follow the procedure shown in the window to put the Mobile Module in "Setup Mode". Once in setup mode, press the setup button again.

Setup MicroRidge MobileCo	ollect Mobile Module	×
Instructions: To setup a Mobile Module, 1. Put the Mobile Module 2. Once both LEDs start 3. When Xpress Setup re Refer to the VideoTraining Mode. Note: CDI Indicators contai	you must send the current Mobile Module parameters to the Xpress Setup program. e into the Setup mode. to flash rapidly, press and release the Setup button. ceives the Mobile Module parameters, the appropriate setup dialog will be displayed. menu item on the main window for a video showing how to put a Mobile Modile into th ning an internal MicroRidge RM2.4 Radio Module do not use this dialog to configure the	ne Setup e indicator.
	Help	Cancel

4. The "Mobile Module Setup" Window will appear.



5. Press the Read Mode Button to open the Read Mode Window. Proceed to Section 3.

Module ID Module label Read mode Battery voltage Battery voltage	= 070042 = 070042 = Single (radio on) = 2.70 volts (radio off) = 2.92 volts	Firmware version Firmware date Gage type RF Channel	= 5.38 = 7-1-24 14:49:51 = Mitutoyo output = 21	Target Base ID = 183804 Connected Base ID = 183804
Note: To maxin off after this dia	nze battery life, the Mobile Module is ti alog is displayed.	umed		Module is paired with connected Base
lser definable p	arameters:			
Module label	070042 (must contain	n from 1 to 8 characters)		
Read mode	Single Read with B	utton Press		
Read mode 5	Single Read with B ule gage output type: e output type selection	utton Press	Gage Help	The gage output type must be specified by the user for the Mini Mobile Modi Several of the gage output formats can be found on gages from different manufacturers.
Read mode 5	Single Read with B ule gage output type: e output type selection Federal Maxum	Utton Press	Gage Help Opto Simplex	The gage output type must be specified by the user for the Mini Mobile Mode Several of the gage output formats can be found on gages from different manufacturers.
Read mode 5	Single Read with B ule gage output type: e output type selection Federal Maxum Insize Caliper	utton Press	Gage Help Opto Simplex Starrett TTL	The gage output type must be specified by the user for the Mini Mobile Mod Several of the gage output formats can be found on gages from different manufacturers. Gages from other manufacturers such as CDI, LMI, etc. also produce gages have a Mitutoyo compatible output. If your gage is manufactured by Mitutor
Read mode 5	Single Read with B ule gage output type: e output type selection Federal Maxum Insize Caliper Insize Indicator	utton Press Mahr Pocket Surf 1 & 10 Mahr Serial Mahr uMaxum II	Gage Help Opto Simplex Starrett TTL TruPosition	The gage output type must be specified by the user for the Mini Mobile Mod Several of the gage output formats can be found on gages from different manufacturers. Gages from other manufacturers such as CDI, LMI, etc. also produce gages I have a Mitutoyo compatible output. If your gage is manufactured by Mituto will have a Mitutoyo output. Mitutoyo uses several different connector styles their gage cables.
Read mode 5	Single Read with B lule gage output type: e output type selection Federal Maxum Insize Caliper Insize Caliper Insize 2-Button Micrometer	Utton Press Mahr Pocket Surf 1 & 10 Mahr Serial Mahr uMaxum II Mahr uMaxum II	Gage Help Opto Simplex Starrett TTL TruPosition	The gage output type must be specified by the user for the Mini Mobile Modi Several of the gage output formats can be found on gages from different manufacturers. Gages from other manufacturers such as CDI, LMI, etc. also produce gages have a Mitutoyo compatible output. If your gage is manufactured by Mituto will have a Mitutoyo output. Mitutoyo uses several different connector styles their gage cables.
Read mode	Single Read with B ule gage output type: e output type selection Federal Maxum Insize Caliper Insize Caliper Insize 2-Button Micrometer Insize 3-Button Micrometer	Mahr Pocket Surf 1 & 10 Mahr Serial Mahr uMaxum II Mitutoyo output Ono Sokki	Gage Help Opto Simplex Starrett TTL TruPosition Remote Read Switch	The gage output type must be specified by the user for the Mini Mobile Modi Several of the gage output formats can be found on gages from different manufacturers. Gages from other manufacturers such as CDI, LMI, etc. also produce gages have a Mitutoyo compatible output. If your gage is manufactured by Mituto will have a Mitutoyo output. Mitutoyo uses several different connector styles their gage cables.
Read mode	Single Read with B wile gage output type: e output type selection Federal Maxum Insize Caliper Insize Indicator Insize Indicator Insize 2-Button Micrometer Mahr Pocket Surf IV	utton Press Mahr Pocket Surf 1 & 10 Mahr Serial Mahr uMaxum II Mitutoyo output Ono Sokki Opto Duplex	Gage Help Opto Simplex Starrett TTL TruPosition Remote Read Switch Transmit Label Field	The gage output type must be specified by the user for the Mini Mobile Mod Several of the gage output formats can be found on gages from different manufacturers. Gages from other manufacturers such as CDI, LMI, etc. also produce gages I have a Mitutoyo compatible output. If your gage is manufactured by Mituto will have a Mitutoyo output. Mitutoyo uses several different connector styles their gage cables.
Read mode	Single Read with B ule gage output type: e output type selection Federal Maxum Insize Caliper Insize Indicator Insize 2-Button Micrometer Insize 3-Button Micrometer Mahr Pocket Surf IV	utton Press Mahr Pocket Surf 1 & 10 Mahr Serial Mahr uMaxum II Mitutoyo output Ono Sokki Opto Duplex	Gage Help Opto Simplex Starrett TTL TruPosition Remote Read Switch Transmit Label Field	The gage output type must be specified by the user for the Mini Mobile Mod Several of the gage output formats can be found on gages from different manufacturers. Gages from other manufacturers such as CDI, LMI, etc. also produce gages I have a Mitutoyo compatible output. If your gage is manufactured by Mitutov will have a Mitutoyo output. Mitutoyo uses several different connector styles their gage cables.
Read mode	Single Read with B ule gage output type: e output type selection Federal Maxum Insize Caliper Insize Caliper Insize Indicator Insize 2-Button Micrometer Mahr Pocket Surf IV	utton Press Mahr Pocket Surf 1 & 10 Mahr Serial Mahr uMaxum II Mitutoyo output Ono Sokki Opto Duplex	Gage Help Opto Simplex Starrett TTL TruPosition Remote Read Switch Transmit Label Field	The gage output type must be specified by the user for the Mini Mobile Mox Several of the gage output formats can be found on gages from different manufacturers. Gages from other manufacturers such as CDI, LMI, etc. also produce gages have a Mitutoyo compatible output. If your gage is manufactured by Mitut will have a Mitutoyo output. Mitutoyo uses several different connector style their gage cables.

3. Continuous and Absolute Read Mode Setup

- 1. Mobile Module Read Mode is set to send a Single Reading with every button press by default.
- 2. To change to a Continuous Read Mode, select the Desired Continuous Read Mode radio button
- 3. To change to absolute value mode, select the Absolute Value radio button

ead Mode Setup								
Read mode:								
Single read with button press								
∫ ⊂ Continuous read: Press read	button to sta	rt. Rel	ease read b	utton to	stop.			
Continuous read: Press & rel	ease read but	tton to	start. Press	& relea	se rea	d buttor	n to sto	p.
 Single read with button press Absolute value is only suppor and Command and V2 Mobile 	and convert ted on Mini M Modules wit	reading 1obile I h 5.36	g to absolute Modules with or later.	e value h versior	is 5.19) or late	ir	
Continuous read mode & TIR:								
Gap between readings			500					
Use gap times from 10 to	10000 msec		500					
O Use gap times from .05 to	o 130.00 min	utes	1.00					
Delay prior to first reading	5	(1	to 30 secon	ds)				
Total read time	15	(1	to 4000 seco	onds)				
Total number of readings	20	(1	to 3000)					
Note: 1,000 msec = 1 second								
Enable TIR When TIR i Data sent Example:	s enabled, da :: Number of 53,1.0235,1	ita is o readin .0310,	nly transmit js, Minimun .0075	ted at thi 1 value, I	e end Maxiu	of the ri m value	ead cyc , Rang	e
			Set Defau	ts	(Ж		Cancel

- 4. When one of the Continuous Read Modes is selected, the lower "Continuous read mode & TIR" section will activate.
- 5. Time between readings can be set from 10 milliseconds to 130 minutes.
- 6. A one-time delay can be added. This is useful to prevent unwanted/erroneous initial data. For example, a delay can allow an operator time to setup the fixture before measurements are recorded.
- 7. Total read time and/or total number of readings can be set to end continuous read mode.
 - a. Note: If both parameters are selected, the continuous readings will stop at whichever parameter is met first.
 - b. Note: If "Press read button to start. Release read button to stop" mode is select, the read button must be held down until the time or number of readings parameter is met.
- 8. TIR Mode is a special mode where the Mobile Module will take continuous readings based on the selected parameters. After continuous readings have ended, the Mobile Module will output the Number of readings taken, Minimum Value, Maximum Value, and Range.

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◯ Single read with button press	5	
○ Continuous read: Press read	button to start. Release read button to stop.	
O Continuous read: Press & re	lease read button to start. Press & release read button to stop.	
 Single read with button press Absolute value is only suppo and Command and V2 Mobile 	and convert reading to absolute value rted on Mini Mobile Modules with versions 5.19 or later e Modules with 5.36 or later.	
Continuous read mode & TIR:		
Gap between readings		
Use gap times from 10 to	500 500 500 500 500 500 500 500 500 500	
Use gap times from .05 t	o 130.00 minutes 1.00	
Delay prior to first reading	5 (1 to 30 seconds)	
Total read time	15 (1 to 4000 seconds)	-
✓ Total number of readings	20 (1 to 3000)	
Note: 1,000 msec = 1 second		
Enable TIR When TIR Data sen Example	is enabled, data is only transmitted at the end of the read cycle. t: Number of readings, Minimum value, Maxium value, Range : 53,1.0235,1.0310,0075	

9. When completed, click OK to close the "Read Mode Setup" Window. Proceed to update the Mobile Module with the new parameters. Note that you may need to put the Mobile Module Back into Setup Mode to send the new parameters.

Module ID Module label Read mode Battery voltage Radio type The Mobile Mod	= 070042 = SALES = Single = 2.63/2.85 volts = RM2.4	Serial number Model number Firmware version Firmware date Network S/N Gage type e unit connected to t	 MC-M3R-07230307 MC-XMM-R2 5.38 7-1-24 14:49:51 07230307-0600421 Mitutoyo output this setup program. 	0	Target Base ID PAN ID Base Network S/N Module RF Channe Base RF Channel	= 183804 = 3eba = 18250409-1 el = 21 = 21	.0380420
er definable Mini	i Mobile Module parameters	:		Mini Mobile Module Ba	se pairing:		
Module label	SALES (mus	contain from 1 to 8	characters)	Target Base ID	183804	PAN ID	3eba
Description	Mini Mobile Module			Base Network S/N	18250409-10380420	RF Channel	21
Read mode	Continuous Read with	Press to Start & Pres	ss to Stop	O Do not change cu	irrent Mobile Module pairing		
RF channel	Channel	21 @ 2.455 GHz		Remove the Mob	ile Module pairing		
Gage output	Gage output	type = Mitutoyo outpo	ut	 Pair with Base ur Pair with another 	Base unit Select	am Base Unit	
structions:							
he Mobile Modul - Press and hole - Press and rele - Once both LEI - When the Mob	le must be in the setup moo d the Setup button on the № ase the Read button. Ds start to flash release the pile Module is in the setup n	le in order to receive lobile Module. Setup button. node, both LEDs will f	updates from this dialog flash every 300 msec (0.:	3 seconds).			
ou can change t he Mini Mobile N	he Mobile Module paramete Aodule will automatically ex	rs even if the Module	is not paired with the cu	rrent Base. tv		9 S	end Setup t Iobile Modu
The Mini Mobile M	1odule will automatically ex	t the setup mode afte	er 15 seconds of no activi	ty.		9	
							Close



Extended Setup

Vini Mobile Moo	dule Setup			×
Module informat Module ID Module label Read mode Battery voltage Battery voltage	ion: = 070042 = SALES = Continuous (radio on) = 2.50 volts (radio off) = 2.85 volts ize battery life, the Mobile Module is tu	Firmware version Firmware date Gage type RF Channel	= 5.38 = 7-1-24 14:49:51 = Mitutoyo output = 21	Target Base ID = 183804 Connected Base ID = 183804
User definable p Module label Read mode	arameters: 070042 (must contain Continuous Read with Press to	from 1 to 8 characters) Start & Press to Stop		
Mini Mobile Mod	ule gage output type: e output type selection Federal Maxum Insize Caliper	Mahr Pocket Surf 1 & 10	Gage Help Opto Simplex Starrett TTL	The gage output type must be specified by the user for the Mini Mobile Module. Several of the gage output formats can be found on gages from different manufacturers. Gages from other manufacturers such as CDI, LMI, etc. also produce gages that have a Mitutoyo compatible output. If your gage is manufactured by Mitutoyo, it
Gage Help	Insize Indicator Insize 2-Button Micrometer Insize 3-Button Micrometer Mahr Pocket Surf IV	Mahr uMaxum II Mitutoyo output Ono Sokki Opto Duplex	 TruPosition Remote Read Switch Transmit Label Field 	will have a Mitutoyo output. Mitutoyo uses several different connector styles for their gage cables.
Instructions & Ba The Mobile Moo You can change You must Close	attery Information: dule must be in the Setup Mode in orc the Mobile Module parameters even e this dialog before you can update a	ler to receive the updates from thi: if the Module is not paired with th different Mobile Module.	s dialog. e current Base.	9 Help 9 Update Module Close

Xpress Setup