

Inverter Compatibility Matrix for the ME-RTR with Version 3.1

The ME-RTR has many advanced settings, and is designed to work with the advanced features in your Magnum inverter and/or other Magnum devices (i.e., ME-AGS-N or ME-BMK). The ME-RTR communicates with your inverter to allow these advanced features to be set up or enabled. However, when the ME-RTR is released with a new software revision, some of the features and functionality in this remote may not be available in an inverter or networked accessory that has an earlier software level. In this case, when the advanced setting is requested from the ME-RTR to your inverter (or any other Magnum device networked with the inverter), this setting is not recognized and will not function. Use the steps below to help you determine which ME-RTR (Version 3.1) menus/features are compatible with your inverter.

1. Go to: <http://magnumenergy.com/inverter-compatibility/> to determine your inverter's compatibility level (L1, L2, L3 or L4).
2. Use the table below to determine which ME-RTR 'Features/Settings' you want to use and what inverter compatibility level is required (see 'Inverter Model/Level Required').
3. If your inverter compatibility level is the same or greater than the 'Inverter Model/Level Required', then your inverter can support the device setting/feature you want.
4. If your inverter does not have the required compatibility level for a feature/setting you want, contact Magnum Energy to determine if there is a software upgrade option for your inverter.

Notes for the ME-RTR (Version 3.1) Compatibility Matrix:

* 12-volt values shown; for 24-volts systems - multiply by 2, and for 48-volt systems - multiply by 4.

** These settings return to the factory default setting when power to the remote is removed.

[F] Features added to Version 3.1.

[1] Not available on MM/MM-E/MM-AE/MMS/MMS-E models.

[2] AC Couple Mode activates when Battery Type = Custom with MS-PAE Series \geq Rev 4.1 or MS/MS-PE series \geq 5.0.

[3] The AC output volts are only accurate when connected to MS, MS-PAE, MS-PE or MSH Series models.

[4] The AC amps displays are not shown unless connected to MS-PAE, MS-PE or MSH Series models.

[5] Level 2 and 3 inverters can be used, but:

Level 2 inverters are limited from 1.0 hour to 4.5 hours,

Level 3 inverters <Rev 4.1 are limited from 1.0 hour to 6.5 hours,

Level 3 inverters \geq Rev. 4.1 (and MMS Rev 1.5) are limited from 1.5 hours to 6.5 hours;

Any setting outside these limited ranges are not recognized and reverts to the inverter's default absorption time (2.0 hours).

[6] BM/SOC features require the ME-BMK (Battery Monitor Kit) to be installed.

[7] To manually turn the generator "ON" with the remote, ME-AGS-N rev 5.2 or higher is required.

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ME-RTR (VERSION 3.1) COMPATIBILITY MATRIX						
Button	FEATURES/SETTINGS			Inverter Model/Level Required	Default setting	User setting
	Main Menu	Menu Heading/Item	Selections/Adjustments Range			
CTRL	01 AC In Control		Auto Connect	≥Level 1	Auto Connect	
			VDC Connect, Time Connect, AC-In Disabled	≥Level 3 [1]		
			SOC Connect [F]	≥Level 3 [1][6]		
	02 CHG Control		Multi-Stage, Start Float[F], Start Bulk	≥Level 4	Multi-Stage	
03 Gen Control		OFF, ON, AUTO	≥Level 1 [7]	OFF**		
04 RTR Aux Relay		Force Open, Force Closed, Auto VDC, Auto VDC (BTS Comp) [F], Auto Fault [F], Auto SOC [6][F]	≥Level 1	Force Open		
METER	01 DC Meters	01A DC Volts to Inv	Read only display	≥Level 1	Read Only	
		01B Inv/Chg DC Amps	Read only display	≥Level 1	Read Only	
	02 AC Meters	02A AC Output Volts	Read only display	≥Level 4 [3]	Read Only	
		02B AC Output Hz	Read only display	≥Level 4	Read Only	
		02C System AC Amps	Read only display	≥Level 4 [4]	Read Only	
		02D Inv/Chg Sys Amps	Read only display	≥Level 4 [4]	Read Only	
		02E AC Load Amps	Read only display	≥Level 4 [4]	Read Only	
		02F AC Input Amps	Read only display	≥Level 4 [4]	Read Only	
		02G Inv/Chg AC Amps	Read only display	≥Level 4 [4]	Read Only	
		02H Input Volts AC1 [F]	Read only display	MSH Models only	Read Only	
	03 Timers	02I Input Volts AC2 [F]	Read only display	MSH-RE Models	Read Only	
		03A Charge Time	Read only display	≥Level 1	Read Only	
		03B Days Since [F]	Absorb/CV Done (Read only display) EQ Chg Started (Read only display)	≥Level 1 ≥Level 1	Read Only Read Only	
	04 AGS Meters	04A AGS Status	Read only display	≥Level 1	Read Only	
		04B DC Volts to AGS	Read only display	≥Level 1	Read Only	
		04C Gen Run Time	Read only display	≥Level 1	Read Only	
		04D AGS Temp	Read only display	≥Level 1	Read Only	
		04E Since Run Days	Read only display	≥Level 1	Read Only	
		04F Since 100% Days [F]	Read only display	≥Level 1	Read Only	
		04G Gen Hour Meter [F]	Read only display (Press SELECT to reset)	≥Level 1	Read Only	
	05 BMK Meters	05A BMK SOC	Read only display	≥Level 1 [6]	Read Only	
		05B DC Volts-BMK	Read only display	≥Level 1 [6]	Read Only	
		05C DC Amps-BMK	Read only display	≥Level 1 [6]	Read Only	
		05D Amp Hours In/Out	Read only display	≥Level 1 [6]	Read Only	
		05E Resettable Ahrs	Read only display (Press SELECT to reset)	≥Level 1 [6]	Read Only	
		05F Total kAhrs Out	Read only display (Press SELECT to reset)	≥Level 1 [6]	Read Only	
		05G Minimum VDC	Read only display (Press SELECT to reset)	≥Level 1 [6]	Read Only	
		05H Maximum VDC	Read only display (Press SELECT to reset)	≥Level 1 [6]	Read Only	
	01 System Setup	05I Days Since 100% [F]	Read only display	≥Level 1 [6]	Read Only	
		01A System Clock	Time= 12:00AM-11:59PM	≥Level 1	12:00AM**	
		01B Screen Setup	Contrast = 0-100% Brightness = 0-100%	≥Level 1 ≥Level 1	100%** 50%**	
		01C Power Save	PowerSave=OFF, 1-60 Minutes	≥Level 1	15 min	
Port LEDs = Auto, OFF			≥Level 1	Auto		
01D Temp Display		Fahrenheit, Celsius	≥Level 1	Fahrenheit		
01E Viewing Ports		Auto Scroll = OFF, 1-60 sec	≥Level 1	OFF		
01F RTR Aux Relay		Open Volts = 8.0-17.0*	≥Level 1	10.0V		
		Close Volts = 8.0-17.0*	≥Level 1	14.0V		
		Open Delay = 0-127secs, 1-127mins	≥Level 1	10secs		
		Close Delay = 0-127secs, 1-127mins	≥Level 1	10secs		
01G Aux Relay SOC [F]	Open = 20-100%	≥Level 4 [6]	50%			
	Close = 20-100%		100%			
02 Invert Setup	02A Search Watts	OFF, 5-50 watts (1 watt increments)	≥Level 1	5 Watts		
	02B LBCO Setting	9.0-12.2* VDC	≥Level 2	10.0 VDC		
	02C AC In - Time	Connect Time= 12:00AM-11:45PM	≥Level 3 [1]	6:00AM		
		Disconnect Time= 12:00AM-11:45PM		6:00PM		
	02D AC In - VDC	Connect Volts= 9.0-15.9* (12V)	≥Level 3 [1]	11.0		
		Disconnect Volts= 9.1-16.0* (12V)		14.1		
	02E AC In - SOC [F]	Connect SOC= 20-99%	≥Level 3 [6]	80%		
Disconnect SOC= 21-100%		100%				
02F Power Up Always [F]	NO, YES	≥Level 1	NO			
02G Inverter Threshold to start Parallel	OFF, 30-90%	MS-PAE & MS-PE only	60%			

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SETUP	03A AC Input Amps	AC/AC1 Input= 5-60A	≥Level 1 [1]	30A	
		AC2 Input= 5-60A [F]	MSH-RE Models	20A	
	03B Low VAC Dropout	AC/AC1 Input= 60-100 VAC, UPS Mode	US Models	80 VAC	
		AC Input= 110-190 VAC, UPS Mode	Export Models	150 VAC	
	03C Battery Type	AC2 Input= 60-100 VAC, UPS Mode	MSH-RE Models	70 VAC	
		Gel, Flooded, AGM 1, AGM 2	≥Level 1	Flooded	
		CC/CV [F]	Max Chg Amps = (20A-990A)	≥Level 4	200A
			CV Chg Volts = (12.0-16.0V)*		13.8V
			CV Chg Done= (Time, Amps, Hold VDC)		Time
			CV Chg Done Time= (0.1-25.5 Hrs)		2.0 Hrs
			Max CC/CV Time= (OFF, 0.1-25.5Hrs)		12.0Hrs
			DC Volts to ReCharge= (12.0-16.0V)*		12.0V
			CV Chg Done Amps= (0-250ADC)		20ADC
			Max CC/CV Time= (OFF, 0.1-25.5Hrs)		12.0Hrs
		Custom	DC Volts to ReCharge= (12.0-16.0V)*	≥Level 3 [2]	12.0V
			Hold CV Chg Volts		
			Absorb Volts = (12.0-16.0V)*		14.4V
	Float Volts = (12.0-16.0V)*		13.2V		
	03D Absorb Done	EQ Volts = (12.0-16.0V)*	≥Level 3 [2]	15.6V	
		EQ Time = (0.1-25.5Hrs)		4.0 Hrs	
Time, Amps, SOC		Time			
03E Max Charge	Time= 0.1-25.5 Hrs	≥Level 4 [4]	2.0 Hrs		
	Amps= 0-250 ADC	≥Level 4	20 ADC		
	SOC= 50-100%	≥Level 4 [6]	100%		
03F Final Charge Stage	Rate = 0-100%	≥Level 3	100%		
	Time = OFF, 0.1-25.5 Hrs	≥Level 4	12.0Hrs		
03G Days remind to EQ [F]	Multi-Stage, Float, Silent		Multi-Stage		
	Multi-Stage	≥Level 1			
	Float	≥Level 4			
04 AGS Setup	04A Gen Run VDC	Silent DC Volts to Rebulk = (12.0-16.0V)*	≥Level 4	12.0V	
		OFF, 1-255 days	≥Level 1	OFF	
	04B Gen Run Time	Start Gen Volts= OFF, 9.0-15.9*	≥Level 1	11.5	
		Start Volts Delay= 0-127 sec, 1-127 min		120 Sec	
		Stop Gen Volts= 9.1-16.0*, Float		14.4	
		Stop Volts Delay= 0-127 sec, 1-127 min		120 Sec	
	04C Gen Run Amps	OFF, ON= Start Gen Time= 12:00AM-11:45PM	≥Level 1	OFF	
		Stop Gen Time= 12:00AM-11:45PM		12:00AM	
		Start Gen AC Amps= OFF, 5-60A		OFF	
	04D Gen Run SOC	Stop Gen AC Amps= 4-59A	≥Level 4	4A	
		Start Amps Delay= 0-127secs, 1-127mins		120secs	
		Stop Amps Delay= 0-127secs, 1-127mins		120secs	
	04E Gen Run Temp	OFF, Start Gen SOC= 20-90%	≥Level 1 [6]	OFF	
		Stop Gen SOC= 21-100%		90%	
	04F Max Gen Run Time	Start= OFF, Ext Input, 65-95F (18-35C)	≥Level 1	OFF	
		Time= 0.5-25.5 Hrs		65F/2.0Hrs	
	04G Gen Quiet Time	OFF, 0.1-25.5 Hrs	≥Level 1	12.0 Hrs	
		OFF, ON= Start Quiet Time= 12:00AM-11:45PM		OFF	
		Stop Quiet Time= 12:00AM-11:45PM		10:00AM	
	04H Gen Exercise	Quiet Time Topoff= OFF, 30-120Min	≥Level 1	OFF	
Days= OFF, 1-255 days		OFF			
Run Hour/Min/AM-PM= 12:00A-11:45P		8:00AM			
04I Gen No-Load Time	Run Time= 0.1-25.5 hours	≥Level 1	1.0 Hours		
	Warm-up = 0-127secs, 1-127mins		60secs		
04J Gen 100% SOC Start [F]	Cool-down = 0-127secs, 1-127mins	≥Level 1	60secs		
	OFF, Days = 1-255		OFF		
05 BMK Setup	Time= 12:00AM-11:45PM	≥Level 1 [6]	8:00AM		
	05A Charge Eff	Auto, 50-99%	Auto		
05B AmpHour Size	200-2500 AH	≥Level 1 [6]	400 AH		
06 RC Setup	06A Remote Control	System, Port 1 - Port 6	≥Level 1	System	
01 Temperatures	01A BTS Temp	Read only display	≥Level 1	Read Only	
	01B INV Tfmer Temp	Read only display	≥Level 1	Read Only	
	01C INV FETs Temp	Read only display	≥Level 1	Read Only	
02 Port Versions / RTR Version		Read only display / RTR=3.1	≥Level 1	Read Only	
03 Acc Port Versions		Read only display	≥Level 1	Read Only	
04 Fault History	INV Faults	Read only display (rotate SELECT for history)	≥Level 1	Read Only	
	AGS Faults [F]	Read only display (rotate SELECT for history)	≥Level 1	Read Only	
	Clear Faults [F]	Press SELECT (x5 Secs) to clear fault history	≥Level 1	Read Only	
05 SETUP PIN		Locked, Unlocked, Change PIN (PIN= 0000)	≥Level 1	Unlocked	
06 Ext Control		Read only display	≥Level 1	Read Only	
07 Show all Menus [F]		YES, NO	≥Level 1	NO**	
08 Load all Defaults		Press SELECT (x5 Secs) for default settings	≥Level 1		