

## General introduction

### Overview

The ZMCP-2.1MB signal level meter is designed to provide the most desiring features at reduced cost. It performs fast and efficiently to take carrier amplitude measurements. It can also take the direct power measurement of DVB signals



- Direct frequency input from 5(46)MHz ~ 870MHz.
- DVB average power measurement.
- Direct channel input of channel numbers.
- Simultaneously displays video carrier and audio carrier strength, and V/A measurement.
- Selectable dBmV, dBμV and dBm units.
- Tilt measurement of three user definable channels Carrier-to-noise ratio measurement.
- Trunk voltage measurement.
- Large 128\*64 dot matrix LCD display with back light RS-232C port with PC communication function
- Battery-powered handheld model, Internal Li-ion battery with included charger.
- Rugged, compact and mobile, with rubber jacket, carry strap and manual.
- Battery life: ~8 hours

CHAN	FREQ	TYPE	SELE
2	55.25	Anal	
3	Input Filename		
4			
1	70.25	Anal	
5	77.25	Anal	

## Unique features – Channel edit

Channel plan can be edited on meter.  
Even the frequency can be edited.

[illegible]

## Unique features - Edit channel with .TXT file

You can use Windows Notepad to edit the channel plan and then program to PC.



## Unique features - Audio carrier signal level measurement

Most advanced calibration technology,  
use R&S (Germany) digital signal  
generator, calibrate meter at high and  
low temperatures.

## Unique features - Upgrade

Can be upgraded to the latest firmware, by using the upgrading software, to add functions, fix meters, or keep update.

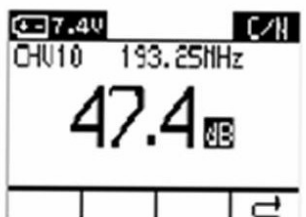
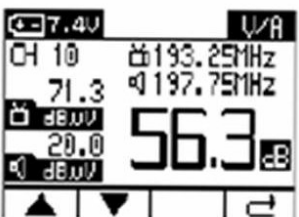
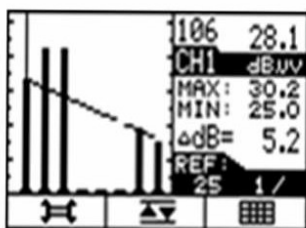
Graphic bar indicates the value of the signal level or channel power

It simultaneously displays video carrier, audio carrier strength, V/A measurements, Tilt measurement, C/N measurement and Trunk voltage measurement.

The full-scan option and spectrum option provide you the features to view the carrier amplitude in a full-span display and spectrum analysis. The new digital analysis option adds digital signal testing that includes BER, MER. The internal high volume Ni-MH battery supports your 5 hours continuous work after full charge. It's durable, simple to use in a wide range of conditions. The tough plastic shell and protective jacket make it highly resistant to damage from shock and impact.

## Performance LCD

The meter has a 128\*64 white and black LCD and the new screen graphics enhance readability and simplify operations, learned channel plans, changeable through PC, also has 2 user



## Specifications

Channel Type:	
Analog TV:	TV
Digital TV:	QAM, QPSK
FM channel:	Single Frequency
Analog Level Measurement:	
Range:	25dBuV—120dBuV
Accuracy:	±2dB
Resolution:	0.1dB
Input Impedance:	75ohm
Wave detection:	peak value
Channel Scan	
Number of Channels:	200 channels max.
Scanning speed:	4 channels / sec
Scale:	1, 2, 5, 10, 20 dB/div
Zoom:	1X, 2X, 4X three levels of magnification or full Channel Plan scan.
Memory:	100 Groups, each group store Max 200 Channels.
Marker: 1 (frequency and signal level)	1 (frequency and signal level)
Spectrum Analysis	
Bandwidth:	Ranging between 4.5MHz, 9MHz, 27MHz, 54MHz, and full span.
Scale:	1, 2, 5, 10, 20 dB/div
Marker:	1 (Frequency and signal level)
Carrier-Noise Ratio (C/N):	
Input range:	65dBuV (minimum input level).
Measurement range:	30 to 54 dB
Accuracy:	±2dB
Resolution:	0.1dB

## Specifications

QAM Analysis	
Support:	16/32/64/128/256QAM DVB-C;
Demodulation type	ITU-TJ.83-AnnexA/AnnexB/AnnexC
Symbol Rate:	1.00MS/s ~7.00MS/s
Bandwidth:	1MHz~8MHz
Frequency tuner	50 KHz
MER measurement range:	19~40dB±2dB
BER Pre/post FEC measurement range:	10E-2 to 10E-9
Tuning range:	5 (46) MHz~870MHz
Tuning mode:	by channels or by frequency
Power measurement type:	QAM, QPSK, DOFDM
Frequency	
Range:	5(46)MHz—870MHz
Resolution:	10KHz
Bandwidth:	≥280KHz
Frequency tuner:	50 KHz
Accuracy:	±50 ppm @ 20° C ± 5°
Digital Channel Power (Average):	
Level range:	35 to 120 dBuV
Accuracy	±2.0 dB@10° to 30°C (50° to 86°F).
	±3.0 dB@-10° to +40°C (14° to 104°F)
Resolution:	0.1dB
Constellation (Optional)	
Display size:	64 and 256 QAM Constellation with zoom capability

Tilt measurement	
Number of channels: 8	8
Resolution:	0.1dB
Trunk Voltage measurement:	
Input range:	0-100VAC
Accuracy:	± 1.5V Resolution 0.1V
Resolution:	0.1V
Auto- Test	
Number of channels:	8
Tests:	Level or digital channel power



## Specifications

Channel Plan:	
Number of Channels	200 channels max
Number of Learned Channel Plan	17 max. 8 preset, 8 editable by PC, 1 user defined
Power Supply	
Battery:	7.4V 1.5AH Li-ion battery,
Charger:	AC 100V-240V/50Hz
Working Time:	>=8 hours (full charged battery).
Auto power off:	Selectable (10 min, 20 min, 30 min, always on)
Charging Time:	5-10 hrs.
Connector type: F81 connector	
Display:	128*64 black and white LCD
Storage	
Memory	256 Kb Up to 200 complete scan files (200 channels, max); less if other files (Level, Tilt, QAM, Spectrum) are saved
Dimensions	
Size	240mm*100mm*60mm
Gross weight:	1.4 kg Net weight:0.6kg (with rubber jacket)
Package:	290mm*190mm*87mm

Other Guides	
Model	Features
<b>Z 201A</b>	46~870MHz, 128*64 B/W LCD, digital power
<b>Z 201B</b>	5~870MHz, 128*64 B/W LCD, digital power
<b>Z 201D</b>	5~870MHz, 128*64 B/W LCD, digital power, MER, BER, (CSO, CTB can be optional) Constellations