

GOSPELL	Gospell Digital Technology Co., Ltd.	Model: GCR-K201
		Version: 1.0

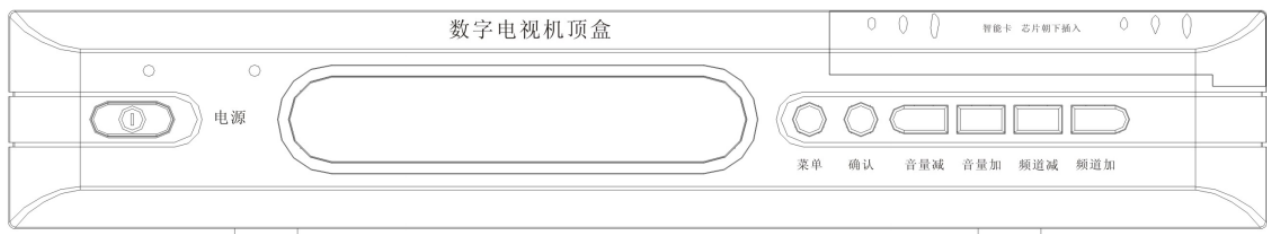
## Product Manual

- ◆ Model: GCR-K201
- ◆ Type: DVB-C/MPEG-2

### Main Function and Feature:

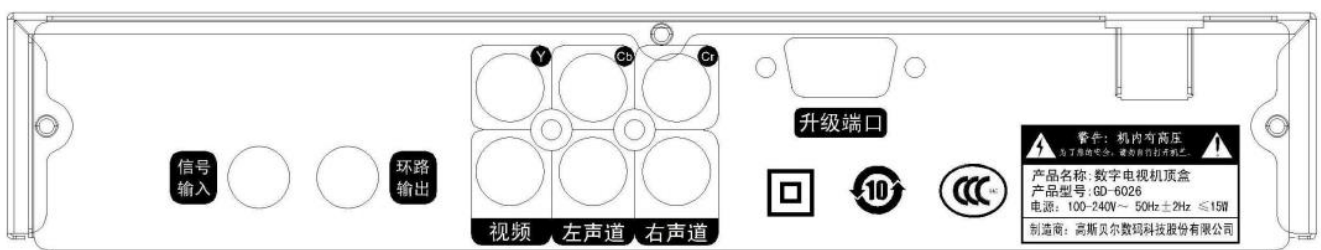
- ✓ Full compliance with DVB-C digital TV reception standards
- ✓ Full compliance with MPEG-2 standard
- ✓ Safety in line with GB / T8898 second-class equipment in the relevant requirements
- ✓ The main chip using a new generation Montage HM1521 chip, safe and stable. Support MPEG2 decoding, support domestic mainstream CA, support true standby. High technology, low power consumption.
- ✓ This chip uses high-performance processors, clocked at up to 330MHz
- ✓ Embedded Loader supports remote upgrade, the program can be updated to the latest version, OTA upgrade 100% success rate
- ✓ NIT table automatic search function and manual search function
- ✓ In addition to standard EPG, it also includes advanced features such as program extensions, program categories, program scheduling, and parental level control
- ✓ Support for online automatic upgrade of DVB mode
- ✓ Ultra-low power consumption, prolonged use of the chip temperature does not change very high

### Front Panel:



Length × width × height: 219×140×38mm

### Rear Panel:



## Technical specifications

### ◆ Chip Description :

CPU work frequency: 330MHz  
Flash memory: 64M bits  
SDRAM: 512Mbits DDR1

### ◆ Power:

Input power: AC 110-240V ~ 50 / 60Hz  
Maximum power consumption: 15W

### ◆ Interface Description:

RCA	1 group	YCbCr	1 group
RF IN	1 way	RF LOOP	1 way
DB9F	1 group		

### ◆ Tuner:

Tuner: DVB-C  
Receiver operating frequency range: 115-860MHz  
Input signal level: 36dBuV ~ 100dBuV  
Input impedance: 75 ohms  
Frequency capture range:  $\pm$  600KHz  
Input reflection loss: > 8dB  
LO leakage: < 43dBuV  
Support symbol rate range: 3.6-6.952MS / s  
Program Time Base (PCR) jitter adaptation: + 500ns

### ◆ Demodulation :

Demodulation mode: DVB-C  
Demodulation method: 64QAM, 128QAM, 256QAM  
IF bandwidth: 6-8MHz

### ◆ Video Decoding:

Decoding method: MPEG-2  
Video output format: PAL / NTSC automatic;  
Single video compression bit rate: 2-15Mbps (continuously adjustable)

### ◆ Audio Decoding:

Audio decoding: MPEG-1 H and MPEG-2 Layer I, II audio decoding  
Audio work: mono, two-channel, stereo  
Audio sampling frequency: 32, 44.1, 48 KHz

### ◆ Channel Decoding:

Coding method: RS code (204, 188, T=8)

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◆ **PAL-D Video Output:**

Video output amplitude:  $700 \pm 30\text{mvp-p}$ ;  
 Video synchronization amplitude:  $300 \pm 20\text{mvp-p}$ ;  
 Video amplitude frequency characteristics:  $\pm 0.8\text{dB}$  (0.5MHz ~ 4.8MHz)  
 $\pm 1\text{dB}$  (> 4.8MHz ~ 5.0MHz)  
 $+ 0.5 \sim -4\text{db}$  (5.5MHz)

Video signal to noise ratio:  $\geq 56\text{dB}$   
 K coefficient:  $\leq 3$   
 Chroma / brightness gain difference:  $\pm 5\%$   
 Chroma / brightness delay difference:  $\leq 30\text{ns}$   
 Nonlinear distortion of brightness:  $\leq 5\%$   
 Differential Gain Distortion:  $\pm 8\%$   
 Differential phase distortion:  $\pm 8$  degrees  
 Line synchronization front jitter:  $\leq 10\text{dB}$

◆ **Audio Output:**

Audio frequency response:  $\pm 2.0\text{dB}$  (20Hz-60Hz)  
 $\pm 1\text{dB}$  (> 60Hz-18KHz)  
 Audio signal to noise ratio:  $\geq 70\text{dB}$   
 Total harmonic distortion of audio:  $\leq 1\%$   
 Audio left and right channel level difference:  $< 0.5\text{dB}$  (60Hz-18KHz)  
 Audio left and right channel phase difference:  $\leq 5$  degrees (60Hz-18KH z)  
 Left and right channel crosstalk suppression ratio:  $\geq 60\text{dB}$   
 Output level:  $\geq 4\text{dBu}$

- ◆ **Stability:** Mean time between failures (MTBF) of more than 15,000 hours
- ◆ **Reliability:** using SJ / T11219-20005.10 test program
- ◆ **Electromagnetic radiation interference value:**  $< 1 \times 10^{-4} \text{ W}$