

**1. Fill in!**

Analog television (ATV) transmits an **analog** signal whose amplitude values vary over a **continuous** interval.

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**2. Analog signal is influenced during transmission by:**

**X interferences**

light

**X noise**

antenna gain

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**3. Analog signal carries:**

1. **audio signal (sound)**

2. **video signal (information about picture brightness and color)**

3. **synchronization information (horizontal, vertical)**

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**4. Fill in correctly!**

Digital television (DTV) transmits **digital** signal. Because source video and audio signals are analog signals they have to be **digitized** at first, subsequently **compressed** and then **combined** to form a transport signal (stream) that is adjusted for broadcasting finally.

- **digitized**
  - **digital**
  - **compressed**
  - **combined**
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**5. DVB technology adopted compression standards of a group:**

- JPEG
- X MPEG**
- CPEG
- GPEG

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**6. MPEG-2 standard (just as MPEG-1) defines three main parts:**

1. **MPEG-2 system**
2. **MPEG-2 video**
3. **MPEG-2 audio**

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**7. Assign correct definition!**

- I (Intra) frames                      **C**
- P (Predicted) frames                **A**
- B (Bi-directional) frames          **B**

**A** – are coded in reference to previous (I or P) picture. These pictures only carry information about a change (motion) between previous and actual picture.

**B** – are similar to the P pictures but they are also coded in reference to a picture which follows that's why they are coded by bidirectional interpolation.

**C** – are coded in similar way like JPEG pictures without any reference to other video pictures. They contain all information needed to reconstruct original pictures but provide lowest compression rates.

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**8. H.264/MPEG-4 AVC codec supports:**

- X HD (High definition) video**
- VHF (Very high frequency) video
- UHF (Ultra high frequency) video
- X UHD (Ultra high definition) video**



**9. HEVC (High Efficiency Video Coding) standard can:**

- provide medium picture quality
- define three audio layers
- X double compression rate at the same level of video quality**
- discrete Laplace transform