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# NALLA NARASIMHA REDDY EDUCATION SOCIETY'S GROUP OF INSTITUTIONS

Approved by AICTE, New Delhi. Affiliated to JNTU - Hyderabad

## SCHOOL OF ENGINEERING

### MANA TV STUDIO

Dr.B.R.AMBEDKAR OPEN UNIVERSITY

DATE: 9<sup>th</sup> OCTOBER, 2015.  
FROM: NALLA NARASIMHA REDDY GROUP OF INSTITUTIONS,  
FACULTY INCHARGE: A. GOPAL  
MS. ANJUSHA  
NUMBER OF STUDENTS: 55  
BRANCH: ELECTRONICS AND COMMUNICATION ENGINEERING

### MANA STUDIO:-

**Live interactive for Distance Education & Training for Human Resource Development, Social Sector & Agriculture**

The channel is dedicated for distance mode trainings Rajiv Vidya Mission of Primary School Education dept. Rural Development and Panchayat Raj dept. (MGNREGS), for live interactive teleconference with field functionaries for distance trainings. Social Sector-Self Help Groups/ empowerment of women (SERP), SERP- CMSA (Agriculture based program), Women Development and Child Welfare, Public Health and Family Welfare, Adult Education, etc.

## School Education

The channel is dedicated to the school education. The channel is utilized by the SCERT and SIET. The pre-recorded programmes are transmitted for primary and secondary schools students from Monday to Saturday from 10:00am to 3:30pm. The fourth channel covers the entire gamut of mainstream educational and administrative activity and also several development activities like grass roots governance etc.

### SATELLITE INFORMATION

Satellite – GSAT-8, 55° E Longitude

#### Downlink frequency parameters

Satellite	-	GSAT-8
Located at	-	55° E
Downlink frequency	-	10968.357 MHz
Symbol Rate	-	10.8519 MSPS
FEC	-	1/2
Polarization	-	Vertical, Linear

### HOW TO RECEIVE MANA TV PROGS

Users need to install the ROT to view the programmes

1. Ku-band Receiving Dish/Antenna
2. LNBC
3. IRD or STB
4. IF Cable
5. TV set with Audio and Video input output facilities with remote

## PRODUCTION AND CONTROL UNIT:-

INCHARGE: SURYA NARAYANA

SATHYA NARAYANA

In production and control unit we came to know how the program or serial are recorded and what type of lighting techniques are used. The lighting used in recording is of different types like cooling light's etc. The uninterrupted power supply (UPS) is used in LIVE program's. In every field we require one decision maker in production control unit the producer is that person who make decision how the lighting should be. We have also learned about effects provided to any program before transmitting. In production and control unit, every action is controlled and monitored by the producer itself.

## LIVE STUDIO:-

INCHARGE: BASKAR

The camera used for LIVE program coverage is master camera. In LIVE shows if there is any debate or news we will decide the camera's based on the person i.e., is called single pointing, double pointing etc. Basically MANA TV studio is used telecast educational programs we require maximum of 3 cameras. One is focussed on the anchor or the host and second camera is kept at long shot i.e., to be focussed on all pointers in the debate and the last camera is on the person who speaks at that time.

In the studio we need to use a bright coloured background's i.e., Green and blue so that we can replace the background's with the banners or graphics.

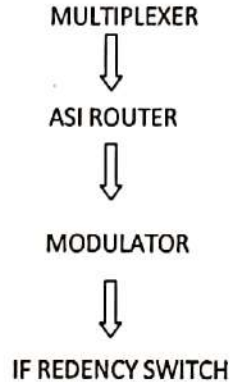
FINAL TESTING:-

INCHARGE: SATHYA NARAYANA

After completion of LIVE studio process the output is given to video tape recorder (VTR) which is of two types data (30min and 60 min) and DV (20 min and 120 min).

In VTR, the live program or the recorded programs are being converted from Analog to Digital format for the transmission purpose and also the video and audio signals are synchronised in the VTR.

After VTR output will be send to the digital cable connector (DCC) in which logo will be inserted and sent to 16x16 routers which count's the IP address.



The IF signals generated is uplinked by transferring it through coaxial cable to wave guide and to the antenna. The transmitted signal is checked once again at that place by down linking it from satellite with a frequency of 17 MHz.



*P. S. Chavala*  
HOD

ECE Department  
Head of the Department  
Electronics & Communication Engineering  
Nalla Narasimha Reddy Education Society's