

लोक शिक्षण संचालनालय, मध्यप्रदेश

गौतम नगर भोपाल-462023

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कमांक/RMSA/DTH/2018/1495

भोपाल, दिनांक- 28/09/2018

प्रति,

1. जिला शिक्षा अधिकारी
समस्त जिले।
2. प्राचार्य, हाई/हायर सेकेण्डरी स्कूल
मध्यप्रदेश।

विषय - स्कूलों में डीटीएच के माध्यम से स्वयंप्रभा चैनल प्रारम्भ करने बावत।

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्वयंप्रभा टेलीविजन चैनल प्रारम्भ किया गया है। डायरेक्ट-टू-होम(DTH) के 32 चैनल के माध्यम से गुणवत्तायुक्त शैक्षिक सामग्री स्कूल के छात्रों के लिए स्वयंप्रभा द्वारा उपलब्ध करायी जा रही है। स्वयंप्रभा में आईआईटी सहित प्रतिष्ठित संस्थानों के विषय विशेषज्ञों के व्याख्यान का सीधा प्रसारण किया जा रहा है। निर्धारित समयसारिणी के अनुसार विषय से सम्बन्धित व्याख्यान को प्रसारित तथा पुनःप्रसारित भी किया जाता है, जिसे विद्यालय अपनी सुविधा के अनुसार देख सकते हैं।

2. स्वयंप्रभा योजना की विशेषताएं प्रमुख बिन्दु

- 2.1 विस्तृत जानकारी के लिये स्वयंप्रभा वेबसाइट www.swayamprabha.gov.in का अवलोकन करें।
- 2.2 स्वयंप्रभा के लिये 32 चैनल हैं। चैनल 19-22(आईआईटी पाल के नाम से है, जिनका प्रबंधन आईआईटी दिल्ली द्वारा किया जा रहा है) एवं चैनल 31(प्रबंधन एन.सी.ई.आर.टी. द्वारा किया जा रहा है) स्कूली पाठ्यक्रम से संबंधित है।
- 2.3 कक्षा 9-12 के छात्रों के लिये पाठ्यक्रम आधारित चैप्टर पढाये जाते हैं।
- 2.4 व्यावसायिक पाठ्यक्रम(इंजीनियरिंग/मेडिकल) की तैयारी कर रहे कक्षा 11-12 के छात्रों के लिये उपयोगी।
- 2.5 वर्तमान में कुछ कार्यक्रम हिन्दी भाषा में उपलब्ध हैं।

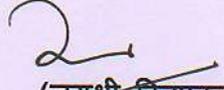
3. स्वयंप्रभा : मोबाईल एप्प एवं यूट्यूब

- 3.1 स्वयंप्रभा मोबाईल एप्प भी उपलब्ध है, शिक्षक एवं विद्यार्थी इसे अपने मोबाईल पर इंस्टाल करके विषय से सम्बन्धित पूर्व प्रसारित वीडियो भी देख सकते हैं।
- 3.2 स्वयंप्रभा के प्रत्येक चैनल के वीडियो को यूट्यूब पर भी देखा जा सकता है। उदाहरणार्थ स्वयंप्रभा का चैनल-21 यूट्यूब पर "Ch-21Mathematics [IIT-PAL]" के नाम से उपलब्ध है।

4. विद्यालय में स्वयंप्रभा चैनल प्रारम्भ करने के लिये की जाने वाली कार्यवाही

ऐसे विद्यालय जिनके पास 32" या उससे अधिक साईज का टी.व्ही. अथवा प्रोजेक्टर उपलब्ध है, वे विद्यालय डीटीएच उपकरण (Dish Antenna and Set-Top-Box) को क्रय कर विद्यालय में स्वयंप्रभा चैनल प्रारम्भ कर सकते हैं। डीटीएच उपकरण का मूल्य रु. 2000/- की सीमा के अन्दर है। उक्त व्यय विद्यालय की स्थानीय निधि अथवा रा.मा.शि.अ. के अंतर्गत प्राप्त राशि से किया जाये।

स्वयंप्रभा का ब्रोशर तथा डीटीएच उपकरणों का तकनीकी विवरण पत्र के साथ संलग्न है। उक्त निर्देशों के अनुसार विद्यालय में 15.10.2018 के पूर्व डीटीएच सुविधा स्थापित करें, जिससे विद्यार्थियों को इस सुविधा का लाभ प्राप्त हो सके।


(जयश्री कियावत)

आयुक्त

लोक शिक्षण, मध्य प्रदेश

स्वयंप्रभा चैनल प्राप्त करने के लिए

पृ.क्रमांक/RMSA/DTH/2018/1496

भोपाल, दिनांक- 28/9/2018

प्रतिलिपि:-

- 1 निज सचिव, माननीय मंत्रीजी/राज्य मंत्रीजी म.प्र. शासन स्कूल शिक्षा विभाग, मंत्रालय भोपाल ।
- 2 प्रमुख सचिव, म.प्र. शासन स्कूल शिक्षा विभाग, मंत्रालय वल्लभ भवन भोपाल की ओर सूचनार्थ।
- 3 समस्त संभागीय संयुक्त संचालक, लोक शिक्षण की ओर सूचनार्थ।

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आयुक्त

लोक शिक्षण, मध्य प्रदेश

1) Use small band Dish antenna - DD Free Dish (Size of 60 to 36 cm in dia)
DD Free Dish is available at Nu-Brand on GOAT-15 lat 83.5°E.
2) Install Dish Top Box (DTB) also known as IRD (Integrated Receiver Decoder) with Hardly Remote
जिस उपकरण चंद्र के सिग्नल को सही-सही ट्यूनिंग/डिकोडिंग की सुविधा में सक्षम है सचिव के 20000 के ऊपर चार्ज ही जायेगा।
2. इस परचिन का इस्तेमाल :-

Dist: Antenna की helpिंग चैनल से ही receives the signal from satellites and transmits it to the indoor set-top box जो अंततः छत पर लक्षित दिशा की ओर फिट कराये।

Step 1: Install DD Free Dish as per the directions given at: <http://ddfree Dish.gov.in> (Under the Page/DTB- Free-Dish/DTB/Setup)

Step 2: Specify following parameters in the Setting box for SWAYAM PRABHA Channel

a) Parameters for SWAYAM PRABHA channel No. 1 to 16: Downlink Frequency - 11390 MHz, Polarization - Vertical LNB Frequency - 9750 Symbol Rate - 29900 Kaps FEC

b) Parameters for SWAYAM PRABHA channel No. 17 to 32: Downlink Frequency - 11675 MHz, Polarization - Vertical LNB Frequency - 9750 Symbol Rate - 29900 Kaps FEC

1. Satellite Name:
 - a) Go to installation menu or setup Programme from remote.
 - b) Select Channel Edit menu.
 - c) Select Add New Satellite menu.
 - d) Select Sat Name Edit menu.
 - e) Enter Satellite name as GOAT-15.
 - f) Enter Sat Orbital Longitude as 83.5°E.
 - g) Press Exit.

2. LNB Configuration:
 - a) Go to LNB Configuration menu. Ensure that satellite selected is GOAT-15 only.
 - b) Select LNB Type as Universal.
 - c) Set LNB Power on.
 - d) Press Exit.

स्वयंप्रभा चैनल प्रारम्भ करने के लिये “डी.डी. फ्री डिश एण्टीना” तथा सेट-टॉप बॉक्स को इंस्टाल करना

1. विद्यालय में स्वयंप्रभा चैनल प्रारम्भ करने के लिये निम्नलिखित सामग्री की आवश्यकता होगी :-

1) One small sized Dish Antenna - **DD Free Dish** (Size of 60 to 90 cm in diameter along with LNBF

DD Free Dish is available in Ku-Band on GSAT-15 (at 93.5°E).

2) Indoor Set-Top-Box (STB) also known as IRD (Integrated Receiver Decoder) with Handy Remote
उक्त उपकरण शहर के किसी भी टी.व्ही./इलेक्ट्रॉनिक की दुकान से राशि रु 2000/- के अन्दर प्राप्त हो जायेंगे।

2. डिश एण्टीना का इंस्टालेशन :-

Dish Antenna को facing clear south receives the signal from satellite and transmits it to the indoor Set top box unit अर्थात् छत पर दक्षिण दिशा की ओर फिट करायें।

- **Step 1:** Install DD Fresh Dish as per the directions given at: [http://ddindia.gov.in/Technical/Pages/DD-Free-Dish-\(DTH\).aspx](http://ddindia.gov.in/Technical/Pages/DD-Free-Dish-(DTH).aspx)
- **Step 2:** Set following parameters in the Set-top box for SWAYAM PRABHA Channels:

a) Parameters for SWAYAM PRABHA channel No.1 to 16: Downlink Frequency: - 11590 MHz Polarization: - **Vertical LNB Frequency: - 9750 Symbol Rate: - 29500 Ksps FEC:**^{3/4}

b) Parameters for SWAYAM PRABHA channel No. 17 to 32: Downlink Frequency: - 11670 MHz
Polarization: - Vertical LNB Frequency: - 9750 Symbol Rate: - 29500 Ksps FEC:

1. Satellite Name:

- | | |
|------------------------------------------------------------|-----------------------------------------|
| a) Go to Installation menu or setup Programme from remote. | b) Select Satellite Edit menu. |
| c) Select Add New Satellite menu | d) Select Sat Name Edit menu. |
| e) Enter Satellite Name as GSAT-15. | f) Enter Satellite Longitude as 93.5° E |
| g) Press Exit | |

2. LNB Configuration

- | | | | |
|----------------------------------------------------------------------------------|----------------------|---------------|--|
| a) Go to LNB Configuration menu. Ensure that satellite selected is GSAT-15 only. | | | |
| b) Set LNB Types as Universal. | c) Set LNB Power on. | d) Press Exit | |

3. Transport streams of Transponder (TP) Edit:

- a) Go to Transponder Edit menu. Ensure that satellite selected is GSAT-15.
- b) Select Add New TP menu.
- c) Enter TP Frequency as 11090 MHz
- d) Select Symbol rate as 29500 Ksps.
- e) Select Polarization as Vertical.
- f) '22K' OFF*
- g) 'Disc. Equal'. Off
- h) Select Scan as FTA.
- i) Press OK.

स्वयं प्रभा चैनल से सम्बंधित सवाल और जवाब (FAQ)

1. Swayam prabha channel देखने के लिए क्या करना होगा ?

इसके लिए आपको DD Free Dish खरीदना होगा जो 2000 रुपये तक में आएगा।

2. कौन सा DTH सर्विस स्वयं प्रभा चैनल का प्रसारण कर रहा है ?

DD Free Dish पर ही ये चैनल देख सकेंगे।

4. Swayamprabha channel tata sky, airtel, videocon इत्यादि पर उपलब्ध है या नहीं ?

नहीं, इन DTH सर्विस प्रोवाइडर पर उपलब्ध नहीं है।

5. क्या swayamprabha channel देखने के लिए कोई सब्सक्रिप्शन फीस देना होगी ?

नहीं, ये बिलकुल फ्री है।

6. क्या swayam prabha channel online देखा जा सकता है ?

टेलीकास्ट हो चुके कार्यक्रम को ऑनलाइन देख सकते हैं। लाइव प्रसारण सिर्फ DD Free Dish पर देख सकते हैं।

7. प्रसारित हो चुके कार्यक्रम को देखने के लिए क्या करना होगा ?

ये सभी वीडियो स्वयं पोर्टल swayamprabha.gov.in पर और swayam prabha mobile app पर उपलब्ध हैं।

8. क्या विद्यालय में एक से ज्यादा टीवी पर swayamprabha channel देखने के लिए अलग-अलग set top box लगेगा ?

हाँ, सभी के लिए अलग-अलग set top box की जरूरत पड़ेगा।

9. D.El.Ed. के लिए कौन सा चैनल नंबर पर कार्यक्रम आएगा ?

swayamprabha channel number 32

Channel Name	Channel Route/Parent
Channel 01: CEC/UGC: Humanities- 1, Language and Literature	EMRC, EFLU, Hyderabad
Channel 02: CEC/UGC: Humanities- 2, Arts, History,Philosophy and related Subjects	CEC, New Delhi
Channel 03: CEC/UGC: Social Science -1, Sociology, Political Science and related subjects	CEC, New Delhi
Channel 04: CEC/UGC: Social Science - 2, Education, Psychology, Home Science and related subjects	CEC, New Delhi
Channel 05: CEC/UGC: Social Science - 3, Management, Library Science, Information Science and related subjects	EMRC/MCRC, Jamia Millia Islamia, New Delhi
Channel 06: CEC/UGC: Social Science - 4, Law, Legal Studies, Human Rights and related subjects	EMRC, Punjabi University, Patiala
Channel 07: CEC/UGC: Economics, Commerce and Finance	EMRC, Gujarat University,Ahmedabad
Channel 08: CEC/UGC: Physical sciences, Mathematics, Physics, Chemistry and related Subjects	EMRC ,University of Calicut
Channel 09: CEC/UGC: Life Sciences, Botany, Zoology, Bio-Science and related subjects	EMRC, Kashmir University, Srinagar
Channel 10: CEC/UGC: Applied Sciences, Allied Physical and Chemical sciences and related subjects	EMRC, Anna University, Chennai
Channel 11: NPTEL: Chemical Engineering, Chemistry and related Subjects	IIT Kharagpur
Channel 12: NPTEL: Civil Engineering and related subjects	IIT Delhi
Channel 13: NPTEL: Computer Science and Engineering	IIT Kharagpur
Channel 14: NPTEL: Electrical engineering, Electronics and Communication Engineering and related subjects	IIT Delhi
Channel 15: NPTEL: Engineering Sciences and general subjects for engineering	IIT Madras
Channel 16: NPTEL: Humanities, Social Sciences and Management	IIT Kanpur
Channel 17: NPTEL: Mechanical Engineering and related subjects	IIT Kanpur
Channel 18: NPTEL: Mathematics, Physics, Metallurgy and related subjects	IIT Tirupati / IIT Madras
Channel 19: IIT PAL: Biology	IIT PAL 1 IIT Delhi
Channel 20: IIT PAL: Chemistry	IIT PAL 2, IIT Delhi
Channel 21: IIT PAL: Mathematics	IIT PAL 3. IIT Delhi
Channel 22: IIT PAL: Physics	IIT PAL 4, IIT Delhi
Channel 23: IGNOU: Liberal Arts and Humanities	IGNOU, New Delhi
Channel 24: IGNOU: Agriculture, Vocational and Allied Sciences	IGNOU, New Delhi
Channel 25: IGNOU: Culture	IGNOU, New Delhi
Channel 26: IGNOU: State Open Universities' programs	IGNOU, New Delhi
Channel 27: NIOS: Secondary School Education	NIOS, New Delhi
Channel 28: NIOS: Higher Secondary School Education	NIOS, New Delhi
Channel 29: QEEE: QEEE 1 (Live classes in Engineering and Technology)	IIT Madras
Channel 30: NPTEL: Mathematics	IIT Madras
Channel 31: NCERT: School and Teacher Education	NCERT, New Delhi
Channel 32: IGNOU and NIOS: Teacher Education	IGNOU and NIOS, New Delhi

Install and configure DD Free Dish to receive transmission on SWAYAMPBABHA channels?

Two-step process for configuring and installing DD Free Dish and Set-top box, generally available with all TV dealers for less than Rs. 2,000/-, is as follows:

- **Step 1:** Install DD Free Dish as per the directions given at: [http://ddindia.gov.in/Technical/Pages/DD-Free-Dish-\(DTH\).aspx](http://ddindia.gov.in/Technical/Pages/DD-Free-Dish-(DTH).aspx)
- **Step 2:** Set following parameters in the Set-top box for SWAYAMPBABHA Channels:

a) Parameters for SWAYAMPBABHA channel No.1 to 16: Downlink Frequency: - 11590 MHz Polarization: - **Vertical LNB Frequency: - 9750 Symbol Rate: - 29500 Ksps FEC:**^{3/4}

b) Parameters for SWAYAMPBABHA channel No. 17 to 32: Downlink Frequency: - 11670 MHz
Polarization: - Vertical LNB Frequency: - 9750 Symbol Rate: - 29500 Ksps FEC:

How to receive DD Free Dish?

Receive system of DD Free Dish contains three units: 1) One small sized Dish Antenna along with LNB 2) Indoor Set-Top-Box (STB) also known as IRD (Integrated Receiver Decoder) and 3) Handy Remote control unit for STB. Dish Antenna installed at the roof top or on wall facing clear south receives the signal from satellite and transmits it to the indoor Set top box unit. The set top box further decodes the different TV channels from the DTH bouquet and feeds it to the TV set for viewing.

The complete DD Free Dish DTH system (Dish Antenna, Set Top Box and Remote control unit) is a one-time purchase from the open market with a nominal cost. There is absolutely no further recurring expenditure in terms of monthly subscription etc. for viewing DD Free Dish Channels.

What is DTH ?

DTH is Direct to Home service for receiving TV service directly through satellite with a personal small dish antenna. DTH service does not require a local cable operator for receiving TV service at home

What is DD Free Dish?

Doordarshan's DTH service which known as DD Free Dish with the modest capacity of 33 channels. DD Free Dish has been upgraded from time to time. At present its capacity is 104 SDTV channels along with 40 Radio channels. DD Free Dish is available in Ku-Band on GSAT-15 (at 93.5°E). This Ku-Band DTH service provides the TV coverage throughout the Indian territory (except Andaman & Nicobar Islands). DTH signals can be received through a small sized dish receive system (i.e. Set Top Box and Dish of size of 60 to 90 cm in diameter) for which no monthly subscription fee is payable by the viewers.

Future of DD Free Dish?

Expansion of DD Free Dish has been carried out from time to time. With the introduction of new MPEG-4, DVB-S2 stream, the present capacity of 104 SDTV channels and 40 Radio channels is likely to be enhanced in near future. There is also plan to introduce HD channels in the bouquet of DD Free Dish. The 80 channels of MPEG-2 streams will also be expanded to MPEG-4 in phased manner.

How DD Free Dish is different from other DTH systems?

Most of the DTH operators, provide paid DTH Service. In the paid service, the DTH operators uplink the encrypted TV signals to the satellite and the signals are received by subscribers through a Dish receive system having a Dish Antenna and one Customized Set Top Box (DIGITAL DECODER). By

choosing the bunch of various desired TV channels subscribers are charged by DTH operator for viewing these channels.

Whereas, viewing channels on DD Free Dish is absolutely free, as Doordarshan is not charging any monthly subscription fee from the viewers for complete bouquet of the DD Free Dish channels, making the system quite affordable. It requires only a small one time investment in purchasing a Dish Receive System containing Set-Top-Box and small sized Dish Antenna with LNB.

How to receive DD Free Dish?

Receive system of DD Free Dish contains three units: 1) One small sized Dish Antenna along with LNBF 2) Indoor Set-Top-Box (STB) also known as IRD (Integrated Receiver Decoder) and 3) Handy Remote control unit for STB. Dish Antenna installed at the roof top or on wall facing clear south receives the signal from satellite and transmits it to the indoor Set top box unit. The set top box further decodes the different TV channels from the DTH bouquet and feeds it to the TV set for viewing.

The complete DD Free Dish DTH system (Dish Antenna, Set Top Box and Remote control unit) is a one-time purchase from the open market with a nominal cost. There is absolutely no further recurring expenditure in terms of monthly subscription etc. for viewing DD Free Dish Channels.

Doordarshan has recently empanelled eleven Indian Set Top Box (STB) manufacturers who will manufacture, sell and install DD Free Dish STBs in India.

Installation of the Receive System of DD Free Dish:

The viewers may contact empanelled DD Free Dish STB manufacturers for any help in buying or installing the DD Free Dish STB.

Tuning of old DD Free Dish STB:

Following is the suggestive tuning procedure of STB for receiving the TV Channels.

1. Satellite Name:

- a) Go to Installation menu or setup Programme from remote.
- b) Select Satellite Edit menu.
- c) Select Add New Satellite menu
- d) Select Sat Name Edit menu.
- e) Enter Satellite Name as GSAT-15.
- f) Enter Satellite Longitude as 93.5° E
- g) Press Exit

2. LNB Configuration

- a) Go to LNB Configuration menu. Ensure that satellite selected is GSAT-15 only.
- b) Set LNB Types as Universal.
- c) Set LNB Power on.
- d) Press Exit

3. Transport streams of Transponder (TP) Edit:

- a) Go to Transponder Edit menu. Ensure that satellite selected is GSAT-15.
- b) Select Add New TP menu.
- c) Enter TP Frequency as 11090 MHz
- d) Select Symbol rate as 29500 Ksps.
- e) Select Polarization as Vertical.
- f) '22K' OFF*
- g) 'Disc. Equal'. Off

- h) Select Scan as FTA.
- i) Press OK.

After filling the above values go to ‘Search’

Press ‘OK’

The new 16 TV and 06 Radio services will be displayed. Similarly add all other four Transport streams (TPs) by entering respective frequencies, symbol rate and polarization as given in Table above

Note: - The above-mentioned steps may be in different order in some of the STBs.

Frequently Asked Questions (FAQs)

Technical Issues:

1. How to update the changes in TV channel tuning manually in old non iCAS STB?

Ans: For old non iCAS STB, procedure to update the changes in program name varies from make to make of STBs. Follow the procedure mentioned in the installation manual supplied along-with the STB. However, as broad guidelines the steps involved are as indicated in the example given hereunder:

In new iCAS STB, all changes will be done over the air automatically and no manual interaction is required.

EXAMPLE-1.

Following are the steps to be followed to scan or search the channels on DD Free Dish DTH bouquet.

Press ‘Menu’ Button on Remote of DD Free Dish Set-Top-Box

Go to ‘Installation’ or ‘Setup Programme’

Fill the details as below

‘Satellite’	GSAT- 15
‘T P Frequency’	11090 MHz
‘LNB Frequency’	09750 MHz
‘Symbol rate’	2 9500 Ksps
‘Polarization’	V
‘22K’	OFF
‘Search mode’	FTA
‘Disc. Equal’	Off

After filling the above values go to ‘Search’ Press ‘OK’

The new TV and Radio services will be displayed.

For other frequencies and related parameters refer to table below.

Note:-The above-mentioned steps may be in different order in some of the STBs. The different transponder frequency, LNB frequency, symbol rate etc. required to tune to the STBs for all the channels available in the DD Free Dish are summarized as below: -

S. N.	Transponder Frequency (MHz)	Polarization	Symbol Rate (Ksps)	FEC	LNB Frequency (MHz)	22K	Disc. Equal
1.	11090	V	29500	3/4	09750	OFF	OFF
2.	11170	V	29500	3/4	09750	OFF	OFF
3.	11470	V	29500	3/4	10600	OFF	OFF
4.	11510	V	29500	3/4	10600	OFF	OFF

5.	11550	V	29500	3/4	10600	OFF	OFF
6.	11630	V	30000	3/5	10600	OFF	OFF

2. How to delete TV channel programme in STB manually?

A. The procedure to delete TV Channel programme in the TV channel list varies from make to make of STBs. Follow the procedure mentioned in the installation manual supplied along-with the STB.

EXAMPLE 2.

Following are the steps to be followed to delete channels in TV channel list.

Go to 'Edit Programme'

Select- 'Delete Option'

Select the channel, using up down key.

Press 'OK'

Please Note: In old low cost Set Top Boxes having limited storage capacity may not store all the channels, so viewers having such boxes are advised to delete the pre-stored channels using "Delete Option" in "Edit Programme Menu" before going for AUTO SCAN Option for returning their Set Top Boxes. For Manual / Auto scan is required to select FREE / FTA channels only.