CABLE SENDER (POWER sender TV AVS815)



Thank you very much.

You have acquired an electronic system of a very high technical standard. With the TV AVS 815 Power Transmitter you can transmit colour images with stereo sound through walls and ceilings.

The greatest possible care is necessary for bringing it into operations, and that means studying every point in these operating instructions.

Please read these operating instructions even if a third party has already installed the system because they contain important information and the basic principles of operation.

We would not expect any problems to arise with the system, but if any should occur please inform the dealer from whom you acquired this device.

Please keep this instructions ready to hand whenever you may need to consult them.

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1. Safety instructions

IMPORTANT

If the system is handled incorrectly there is a risk of injury from electric shock. The following instructions must be followed, in order to avoid any risk of injury or damage, and the operating instructions must also be adhered to.

- It is never allowed to open the plug-in mains adapter
- Only a properly qualified technician is allowed to check and inspect the system.
- The system is only ever to be operated in dry, indoor rooms.
- Avoid high atmospheric humidity and extreme ambient temperatures
- Should any fault occur in the power supply the system should be taken out of operation at once. Never replace defective parts with anything other than original spare parts.
- If there is any danger of a thunderstorm, it is a good precaution to separate the system from the mains network in order to protect it from lightning. The same applies if the system is to be out of action for any length of time.
- Power must be supplied at the correct rating at all times. This
 applies in particular to the operating voltage in the system
 and the mains adapter.
- If there is ever any malfunction, the dealer from whom the system was acquired must be asked to send it back to the manufacturer for inspection.

2. General description

Correct and proper use

The TV AVS 815 Power Transmitter is designed for use in dry, indoor rooms. The power supply is provided by the mains adapter enclosed with the Transmitter. Please only ever use this mains adapter.

It is not allowed to alter or modify any part of the system.

The unit is registered as a device that does not cause or suffer radiofrequency interference, it is CE-approved, and it conforms with the Low Voltage Directory.

The safety and installation instructions must be observed.

There shall be no guarantee cover against damage resulting from any failure to observe these operating instructions, and no legal liability for any resultant consequential damage.

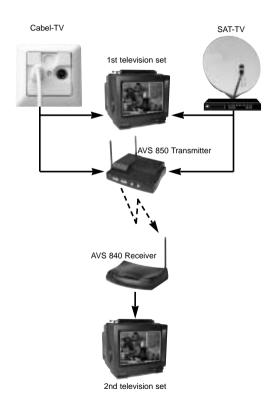
General functions

With the TV AVS 815 Power Transmitter you can transmit cable television signals, and signals from other video equipment such as VCR, SAT-receivers, and video cameras by radio.

The audio and video signals are transmitted in the 2.4 GHz range by the AVS 815 Power Transmitter to the AVS 840 Power Receiver. The maximum line-of-sight range is 300 metres.

The cable tuner integrated into the AVS 850 Power Transmitter is controlled by the Power Receiver with the enclosed RC 815 infra-red remote control. If you point the remote-control unit in the direction of the infra-red window on the AVS 840 receiver, the infra-red signals from this remote-control unit will be converted into radio signals which will in turn be transmitted in the 433 MHz range to the AVS 850 Power Transmitter. Inside the AVS 850, the radio signals are converted back into infra-red signals and passed on to the integral cable tuner.

3. Transmissions



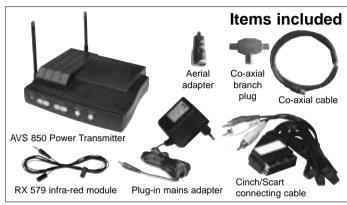
If you use the infra-red remote control of another piece of video equipment, these infra-red signals will be passed on via the RX 579 infra-red module to the relevant appliance, such as a satellite-receiver, the audio and video signals of which are being transmitted. In order to allow this equipment, e.g. the satellite receiver, to be controlled via the remote control to select programmes, the infra-red transmitter on the infra-red module must be glued onto the infra-red receiver of the equipment that is being remote-controlled.

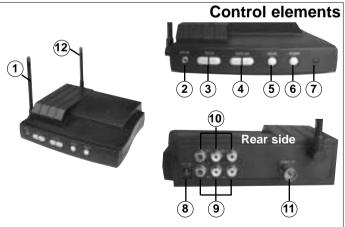
When it is being glued on, attention must be paid to ensuring that the "infra-red eye" of the unit is not completely covered over, so as to ensure that direct control with the original remote-control unit is still possible.

The extension module possesses two infra-red diodes for controlling two different units, e.g. a satellite received and a video-recorder.

Establish the position of the infra-red receiver with the aid of the operating instructions for the unit that is to be controlled; if it is not possible to locate it exactly, a little trial-and-error will be necessary. You will thus have the possibility of controlling the unit, the signals of which are to be transmitted, with the standard remote-c.

4. The AVS 850 Power Transmitter





Items included

- 1 Power Sender AVS 850 Power Transmitter
- 1 12 V plug-in mains adapter
- 1 RX 579 infra-red module
- 1 Cinch/Scart connecting cable
- 1 co-axial branch plug
- 1 co-axial cable
- 1 co-axial infra-red remote-control unit for cable tuner
- 1 aerial adapter

Control elements

1,433 MHz aerial

Receives the 433 MHz signals of the original remote-control unit sent by radio from the AVS 840 Power Transmitter and passes them on to the integrated cable tuner. The infra-red remote-control signals are also passed on via the enclosed infra-red module to the connected item, such as a video-recorder. The aerial must be placed upwards when the unit is in operation.

2. Socket for RX 579 extension module

For connecting the RX 579 extension module, which remotecontrols the transmitter. The infra-red diode on the extension module must be glued over the infra-red eye of the item being controlled. Please note Point 3 here.

3. Channel switch

The channels can either be selected one behind the other (1,2,3,4,1,2, etc., or the other way round) or set by means of the enclosed infra-red remote-control unit (using the keys TXA ... TXD – see Point 5).

4. TV channel selection switch

The TV channels can be selected with this switch.

5. Mode switch

It is possible to switch from TV to cable TV and video input.

6. On / Off switch

This is for switching the video transmitter on and off. When the video transmitter is on, LED 7 will light up.

7. LED display

This lights up when the transmitter is in operation.

8. Connecting socket for the mains adapter

This is for connecting the mains adapter.

9. A/V cinchinput sockets

1 video, 2 audio input sockets for feeding in the transmission signals. With adapter cables (2 are included with the system) it is possible to connect almost any item of equipment.

Note: for audio transmissions, it is usual to use a cinch/cinch cable. These are readily available in the trade (see picture).



10. AV cinch output sockets

1 video, 2 audio output sockets. These transmit the cable channel that has been set, or the signal from the video input. This depends on the setting of the mode button (5) and the remote control unit (see Point 5).

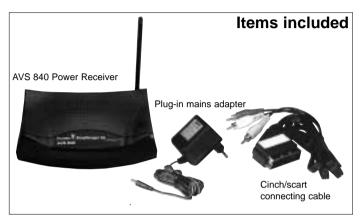
11. Aerial input socket for cable television

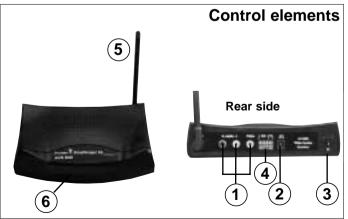
For connection to the cable television socket. For connecting, use the enclosed adapter and the co-axial cable.

12. 2.4 GHz transmission aerial

Transmits the cable or AV signal to the selected channel.

5. AVS 840 Power Receiver





Items included:

- 1 Power AVS 840 Power Receiver
- 1 9 V plug-in mains adapter
- 1 Cinch/scart connecting cable

Control elements

1. A/V Cinch output sockets

1 video, 2 audio output sockets. These take the received signal and feed it into the receiving unit via the appropriate adapter cable. With adapter cables (2 cinch / scart cables are included with the system) it is possible to connect almost any item of equipment.

Note: for audio transmissions, it is usual to use a cinch/cinch cable. These are readily available in the trade (see picture).



2. Connecting socket for 9 V mains adapter

For connecting the 9 V mains adapter.

3. On / Off switch

For switching the video receiver on and off.

4. Channel and switch settings.

The AVS 840 Power Receiver can be operated in one of two ways:

- 1. Permanent reception of a given wireless channel (cable TV or video).
- 2. Switching between the pre-set wireless channels at predetermined intervals. This function is necessary when, for instance, the Power Receiver is to be used with a number of different wireless monitor cameras with the AVS 850 Power Transmitter

4.1 Channel switch (rear side)

4 channel switches (switches 1 to 4) for setting the wireless-reception channel.

In this example, Channel 2 is activated.



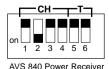
AVS 840 Power Receiver

4.2 Setting the switch-over time

Switches 5 and 6 can be used to set the switch-over time between the pre-set channels.

Timetable:

5	6	Time
ON	ON	8 seconds
ON	OFF	4 seconds
OFF	ON	2 seconds
OFF	OFF	1 seconds



4.3 Use as receiver without channel switching

The same channel must be set on the transmitter and the receiver. This facility means that up to four systems can be operated independently of one another.

Example: the AVS 840 Power Transmitter is sending the signal via Channel 2 to the AVS 850 Power Receiver



AVS 840 Power Receiver

4.4 Use as receiver with channel switching

Switches 1 to 4 enable the channels to be set to each of which the system will switch in turn. Switches 5 and 6 enable the switch-over time to be set

Example: the AVS 840 Power Transmitter is switching at 4-second intervals between Channels 1 and 2.



AVS 840 Power Receiver

5. Aerial for the control channel

Transmits the 433 MHz control signals of the original remotecontrol unit.

6. Infra-red eye

This is the point towards which the unit connected to the remotecontrol unit of the AVS 850 Power Transmitter must be pointed.



6. The infra-red remote-control unit for the cable tuner

General

You need the RC 815 remote-control unit in order to be able to control the cable tuner integrated into the AVS 850 Power Transmitter. The basic code "0000" is set on the remote-control unit when it is delivered. This code can be changed, e.g. if two parties in one building want to use the AVS 815 Power Transmitter in parallel (see more about this under Point 6.4).



Control elements

TX Power: for switching the 2.4 GHz wireless transmitter on and off

Power: for switching the AVS 850 on and off

0-9,+100: direct TV channel selection

CH: for paging up and down through the cable-TV channels

CH RTN: for switching back to the channel last selected.

TV/CATV: for switching between TV channels and cable

TV channels.

TV/VIDEO: for switching between cable TV and video input

SCAN: automatic search tuning for TV and cable TV transmitters

(to start the automatic search tuning, press "SCAN" twice)

CH+/-: Add or delete cable TV channels.

To delete a channel, select the one you want to delete, such as no. 30, and press "CH+/-". "-30 CANCEL" will appear in the screen. Next time you page through the

channel, no. 30 will no longer appear.

To add a channel (again), select it directly, e.g. select no. 30 by pressing 3+0. Press "CH+". "-30 ADD" will appear in the display. Next time you page through the channel.

no. 30 will be there.

TXA-TXD: for setting the 2.4 GHz transmission channel. This setting

must be the same as the channel in the AVS 840 Power

Transmitter. TXA=Channel 1, TXB= Channel 2,

TXC= Channel 3, TXD= Channel 4.

SET: for setting the code (see Point 6.2).

VOL: no function

FUNC: for setting the code (see Point 6.2).

MTS: no function MUTE: no function

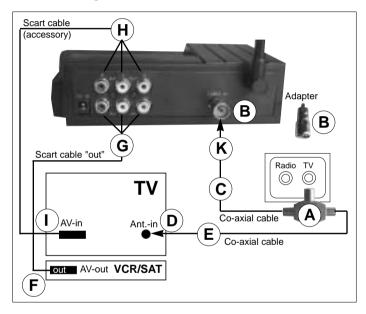
RECALL: shows the current mode in the TV channel and wireless

channel (e.g. TXA) in the television screen.



7. Bringing into operation

7.1 Connecting the AVS 850 Power Transmitter



- 1. Insert the cable branch plug "A" into the TV cable socket.
- 2. Insert the adapter "B" into the aerial socket of the AVS 850.
- 3. Connect the cable branch plug "A" and the aerial input "B" of the AVS 850 with the enclosed co-axial cable "C", using the adapter "B".

- Connect the cable branch plug "A" and the aerial input "D" of the TV set with the existing co-axial cable "E" (not included with this system).
- Connect the video output "F" of the video recorder or SAT receiver with the video input "G" of the AVS 850, using the cinch/scart cable labelled "out".
- Connect the video output "H" of the AVS 850 with the video input "I" of the television set (cable not included with this system).

Note: Points 5 and 6 are not necessary if the signal from the video recorder is not to be transmitted.

Note: If you use a cinch cable for the connection (accessory), note when connecting the unit that the colour of the plug has to match the colour of the socket on the unit. If they are different, please note the following: the yellow plug carries the video signal and must be inserted into the "video" socket, the red one goes into "audio right", and the white one into "audio left".

- Insert the mains adapter plug into a 230 V mains socket, and the unit plug into the socket provided. Never use any other mains adapter than this one.
- Switch the AVS 850 on with the "POWER" switch (an LED lights up).
 Place the AVS 850 video transmitter in a favourable position such as on top of the television set.
- Insert the RX 579 infra-red module into the "IR-Extender" socket provided and glue the infra-red diode onto the eye of the unit it is to control (see Point 3).

-

7. Starting up

7.2 Connecting the AVS 850 Power Receiver



The AVS 840 receives the AV signal from the AVS 850 Power Transmitter. The output signal is available from the AV sockets on the rear side of the unit.

Connecting:

- Insert the cinch plug of the connecting cable into the AV socket of the Power Receiver. Make sure the colour on the plug is the same as the one on the socket.
- 2. Now connect the plug at the other end of the cable to the unit that is to receive the signals. Make sure that the enclosed scart plug is inserted the right way round. Use the cable labelled "In". Do not exert force when inserting the plug!
 NOTE: If you use a cinch cable for the connection (accessory), note when connecting the unit that the colour of the plug has to match the colour of the socket on the unit. If they are different, please note the following: the yellow plug

carries the video signal and must be inserted into the "video" socket, the red one goes into "audio right", and the white one into "audio left".

- Set one of the channels 1 to 4 at the channel switch.
 Note. If the AVS 850 Power Transmitter and the AVS 840 Power Receiver are to work together, they have to be set both at the same wireless channel.
- Insert the mains adapter into a 230 V mains socket and the 9V plug into the socket provided. Never use any other mains adapter than this one.
- 5. Switch the Power Receiver on with the "On" (I) switch (the LED at the front lights up).

Place the AVS 840 Power Receiver in a favourable position, e.g. on top of the television set.,

NOTE: To control the cable tuner in the AVS 850 or the video recorder to which the AVS 850 Power Transmitter is connected, point the RC 815 cable-tuner remote-control unit, or use the original remote-control unit of the video recorder, at the infra-red eye of the AVS 840 on the front side.

Connecting the Power Receiver to a television set with a video recorder

If you would like to feed the AV signal into a video recorder, connect the AVS 840 Power Receiver to the AV or scart input sockets on the video recorder. You can then record the programme that is being received and/or watch television at the same time.



7. Starting up

7.3 Settings on the cable tuner

The settings on the cable tuner are made with the RC 815 infra-red remote-control unit from the place where the AVS 840 Power Receiver is set up.

Note: the TV AVS 815 Power Transmitter has two separate television programme memories, one for TV channels and the other for cable TV channels. You have to do a separate search-tuning scan for each level.

- Switch on the television set to which the AVS 840 is connected and select the video input (AV).
- Switch on the AVS 850 Power Transmitter and the AVS 840 Power Receiver.
- 3. The television set will display "RF ID OOO".
- Press the "Power" button to switch on the AVS 850 Power Transmitter.
- 5. Select the "TV/CATV" button with the level "TV".
- Press the "SCAN" button, and the TV will display "PROGRAMME PRESS SCAN AGAIN", so press "SCAN" again (within 2 seconds).
- The automatic search tuning scan (for terrestrial TV transmitters) will run for the TV level (it takes about 1 minute).
- 8. Select the level "CATV" with the "TV/CATV" button.
- Press the "SCAN" button, and the TV will display "PROGRAMME PRESS SCAN AGAIN", so press "SCAN" again (within 2 seconds).
- The automatic search tuning scan for the CATV level (cable TV) will run.
- 11. Finished with the channel section button "CH" you can now page through all the channels that have been found.
- 12. To delete channels or to put them back, press the "CH+/-" button (see description of RC 815, Point 5).
- 13. The "TV/CATV" button can be used to select either TV or cable TV.

7.4 Changing the coding of the RC 815 remote-control unit

Note: it is only necessary to change the code of the RC 815 remote-control unit if another TV AVS 815 Power Transmitter is being operated in your immediate neighbourhood (within about 300 metres).

The basic setting for the code is "000". To operate the TV AVS 815 Power Transmitter, you need the RC 815 infra-red remote-control unit included with the system.

To avoid switching your neighbour's Power Transmitter TV on and off, you can set a code on the RC 815 remote-control unit and at the AVS 850 Power Transmitter.

Please proceed as follows:

- Connect the AVS 840 Power Receiver to the television set to which the cable signal is to be sent (see Point 6.2).
- Take the AVS 850 Power Transmitter, place it next to the AVS 840 Power Receiver, and connect only the mains adapter.
- Take the RC 815 remote-control unit and press the buttons "FUNC" and "SET" simultaneously for about 2 seconds. (The red LED will flicker when you let go of them).
- Use the number keys (0 to 9) to enter a three-digit code number. Any number is available between 000 and 255.



RC 815 infra-red remote-control unit

- Press the "SFT" button.
- Switch on the television set connected to the AVS 840 Power Receiver and select the AV input.
 You will see the lettering "RF ID XXX" (XXX represents the code

currently set on the RC 815 remote-control unit).

- 7. Disconnect the mains adapter of the AVS 850 from the wall socket for a moment and then insert it again.
- Point the RC 815 remote-control unit at the AVS 840 Power Receiver and press the "POWER" button.
 Now press "POWER" and "SET" simultaneously.
 (You have about 30 seconds time for Points 7 and 8). The display on the television screen will now be "RF ID ABC" (ABC represents the code you have now selected).
- 9. Test the connection by pressing "POWER" (you will only see a glittering pattern on the television set).
- 10. Connect the AVS 850 Power Transmitter to the cable TV socket again (see Point 7.1).



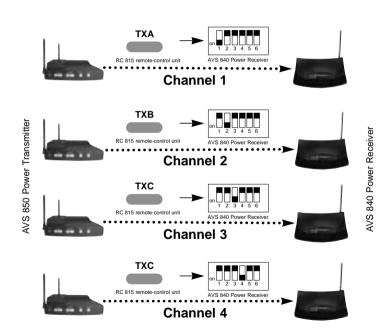
8. Operating possibilities

Fine-tuning the TV AVS 815 Power Transmitter

The AVS 850 power transmitter is able to transmit AV signals over a distance of up to 300 metres (line of sight). Any wall or concrete ceiling will represent a slight obstacle, and will thus reduce the transmission range of the system.

Parallel operation of a number of AVS 815 Power Transmitters

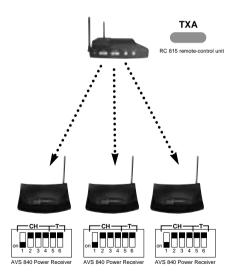
The various different channel settings (1 to 4) enable up to four Power Transmitters to operate in the immediate vicinity of one another.



Extension possibilities with the TV AVS 815 Power Transmitter

An AVS 815 Power Transmitter TV Set can be extended with a number of AVS 840 Power Receivers.

Example: 1 Power Transmitter to 3 Power Receivers



9. Rectifying a malfunction

Problem	Remedy
Poor transmission quality	 Reflections of the signal can sometimes affect the transmission quality. Move the Power Transmitter or Receiver away just a few inches and this should solve the problem. Change the channel settings (1 to 4) on the Power Transmitter and the Power Receiver.
No transmission	 Is the same transmission channel (1 to 4) set on the Power Transmitter and on the Power Receiver? Is the transmission distance too great? Reduce the distance between the Power Transmitter and the Power Receiver. The range is up to 300 metres line-of-sight, but walls and ceilings reduce it. Have you used the right scart cable?
Remote-control channel	 If you operate wireless headphones or a similar wireless transmitter on the same frequency as the AVS 815, this can severely reduce its range. Is the RX cable inserted into the AVS 850 and glued over the infra-red eye of the unit that is being controlled?
RC 815 infra-red remote-control does not control the AVS 850	Wrong code set. Reset the code as described in Point 7.4.

10. Technical data

Power Transmitter TV Set AVS 815

Power Transmitter AVS 850

Operating voltage: Mains adapter 12 V DC

Transmitter: 4 Channel Channel 1 (TXA): 2.414 GHz Channel 2 (TXB): 2.432 GHz Channel 3 (TXC): 2.450 GHz Channel 4 (TXD): 2.468 GHz Transmitter output: 10 mW

up to 300 metres line-of-sight Range:

433.92 MHz Receiver:

Cable tuner channels:

VHF low: S6 (140.25 MHz) to

e2 (48,25 MHz)

VHF high: S31 (383,25 MHz) to

s7 (147,25 MHz)

UHF: CH 69 (855,25 MHz) to

s32 (391.25 MHz)

AV connections: 3 cinch sockets

2 audio, 1 video

FΜ Modulation:

Video input signal: 1 Vpp (type) Audio input signal: 1 Vpp (type) 75 Ohm Video input impedance: Audio input impedance: 600 Ohm

Dimensions (W x H x D): 195 x 47 x 150 mm

Weight: 470 g

AVS 840 Power Receiver

Operating voltage: Mains adapter 9 V DC

Receiver: 4 Channel Channel 1: 2.414 GHz Channel 2: 2.432 GHz Channel 3: 2.450 GHz Channel 4: 2.468 GHz AV connections: 3 cinch sockets 2 audio, 1 video

Video output signal: 1 Vpp (type) Audio output signal: 1 Vpp (type) Remote-control channel:

433.92 MHz.

1 mW transmission output Dimensions (W x H x D): 170 x 40 x 130 mm

Weight: 270 g

Right reserved to make modifications