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MyM Pro 3S/6S Installation guide

a2b
design for TV

CONTENT

1 Introduction

Thank you for purchasing an A2B Electronics product. The MyM Pro 3S/6S is a revolutionary solution for reception and modulation of by satellite transmitted TV content into an analogue format suited for small SMATV networks where cost efficiency and high quality is required.
The MyM Pro 3S/6S receives DVB-S/S2 transmissions.

The MyM Pro 3S/6S unit is delivered with hardware and software that supports DVB-S/S2 reception, MPEG2/MPEG4 decoding, HD downscaling,
DSB RF modulation with NICAM or A2 audio, IP control and management.
The MyM Pro 3S/6S can be upgraded for enhanced functionality by software upgrades.

Software upgrades are available from A2B Electronics web site.

A2B Electronics AB
Phone: +46 (0)141 229115
E-mail: support@a2b.se

Visit our web site www.a2b.se for more information.

2 Unpacking the unit

The following items are included in the package:

Amount	Description
1	MyM Pro 3S/6S
1	Quick guide

Every unit is quality controlled by us before delivery. Should any items be missing when unpacking, please contact our support service (see page 3 for contact info).
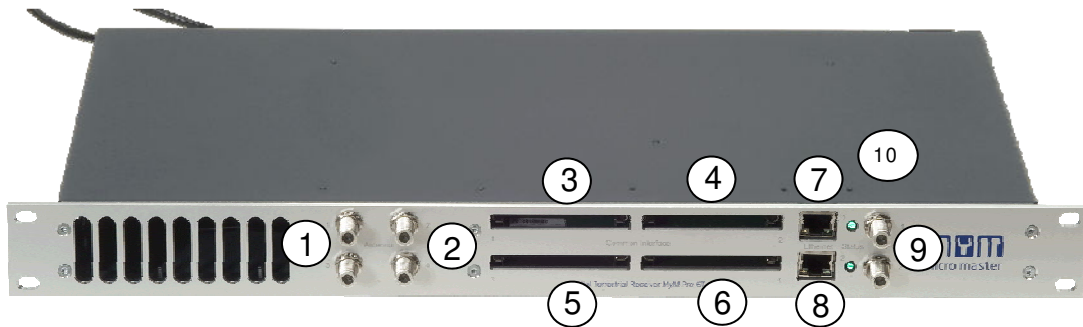
1. Antenna inputs
(Ch1 to Ch3)

Connect the satellite signal to these connectors

2. Antenna inputs
(Ch4 to Ch6)

Connect the satellite signal to these connectors

3. Common Interface 1

Insert a Common Interface module into this slot
(Supports decryption for Channel 1 and 2)

4. Common Interface 2

Insert a Common Interface module into this slot
(Supports decryption for Channel 3)

5. Common Interface 3

Insert a Common Interface module into this slot
(Supports decryption for Channel 4 and 5)

6. Common Interface 4

Insert a Common Interface module into this slot
(Supports decryption for Channel 6)

7 and 8. Ethernet ports

RJ-45 port for 10/100 baseT Ethernet. Connect your
PC to these ports for management and upgrades.

9. RF-output(s)

Combined 3 channel RF outputs for connection to
your SMATV network.

10. Indicator LED(s)

Status indicator

The MyM Pro 3S/6S has an embedded web server allowing web browser Internet Explorer to connect to the unit for settings and management.
No controller software is needed. The MyM Pro 3S/6S has by default static IP address(es) for connecting your PC to the unit.

*NOTE! MyM Pro 3S/6S is only approved with Internet Explorer as web browser.*

The MyM Pro 3S/6S is delivered with the default IP address: 192.168.0.20 for port 1 and 192.168.0.21 for port 2 in 6S.
First time installation requires that you set a static IP address on your computer. For example set your PC to IP address: 192.168.0.19 and Net mask: 255.255.255.0

TCP/IP settings for Windows XP (setting your PC to 192.168.0.19)

Select "Start", "Control panel" and "Network connections". Next select "Network and Internet settings". "Right click" on [Settings for local network] and select [Properties].
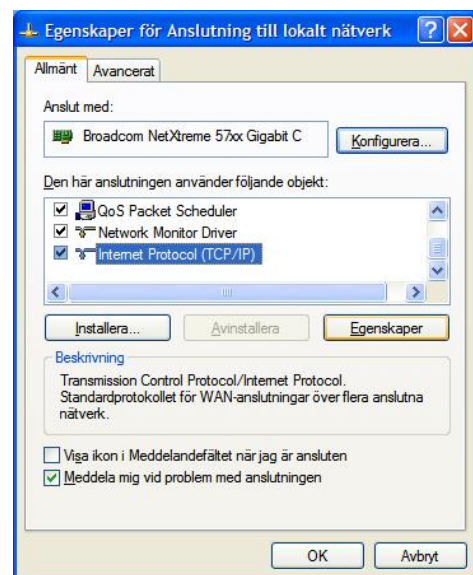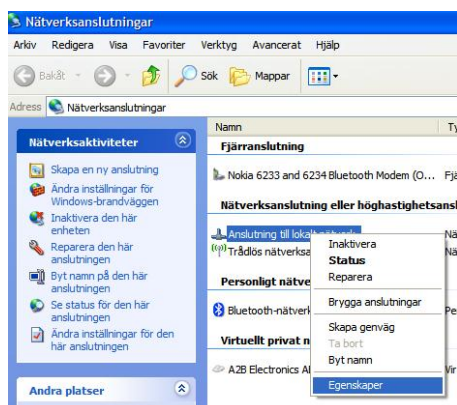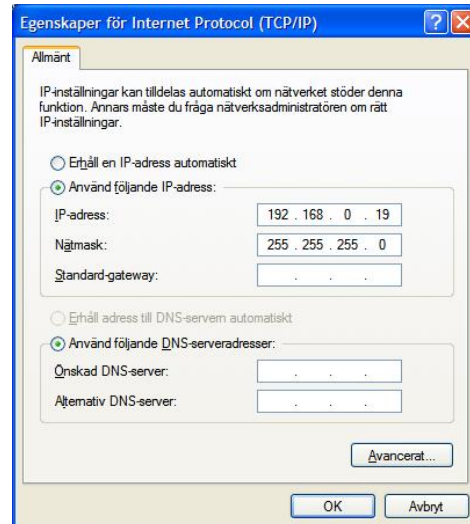
In Properties select [Internet protocol (TCP/IP)] and [Properties].

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Select [Use this IP adress] and write: 192.168.0.19 and select [Net mask] 255.255.255.0. Click [OK] and then click [Close].

NOTE! For PC with other Operating Systems (OS) than Windows, please consult the Owners manual for your PC for [IP/Network settings].

Connecting your PC to the MyM Pro 3S/6S

Connect the MyM Pro 3S/6S double power cords to a wall outlet.
See section 6 for installation.
Next connect your PC to the MyM Pro 3S/6S with a network cable.
Start your web browser and write the IP address 192.168.0.20 and 192.168.0.21 for second port *) in the address field of your browser.

NOTE! MyM Pro 3S/6S is only approved with Internet Explorer as web browser.

Settings of IP address

Click the **[System options]** menu and then press **[IP Settings]** to set a new IP address, Netmask and Gateway for the MyM Pro 3S/6S.

*) MyM Pro 6S

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English

5 Menus and settings

All necessary settings can be made in the web GUI via a web browser. When first connection is made with the MyM Pro 3S/6S following overview menu will appear.

5.1 Overview menu

Current settings

Contains information of current input and output signals, if the tuners are locked to a signal, uptime, firmware version, bootloader version, hardware revision, serial number, current IP Network settings, Description and Position.

Installation overview

In this menu you can see all MyM Pro units when connected to a switch and also see EXM/OXM units that are connected to the same switch.

Software options

In this menu you can see which software options that are activated.

To continue with settings click the **[Input]** name in the banner.

5.2 Input settings

As the MyM Pro 3S/6S contains 2 separate tuners, start by selecting either **[Tuner 1]** or **[Tuner 2]**. Tuner 1 provides the service list for RF output 1 and 2. Tuner 2 provides the service list for RF output 3. The tuner can also be "Disabled".

Select the actual Input parameters for the satellite transponder you receive. After the tuner has locked you can read the values for **[Locked]**, **[Level]** and **[C/N]**.

If you have an MyM Pro 6S proceed with next two tuners **[Tuner 3]** and **[Tuner 4]** after moving the TP cable to the other RJ45 port (if not using switch). Tuner 3 provides the service list for RF output 4 and 5. Tuner 4 provides the service list for RF output 6.

MyM Pro WEB Configurator

MyM Pro WEB Configurator

MyM Pro WEB Configurator

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English

5 Menus and settings (continued)

5.3 Output settings

Modulation

Band
Start the output setup by selecting which band you want to use. You can select VHF-7, VHF-8 and UHF. VHF-7 corresponds to 7/8 MHz bandwidth (CCIR). VHF-8 corresponds to 8 MHz bandwidth (OIR). After selection press **[Set].**

Frequency
For each of the 3 (or 6) possible RF output channels, set the desired output channels by using **[Channel name]** scroll list or write the frequency.

NOTE! The MyM Pro provides DSB modulation so you can't use adjacent channels.

MyM Pro WEB Configurator

MyM Pro WEB Configurator

National

**Subtitle/
Type**
Set type of subtitling to Normal or for Hearing Impaired or None.

Language
Select subtitling language. Depends of received languages in the terrestrial signal.

Priority
Set DVB or Teletext subtitling as default selection.

Audio/Video Delay (ms)
This is automatic. However, if you experience a lip-sync delay problem you can set delay between 200ms and -200ms individually for each Channel.

MyM Pro WEB Configurator

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English

5.3 Output settings continued

National (continued)
Auto conversion
Setting this in position "On" converts subtitling to fit actual picture aspect ratio if needed (If 4:3 is chosen and transmission in 16:9).

Teletext Charset
Select appropriate characters for selected language.

Audio/
Audio language
Select which language to receive and transmit on the outgoing programs.

Audio level
This setting allows to equalise the difference in sound level between different programs. Settings can be done between +6 and -6 dB.

Advanced

Aspect ratio
Set correct picture format of the programs transmitted from the MyM Pro 3S/6S.

Video standard
Select your regional video standard.

Audio system
Set your regional audio standard.

Video watchdog
Here you can switch the video WD On or Off. This can be useful for example if authorisation of a new smartcard is hard to achieve.

NOTE! Changing this setting will only take effect if a reboot is done after the change.

MyM Pro WEB Configurator

MyM Pro WEB Configurator

5.4 Service Management

The MyM Pro 3S contains 2 and for
MyM Pro 6S 4 separate DVB-T tuners and totally 3 or 6 services can be selected for each of the output channels, named **[CH-1], [CH-2]** and **[CH-3]** and for MyM Pro 6S also **[CH-4]**, **[CH-5]** and **[CH-6]**.

The list of services presents all received services from both tuner inputs. Service from Tuner 1 is named "Ant 1" and services from Tuner 2 is named "Ant 2".

When one program (service) is selected, the box in front of the program name changes colour to green.

The service list gives following information:

Selected service   Green colour indication

Type   Shows type of service (MPEG-2, MPEG-4, Data etc.)

Name   Program name

Provider   Name of operator

Input   Indicates what tuner input the service is received from.

SID   Service ID number (as received)

Hanglock   Shows if service is encrypted or not and if CAM is inserted

Status   Icons for Analogue out and watchdog enabled

Count   Counts if there is a fault in the video decoding

NOTE! To detect whether a Common Interface module and smart card actually decrypts the programs is only possible by watching the outgoing signal on a TV-set tuned to the correct frequency.
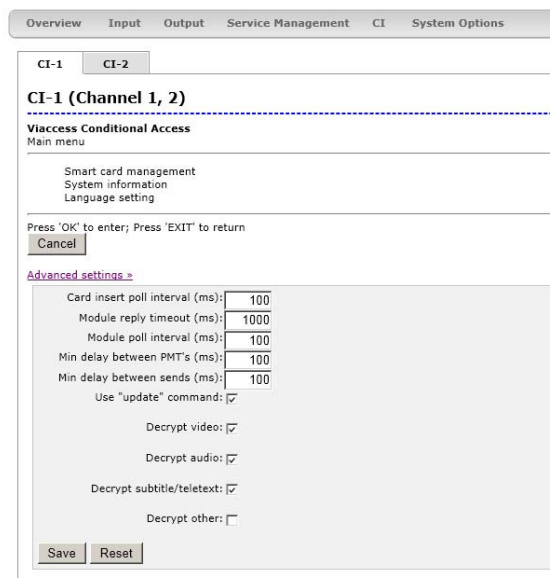
5.5 CI menu

The MyM Pro 3S contains 2 CI (Common Interface) and MyM Pro 6S contains 4 CI (Common interface). **[CI-1]** decrypts services for output CH-1 and CH-2. The **[CI-2]** decrypt services for output CH-3.

In MyM Pro 6S **[CI-3]** decrypt services for CH-4 and CH-5 and **[CI-4]** decrypt service for CH-6. In menu you get information about CAM and card.

In the Advanced settings menu you can change timing settings for the used CAM if there is a need for changing that. After a change is made the **[Save]** button must be clicked. If changes are made and does not work, you can get the default settings again by a click on the **[Reset]** button and a click on the **[Save]** button.

NOTE! If one change CAM to another CA system (i.e. from NDS to Conax) the unit needs to be rebooted. Decryption may take some seconds before it starts.

MyM Pro WEB Configurator

MyM Pro WEB Configurator

5 Menus and settings (continued)

5.6 System options

Upload/Upgrade

The Upgrade menu is used to be able to download software Upgrades or future software functionality.

The procedure of downloading a new software looks as described below:

1. Download the appropriate file from our web page to your PC.

2. Browse for the file in the MyM Pro 3S/6S user Interface.

3. Press [Upload]

4. Wait until message shows up, "Upload completed".

5. Click on **[Restart]** to reboot the MyM Pro 3S/6S.

NOTE! It could take up to two minutes to reboot!

The Upload menu shows current files downloaded into the units and can be useful when contacting A2B support.

Uptime

The Uptime menu gives statistics of uptime and possible restarts. The log can be cleared by click on **[Clear log]**.

IP settings

This section shows current IP-address, Netmask and Gateway settings.

Remember to change settings if the default IP-address is used by other devices in your network.

In case you have forgotten your IP-address please consult the A2B support web site and download free of charge our tool "IP-supporter". This tool finds all MyM Pro 3S/6S and their respective IP-addresses available in your network.

Also remember to press **[Apply settings]** when ready.

Reboot MyM

Pressing **[Reboot unit]** re-starts the MyM Pro 3S/6S. All settings are preserved so no settings or programs will be lost.

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English

6 Installation and configuration

The MyM Pro 3S/6S can be installed either as a stand alone unit directly on the wall by the use of a dedicated MyM Pro 3S/6S Wall Mount brackets (part number 702800.10) or in an 19 inch cabinet.

Before connecting power to the MyM Pro 3S/6S, make sure that all other connections have been made. A coaxial cable of good quality with an F-connector should be connected to the Antenna input and another one from the RF output to the SMATV network.
Make all necessary settings as described in section 4 and 5.
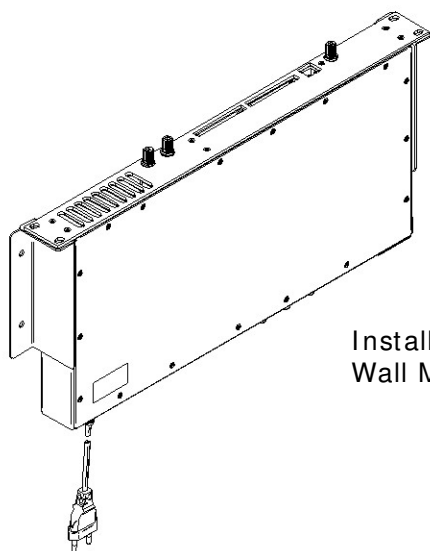
Installation with MyM Pro 3S
Wall Mount kit 1 unit.
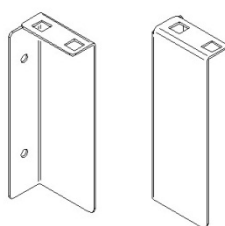
MyM Pro 3S/6S Wall
Mount kit 1 unit
including screws
and nuts
Art no: 121401.10
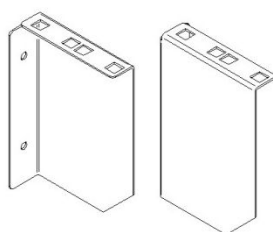
MyM Pro 3S/6S Wall
Mount kit 2 units
including screws
and nuts
Art no: 121402.10
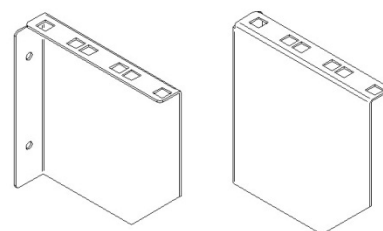
MyM Pro 3S/6S
Wall Mount kit 3
units (for two MyM
and one switch)
including screws
and nuts.
Art no: 121403.10

7 Technical specification MyM Pro 3S/6S

2 / 4 x DVB-S/S2 Satellite Receiver

Input frequency	950 - 2150 MHz
Symbol rate	1-45 Msymbols/s
Connectors	Type F female, 75 Ω
Input level	-65 to -25 dBm
LNB voltage	Auto, off or 13/18V
LNB current	200 mA per input
22kHz to LNB	Auto, on or off
FEC	Auto
DiSEqC	1.1

3 / 6 x MPEG Decoder – Video - audio

Video standard	MPEG2 MP@ML, MPEG4 h.264 AVC MP@L3
Audio standard	AAC HE or MPEG 1 layer II
Picture aspect ratio	Letterbox, Anamorphic
Teletext	VBI
Subtitling	Teletext or DVB subtitling

3 / 6 x Modulator

|	
Modulation standard	PAL B/G, I, D/K, SECAM (DSB)
Audio	FM-mono, NICAM stereo and A2/A2* stereo
Output channels	Double side band from 160 – 862 MHz.
Output level	Min. 80 dBµV, fixed
RF output connector	Type F female, 75 Ω

Decryption

Decryption Interface	2/4 x Common Interface (PMCIA 5VDC)
Decryption type	Single or Multidecryption CAM's supported
CI 1 slot (3/6S)	Decryption for output Ch1 and Ch2
CI 2 slot (3/6S)	Decryption for output Ch3
CI 3 slot (6S)	Decryption for output Ch4 and Ch5
CI 4 slot (6S)	Decryption for output Ch6

Miscellaneous

AC Power supply	230 VAC typ (94-264VAC)
AC power consumption 3S	Typ. 18 W
AC power consumption 6S	Typ. 36 W
Ethernet port	Setup and update
Setup	Web based GUI (approved with Internet Explorer)
Dimension	383x220x44 mm (excl. connectors)
Weight	Approx. 3,2 kg
Operating temperature	-20 to +45°C non condensing

Example of MyM Pro 3S/6S Web GUI

8 Declaration of Conformity

The document for Declaration of Conformity is available for download from www.a2b.se.

Further information at www.a2b.se.

9 Abbreviations

DVB	Digital Video Broadcasting (Standardization body)
MPEG-2	Compression format for digital TV
MPEG-4	Compression format for digital TV (SD and HD)
DSB	Double Side Band (RF modulation occupying 2 channels)
NICAM	Digital sound format for analogue TV transmission
IP	Internet Protocol (defines how data is packetized for Internet broadcast)
DVB-S	Modulation format (QPSK) for satellite transmission of digital TV
DVB-S2	Modulation format (QPSK or 8PSK) for satellite transmission of digital TV
DHCP	Dynamic Host Configuration Protocol is a protocol used by networked devices (*clients*) to obtain the parameters necessary for operation in an Internet Protocol network. This protocol reduces system administration workload, allowing devices to be added to the network with little or no manual configuration.
Common Interface	Connector for a PCMCIA module used for decrypting encrypted TV programs. Modules should comply with the DVB CI standard
SD	Standard definition TV (576i in Europe)
SMS	Service Management System (system for handling smartcards).
SMATV	Satellite Master Antenna TV.
A2	Dual sound analogue stereo audio
LNB	Low Noise Block (outdoor unit for sat. Reception)
GUI	Graphical User Interface
QAM	Quadrature Amplitude Modulation (digital modulation method)
QPSK	Quadrature Phase Shift Keying (digital modulation method)
8 PSK	Eight Phase Shift Keying (digital modulation method)
FEC	Forward Error corection (digital error correction method for digital transmissions)
C/N	Carrier to Noise ratio (defines the difference in dB between digital signal and noise level
AAC-HE	Digital sound compression standard
VBI	Vertical Blanking Interval. Part in video signal non-visible
CAM	Conditional Access Module (see above Common Interface)

Notes

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