

SKILLRUN UNITY 5000

- SKILLRUN UNITY 7000

- SKILLRUN TX 500

(DJJ)

Pre-Installation Requirements

Rev: **2.0**
Date: **2019-02-10**



The Wellness Company

Index

1. GENERAL WARNINGS	7
2. NETWORK DESIGN – CONFIGURATION AND INSTALLATION.....	9
2.1 NETWORK DESIGN AND INSTALLATION	9
2.2 CONFIGURATION AND INSTALLATION	9
3. DISPLAY	11
3.1 SKILLRUN UNITY 5000 / 7000	11
3.2 SKILLRUN TX 500.....	11
4. ELECTRICAL AND TECHNICAL DATA / REQUIREMENTS	13
4.1 DATA & REQUIREMENTS.....	13
4.2 OVERALL DIMENSIONS OF EQUIPMENT	14
4.2.1 SKILLRUN UNITY 5000 / 7000	14
4.2.2 SKILLRUN TX 500	15
4.3 ELECTRICAL CONNECTION.....	15
4.4 CONNECTION TO ANOTHER DEVICE	16
4.5 POSITIONING OF POWER SUPPLY SOCKET AND LAYOUT OF CABLES	17
4.6 POSITIONING OF POWER INLET	20
5. NETWORK REQUIREMENTS	21
5.1 INTRODUCTION	21
5.2 FREEZING UNITY DUE TO A WRONG LAN NETWORK SETUP (ONLY FOR SKILL- RUN UNITY 5000 / 7000)	21
5.3 ETHERNET CABLED NETWORK (ONLY FOR SKILLRUN UNITY 5000 / 7000).....	21
5.4 WI-FI NETWORK REQUIREMENTS.....	21
5.5 WIRELESS GUIDELINES	22
5.6 MAXIMUM NUMBER OF EQUIPMENT CONNECTED TO ONE ACCESS POINT	23
5.7 INTERNET CONNECTION BANDWIDTH REQUIREMENTS (ONLY FOR SKILL- RUN UNITY 5000 / 7000)	23
5.8 INTERNET CONNECTION BANDWIDTH REQUIREMENTS (ONLY FOR SKILLRUN TX 500).....	25
5.9 FIREWALL / ROUTER RULES FOR ACCESS TO MYWELLNESS CLOUD SERVIC- ES	27
5.10 PROXY (ONLY FOR SKILLRUN UNITY 5000 / 7000)	28
6. STANDARD TV TECHNICAL SPECIFICATIONS (ONLY FOR SKILLRUN UNITY 5000 / 7000)	29
6.1 INTRODUCTION	29



6.2	VIRTUAL LAN	30
6.3	LAN	30
6.4	UNITY 3.0 - VERSION (-T) STANDARD OPTIONS	31
6.4.1	RANGE OF FRAMERATE AND BITRATE OF DVB-T HD VIDEO STREAM	33
6.5	UNITY 3.0 - VERSION (-A) STANDARD OPTIONS - USA/CANADA	33
6.6	UNITY 3.0 - VERSION (-I) STANDARD OPTIONS - JAPAN	36
7.	SKILLRUN CLASS REQUIREMENTS (ONLY FOR SKILLRUN UNITY 5000 / 7000)	39
8.	ACKNOWLEDGEMENT AND ACCEPTANCE	41
9.	LIST OF CHANGES FOR MANUAL REVISION.....	43
9.1	REVISION 2.0.....	43

The information in this manual is intended for QUALIFIED TECHNICAL PERSONNEL - designated by the customer - who are in charge of preparing the electrical and network line, to guarantee the correct functioning of equipment.



NOTES: This document contains proprietary information that is covered by copyright. All rights reserved. No part of this document may be circulated, copied, reproduced or translated into another language without the prior written consent of Technogym.

Additional information may be included in the After Sales technical documents, available in the official 'After Sales documents repository'.

The information contained in this document may be changed without prior notification. For updates, please refer to the official 'After Sales documents repository'.

Technogym® is a trademark owned by Technogym S.p.A.



The Wellness Company

SKILLRUN (DJJ) Pre-Installation Requirements

Rev. 2.0

Blank page

1. GENERAL WARNINGS

This manual includes informative notes with specific meanings:



DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.



CAUTION: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



ATTENTION: Regulation that may lead to damage to the equipment if not complied with.



Detail regarding the operation in progress.



The Wellness Company

SKILLRUN (DJJ) Pre-Installation Requirements

Rev. 2.0

Blank page

2. NETWORK DESIGN – CONFIGURATION AND INSTALLATION

2.1 NETWORK DESIGN AND INSTALLATION

During the network design and preparation phases, Technogym requests to be put in touch with the technicians of the company performing the work, in order to obtain and provide technical information, so that the network is installed and configured according to the required technical.

Technogym can not be held responsible for failures due to site preparation, assembly and installation not correct.

2.2 CONFIGURATION AND INSTALLATION

Before performing the installation the customer shall inform Technogym that all the required components have been provided and installed and that they operate correctly.



ATTENTION: Installation and configuration of the network infrastructure (cables), of the network hardware (Switch, Router, firewall) and any wireless network are at the expense of the customer.



ATTENTION: Technogym warns that the efficiency and correct operation of the equipment and of the mywellness Cloud services depend on the technical characteristics of the hardware that is installed.



ATTENTION: Technogym does not guarantee the correct operation of the mywellness Cloud services in the event of failure to comply with all the technical specifications and warnings indicated.



The Wellness Company

SKILLRUN (DJJ) Pre-Installation Requirements

Rev. 2.0

Blank page

3. DISPLAY

3.1 SKILLRUN UNITY 5000 / 7000

The SKILLRUN UNITY 5000 / 7000 is fitted with UNITY 3.0 display.



Fig. 1 - UNITY 3.0 display

3.2 SKILLRUN TX 500

The Skillrun TX 500 is fitted with TX display (10").



Fig. 2 - TX display



The Wellness Company

SKILLRUN (DJJ) Pre-Installation Requirements

Rev. 2.0

Blank page

4. ELECTRICAL AND TECHNICAL DATA / REQUIREMENTS

4.1 DATA & REQUIREMENTS

SKILLRUN (DJJ)		
	DJJ0E... - DJJAE...	DJJ0A... - DJJAA...
Power Supply	200÷240Vac 50/60Hz	100÷240Vac 50/60Hz
Power Requirements	“EU” version: 200÷240V 50/60Hz (It is advisable 16A 250V dedicated socket for each machine)	“U” version: 100÷240V 50/60Hz (It is advisable 20A 125V or 20A 250V dedicated socket for each machine)
Peak Motor Power	5800 W (8 Hp)	5800 W (8 Hp)
Maximum user weight in walking mode	220 Kg (485 lb)	220 Kg (485 lb)
Maximum user weight in running mode	180 Kg (397 lb)	180 Kg (397 lb)
Speed 100 Vac power supply maximum power input	-	0.2 ÷ 25 Km/h (0.1 ÷ 15.5 mph) 1800 VA
Speed 120 Vac power supply maximum power input	-	0.2 ÷ 30 Km/h (0.1 ÷ 18.6 mph) 1800 VA
Speed 200 ÷ 240 Vac power supply maximum power input	0.2 ÷ 30 Km/h (0.1 ÷ 18.6 mph) 2000 VA	0.2 ÷ 30 Km/h (0.1 ÷ 18.6 mph) 2000 VA
Gradient	-3% ÷ 25%	-3% ÷ 25%
Noise Level	Less than 70 dB	Less than 70 dB
Protection grade	IP 20	IP 20
Operating Temperature	from +5°C to +30°C (from +41°F to +86°F)	from +5°C to +30°C (from +41°F to +86°F)

Tab. 1

The peak power values refer to a user with a maximum weight of 100Kg.

i NOTE: We recommend a dedicated power supply line for each machine.

i NOTE: ONLY UK: Recommended 3 x treadmills per ring main with 32amp Type C MCB.

4.2 OVERALL DIMENSIONS OF EQUIPMENT

4.2.1 SKILLRUN UNITY 5000 / 7000

Length	1851 mm - 73"
Width	876 mm - 34"
Height	1683 mm - 66"
Weight of equipment - SKILLRUN UNITY 5000	220 Kg (485 lb)
Weight of equipment - SKILLRUN UNITY 7000	232 Kg (511 lb)

Tab. 2

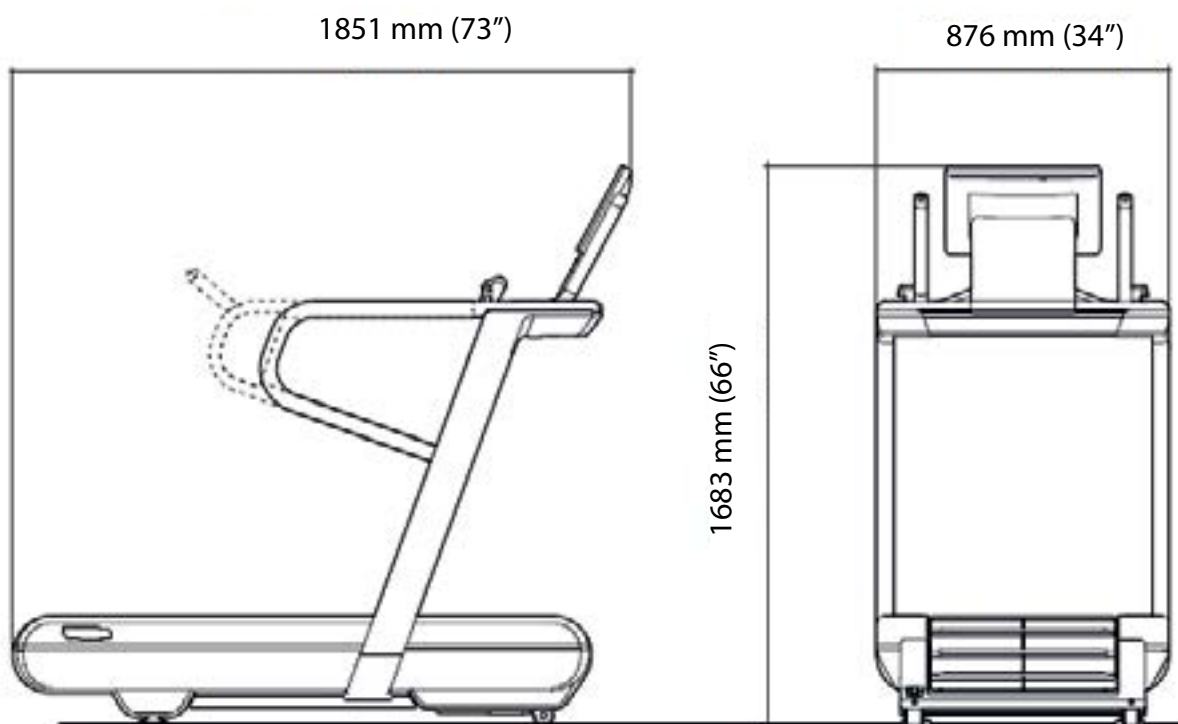


Fig. 3

4.2.2 SKILLRUN TX 500

Length	1835 mm - 72"
Width	876 mm - 34"
Height	1599 mm - 63"
Weight of equipment	216 Kg (476 lb)

Tab. 3

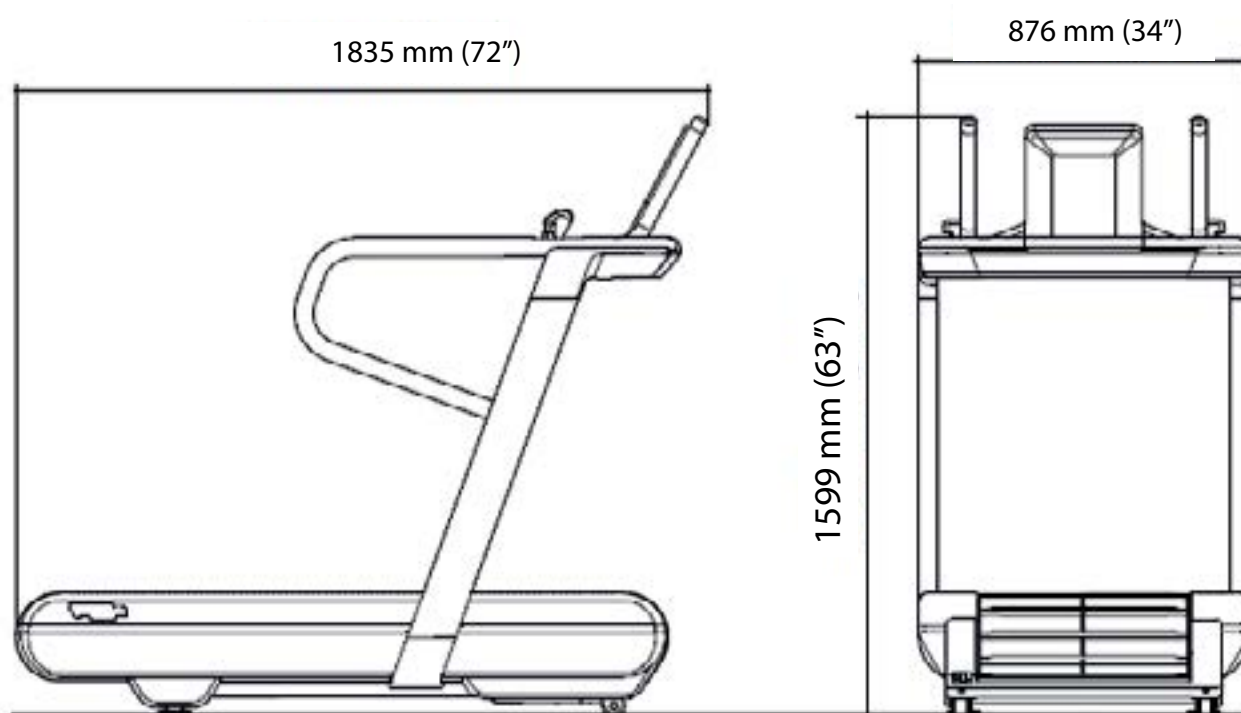


Fig. 4

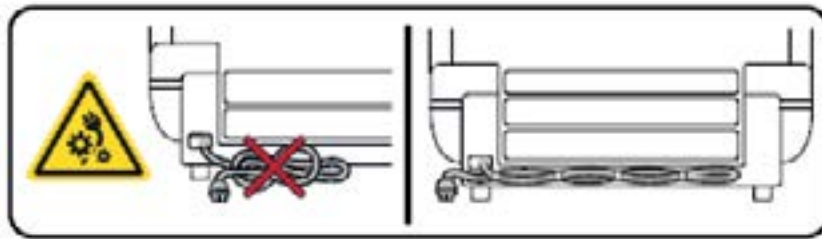
4.3 ELECTRICAL CONNECTION

Before connecting the equipment to the mains power supply, ensure that the electrical system specifications comply with current regulations. Check the mains power supply specifications on the identification label.



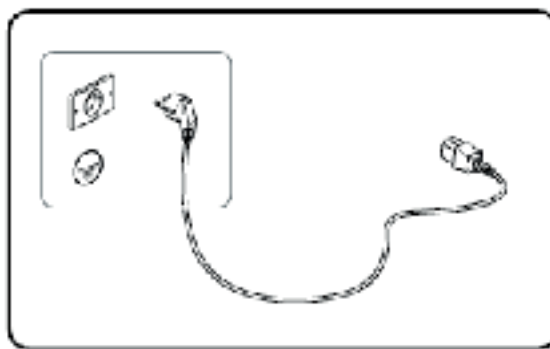
WARNING: The wall socket must be located in a place where the plugging and unplugging can be done easily and safely.

The excess cable must be arranged with specific cable ties / clips.

**Fig. 5**

The power supply socket must be grounded . If not, a ground connection must be installed by a qualified electrician before connecting the equipment to the electricity mains.

The product must be grounded. If the unit malfunctions or breaks down, earthing provides a minimum resistance path for electric current thus reducing the risk of electric shock. The product is equipped with a cable that includes an earth wire and an earthing plug. The plug must be connected to an appropriate socket that is properly installed and earthed in accordance with all local codes and ordinances.

**Fig. 6**

WARNING: Improper connection of the earth wire may result in risk of electrical shock. Check with a qualified electrician or maintenance operator if you are in doubt as to whether the product is properly earthed. Do not modify the plug provided with the product; if it does not fit the socket, have a suitable socket installed by a qualified electrician.

4.4 CONNECTION TO ANOTHER DEVICE

Use an RF coaxial cable for the connection with an F type of connector for the equipment.

The wall socket of the aerial cable must be positioned so that the plug can be easily inserted and removed.



WARNING: The devices connected must comply with international standards.

4.5 POSITIONING OF POWER SUPPLY SOCKET AND LAYOUT OF CABLES

In the SKILLRUN, It is mandatory to correctly arrange the cables (TV + LAN + power cord), preventing the cables from being pinched when the belt is moving and the equipment moves with a gradient. Moreover, the customer should position the power supply socket as detailed below.



WARNING: The rubbing of the cables with the running surface causes the wear of the plastic / insulation protection up to create a short circuit: a potentially dangerous condition for the user.

The following figure shows the compliant positioning of power supply socket with respect to the equipment and the relative layout of cables (TV + LAN + power cord).

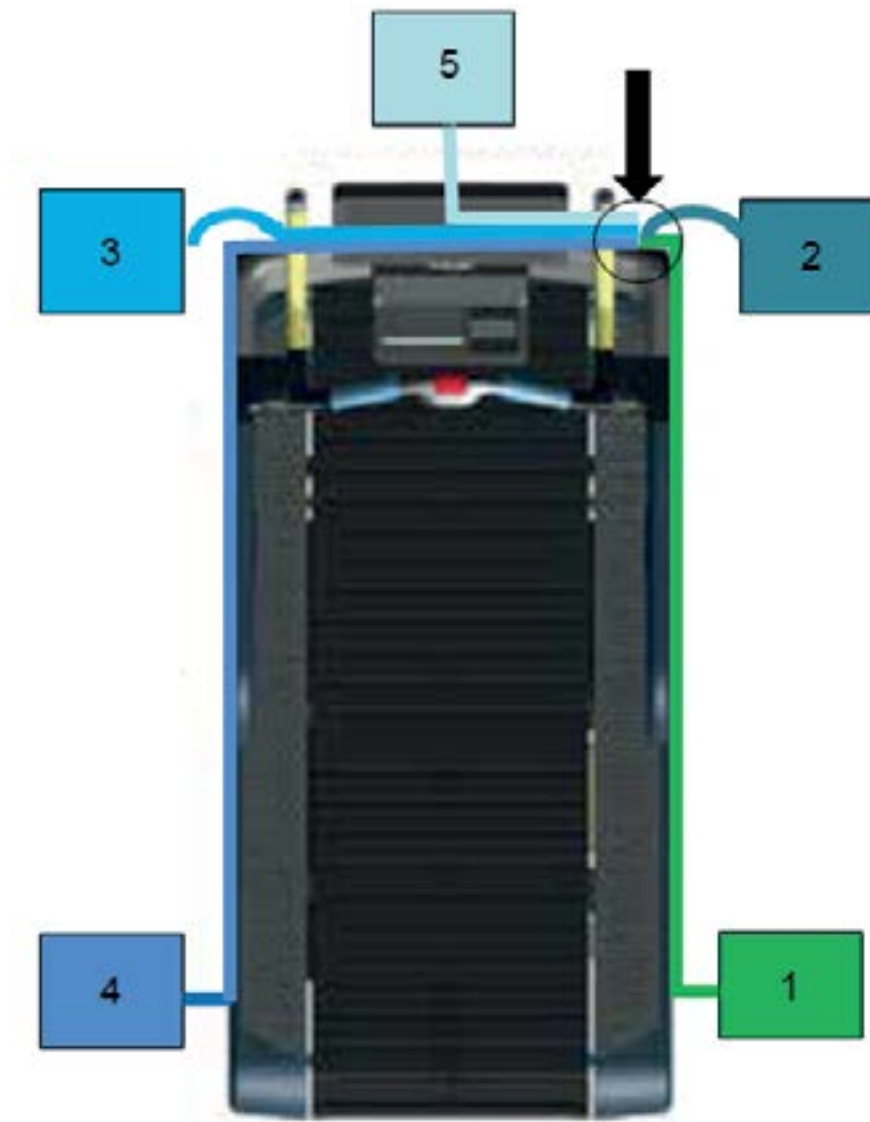


Fig. 7 - Position of power supply socket and cables layout



ATTENTION: It is not recommended to have the power supply socket located below the Skillrun.

LAYOUT 1 / 4:



ATTENTION: The LAYOUT 1 is the recommended layout.



Fig. 8 - Layout 1 recommended

Layout 4: make sure that the cables are long enough.

LAYOUT 2 / 3:

It is recommended to use a sheath for cables (to be provided by the customer) that guides the bending of cables. Hereafter an example:



Fig. 9 - Layout 2 / 3 OK

LAYOUT 5:

The following figure doesn't show a sheath for cables but its use is recommended (to be provided by the customer). The cable must follow the following path. If this is not possible, it's required to reverse the socket (case of American plug) (to be provided by the customer).

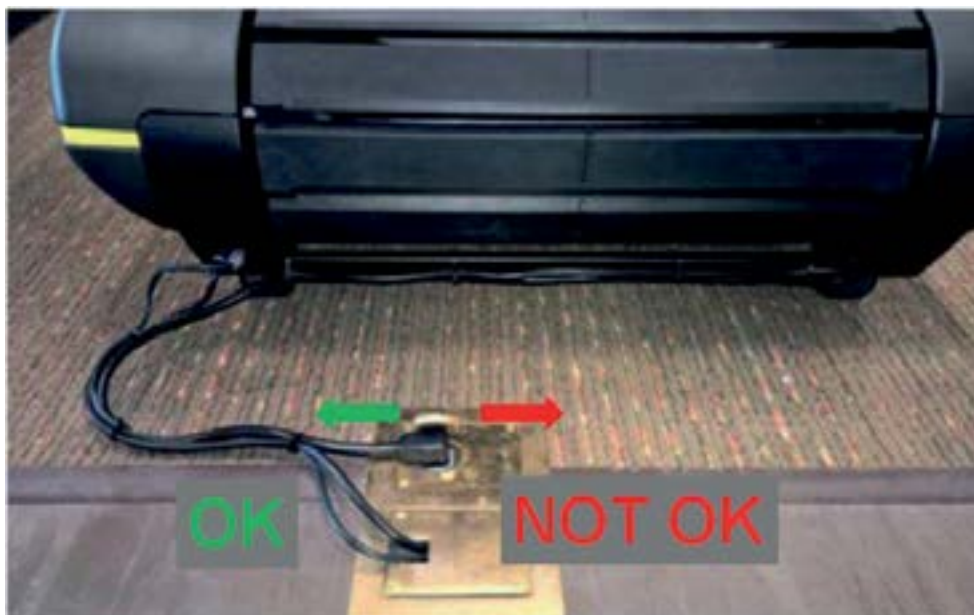


Fig. 10 - Layout 5 OK but the use of a cable sheath is recommended



Fig. 11 - Layout 5 OK but the use of a cable sheath is recommended

4.6 POSITIONING OF POWER INLET

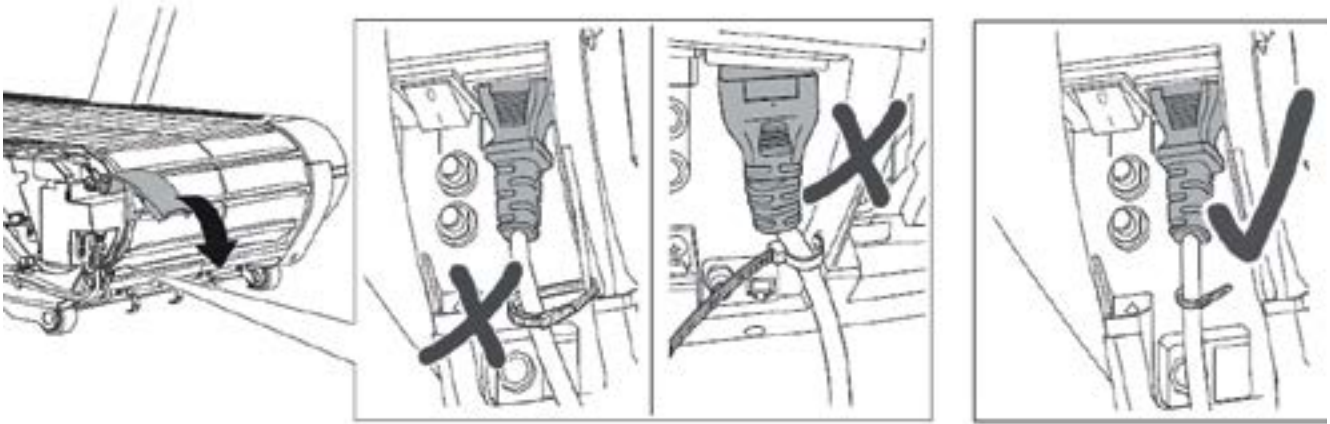


Fig. 12

5. NETWORK REQUIREMENTS

5.1 INTRODUCTION

SKILLRUN UNITY 5000 /7000 (equipment fitted with UNITY 3.0) support both wireless and wired internet connection.



NOTE: In all situations, where possible, Technogym recommends connection via network cable.

SKILLRUN TX 500 (equipment fitted with TX10" interface) support a wireless internet connection.

In all cases, the network must be installed and configured by the customer before Technogym delivers the product, in accordance with the technical specifications set out below.

5.2 FREEZING UNITY DUE TO A WRONG LAN NETWORK SETUP (ONLY FOR SKILLRUN UNITY 5000 / 7000)

In case of Unity in a scenario with a LAN network, It is suggested to configure a dedicate LAN network without external devices connected - such as Smart TV or other devices- that put in the network a very high volume of broadcast packets and could generate randomly freezing on Unity.

There are two possibilities to avoid the issue:

1. Configure properly the switch to filter unexpected broadcast high volume traffic (in case of external devices connected in the same LAN network of the equipment);
2. Avoid to connect external devices in the same LAN network of the equipment.

5.3 ETHERNET CABLED NETWORK (ONLY FOR SKILLRUN UNITY 5000 / 7000)

_Category 5e/6 - UTP Ethernet cables with RJ45 patch;

_Switch with a number of ports greater than the number of equipment fitted with UNITY 3.0 connected.

5.4 WI-FI NETWORK REQUIREMENTS

_ Standard: IEEE 802.11 a/b/g/n at **5GHz** or 2.4GHz;

_ Security Protocol: WEP, WPA/WPA2, open (free) network;



NOTE: The Protocol WPA2 Enterprise is not supported.

_ There must be only one dedicated Access Point / Wi-Fi router that provides the service;

_ DHCP enabled;

In case of professional Access Point or if the equipment is used in a public / company network (hotel, fitness facility) you must cover the following additional requirements:

_ Configure the Access Point to broadcast only one SSID (Service Set Identifier) needed for the equipment installation. The SSID must not be hidden;

_ Program in the display of equipment (Customer Menu 2406: Network: Wi-Fi) just only the SSID defined above;

_ Frequency Band:

- **5GHz band only** (not automatic) is the configuration suggested;
- If the Access Point is not provided with 5GHz band, 2.4GHz is ok but might need some channel fine tuning by the local IT company. The best practice for 2.4GHz Wi-Fi configuration is enabling Wi-Fi on one of the following channels: 1, 6, 7, 8, 9, 10, 11, 12. Other channels: 2, 3, 4, 13, 14 might cause interference with Bluetooth signal.
- Avoid in any case to broadcast the same SSID through 2.4 and 5 GHz at the same time.

_ LEASE TIME : at least three days;

_ SESSION TIMEOUT disabled (Typically achieved setting the timeout = 0).



For more details about Access Point, refer to the AP technical specifications.

5.5 WIRELESS GUIDELINES

The following indications must be interpreted only as guidelines.

The wireless network must be installed and configured only by specialised companies and expert technicians.

_ The equipment must not be more than 25-30 metres LOS (line of sight) away from the Access Point (analyse possible problems due to the presence of walls or other obstacles between the Access Point and the equipment).

_ If you use an Access Point with a fixed channel: avoid overlapping problems if, in the same area, there are Access Points that use the same channel.

5.6 MAXIMUM NUMBER OF EQUIPMENT CONNECTED TO ONE ACCESS POINT

_Up to 5 devices: use a commercial Access Point.

_More than 5 devices: use a professional Access Point (see the technical datasheet).



For more details about Access Point, refer to the AP technical specifications.

5.7 INTERNET CONNECTION BANDWIDTH REQUIREMENTS (ONLY FOR SKILLRUN UNITY 5000 / 7000)

The below table illustrates the minimum infrastructure requirements, based on the number of equipment fitted with UNITY 3.0. In detail, the requirements (minimum and target) are based on average usage of UNITY 3.0 machines / applications at the same time.



NOTE: Configuration with minimum Internet bandwidth may slow down Internet browsing when all equipment fitted with UNITY 3.0 are using Internet at the same time.



NOTE: The full usage of UNITY 3.0 applications (youtube, skype, etc.) could require up to 1.5Mbps/device.

UNITY 3.0 - NETWORK/INTERNET BANDWIDTH REQUIREMENTS																		
		max #equipment units																
		5		10		20		40		60		100						
MINIMUM requirements (eg. webpages without video, Facebook, Cloud, etc)	local network	WIFI [1] or Cable [2]		WIFI [1] or Cable [2]		WIFI [1] or Cable [2]		WIFI [1] or Cable [2]		WIFI [1] or Cable [2]		WIFI [1] or Cable [2]						
	internet connection (bandwidth requirements)	Download	Upload	Download	Upload	Download	Upload	Download	Upload	Download	Upload	Download	Upload					
		> 2 Mbps	>512Kbps	> 5 Mbps	>512Kbps	>7 Mbps	>1Mbps	>10 Mbps	>1Mbps	>2Mbps	>16 Mbps	>2Mbps	>2 Mbps					
	local server	not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]						
TARGET requirements (With web video like youtube, facebook video, Netflix, etc. No skype. For Skype call see the table below)	local network	WIFI [1] or Cable [2]		WIFI [1] or Cable [2]		WIFI [1] or Cable [2]		WIFI [1] or Cable [2]		WIFI [1] or Cable [2]		WIFI [1] or Cable [2]						
	internet connection (bandwidth requirements)	Download	Upload	Download	Upload	Download	Upload	Download	Upload	Download	Upload	Download	Upload					
		>5 Mbps	>512Kbps	>7 Mbps	>512Kbps	>10 Mbps	>1Mbps	>20 Mbps	>1 Mbps	>2 Mbps	>30 Mbps	>50 Mbps	>2 Mbps					
	local server	not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]						
SKYPE	The bandwidth required depends on the type of calls you want to make. The table below provides (for each USER) the minimum download and upload speeds required, as well as the recommended speeds for best performance. If you are signed in to Skype but not making any calls, Skype will use on average 0-4kpbs		Calling				Video calling (screen sharing)				Video calling (High quality)				Video calling HD			
			Download		Upload		Download		Upload		Download		Upload		Download		Upload	
			30kpbs		30kpbs		30kpbs		128kpbs		400kpbs		400kpbs		1,2Mbps		1,2Mbps	
			recommended speed (one call)		100kpbs		100kpbs		300kpbs		500kpbs		500kpbs		1,5Mbps		1,5Mbps	

 **NOTE:**

[1]: See “5.4 WI-FI NETWORK REQUIREMENTS” and “5.6 MAXIMUM NUMBER OF EQUIPMENT CONNECTED TO ONE ACCESS POINT”.

[2]: See “5.3 ETHERNET CABLED NETWORK (ONLY FOR SKILLRUN UNITY 5000 / 7000)”.

[3]: The integration of caching server optimizes performance of network and reduces the bandwidth requirements for the club.

 **NOTE:** *Flash player & Silverlight are not supported.*

5.8 INTERNET CONNECTION BANDWIDTH REQUIREMENTS (ONLY FOR SKILLRUN TX 500)


The below table illustrates the minimum infrastructure requirements, based on the number of equipment fitted with TX display. In detail, the requirements (minimum and target) are based on average usage of equipment fitted with TX display at the same time.



Rev. 2.0

NETWORK/INTERNET BANDWIDTH REQUIREMENTS													
		max #equipment units											
		5		10		20		40		60		100	
MINIMUM requirements	local network	WIFI [1]		WIFI [1]		WIFI [1]		WIFI [1]		WIFI [1]		WIFI [1]	
	internet connection (bandwidth requirements)	Download > 2 Mbps	Upload >512Kbps	Download > 5 Mbps	Upload >512Kbps	Download >7 Mbps	Upload > 1Mbps	Download > 10 Mbps	Upload >1Mbps	Download > 16 Mbps	Upload > 2Mbps	Download >20 Mbps	Upload >2 Mbps
	local server	not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]		not necessary [3]	

Fig. 14

 **NOTE:**

[1]: See “5.4 WI-FI NETWORK REQUIREMENTS” and “5.6 MAXIMUM NUMBER OF EQUIPMENT CONNECTED TO ONE ACCESS POINT”.

[3]: The integration of caching server optimizes performance of network and reduces the bandwidth requirements for the club.

 **NOTE:** Flash player & Silverlight are not supported.

5.9 FIREWALL / ROUTER RULES FOR ACCESS TO MYWELLNESS CLOUD SERVICES

The Firewall\Router installed locally must be configured with **ports 80 and 443 open**. These ports must also be opened on the devices of the related ISP (Internet service provider).

Free access to the Internet must be guaranteed for correct use of the Mywellness Cloud services, and in particular access to the following DNS names must never be disabled.

SKILLRUN UNITY 5000 / 7000
DNS Names for UNITY 3.0 Display
mywellness.com
technogym.com
facebook.com
facebook.net
fbcdn.net
google.com
googleapis.com
google-analytics.com
worldweatheronline.com
clouddrive.com;
cloudfront.net;
rackcdn.com;
races-lb-639687283.eu-west-1.elb.amazonaws.com

Tab. 4 - DNS Names for SKILLRUN with UNITY 3.0 Display

SKILLRUN TX 500 DNS Names for TX Display
mywellness.com
technogym.com
google.com
googleapis.com
google-analytics.com
clouddrive.com;
cloudfront.net;
rackcdn.com;

Tab. 5 - DNS Names for SKILLRUN with TX Display (10")



NOTE: It shall be possible to download .tar packets.

5.10 PROXY (ONLY FOR SKILLRUN UNITY 5000 / 7000)

This parameter MUST ALWAYS BE DISABLED, because if enabled UNITY 3.0 does not manage the Apps.

6. STANDARD TV TECHNICAL SPECIFICATIONS (ONLY FOR SKILLRUN UNITY 5000 / 7000)

6.1 INTRODUCTION

The data useful to antenna installers for checking the suitability of the antenna signal input to the equipment with UNITY 3.0 are detailed below.



NOTE: The readings in the tables below must be taken directly at the antenna input connector on the equipment.



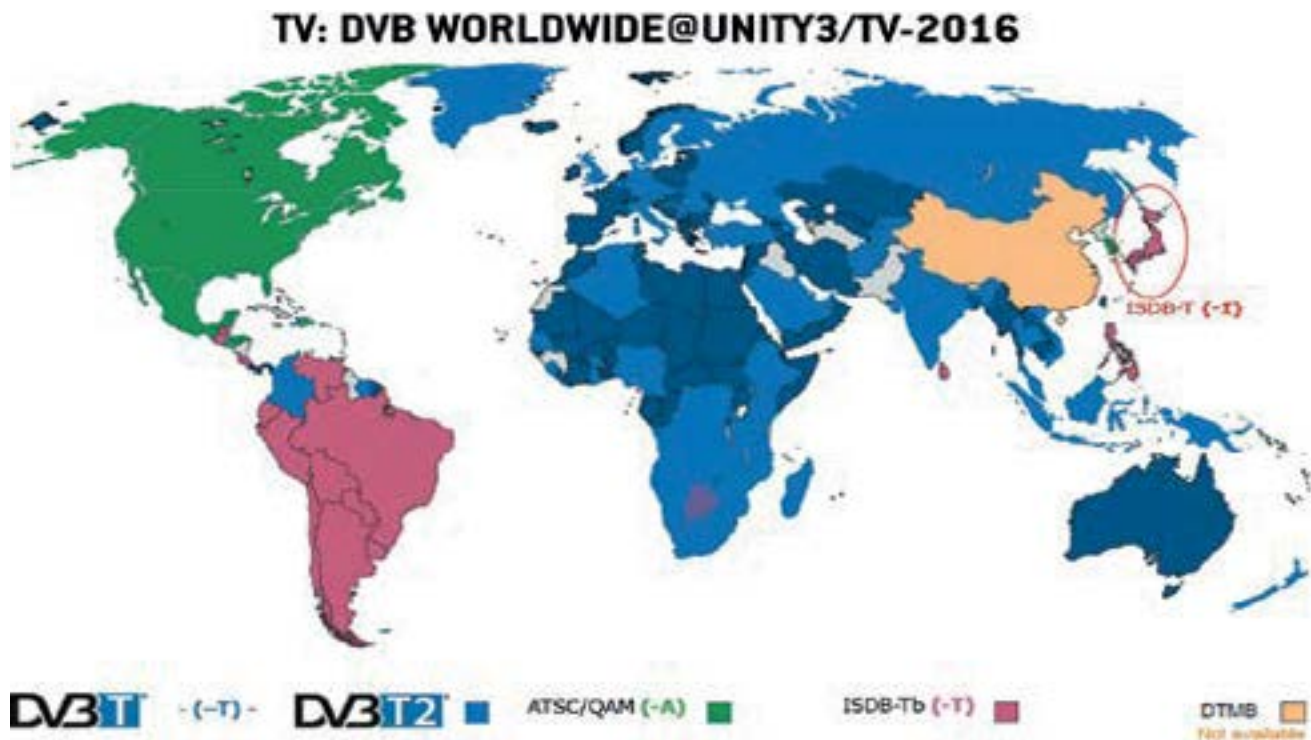
NOTE: If the equipment is not connected to a terrestrial antenna or if it is connected but the signal is interrupted by line disconnection switches, such as television control units or modulators or other devices, the equipment will not be able to receive the signal to tune into the radio stations.



NOTE: Key to abbreviations:

- dB μ V = dB microVolt
- dBmV = dB milliVolt
- dBm = dB milliWatt
- SNR = Signal to Noise Ratio

Hereafter is shown the UNITY 3.0 – Digital TV standards broadcasting map:

**Fig. 15**

6.2 VIRTUAL LAN

UNITY 3.0 doesn't manage the VLANs because UNITY 3.0 has only one CPU port that manages both Internet and IPTV on the same network. Therefore it's not possible to set a VLAN network on IPTV infrastructure.



NOTE: However, it's possible to manage the VLANs, through a dedicated upgrade kit. See the below standard options.

6.3 LAN

If there's an IPTV infrastructure via LAN, internet must be via ethernet.



NOTE: However, it's possible to have internet via Wi-Fi, through a dedicated upgrade kit. See the below standard options.

6.4 UNITY 3.0 - VERSION (-T) STANDARD OPTIONS

NOT ENCRYPTED

- Analog TV + FM Radio
- Digital TV DVB-T/ DVB-T2 (mpeg2 & H264) not encrypted
- Digital TV DVB-T/ DVB-T2 (HEVC) not encrypted -> (ADD-ON A0000854)
- Digital TV ISDB-Tb (NOT FOR JAPAN) not encrypted
- Cable DVB-C (64/128/256) not encrypted
- IPTV (LAN- mpeg over UDP/RTP) not encrypted + Internet via LAN
- IPTV (LAN- mpeg over UDP/RTP) not encrypted + Internet via LAN (different VLAN)-> (ADD-ON A0000897)
- IPTV (LAN -mpeg over UDP/RTP) not encrypted + Internet via Wi-Fi (ADD-ON A0000897)

ENCRYPTED

DIGITAL COAX - ENCRYPTED

- Pro:IDIOM (Released only in US): Cable TV (coax QAM-B 64/256) ENCRYPTED Pro:IDIOM - (ADD-ON A0000845)
- Other encryption standards: centrally convert the signal to COAX analog/digital (DVBC) without encryption

DIGITAL IPTV - ENCRYPTED

- Pro:IDIOM : IPTV SD/HD (LAN mpeg over UDP/RTP) ENCRYPTED Pro:IDIOM -(ADD-ON A0000897)
- IPTV (other encryption standards): centrally convert the signal to IPTV WITHOUT encryption

INTERNET IPTV (e.g. Netflix)

ANDROID APP (FREE) – Compatibility check

SUPPORTED ANALOGIC STANDARDS

- PAL B/G , PAL I , SECAM DK , SECAM L , SECAM L1;
- NTSC M , PAL M , PAL N;
- PAL B/G AUSTRALIA;
- PAL D/K.

STANDARD (NOT ENCRYPTED) DVB-T/ DVB-T2/ DVB-C/ISDB-Tb (not Japan)		
ANALOG / IPTV		
UNITY 3.0 VERSION "-T"		
Broadcast System	DIGITAL TV: DVB-T/DVB-T2 (mpeg2 & H264)/ DVB-C / ISDB-Tb	
	ANALOG TV: YES	
	RADIO FM: YES	
	RF INPUT: F-Type connector	
	INPUT INPEDENCE: 75 Ohm (max nondestructive input power: 10 dBm)	
	DVB-C	QAM 16, 32, 64, 128, 256 / BANDWIDTH 8 MHz
		CABLE TUNER: 42 MHz to 1002 MHz
		Symbol Rate: 6875, 6900, 6956 , manual setting (Automatic selection of the first one available)
Digital Signal Level (COAX)	DVB-T/T2/ ISDB-Tb	MIN: -60 dBm / 49 dB μ V / -11 dBmV (SNR> 23) MAX: 0 dBm / 109 dB μ V / 49 dBmV (SNR> 23)
	DVB-C (256 QAM)	MIN: -50 dBm / 59 dB μ V / -1 dBmV (SNR> 33) MAX: 0 dBm / 109 dB μ V / 49 dBmV (SNR>33)
Codecs	MPEG-2 MP@HL. MPEG -4 pt10 AVC/H.264 HP@L4-VC1	
Video Resolutions	Decodes up to 720p and 1080p	
Audio	MPEG 1, 2, MP3, DD/DD+, AAC, AC3	
IPTV	INPUT: Ethernet 10/100/1000 BaseT via RJ-45 shielded connector PROTOCOLS: mpeg TS over UDP/RTP protocols Supports IP and RF tuning: direct IPTV, RF only, and mixed RF/IP	

Tab. 6

IPTV Pro:IDIOM®	
UNITY 3.0 VERSION "-T" + UPGRADE KIT A0000897	
Codecs	MPEG-2 MP@HL. MPEG -4 pt10 AVC/H.264 HP@L4-VC1
Video Resolutions	Decodes up to 720p and 1080p
Audio	MPEG 1, 2, MP3, DD/DD+, AAC, AC3
IPTV Input	Ethernet 10/100 BaseT via RJ-45 shielded connector
IPTV Protocols	mpeg TS over UDP/RTP protocols
Encrypted TV	Embedded Zenith Pro:IDIOM® DECRYPTION

Tab. 7

DVB-T2 HEVC	
UNITY3.0 VERSION "-T" + UPGRADE KIT A0000854	
Codecs	MPEG-2, MPEG-4 H264/AVC - H.265/HEVC decoding
Video Resolutions	Decodes up to 720p and 1080p@50/60Hz
Audio	Mpeg1 (Layer I/II/III), Mpeg2(Layer I/II), Dolby D, Dolby D+, HE-AACv1, MP3
Analog TV	NO
Radio FM	NO

Tab. 8

6.4.1 RANGE OF FRAMERATE AND BITRATE OF DVB-T HD VIDEO STREAM

DVB-T HD video stream	
Conform framerate	24fps, 25fps or 30fps
Conform bitrate	from 10 Mbps to 20 Mbps

Tab. 9

6.5 UNITY 3.0 - VERSION (-A) STANDARD OPTIONS - USA/CANADA

NOT ENCRYPTED

- Analog TV (e.g. NTSC) + FM Radio
- Digital TV (coax ATSC) not encrypted Version
- Cable TV (coax QAM-B 64/256) not encrypted
- IPTV (LAN- mpeg over UDP/RTP) not encrypted + Internet via LAN
- IPTV (LAN- mpeg over UDP/RTP) not encrypted + Internet via LAN (different VLAN)-> (ADD-ON A0000897)
- IPTV (LAN -mpeg over UDP/RTP) not encrypted + Internet via Wi-Fi (ADD-ON A0000897)

ENCRYPTED

DIGITAL COAX - ENCRYPTED

- Pro:IDIOM: Cable TV (coax QAM-B 64/256) ENCRYPTED Pro:IDIOM - (ADD-ON A0000845)
- Other encryption standards:

Centrally convert the signal to COAX analog/digital (QAM) without encryption

Install an external Set Top Box: HDMI-IN input ready for external STB (ADD-ON A0000915)

DIGITAL IPTV - ENCRYPTED

- Pro:IDIOM : IPTV SD/HD (LAN mpeg over UDP/RTP) ENCRYPTED Pro:IDIOM -(ADD-ON A0000897)

- IPTV (other encryption standards):

Centrally convert the signal to IPTV WITHOUT encryption

Install an external Set Top Box: HDMI-IN input ready for external STB (ADD-ON A0000915)

INTERNET IPTV (E.G. NETFLIX)

ANDROID APP (FREE) – Compatibility check

SUPPORTED ANALOGIC STANDARDS: NTSC M , PAL M , PAL N.

STANDARD (NOT ENCRYPTED) ATSC/QAM-B/ANALOG NTSC/IPTV		
UNITY 3.0 VERSION “-A”		
Broadcast System	CABLE TV: QAM-B (64/256 QAM –ITU J83 Annex B) – Channel spacing 6MHz DIGITAL TV : ATSC (free to air) ANALOG TV: YES RADIO FM: YES RF INPUT: F-Type connector INPUT INPEDENCE: 75 Ohm (max nondestructive input power: 10 dBm) CABLE TUNER: 54 MHz to 1GHz	
Digital Signal Level (COAX)	ATSC	MIN: -60 dBm / 49 dBμV / -11 dBmV (SNR> 23) MAX: 0 dBm / 109 dBμV / 49 dBmV (SNR> 23)
	256 QAM	MIN: -50 dBm / 59 dBμV / -1 dBmV (SNR> 33) MAX: 0 dBm / 109 dBμV / 49 dBmV (SNR>33)
Codecs	MPEG-2 MP@HL. MPEG -4 pt10 AVC/H.264 HP@L4-VC1	
Video Resolutions	Decodes up to 720p and 1080p	
Audio	MPEG 1, 2, MP3, DD/DD+, AAC, AC3	
IPTV	INPUT: Ethernet 10/100/1000 BaseT via RJ-45 shielded connector. PROTOCOLS: mpeg TS over UDP/RTP protocols. Supports IP and RF tuning: direct IPTV, RF only, and mixed RF/IP.	

Tab. 10

COAX QAM Pro:IDIOM®: ATSC/ QAM-B Pro:IDIOM® UNITY3.0 VERSION “-A” + UPGRADE KIT A0000845		
Broadcast System	CABLE TV: QAM-B (64/256 QAM –ITU J83 Annex B) – Channel spacing 6 MHz DIGITAL TV : ATSC (free to air) ANALOG TV: Not available RADIO FM: Not available RF INPUT: F-Type connector INPUT INPEDENCE: 75 Ohm (max nondestructive input power: 10 dBm) CABLE TUNER: 54 MHz to 1GHz	
Digital Signal Level	ATSC	MIN: -60 dBm / 49 dB μ V / -11 dBmV (SNR> 23) MAX: 0 dBm / 109 dB μ V / 49 dBmV (SNR> 23)
	256 QAM	MIN: -50 dBm / 59 dB μ V / -1 dBmV (SNR> 33) MAX: 0 dBm / 109 dB μ V / 49 dBmV (SNR>33)
Codecs	MPEG-2 MP@HL. MPEG -4 pt10 AVC/H.264 HP@L4-VC1	
Video Resolutions	Decodes up to 720p and 1080p	
Encrypted TV	Embedded Zenith Pro:IDIOM® DECRYPTION Closed Captioning	
Audio	MPEG 1, 2, MP3, DD/DD+, AAC, AC3	

Tab. 11

IPTV Pro:IDIOM® UNITY 3.0/TV VERSION “-A” + UPGRADE KIT A0000897	
Codecs	MPEG-2 MP@HL. MPEG -4 pt10 AVC/H.264 HP@L4-VC1
Video Resolutions	Decodes up to 720p and 1080p
Audio	MPEG 1, 2, MP3, DD/DD+, AAC, AC3
IPTV Input	Ethernet 10/100 BaseT via RJ-45 shielded connector
IPTV Protocols	mpeg TS over UDP/RTP protocols
Encrypted TV	Embedded Zenith Pro:IDIOM® DECRYPTION

Tab. 12

6.6 UNITY 3.0 - VERSION (-I) STANDARD OPTIONS - JAPAN

- Analog TV + FM Radio
- Digital TV ISDB-T (JAPAN) with Smart Card reader
- IPTV (LAN- mpeg over UDP/RTP) not encrypted + Internet via LAN
- IPTV (LAN- mpeg over UDP/RTP) not encrypted + Internet via LAN (different VLAN)-> (ADD-ON A0000897)
- IPTV (LAN -mpeg over UDP/RTP) not encrypted + Internet via Wi-Fi (ADD-ON A0000897)

DIGITAL IPTV - ENCRYPTED

- Pro:IDIOM : IPTV SD/HD (LAN mpeg over UDP/RTP) ENCRYPTED Pro:IDIOM -(ADD-ON A0000897)
- IPTV (other encryption standards): centrally convert the signal to IPTV WITHOUT encryption

INTERNET IPTV (E.G. NETFLIX)

ANDROID APP (FREE) – Compatibility check

SUPPORTED ANALOGIC STANDARDS: NTSC M.

STANDARD ISDB-T - JAPAN / ANALOG / IPTV UNITY3.0 - VERSION “-I”		
Broadcast System	DIGITAL TV: ISDB-T ANALOG TV: YES RADIO FM: YES RF INPUT: F-Type connector INPUT INPEDENCE: 75 Ohm	
Digital Signal Level (COAX)	ISDB-T	MIN: -60 dBm / 49 dB μ V / -11 dBmV (SNR> 23) MAX: 0 dBm / 109 dB μ V / 49 dBmV (SNR> 23)
Codecs	MPEG-2 MP@ML & MP@HL format ISO/IEC 13818-2	
Video Resolutions	Decodes up to 720p and 1080i	
Audio	MPEG-1 layer I/II, MPEG-2 layer II, MPEG-2 AAC and AC3 Dolby® Digital	
IPTV	INPUT: Ethernet 10/100/1000 BaseT via RJ-45 shielded connector PROTOCOLS: mpeg TS over UDP/RTP protocols Supports IP and RF tuning: direct IPTV, RF only, and mixed RF/IP	

Tab. 13

IPTV Pro:IDIOM®	
UNITY 3.0 VERSION “-I” + UPGRADE KIT A0000897 (Tuner “I” need to be removed)	
Codecs	MPEG-2 MP@HL, MPEG -4 pt10 AVC/H.264 HP@L4-VC1
Video Resolutions	Decodes up to 720p and 1080p
Audio	MPEG 1, 2, MP3, DD/DD+, AAC, AC3
IPTV Input	Ethernet 10/100 BaseT via RJ-45 shielded connector
IPTV Protocols	mpeg TS over UDP/RTP protocols
Encrypted TV	Embedded Zenith Pro:IDIOM® DECRYPTION

Tab. 14

NOTE: UPGRADE KIT A0000897: Tuner “I” need to be removed before the installation of the upgrade kit.



The Wellness Company

SKILLRUN (DJJ) Pre-Installation Requirements

Rev. 2.0

Blank Page

7. SKILLRUN CLASS REQUIREMENTS (ONLY FOR SKILLRUN UNITY 5000 / 7000)

The training format - SKILLRUN CLASS - can function only if the customer cover the pre-installation requirements of SKILLRUN UNITY 5000 / 7000 and UNITY SELF.

SKILLRUN CLASS - COMPATIBILITY		
	YES	NO
SKILLRUN UNITY 5000	x	
SKILLRUN UNITY 7000	x	
SKILLRUN TX 500		x
UNITY SELF ARTIS / EXCITE FROM VERSION E0204V15 (UNITY SELF 2016) ON-WARDS (*)	x	
UNITY SELF ARTIS / EXCITE PRIOR TO VERSION E0204V15 (UNITY SELF 2016)		x

Tab. 15

(*) Indeed, it is necessary the presence of HDMI OUT.

For details see:

_This document SKILLRUN PRE-INSTALLATION REQUIREMENTS;

_The document UNITY SELF PRE-INSTALLATION REQUIREMENTS.



NOTE: The official documentation is available on Technogym Direct.



The Wellness Company

SKILLRUN (DJJ) Pre-Installation Requirements

Rev. 2.0

Blank page

8. ACKNOWLEDGEMENT AND ACCEPTANCE

Date: _____

Acknowledged and accepted _____



The Wellness Company

SKILLRUN (DJJ) Pre-Installation Requirements

Rev. 2.0

Blank page

9. LIST OF CHANGES FOR MANUAL REVISION

The main changes made to this manual, are listed below in chronological order.

9.1 REVISION 2.0

Inserted the pre-installation requirements and technical data about SKILLRUN TX 500 with the new TX (10") interface.

Reviewed network requirements.

New paragraph SKILLRUN CLASS REQUIREMENTS.

Inserted the requirements about the installation of SKILLRUN: cables arrangement and positioning of power supply socket. (Important info)



The Wellness Company

SKILLRUN (DJJ) Pre-Installation Requirements

Rev. 2.0

Blank page



The Wellness Company

TECHNOGYM S.p.A.

Via Calcinaro, 2861 - 47521 Cesena (FC) - Operational Headquarters

ITALY

International Technical Support:

TG Branches:	+390547650638 / +390547650667 cloudsupport@technogym.com (Cloud Support) sfdcsvhqit@technogym.com (Equipment Support)
TG Distributors:	+390547650638 / +390547650667 cloudsupport4distributors@technogym.com support4distributors@technogym.com