# LATAM America Movil Android TV 2020 Quick Reference Guide



Part number variants:

Cervino Base Platform	R327600A98-00001
CLARO	R327600A00-00004

## **ACTIVATING RF**

The LATAM America Movil Android RCU shall support both IR and BLE command codes for each key. The default operating mode when supplied and batteries are fitted is explained in the following section.

<b>Programming Name</b>	Trigger	
PAIRING_COMBO	'Home' and 'Back' keys pressed simultaneously and held down for 2s	
UNPAIR_COMBO	'OK' and 'Play/Pause' keys pressed simultaneously and held down for 3s	

Table 1: Pair & Un-pair combos

Item	STB Pairing Table	RCU Pairing Table	Behavior
1	Clear	Clear	Any key press initiates pairing with no further pre-requisites on RCU or STB
2	STB #1 entry for RCU #1	RCU #2 Clear	Either STB accepts pairing with 2 or more RCUs OR user navigates to settings screen using IR mode and manually deletes the pairing info for RCU #1
3	STB #2 Clear RCU #1 entry for STB #1 User has to activate the RCU un-pairing comb pairing table.		User has to activate the RCU un-pairing combo to clear the pairing table.

Table 2: Scenarios for pairing with other devices

## **INFRARED ASSISTANCE**

IR assistance serves two purposes:

- Provides a trigger to the STB in the form of an IR command that the STB can use to start listening for Bluetooth adverts.
- Provides a mechanism for the STB to optionally restrict offering a connection request only to the RCU that sent the IR command.

IR assistance behaviour does not depend on the method of pairing initiation; i.e. both 'auto-pairing' and manual pairing methods shall use IR assistance.

	Action	Behavior	Terminating Condition	Host Response
1	Pairing activated	IR Macro transmitted repeatedly where the 1 <sup>st</sup> frame is the pairing command and the 2 <sup>nd</sup> frame is the last byte of the RCU BT address (MAC)	Pairing timeout of PAIR_ADV_DURATION reached	Optionally decode IR Macro and filter out last byte of MAC ID
2	Indirect Ad (ADV_IND) sent			Optionally only send
3	Scan response sent	Last byte of RCU BT address included as part of 'Complete Local Name'		connection request if IR Macro matches MAC part of local name in Scan response

Table 3: IR assist state table

Note that the host response to use the second frame in the Macro for restrictive pairing is optional. It offers a mechanism to restrict pairing to the device sending the IR frames but it is the host decision to make this restriction and hence does not prevent pairing by default.

#### Features:

- BLE using the UE878, 512K Flash and 64K RAM
- Modeless two device support (TV, STB)
- One RED feedback LED
- Universal IR for TV
- IR assisted pairing
- Quickset for automated setup of devices
- Modeless operation
- Shall be compatible with Android 'P' operating system
- Shall be able to pair with and support BLE features for the following Bluetooth Stacks
  - o Fluoride 1.2
- No mode switching required for TV control
- Low voltage warning when battery level gets critical using Bluetooth BAS service
- Microphone for capturing voice in 16 bits 16KHz quality
- Customer Reset
- Software Version Verification
- Factory Reset
- Volume lock
- UAPI
- OTA (background OTA)
- Operating Temperature
  - $\circ$  0°C to +50°C
- Battery Type: 2 x AAA alkaline

The remote is intended to be used with target STB/devices based on the Android 'P' platform. The following table summarizes the host-side requirements.

BLE Radio Chip	Cypress 'CYW20704UA2KFFB1G'		
on Host			
Bluetooth Stack	Fluoride		
Keys	Standard HOGP		
Voice	Google voice GATT Profile as defined in section		
	Error! Reference source not found.		
<b>OT</b> A	UAPI via UUG		
Quickset	UAPI via UUG		
Battery Status	Standard Battery Service		

UAPI – UEI's API

HOGP – HID over GATT Profile

# COMPLIANCE WITH FCC RULES AND REGULATIONS

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase or decrease the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced remote control/ TV technician for help.

This equipment has been verified to comply with the limits for a Class B computing device, pursuant to FCC Rules. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

### **FCC Authorization Label**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2 This device must accept any interference received, including interference that may cause undesired operation.

FCC ID: MG3-R327600