



Metagrid

user manual

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Thank you for purchasing Metagrid - a flexible and powerful utility app that enables you to control your favorite applications on your computer directly from your iPad through WiFi or USB on Mac or PC. We hope it will find home in your creative environment!

We did our best to make Metagrid as intuitive and user friendly as possible. However, you will need a few minutes to set it up and get familiar with its functions. To help you we have created this manual and comprehensive [video tutorials](#) which demonstrate how to set Metagrid up and outline all functions.

Before you start, let's get familiar with some basic Metagrid terminology:

- **Action Queue:** a stack of actions sent to your computer when you press a Metagrid button to trigger specific commands in your computer application.
- **View:** collection of buttons visible on the screen. The number of buttons depend on the selected grid size for the view.
- **Viewset:** the collection of all views defined for a specific application on your computer.
- **Workspace:** the collection of all viewsets.
- **Navigation Bar:** the upper section of the screen with various buttons and indicators.

Now, it is time you let Metagrid streamline your workflow! If you have some problems, questions, feedback or feature requests, don't hesitate to contact us at support@metagrid.io.

We all love things that are straightforward and familiar. You will find out that Metagrid is a user-friendly tool with a familiar user interface concept. The basic setup is minimal and includes just a few easy steps:

1



METAGRID PURCHASE

If you haven't already done it, go to Apple AppStore, search for **Metagrid** and click **Buy**.

2

METASERVER INSTALLATION

Metagrid needs a small application (**Metaserver**) to be installed on your computer to receive and process keyboard shortcuts and MIDI messages.

1. Go to **www.metasystem.io > Downloads** and download **Metaserver.dmg** file to your computer.
2. Open **Metaserver.dmg** file.
3. Drag and drop **Metaserver** icon to you **Applications** folder.
4. Open **Metaserver** application. You will see  icon on the menu bar.
5. Click  on the menu bar and select **Start Metaserver when you log in**.

IMPORTANT! On some Windows machines you may be asked to install .NET Framework 3.5 to run Metaserver. Proceed with the installation.

IMPORTANT! Some antivirus software may identify Metaserver as a threat. Ignore the warning.

3

WIFI NETWORK/USB SETUP ON YOUR COMPUTER/IPAD

Metaserver needs an active WiFi or USB connection to establish communication between Metagrid on your iPad and your computer. You can use your local WiFi network or create an ad-hoc connection.

IMPORTANT!

Your computer and your iPad have to be connected to the same WiFi network.

To connect your iPad to computer through USB connection, just use the Lightning to USB cable. No additional setup is needed on Mac. For Windows you need to install Apple iTunes on your machine.

4

METAGRID SETUP

The setup in Metagrid app on your iPad is minimal:

1. Open Metagrid on your iPad.
2. You will see **Available Computers** screen where you can select a computer with an active Metaserver instance. If you can't see any computers, make sure both your computer and your iPad are connected to the same WiFi network or is connected with the Lightning to USB cable and touch **Refresh** button in the upper right corner of **Available computers** pane.
3. Select your computer. The main Metagrid screen will be displayed. In the middle of the navigation bar you will see **Connection Status** button (with the name of your computer followed by the name of the application that is currently in focus on your computer).
4. If the computer's name is marked in red and followed by an exclamation mark, it means that it runs an outdated Metaserver version. Download the latest Metaserver version from Metasystem.io website and run it on your computer.

Congratulations! Metagrid on your iPad is now able to send keyboard shortcuts and text to your computer.

To disconnect, touch **Connection Status** button and touch **Disconnect**. If you happen to lose the connection, **Connection Status** button will show **Touch me to connect** and the connection icon will turn from green to gray. To establish the connection, touch **Connection Button** and select your computer.

IMPORTANT!

Currently, Metaserver can simultaneously connect to up to 4 iPads running Metagrid, which means you can control your computer from multiple iPads! No additional setup is needed - just connect your additional iPads per instructions above.

**ADDITIONAL SETUP OPTIONS**

Metagrid is much more than just keyboard shortcuts and text actions. If you want to send MIDI commands and/or app-specific commands to DAW applications, you need to do some additional steps in your DAW application. For easy step-by-step procedures, see [App-specific Setup](#).

DATABASE BACKUP AND EXCHANGE

Metagrid currently doesn't support iCloud backup/sync. It does not support exporting/importing individual views or viewsets for a specific app. However, you can back up the complete Metagrid database and copy it to other iPad through iTunes. To do this:

1. Connect your iPad device to your computer with Lightning to USB cable.
2. Open **iTunes**.
3. Click the icon of your iPad.
4. Click **Apps** in **Settings** section on the left.
5. Go to **File Sharing** section in the right pane.
6. Scroll to **Metagrid** icon and click it. You will see 3 Metagrid documents in **Metagrid Documents** section.
7. Select the documents and drag them to your desktop or your file manager.
8. Disconnect your source iPad.
9. Connect another iPad with Metagrid installed.
10. Repeat steps 4-5.
11. Delete the existing Metagrid files.
12. Drag and drop the copied Metagrid documents to **Metagrid Documents** section.
13. Click **Sync** button to synchronize.

Views in Metagrid are simply sets of buttons displayed on the screen. A view can have from 6 up to 110 buttons depending on the selected grid size. Each application has initially got one view called Default. You can rename it or create additional views. You can define multiple views for any application on your computer.

DISPLAYING A VIEW

1. Touch **Edit** > **Edit View**. You will see **Edit Mode: View** screen, which shows the name of the currently displayed view, its name, description, application name and its grid size.
2. Touch **Selected View** to display the list of all views available for the given computer application.
3. Select a view from the list, and this view will become visible on the screen for editing. The selected view icon will be highlighted in green.
4. Go back to **Edit Mode: View** to edit the selected view.

IMPORTANT!

This procedure is used for view editing. The selected view will disappear when you touch a scene/button assigned to other views.

CREATING A NEW VIEW

1. Touch **Edit** > **Edit View**. You will see **Edit Mode: View** screen, which shows the name of the currently displayed view, its name, description, application name and its grid size.
2. Touch **Selected View** to display the list of all views available for the given computer application.
3. Touch **+** (plus) button in the upper right corner of the screen and enter the name of your view.

Congratulations! You have created your first view named **New View**. Now you can change its name and add the description if needed. You can also resize the existing view for a larger grid size - just touch **Grid Size** and select the desired grid size. After configuring some buttons, you can assign the view to a scene or another button (see [Scenes](#) and [Buttons](#)).

COPYING/PASTING/DUPLICATING/DELETING A VIEW

You can easily copy/paste/duplicate/delete views.

To copy/paste/duplicate/delete a view:

1. Touch **Edit** > **Edit View** and swipe left the required item on the list.
2. Choose the required action.

You can copy views within the same viewset or between viewsets for different applications. While copying views between viewsets for different applications you have to remember that button assignments (such as app-specific commands) may not work correctly after being copied to the viewset defined for another application.

LOCKING VIEWSET TO DAW APPLICATION

By default, Metagrid reacts to changing the application in focus on your computer and displays the corresponding viewset. However, in case of supported DAW applications (Cubase, Logic, Studio One and Digital Performer) it enables you to lock the viewset to the selected application. This way the viewset for this application is still displayed on iPad while computer keyboard and mouse can control another application.

To lock the viewset:

1. With the supported DAW in focus on your computer, double touch **Connection Status** button. You will see the lock icon on the left of Connection Status button. This means that Metagrid will not react to changing the application on your computer and will send app-specific commands to the specified application.

To unlock the viewset:

1. Double touch **Connection Status** button again. The lock icon will disappear. Metagrid will automatically display the viewset for the application that is currently in focus on your computer.

IMPORTANT!

Currently, **App Lock** function works only for the supported DAW applications that send app-specific commands (Cubase, Logic, Digital Perfomer and Studio One). In **App Lock** mode, the application can send only app-specific commands - keyboard shortcuts and text are not transmitted in this scenario. Consequently, when you press a button with Action Queue that includes keyboard shortcut/text you will see the following alert: *"The Action Queue contains a keyboard shortcut or text that cannot be transmitted in App Lock mode. Unlock your app to use this button."*

CHANGING GRID SIZE

You can easily change the grid size of an existing view by going to **Edit Mode: View** screen and touching **Grid Size**. Select the requested grid size. If the selected grid size is smaller that the existing one, some buttons will be permanently deleted and you will have an option to back up the original view.

Scenes in Metagrid enable you to easily switch between different views created for your favorite application. These are buttons located in the lower part of the screen. Each scene can have two views assigned - primary and secondary view displayed by pressing **Shift** buttons. For each application you can create multiple scenes for neat organization and fast access.

IMPORTANT! For each application there has to be at least one scene assigned.

EDITING A SCENE

1. Touch **Edit** and locate **Edit Scenes...** on **Scene Bar** (because it is the last item on the list you may need to scroll left to display this command). You will see **Scene List** screen, which shows the list of the available scenes for the current viewset on the right and the details pane on the left.
2. Touch a scene and then change its name, color and assigned view in the details pane.

DELETING/DUPLICATING AND CREATING A NEW SCENE

1. On **Scene List** screen, touch the corresponding button.

CHANGING SCENE ORDER

1. On **Scene List** screen in the scene list pane touch and hold a scene and then drag the scene to a new location.

UNDO/REDO

1. You can undo/redo you actions affecting scene parameters like changing order, deletion and changing parameters by pressing **Undo/Redo** buttons. Creating a new scene/duplicating a scene cannot be currently undone.

SCENE LOCKING

By default, touching a scene button will display the corresponding assigned view. However, views can also be displayed by buttons in a view (see [Buttons](#)). For example, you have defined a view named Tools and assigned to a scene called My Tools. The view contains a button called Zoom that does not send any message to your computer app but displays a view called Zoom Menu. So when you press Zoom button you will see Zoom Menu view. But when you go to another scene and go back to My Tools, Zoom Menu will be replaced with the view assigned to this scene - namely, Tools. There may be situations where you would like to keep Zoom Menu visible. Fortunately, Metagrid enables you to temporarily lock a view. To do this:

1. Display the view you want to lock.
2. Long touch the scene button. A lock icon will appear, which means that now this scene button is temporarily assigned to a subview. This subview will appear instead of the default assigned view when you press the scene button again.
3. To unlock the scene, long touch the scene button again. The lock icon will disappear, which means that the scene button will now display the default assigned view.

IMPORTANT! Scene locking works only for the primary view.

Buttons in Metagrid enable you to send actions to your computer applications as well as to display other views.

EDITING A BUTTON

1. Touch **Edit** to go to **Edit Mode**. The buttons will start wobbling.
2. Touch the button you want to configure.
3. You will see **Edit Mode: Button** screen where you can define your settings.

Each button has got many configuration options allowing you to customize its functionality and appearance:

- **Hide/Show:** shows/hides the button on the screen (you can also double touch a button in **Edit Mode** to show/hide it). The visible buttons are marked with a blue dot in the upper right corner of the button.
- **Assigned View:** enables you to assign a view to the button.
- **Action Queue:** shows the action queue for the button (see [Actions](#)).
- **Repeat:** enables you to send continuous actions on long touch (the same as key repeat on computer keyboards).
- **Text:** defines the text visible on the button.
- **Color:** shows **Color Selector** for selecting a color for your button.
- **Without Fill:** when checked, the selected color is applied to the button frame only, while the fill remains black.

- **Icon:** shows/hide **Icon Selector** where you can choose from hundreds of icons grouped in theme-related categories.
- **Icon Color:** enables you to define the color for the selected icon.
- **Icon Only:** hides the defined text on the button showing a large icon only.
- **Use Button Color:** applies the button color to the icon (handy while creating a button sharing the same color for its frame and icon).
- **Application Name:** the name of the computer application (non-editable)

ASSIGNING A VIEW TO A BUTTON

Apart from triggering a defined action queue, each button can display an assigned view. To assign a view:

1. In **Edit Mode: Button** touch **Assigned View**. By default, the selection is set to **None**.
2. If you want to assign a specific view, choose it from the list of views available for the given application.
3. Choose **Back to Previous View** if you want your button to take you to the view previously displayed on the screen.

IMPORTANT!

To return to the previous view, you can always click **Return** button (it is followed with the name of the previous view) in on the left on the navigation bar that is displayed when you enter the submenu.

COPYING/PASTING/RESETTING A BUTTON

Metagrid enables you to easily copy/paste button settings within the same view or different views. For your convenience, there are several methods to accomplish this task:

- using **Copy/Paste/Cut/Reset** commands (**Edit Mode: Button** > **Actions** icon on the left of the navigation bar)
- using double-finger double touch to copy
- using double-finger long touch to paste all copied parameters
- using double-finger swipe to perform selective paste action.

SELECTIVE PASTING

While creating your viewsets, you will often need to create buttons that share some parameters like a color or assigned view. Doing this manually for each button would take some time and effort. Fortunately, you can copy the parameters from one button and use selective pasting functionality to paste only selected parameters by double-finger swipe across the button or series of buttons. The parameters for selective pasting can be defined in **Tools** pane.

To display Tools pane, left edge swipe on your iPad screen in **Edit Mode**. You can select the following parameters for selective pasting: **Assigned View, Action Queue, Repeat, Name Text, Color** and **Icon**.

SWAPPING BUTTONS

In **Edit Mode** perform a swipe down gesture on a button - this action will cause all other buttons stop wobbling which means that Metagrid is ready to swap the buttons. Now touch the second button and both buttons will change their position on the grid.

UNDO/REDO

You can easily undo/redo your actions by touching **Undo/Redo** buttons. Leaving **Edit Mode** will reset the undo queue.

Actions are the very core of the Metagrid concept. To create **Action Queue** for the selected button:

1. Touch **Edit** and touch the button you want to edit.
2. In **Edit Mode: Button** touch **Action Queue**. By default, the screen is empty.
3. Touch **+** icon to add an action. You can add multiple actions to create a complex macro.
4. Touch the action to edit its parameters.
5. To change action order, touch and hold action icon on the right and drag it to the new position.
6. Press **Play** button to test your action queue without leaving the screen.

You can easily delete or clone the selected action by touching the respective button on the navigation bar.

You can choose from the following action types:

KEYBOARD SHORTCUTS

This action sends the user-defined combination of keystrokes to your computer app. You can create combos combining function keys like Cmd, Option, Ctrl, Shift plus any key available on a standard computer keyboard with a numeric keypad.

TEXT

This action sends the user-defined text to your computer app. The text cannot contain non-English characters.

MIDI MESSAGE

This action sends a MIDI message to your MIDI-enabled computer app like Protools, Cubase or Logic X. You can send CC, Program Change and Note messages with customized parameters (for example **Note**, **Velocity** and **MIDI channel** for **Note** messages, and **CC**, **Value** and **MIDI Channel** for **CC** messages). To be able to use MIDI actions, first you need to configure MIDI port in your target application. MIDI actions are sent through Metaserver - MIDI port which is available when you open Metaserver on your computer. Make sure your MIDI-enabled application is set to receive MIDI from Metaserver's port.

APP-SPECIFIC COMMANDS

Metagrid features predefined comprehensive sets of searchable commands for some DAW applications (Cubase, Logic X Pro and Studio One). The commands are grouped by categories as in the respective DAW software.

IMPORTANT! To be able to use app-specific commands, you need to perform app-specific setup procedures described in [App-specific Setup](#).

PAUSE

For complex macros, you will often need pauses between actions to allow time for performing specific operations. Pause action enables you to specify time in milliseconds between two actions.

IMPORTANT! When you press the button with the action queue containing pause actions, a progress bar may appear informing you that your iOS device is sending a time-based stream of actions.

IMPORTANT! To name your button per your action, double touch the action icon.

Metagrid enables you to create app-specific actions based on predefined commands sets for Logic X Pro, Cubase and Studio One. To use them, first you need to set up your DAW application. The required files are available in **App-specific Files** folder when you open **Metaserver.dmg** file.

IMPORTANT!

App-specific commands are handled by dedicated plugins, devices or keybiding files depending on your DAW application. For example, in Logic it is a dedicated plugin bundle file, in Cubase - a Generic Remote device. However, in all cases Metagrid sends MIDI CC messages to trigger them through Metaserver dedicated MIDI ports. Each time you press a button with a app-specific command, your DAW is responding to a MIDI CC command received on the MIDI port available through Metaserver. This way Metagrid can control Cubase and DP opened on the same computer without any routing issues. Additionally, you can use Metaserver's MIDI port to send some generic MIDI messages to the specified DAW.

To install and set up your DAW app, copy **App-Specific Files** folder to a temporary location on your computer. You will find folders for four DAW apps. Follow the setup procedure below corresponding to the DAW application of your choice.

MIDI SETUP (WINDOWS ONLY)

If you use Metagrid with a Windows machine and you want to use MIDI or app-specific commands, you need to:

1. Install **LoopMIDI** on your machine- a free virtual MIDI cable software (you can download it from [here](#)).
2. Open **LoopMIDI** and create your ports - e.g. one port for Metasystem MIDI messages and another port for your DAW supported by Metagrid like Cubase, Studio One or Digital Performer. To create a port, click **New port name** text field, type the port name, e.g. *"Metasystem - Cubase"* or *"Metasystem - MIDI"* and click the plus icon.
3. Run Metaserver and then right click the Metaserver icon in the Windows task bar. Choose **Port Setup...** You will see a dialog box that enables you to pair your virtual MIDI ports with Metagrid ports for MIDI actions and each supported DAW or MIDI.
4. Proceed with app-specific setup instructions for your DAW below.

IMPORTANT!

For Digital Performer, please name your port *"Metasystem - DP - In"*. This port is hard-coded into the DP keybindings file that need to be imported to make Metagrid work with this DAW.

LOGIC X PRO (Mac only)

The package contains the bundle file (Metasystem.bundle) needed for Logic Pro X, which needs to be added to Logic Pro X application package.

In Apple Finder:

1. Copy the provided **Metasystem.bundle** file.
2. Go to **Applications** and find **Logic Pro X**.
3. Right click on **Logic Pro X** icon and click **Show Package Contents**.
4. Navigate to **MIDI Device Plug-ins** folder and paste Metasystem.bundle file.

In Logic X Pro:

1. Go to **Logic Pro X > Control Surfaces** on the menu bar and click **Setup**.
2. Click **New/Install**.
3. Navigate to **Metasystem.io** and click this item **Metasystem**.
4. Click **Add** and close **Install** window.
5. In **Control Surface Setup** window set **Input Port** to **Metasystem - Logic Pro X - In**.

IMPORTANT!

Every time you reboot your Mac, Logic X Pro loses MIDI port assignments which is indicated by an exclamation mark on Metasystem icon in Logic's Control Surface Setup window. You have to manually reassign the ports even though Logic shows them assigned. In short, anytime when Metagrid doesn't seem to communicate with Logic go to Logic's Control Surface Setup and check if there is an exclamation mark on the icon. Reassign the ports and you are ready to go.

CUBASE

You need to import the provided Metasystem.xml file in Cubase. To do this:

1. Go to **Devices > Device Setup**.
2. Click the + icon in the upper left corner. The list with predefined controllers will appear.
3. Choose **Generic Remote**.
4. Click **Import** and import the provided **Metasystem.xml** file.
5. Set **MIDI INPUT/OUTPUT** ports as **Metasystem - Cubase - In/Out** (Mac) or the port you have created in LoopMIDI for Cubase (Windows).

You also need to exclude metasystem's MIDI input port from the MIDI ports visible in **All MIDI Input** group in Cubase. To do this:

1. Go to **Device Setup>MIDI Port Setup** (under **MIDI** folder).
2. Uncheck the checkbox in **In All MIDI Inputs** column that correspond to **Metasystem - Cubase - In** (Mac) or the port you have created in LoopMIDI for Cubase (Windows).

IMPORTANT!

If you don't follow this procedure, you can experience MIDI feedback on MIDI tracks. Don't exclude **Metafader - MIDI - In** or the port you have created in LoopMIDI for Metasystem MIDI if you want to receive actions with MIDI messages.

IMPORTANT!

If you use Cubase 9, you will have to import metasystem_Cubase9.xml into a second Generic Remote using the steps above in addition to the Generic Remote you imported metasystem.xml into. Otherwise Metagrid will not trigger the corresponding Cubase 9 commands properly or at all.

Metagrid also features **Macros** category with 100 pre-assigned MIDI messages you can use for your custom macros created in **Project Logical Editor** and **Scenes** category with 100 scene macros that enhance the default visibility features in Cubase. They are handled by additional Generic Remote file that needs to be imported into Cubase (**metasystem_macros.xml**).

To assign a macro to a button:

1. Decide which macro item you are going to edit (e.g. Macro 001, which corresponds to **Macro 001** command in **Macros** command category in Metagrid).
2. In the lower pane of **Device Setup** window in **Device** column choose **Command**.
3. In the lower pane of **Device Setup** window in **Channel/Category** column choose **Process Project Logical Editor**.
4. In the lower pane of **Device Setup** window in **Value/Action** column choose your already existing macro.
5. In Metagrid create a button with **Action Queue** containing the app-specific command named **Macro 001**. This button will trigger the macro you have just assigned in Metasystem for iOS - Macros Generic Remote device.

To create a scene button:

1. In Cubase go to **Edit > Project Logical Editor** and navigate to **Metagrid>SceneXX**.
2. Under **Folder Track** change the string “--- **your folder name** ---” to the name of the folder track in your project that you want to show with your button.
3. Create a button in a Cubase view in Metagrid with the following 5-step Action queue:
 - **Step 1** - App Specific Command: Metagrid Scenes > -Hide All
 - **Step 2** - Pause: 0.5 s
 - **Step 3** - App-Specific Command: Metagrid Scenes > SceneXX
 - **Step 4** - Pause: 0.3 s
 - **Step 5** - App Specific Command: Metagrid Scenes > -Unfold All Visible

For detailed tutorial, watch the this [video](#).

STUDIO ONE

The package contains Metasystem_ControlSurface folder with all support files needed for Studio One.

In Finder, copy the content of the folder to the following directories:

1. **Surface Data** folder - copy the content of the folder to:

- **MAC:** /Users/<user name>/Library/Application Support/PreSonus Software/Studio One 3/Surface Data
- **Windows:** /Users/<user name>/AppData/Roaming/PreSonus/Studio One 3/Surface Data

2. **User Devices** folder - copy the content of the folder to:

- **MAC:** /Users/<user name>/Library/Application Support/PreSonus Software/Studio One 3/User Devices
- **Windows:** /Users/<user name>/AppData/Roaming/PreSonus/Studio One 3/User Devi

In Studio One:

1. Open **Options** window and go to **External Device** tab.
2. Click **Add...** and navigate to **Metasystem.io** folder and select **Metasystem**.
3. Set **Receive From** and **Send To** to **Metasystem - Studio One - In/Out** (Mac) or the port you have created in LoopMIDI for Studio One (Windows).

DIGITAL PERFORMER

The package contains DP/Key Bindings folder with the dedicated key bindings file that needs to be imported in DP.

In Digital Performer:

1. Go to **Setup > Commands**.
2. Choose **Import Key Bindings...** from **Mini Menu** (in the upper right corner of **Commands** window).
3. Navigate to the location you saved Metagrid's app-specific files and select `Metasystem_DP_key_bindings.dpkeybind`.
4. Click OK to import the file.

IMPORTANT! `Metasystem_DP_key_bindings` file does not overwrite any default DP keyboard shortcuts - it just adds MIDI assignments for each available command that are handled by Metaserver's Metasystem - DP - In port.

IMPORTANT! The predefined viewset for DP includes Layouts scene with 40 buttons named Layout 1 - 40. By default, DP does not feature layout selection commands - they appear in **Commands** window when you create them through **Track Selector** window in DP. However, Metagrid features a dedicated command category name **Layouts** with already assigned MIDI messages that can be used for assignment in **Commands** window. This is very useful for frequently used project templates - you can easily assign the layout buttons to layouts you create in DP.

IMPORTANT! Make sure all items in **MIDI Masters** section in **Commands** window are checked.